375th AIR BASE GROUP (MAC)
SCOTT AIR FORCE BASE
SCOTT AIR FORCE BASE, ILLINOIS

LITTLE ROCK DISTRICT
U.S. ARMY CORPS OF ENGINEERS

US EPA RECORDS CENTER REGION 5
1002026

RCRA PART B PERMIT APPLICATION

SCOTT AIR FORCE BASE
SCOTT AIR FORCE BASE, ILLINOIS

APRIL 1990

Prepared By:

ETC ENGINEERS, INC.

Consulting Engineers
1510 South Broadway
Little Rock, Arkansas 72202

TABLE OF CONTENTS

Section		Page
Section A.	RCRA PART A APPLICATION	A-1
Section B.	FACILITY DESCRIPTION	
B-1	General Description	B-1
B-2	Topographic Map	B-4
B-2a	General Requirements	B-4
B-2a(1)	Land Uses	B-4
B-2a(2)	Hazardous Waste Management Facility Boundary	B-4
B-2a(3)	Wind Rose	B-7
B-2a(4)	Access Control	B-7
B-2a(5)	Injection and Withdrawal Wells	B-7
B-2a(6)	Buildings, Treatment, Storage, Disposal Areas, and Other Structures	B-9
B-2a(7)	Recreation Areas	B-9
B-2a(8)	Runoff Control Systems	B-9
B-2a(9)	Storm, Sanitary, and Process Sewers	B-9
B-2a(10)	Loading and Unloading Areas	B-10
B-2a(11)	Fire Control Facilities	B-10
B-2a(12)	Surface Waters	B-10
B-2a(13)	Flood Control/Drainage Barriers	B-10
B-3	Location Information	B-10
B-3a	Seismic Considerations	B-10
B-3b	Floodplain Standard	B-11
B-4	Traffic Information	B-11
B-4a	Traffic Pattern	B-11
B-4b	Volume of Traffic	B-11
B-4c	Traffic Control	B-15
B-4d	Access Road Surfacing	B-15
B-4e	Load-Bearing Capacity	B-15
Section C.	WASTE CHARACTERISTICS	
C-1	Chemical and Physical Analyses	C-1
C-1a	Containers	C-3
C-1b	Tanks	C-3
C-1c	Waste Piles	C-3
C-1d	Surface Impoundments	C-3
C-1e	Incinerators	C-3
C-1f	Landfills	C-3
C-1g	Land Treatment	C-3
C-1h	Additional Requirements for Land Storage, Treatment, and Disposal Facilities	C-3
C-2	Waste Analysis Plan	C-4
C-2a	Parameters and Rationale	C-6

TABLE OF CONTENTS CONT'd

Section		Page
C-2b	Test Methods	C-6
C-2c	Sampling Methods	C-6
C-2d	Frequency of Analysis	C-7
C-2e	Additional Requirements for Wastes Generated Off-Site	C-7
C-2f	Additional Requirements for Ignitable, Reaction, or Incompatible Wastes	C-7
C-3	Waste Analysis Requirements Pertaining to Land Disposal Restrictions	C-7
Section D.	PROCESS INFORMATION	
D-1	Containers	D-1
D-1a	Containers with Free Liquids	D-1
D-1a(1)	Description of Containers	D-1
D-1a(2)	Container Management Practices	D-2
D-1a(2)i	Aqua Storage Yard Facility	D-2
D-1a(2)ii	Building 540 PCB Transformer Storage Facility	D-2
D-1a(3)	Secondary Containment System Design and Operation	D-3
D-1a(3)(a)	Requirement for the Base or Liner to Contain Liquids	D-3
D-1a(3)(b)	Containment System Drainage	D-4
D-1a(3)(c)	Containment System Capacity	D-5
D-1a(3)(d)	Control of Run-On	D-6
D-1a(3)(e)	Removal of Liquids from Containment Systems	D-6
D-1b	Containers Without Free Liquids	D-6
D-2	Tank Systems	D-7
D-3	Waste Piles	D-7
D-4	Surface Impoundments	D-7
D-5	Incinerators	D-7
D-6	Landfills	D-7
D-7	Land Treatment	D-7
Section E.	GROUNDWATER MONITORING	E-1
Section F.	PROCEDURES TO PREVENT HAZARDS	
F-1	Security	F-1
F-1a	Security Procedures and Equipment	F-1
F-1a(1)	24-Hour Surveillance System	F-1
F-1a(2)	Barrier and Means to Control Entry	F-2
F-1a(3)	Warning Signs	F-2
F-1b	Waiver	F-2
F-2	Inspection Schedule	F-2

TABLE OF CONTENTS CONT'D

Section		Page
F-2a	General Inspection Requirements	F-3
F-2a(1)	Types of Problems	F-3
F-2a(2)	Frequency of Inspection	F-3
F-2b	Specific Process Inspection Requirements	F-3
F-2b(1)	Container Inspection	F-9
F-2b(2)	Tank Inspection	F-9
F-2b(3)	Waste Pile Inspection	F-9
F-2b(4)	Surface Impoundment Inspection	F-9
F-2b(5)	Incinerator Inspection	F-9
F-2b(6)	Landfill Inspection	F-10
F-2b(7)	Land Treatment Inspection	F-10
F-2c	Remedial Action	F-10
F-2d	Inspection Log	F-10
F-3	Waiver of Preparedness and Prevention Requirements	F-10
F-3a	Equipment Requirements	F-11
F-3a(1)	Internal Communications	F-11
F-3a(2)	External Communications	F-11
F-3a(3)	Emergency Equipment	F-11
F-3a(4)	Water for Fire Control	F-11
F-3b	Aisle Space Requirement	F-11
F-4	Preventive Procedures, Structures, and Equipment	F-12
F-4a	Unloading Operations	F-12
F-4b	Runoff	F-12
F-4c	Water Supplies	F-13
F-4d	Equipment and Power Failure	F-13
F-4e	Personnel Protection Equipment	F-13
F-5	Prevention of Reaction of Ignitable, Reactive and Incompatible Wastes	F-14
F-5a	Precautions to Prevent Ignition or Reaction of Ignitable or Reactive Wastes	F-14
F-5b	General Precautions for Handling Ignitable or Reactive Wastes and Mixing of Incompatible Wastes	F-15
F-5c	Management of Ignitable or Reactive Wastes in Containers	F-15
F-5d	Management of Incompatible Wastes in Containers	F-15
F-5e	Management of Ignitable or Reactive Waste in Tanks	F-16
F-5f	Management of Incompatible Wastes in Tanks	F-16
F-5g	Ignitable or Reactive Wastes in Waste Piles	F-16
F-5h	Incompatible Wastes in Waste Piles	F-16
F-5i	Ignitable or Reactive Wastes in Surface Impoundments	F-16

TABLE OF CONTENTS CONT'D

Section		Page
F-5j	Incompatible Wastes in Surface Impoundments	F-17
F-5k	Ignitable or Reactive Wastes In Landfills	F-17
F-5l	Incompatible Waste in Landfills	F-17
F-5m	Liquid Wastes in Landfills	F-17
F-5n	Special Requirements for Containers Disposed in Landfills	F-17
F-5o	Ignitable or Reactive Wastes in Land Treatment	F-17
Section G.	CONTINGENCY PLAN	
G-1	General Information	G-1
G-2	Emergency Coordinators	G-1
G-3	Implementation of the Contingency Plan	G-2
G-4	Emergency Response Procedures	G-5
G-4a	Notification	G-5
G-4b	Identification of Hazardous Materials	G-6
G-4c	Hazard Assessment	G-6
G-4d	Control Procedures	G-6
G-4e	Prevention of Recurrence or Spread of Fires, Explosions, or Releases	G-9
G-4f	Storage and Treatment of Released Material	G-9
G-4g	Incompatible Waste	G-10
G-4h	Post-Emergency Equipment Maintenance	G-10
G-4i	Container Spills and Leakage	G-10
G-5	Emergency Equipment	G-10
G-6	Support Agreements	G-11
G-7	Evacuation Plan	G-11
G-8	Required Reports	G-12
Section H.	PERSONNEL TRAINING	
H-1	Outline of Training Program	H-1
H-1a	Personnel Description	H-1
H-1b	Training Content, Frequency, and Techniques	H-3
H-1c	Training Director	H-6
H-1d	Relevance of Training to Job Position	H-6
H-1e	Training for Emergency Response	H-12
H-1e(1)	Procedures for Using, Inspecting, Repairing, and Replacing Facility Emergency and Monitoring Equipment	H-12
H-1e(2)	Key Parameters for Automatic Waste Feed Cutoff Systems	H-12
H-1e(3)	Communications or Alarm Systems	H-12
H-1e(4)	Response to Fires or Explosions	H-13
H-1e(5)	Response to Groundwater Contamination Incidents	

TABLE OF CONTENTS CONT'D

Section		Page
H-1e(6)	Shutdown of Operations	H-13
H-2	Implementation of Training Program	H-13
Section I.	CLOSURE PLAN, POST-CLOSURE PLAN, AND FINANCIAL REQUIREMENTS	
I-1	Closure Plan	I-1
I-1a	Closure Performance Standard	I-9
I-1b	Partial and Final Closure Activities	I-10
I-1c	Maximum Waste Inventory	I-10
I-1d	Invertory Removal, Disposal, or Decontamination of Equipment, Structures, and Soils	I-10
I-1d(1)	Closure of Containers	I-11
I-1d(2)	Closure of Tanks	I-11
I-1d(3)	Closure of Waste Piles	I-11
I-1d(4)	Closure of Surface Impoundments	I-11
I-1d(5)	Closure of Incinerators	I-11
I-1d(6)	Closure of Landfills	I-11
I-1d(7)	Closure of Land Treatment Facilities	I-11
I-2	Post-Closure Plan	I-12
I-3	Notice to Local Land Authority and Notice in Deed to Property	I-12
I-4	Closure Cost Estimate	I-12
I-5	Financial Assurance Mechanism for Closure	I-12
I-6	Post-Closure Estimate	I-13
I-7	Financial Assurance Mechanism for Post-Closure	
I-8	Liability Insurance	I-13
I-9	State Assumption of Responsibility	I-13
I-1f	Schedule for Closure	I-13
I-1g(1)	Extension of Closure Time	I-13
Section J.	OTHER FEDERAL LAWS	J-1
Section K.	CERTIFICATION	K-1
Section L.	INFORMATION CONCERNING PRIOR RELEASES AND CLOSED Sites	
L-1	Solids Waste Management Units	L-1
L-1a	Characterize the Solid Waste Management Units	L-1
L-1b	No Solid Waste Management Units	L-1
L-2	Releases	L-2
L-2a	Characterize Releases	L-2
L-2b	No Releases	L-2

Please print or type in the unshaded areas only
(fill-in areas are spaced for elite type, i.e., 12 characters/inch).

Form Approved OMB No. 158-R0175

FORM 1 GENERAL

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

GENERAL INFORMATION

Consolidated Permits Program

(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER

F I L 7 5 7 0 0 2 4 1 7 7

LABEL ITEMS

- EPA I.D. NUMBER
- III. FACILITY NAME
- V. FACILITY MAILING ADDRESS
- VI. FACILITY LOCATION

PLEASE PLACE LABEL IN THIS SPACE

GENERAL INSTRUCTIONS

If a preprinted label has been provided, aff it in the designated space. Review the inform ation carefully; if any of it is incorrect, cro through it and enter the correct data in t appropriate fill-in area below. Also, if any the preprinted data is absent (*the area to t left of the label space lists the informati that should appear*), please provide it in t proper fill-in area(s) below. If the label complete and correct, you need not comple Items I, III, V, and VI (*except VI-B whi must be completed regardless*). Complete Items if no label has been provided. Refer the instructions for detailed item descri tions and for the legal authorizations und which this data is collected.

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms.

SPECIFIC QUESTIONS	MARK 'X' YES	NO	FORM ATTACHED
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)		X	
B. Does or will this facility (*either existing or proposed*) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)		X	
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)		X	
D. Is this a proposed facility (*other than those described in A or B above*) which will result in a discharge to waters of the U.S.? (FORM 2D)		X	
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)	X		X
F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		X	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X	
H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		X	
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X	
J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X	

III. NAME OF FACILITY

1 SKIP S C O T T A I R F O R C E B A S E

IV. FACILITY CONTACT

A. NAME & TITLE (last, first, & title)	B. PHONE (area code & no.)
2 E V E R E T T M A R K C H E N G R G & E N V M T L	6 1 8 2 5 6 4 7 6 4

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX

3 3 7 5 A B G / D E E

B. CITY OR TOWN	C. STATE	D. ZIP CODE
4 S C O T T A I R F O R C E B A S E	I L	6 2 2 2 5

RECEIVED

MAY 1 1990

IEPA-DLPC

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER

5 A O U A Y A R D & B U I L D I N G 5 4 0

B. COUNTY NAME

S T C L A I R

C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE (if known)
6 S C O T T A I R F O R C E B A S E	I L	6 2 2 2 5	

CONTINUED FROM THE FRONT

VII. SIC CODES (4-digit, in order of priority)

A. FIRST	B. SECOND
7 0 7 1 (specify) National Security	7 (specify)
C. THIRD	**D. FOURTH**
7 4 5 2 1 (specify) Military Air Transport Service	7 (specify)

VIII. OPERATOR INFORMATION

A. NAME: 8 SCOTT AIR FORCE BASE

B. Is the name listed in Item VIII-A also the owner? [X] YES [ ] NO

C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "O" specify.)
F = FEDERAL, S = STATE, P = PRIVATE, M = PUBLIC (other than federal or state), O = OTHER (specify)
F (specify)

D. PHONE (area code & no.): A 618 256 4764

E. STREET OR P.O. BOX: 375 ABG/DED

F. CITY OR TOWN: 8 SCOTT AIR FORCE BASE

G. STATE: IL

H. ZIP CODE: 62225

IX. INDIAN LAND
Is the facility located on Indian lands? [ ] YES [X] NO

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharge to Surface Water): 9 N IL0026859	D. PSD (Air Emissions from Proposed Sources): 9 P
B. UIC (Underground Injection of Fluids): 9 U	E. OTHER (specify): 9 7803004 3 (specify) Oil Fired Boilers
C. RCRA (Hazardous Wastes): 9	E. OTHER (specify): 9 8211005 0 (specify) Pathological Waste Incinerator

XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS (provide a brief description)

Scott AFB is the Headquarters for the Military Airlift Command and Air Force Communications Command. The 375 Aeromedical Airlift Wing is the operational flying unit based at Scott AFB. As a result, the base conducts a variety of military missions as well as conducting aircraft flights, maintenance, supply, transportation, and other base support fuctions.

XIII. CERTIFICATION (see Instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)	B. SIGNATURE	C. DATE SIGNED
RK D. EVERETT Chief, Engrg & Envmtl Planning Br	Mark D. Everett	16 Dec 85

COMMENTS FOR OFFICIAL USE ONLY

Please print or type in the unshaded areas only
(fill-in areas are spaced for elite type, i.e., 12 characters/inch).

Form Approved OMB No. 158-S80004

FORM 3 RCRA

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE PERMIT APPLICATION

Consolidated Permits Program

(This information is required under Section 3005 of RCRA.)

I. EPA I.D. NUMBER

F I L 7 5 7 0 0 2 4 1 7 7

FOR OFFICIAL USE ONLY

APPLICATION APPROVED	DATE RECEIVED (yr., mo., & day)	COMMENTS

II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below *(mark one box only)* to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

A. FIRST APPLICATION *(place an "X" below and provide the appropriate date)*

[X] 1. EXISTING FACILITY *(See instructions for definition of "existing" facility. Complete item below.)*

FOR EXISTING FACILITIES, PROVIDE THE DATE *(yr., mo., & day)* OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)*

C	YR.	MO.	DAY
8	8 0	0 7	1 4

[ ] 2. NEW FACILITY *(Complete item below.)*

FOR NEW FACILITIES PROVIDE THE DATE *(yr., mo., & day)* OPERATION BEGAN OR IS EXPECTED TO BEGIN

YR.	MO.	DAY

B. REVISED APPLICATION *(place an "X" below and complete Item I above)*

[ ] 1. FACILITY HAS INTERIM STATUS

[ ] 2. FACILITY HAS A RCRA PERMIT

III. PROCESSES – CODES AND DESIGN CAPACITIES

A. PROCESS CODE – Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process *(including its design capacity)* in the space provided on the form *(Item III-C)*.

B. PROCESS DESIGN CAPACITY – For each code entered in column A enter the capacity of the process.

1. AMOUNT – Enter the amount.
2. UNIT OF MEASURE – For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:		
CONTAINER (barrel, drum, etc.)	S01	GALLONS OR LITERS
TANK	S02	GALLONS OR LITERS
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS
Disposal:		
INJECTION WELL	D79	GALLONS OR LITERS
LANDFILL	D80	ACRE-FEET *(the volume that would cover one acre to a depth of one foot)* OR HECTARE-METER
LAND APPLICATION	D81	ACRES OR HECTARES
OCEAN DISPOSAL	D82	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	D83	GALLONS OR LITERS

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Treatment:		
TANK	T01	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR
OTHER *(Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)*	T04	GALLONS PER DAY OR LITERS PER DAY

UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G	LITERS PER DAY	V	ACRE-FEET	A
LITERS	L	TONS PER HOUR	D	HECTARE-METER	F
CUBIC YARDS	Y	METRIC TONS PER HOUR	W	ACRES	B
CUBIC METERS	C	GALLONS PER HOUR	E	HECTARES	Q
GALLONS PER DAY	U	LITERS PER HOUR	H		

EXAMPLE FOR COMPLETING ITEM III *(shown in line numbers X-1 and X-2 below)*: A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

C DUP T/A C 1

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY	LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
X-1	S 0 2	600	G		5				
X-2	T 0 3	20	E		6				
1	S 0 1	2640	G		7				
2	S 0 1	4000	G		8				
3					9				
4					10				

ntinued from the front.

I. PROCESSES *(continued)*

SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES *(code "T04")*. FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

V. DESCRIPTION OF HAZARDOUS WASTES

EPA HAZARDOUS WASTE NUMBER — Enter the four—digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four—digit number*(s)* from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

ESTIMATED ANNUAL QUANTITY — For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non—listed waste*(s)* that will be handled which possess that characteristic or contaminant.

UNIT OF MEASURE — For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate c... are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

. PROCESSES

1. **PROCESS CODES:**
   For listed hazardous waste: For each listed hazardous waste entered in column A select the code*(s)* from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.
   For non—listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code*(s)* from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non—listed hazardous wastes that possess that characteristic or toxic contaminant.
   Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code*(s)*.
2. **PROCESS DESCRIPTION:** If a code is not listed for a process that will be used, describe the process in the space provided on the form.

OTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER — Hazardous wastes that can be described by ore than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B,C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

XAMPLE FOR COMPLETING ITEM IV *(shown in line numbers X-1, X-2, X-3, and X-4 below)* — A facility will treat and dispose of an estimated 900 pounds er year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non—listed wastes. Two wastes e corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 00 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
X-1	D054	900	P	T03 D80	
X-2	D002	400	P	T03 D80	
X-3	D001	100	P	T03 D80	
X-4	D002				included with above

CONTINUE ON PAGE 3

Continued from page 2.

NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

Form Approved OMB No. 158-S80004

EPA I.D. NUMBER (enter from page 1)		FOR OFFICIAL USE ONLY	
L 7 5 7 0 0 2 4 1 7 7	T/A C 1	W DUP	T/A C 2 DUP

DESCRIPTION OF HAZARDOUS WASTES (continued)

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (If a code is not entered in D(1))
1	D006	2700	P	S01	
2	F001	2000	P	S01	
3	F002	300	P	S01	
4	F003	1500	P	S01	
5	F005	1500	P	S01	
6	F007	650	P	S01	
7	F008	100	P	S01	
8	F009	600	P	S01	
9	U002	400	P	S01	
10	U019	400	P	S01	
	U036	150	P	S01	
12	U037	200	P	S01	
13	U088	150	P	S01	
14	U188	150	P	S01	
15	U220	800	P	S01	
16	U226	500	P	S01	
17	U239	150	P	S01	
18					
19					
20					
21					
22					
23					
25					
26					

EPA Form 3510-3 (6-80)

CONTINUE ON REVERSE

Continued from the front.

IV. DESCRIPTION OF HAZARDOUS WASTES *(continued)*

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 3.

EPA I.D. NO. *(enter from page 1)*

F I L 7 5 7 0 0 2 4 1 7 7 T/A C 6

V. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility *(see instructions for more detail).*

VI. PHOTOGRAPHS

All existing facilities must include photographs *(aerial or ground–level)* that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas *(see instructions for more detail).*

FACILITY GEOGRAPHIC LOCATION

LATITUDE *(degrees, minutes, & seconds)*	LONGITUDE *(degrees, minutes, & seconds)*
38 32 02	89 51 33

VIII. FACILITY OWNER

☐ A. If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER	2. PHONE NO. *(area code & no.)*
E	

3. STREET OR P.O. BOX	4. CITY OR TOWN	5. ST.	6. ZIP CODE
F	G		

IX. OWNER CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

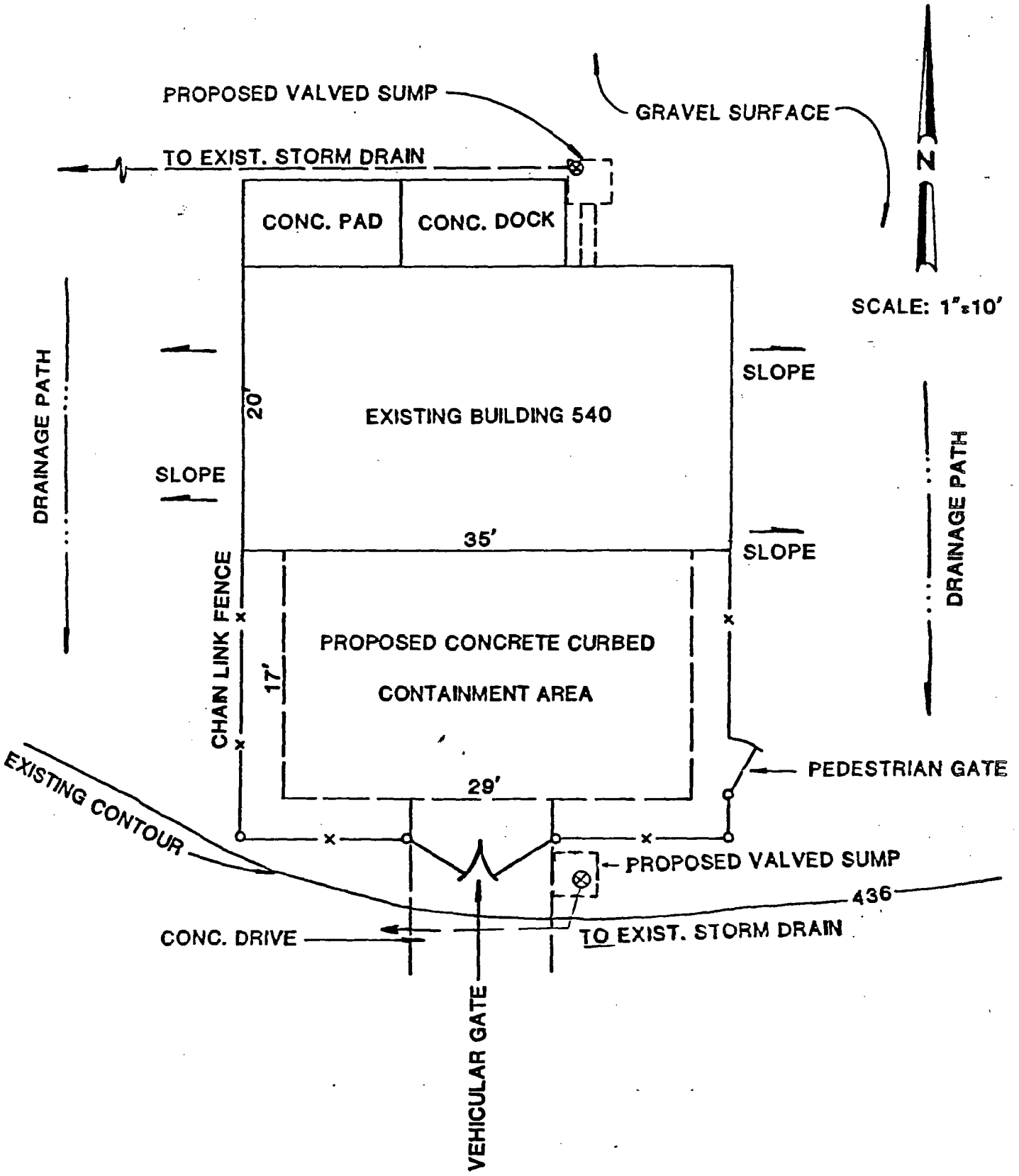
A. NAME *(print or type)*	B. SIGNATURE	C. DATE SIGNED
EDWARD A. GLOWATSKI, Col, USAF Base Commander	Edward A. Glowatski	16 Dec 1985

X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

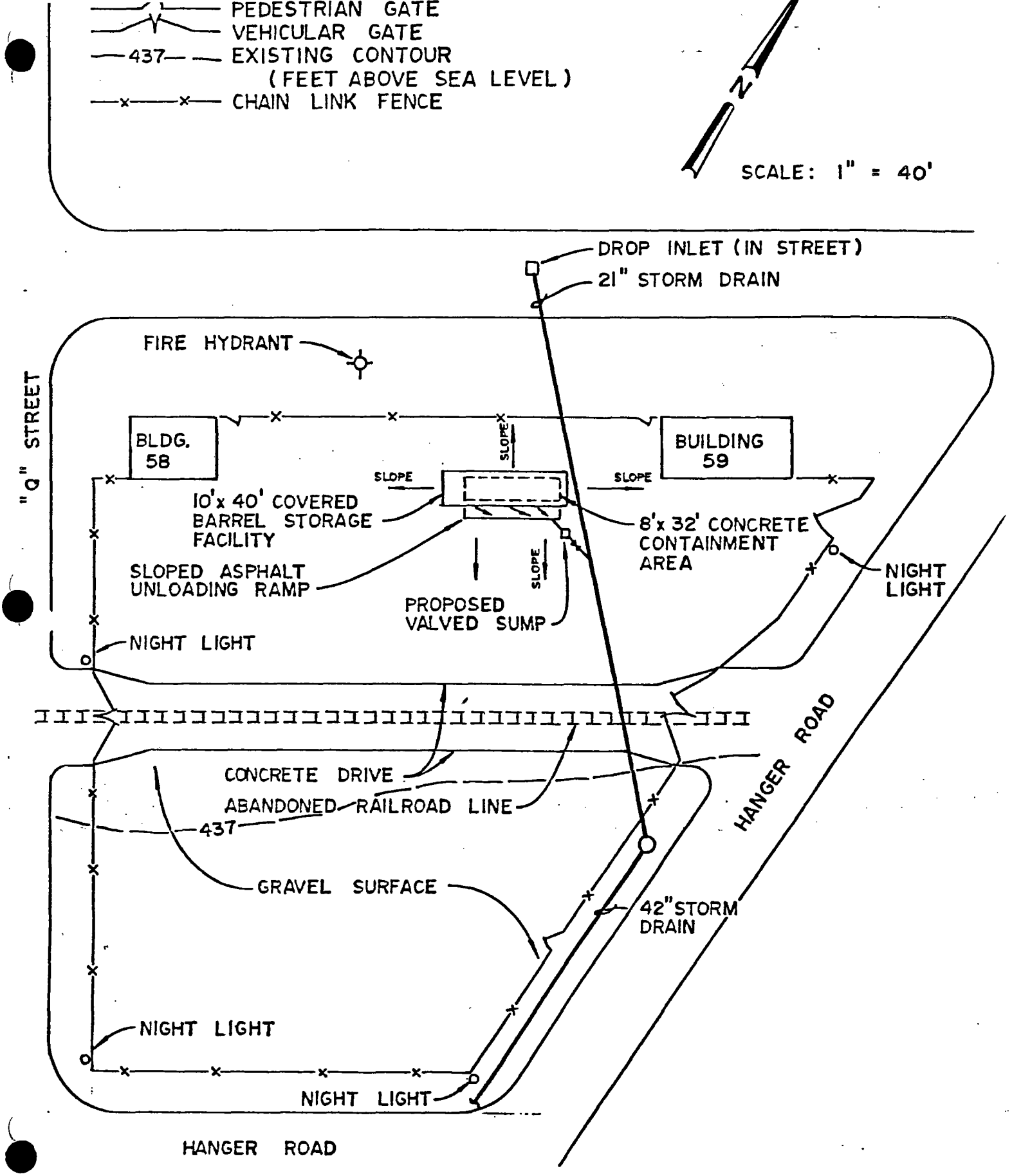
A. NAME *(print or type)*	B. SIGNATURE	C. DATE SIGNED
FLOYD A. ASHDOWN, Col, USAF Base Civil Engineer	Floyd A. Ashdown	16 DEC 1985

 CONTINUE ON PAGE 5



SITE PLAN

BUILDING 540 & PROPOSED ADDITION



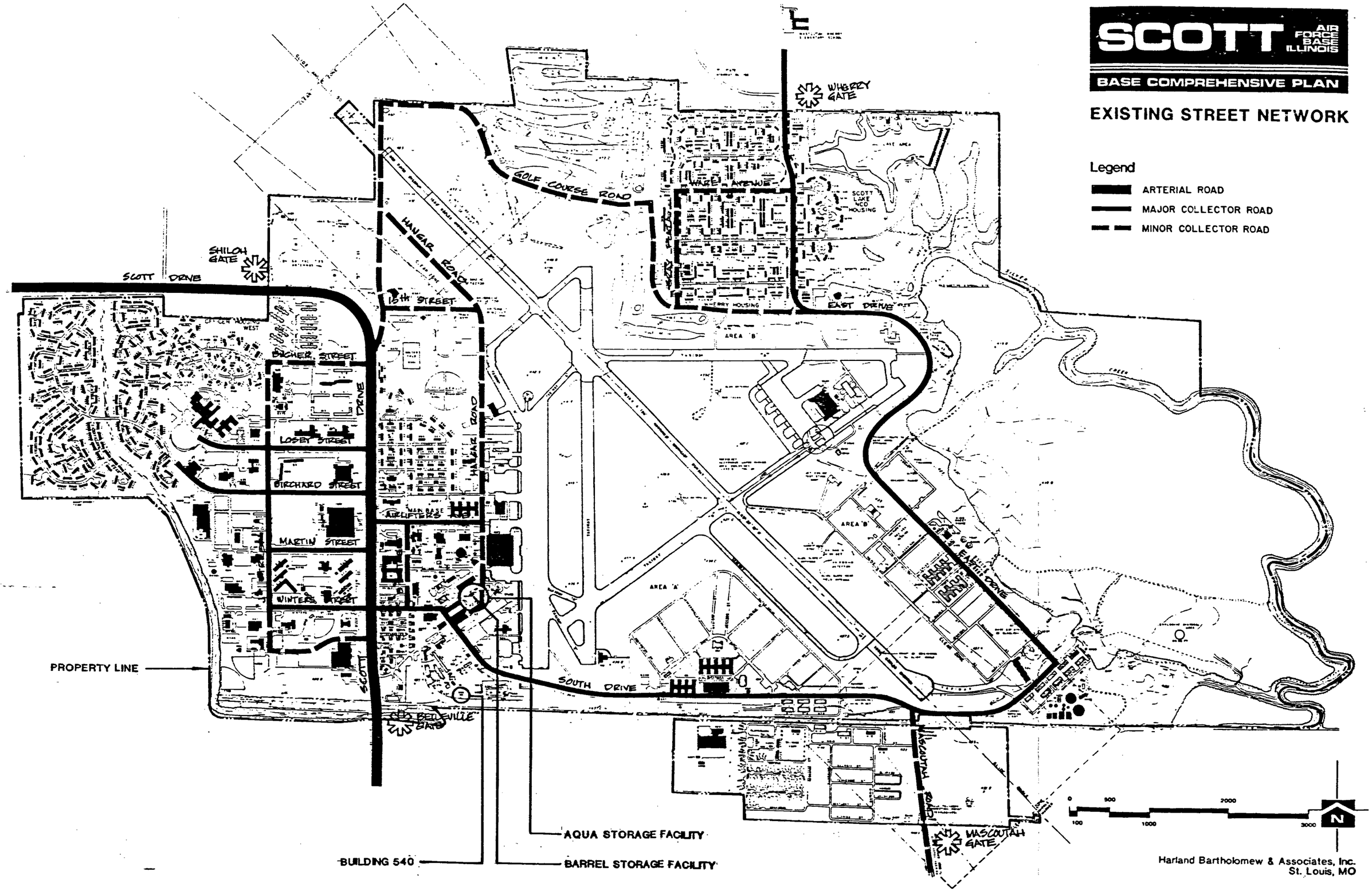
SITE PLAN

AQUA STORAGE YARD

SCOTT AIR FORCE BASE ILLINOIS

BASE COMPREHENSIVE PLAN

EXISTING STREET NETWORK



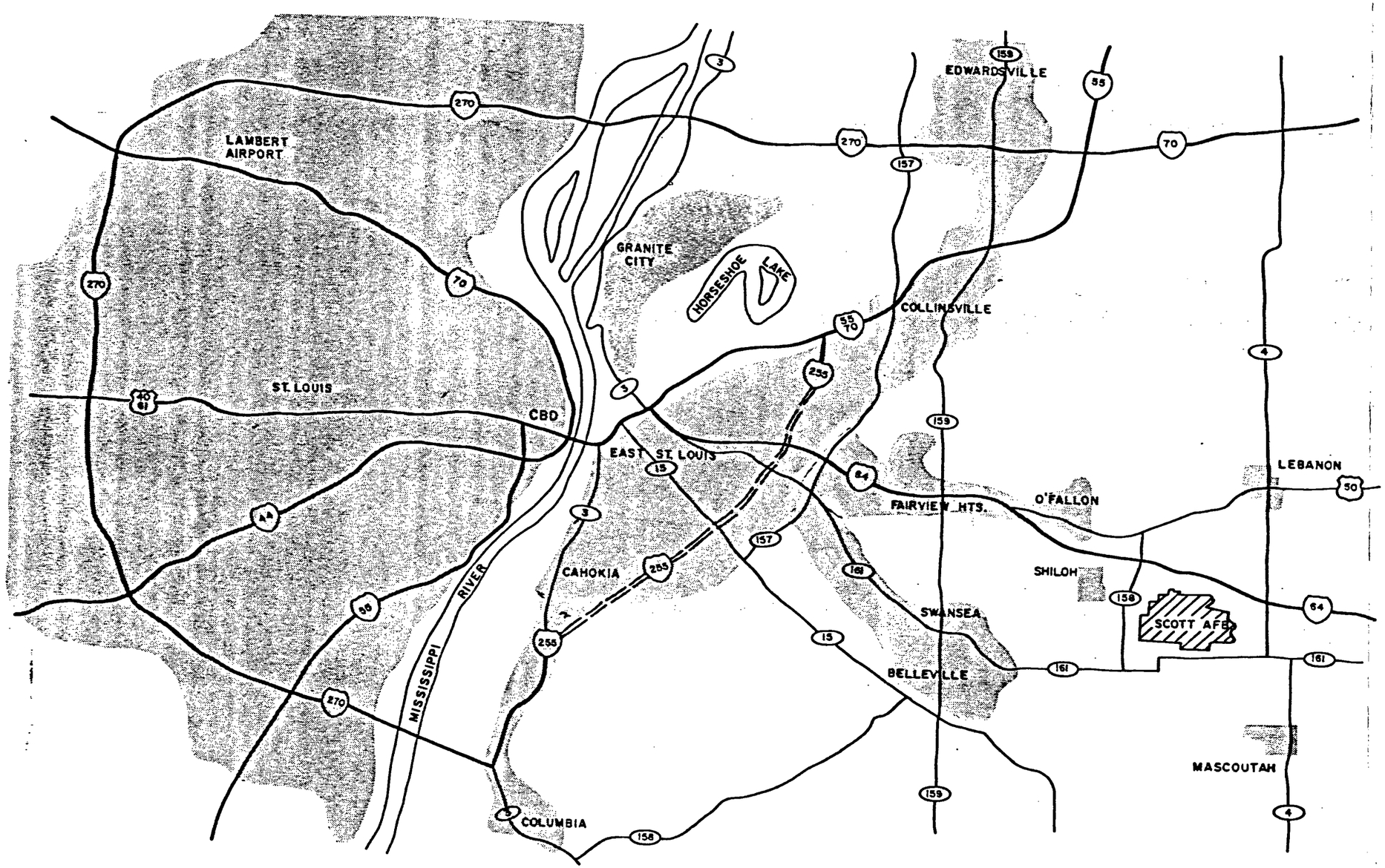
Harland Bartholomew & Associates, Inc.
St. Louis, MO

Figure B-6

SCOTT AIR FORCE BASE ILLINOIS

BASE COMPREHENSIVE PLAN

REGIONAL SETTING AND HIGHWAY TRANSPORTATION NETWORK



Legend

- INTERSTATE HIGHWAY
- ARTERIAL ROAD
- FUTURE CONSTRUCTION

RECEIVED
MAY 1 - 1990
IEPA-DLPC

B-2

0 2000 8000
400 4000 12000
N

Harland Bartholomew & Associates, Inc.
St. Louis, Mo.

Figure B-1

SECTION B

FACILITY DESCRIPTION

As required by 40 CFR 270.14(b), Section B is a general description of the Aqua Yard and Building 540 hazardous waste storage facilities located at Scott AFB (Drawing 1.) Locate both sites on AFB map.

B-1. General Description [40 CFR 270.14(b) (1) Guidance]

In 1980, the Department of Defense (DoD) designated the Defense Logistics Agency (DLA) as the organization responsible for the disposal of hazardous materials/waste. DLA then designated this mission to the Defense Reutilization and Marketing Service (DRMS). DRMS is organized into 5 Defense Reutilization and Marketing Regions (DRMR's) and 217 Defense Reutilization and Marketing Offices (DRMO's)and Offsite Branches (OSB's) The DRMO's and OSB's are the field level activity responsible for accepting hazardous materials/wastes from DoD generators such as Scott AFB and for disposing of these items in an approved manner. The DRMO is a tenant on the Scott AFB and maintains a small field office at the base. It is responsible for the disposal for all surplus scrap property through redistribution, transfer, donation, and sale for organizations at the base as well as offbase generators. The Hazardous Waste Storage Facilities at Scott AFB, under the direct control of 375th Civil Engineering Squadron, stores hazardous waste materials for periods exceeding 90 days until the DRMO office has made arrangements for them to be removed from the HWSF by qualified contractors for proper disposal. The HWSFs at Scott only store hazardous materials generated from the base itself and do not receive materials from other facilities or from off-base.

Scott AFB is a Military Airlift Command (MAC) base. It is located within the Illinois portion of the St. Louis metropolitan area called Metro East. It has a semi-rural setting about 25 miles east of downtown St. Louis, Missouri and is surrounded by the smaller communities of O'Fallon, Lebanon and Mascoutah (Figure B-1). The area of the base is 2,467 acres.

The host unit at Scott AFB is the 375 Aeromedical Airlift Wing (AAW) which supports the following worldwide headquarters at the base. 1.) U.S. Transportation Command 2.) Military Airlift Command (MAC) 3.) Air Force Communications Command (AFCC) 4.) Air Rescue and Recovery Service (ARRS) 5.) Air Weather Service (AWS) 6.) Defense Commercial Communication Office

RECEIVED
MAY 1 - 1990
IEPA-DLPC

(DECCO). In addition, the following squadrons of the 375 AAW operate from the base: 1.) 11th Aeromedical Airlift Squadron (AAS) 2.) 57th Aeromedical Evacuation Squadron (AES) 3.) 1401st Military Airlift Squadron 4.) 137th Flying Training Squadron.

Hazardous materials are used at Scott AFB for aircraft maintenance and other industrial operations including the replacement and elimination of polychlorinated biphenyl (PCB) containing transformers at the base. Waste fuels, solvents, paints, thinners and small amounts of other wastes are generated.

The proposed hazardous waste storage facilities (HWSF) are for the Aqua Yard and for Building 540 (in which only the replaced PCB containing transformers are to be stored). An adjacent compound connected to Building 540 is proposed which will be used to store PCB containing transformers. All other hazardous materials will be stored at the Aqua Yard facility.

The existing Aqua Storage Yard Facility consists of a covered barrel containment storage structure which is 8 feet by 32 feet at the curb lines. The roof is 10 feet by 40 feet including overhangs. It is located on the north side of the Aqua Storage Yard. It is served by a 32 foot by 7 foot load/unload ramp located along the south side of the covered barrel containment storage structure. The enclosed yard itself is 40350 square feet. Storm water will be drained off the yard via conventional storm drainage paths and structures. The storage and loading areas will have valved containment sump and drainage will be physically separated from the yard in general. Only non-hazardous wastes and materials are stored in the yard itself.

The existing Building 540 Facility consists of a 700 square foot storage area with a 12 foot by 6 foot concrete loading dock on the north side of the building. Inside of the building on the west side is a reinforced concrete curbed PCB storage area. The curbs are 1 foot - 8 inches tall. The concrete curbed area is 12 foot by 15 feet - 3 inches. This curbed storage area is 183 square feet. It is served by an overhead 1-ton crane. The remaining portion of the building will be constructed in a similar manner bringing the total storage area to the full 700 square feet.

It is proposed that a covered storage area will be connected to the existing building on the south side. It will be 20 feet by 35 feet. It will have a reinforced concrete floor with 6 inch curbs and a concrete ramp which drains into a valved sump. The sides of the compound will consist of a 8 foot-tall security fence.

These two areas are managed by the Civil Engineering Squadron and are reserved solely for wastes which have completed laboratory analysis if required, are stored in DOT containers except for the

transformers and have been consigned to HWSF on a turn-in document for disposal off-base. The locations of the Aqua Storage Yard and Building 540 are indicated on Drawing 1. A site plan of the Aqua Storage Yard is shown on Figure B-2. A site plan of the Building 540 building and proposed compound is shown on Figure B-3.

The point of contact for the hazardous waste management activities on the Scott AFB is:

Base Civil Engineer
Atten: DEEV

375th ABG/DE
Scott Air Force Bases, Illinois 62225
(618) 256-2701

B-2. Topographic Map [40 CFR 270.14 (b) (19)]

Drawing 2 is mosaic of USGS 7 1/2 minute series topographic maps which includes an area within a 1 mile radius of both the Aqua Storage Yard and Building 540. The scale is 1"=1500.

Figures B-2 and B-3 are site plans showing both of the facility locations with a 1 foot contour interval and at a scale of 1:480. This drawing shows the surface drainage pattern in the vicinity of Aqua Storage Structure to be away from the storage structure in all directions and generally to the south for yard itself. The drainage in the vicinity of Building 540 is also generally to the south.

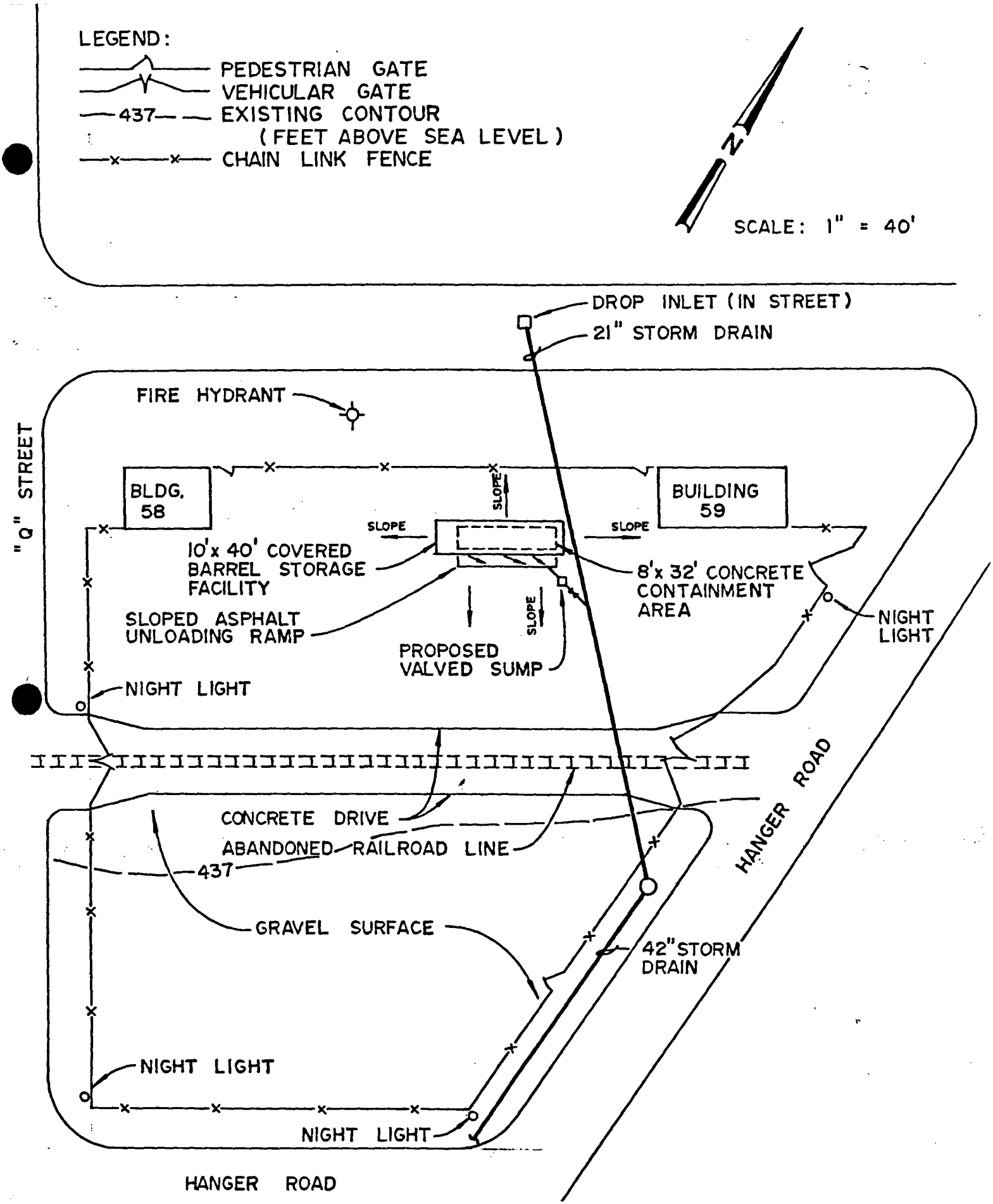
B-2a. General Requirements

B-2a(1). Land Use

Scott AFB land use is divided among three general divisions which are airfield operations, administration and support activities. Drawing 3 illustrates existing land uses.

B-2a(2). Hazardous Waste Management Facility Boundary

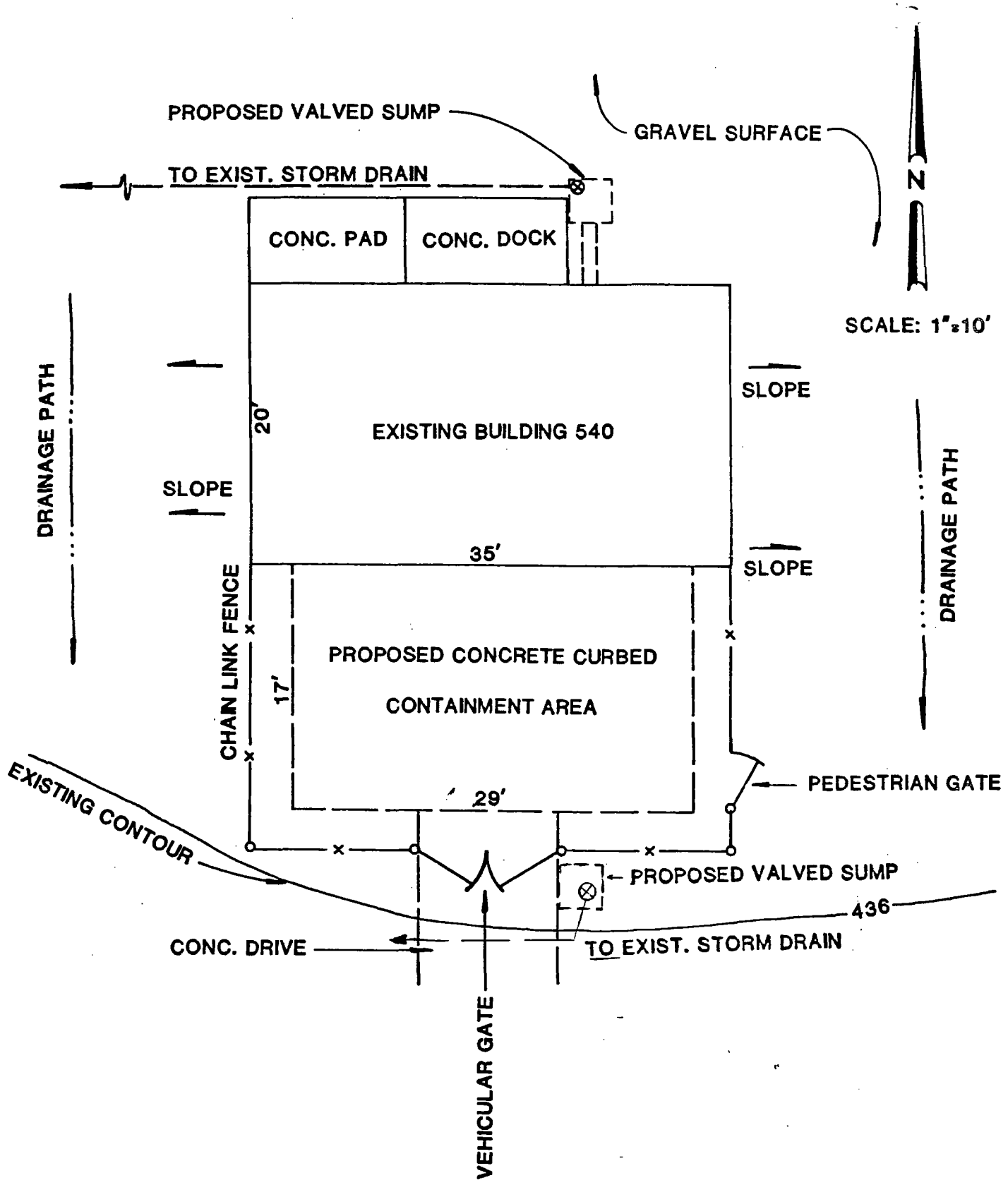
The two HWSF locations are shown on Drawing 1. The Aqua Storage Yard is approximately 1,350 feet north and 3,200 feet east of the



SITE PLAN

AQUA STORAGE YARD

FIGURE B-2



SITE PLAN
BUILDING 540 & PROPOSED ADDITION

FIGURE B-3

closest boundaries of Scott AFB. Building 540 is approximately 180 feet north, and 3,100 feet east of the closest boundaries of the base. The immediate boundary of the Aqua Storage yard is a 6 foot to 8 foot-high security fence around the compound perimeter.

The immediate boundary of building 540 is its structural walls. The proposed addition to Building 540 will incorporate a new 8 foot-high security fence.

B-2a(3). Wind Rose

Figure B-4 is the annual wind rose for Scott AFB. This figure contains meteorological data collected at the base.

B-2a(4). Access Control

The Aqua Storage Yard is surrounded by a 6 foot to 8 foot-high chain-link fence. There are 2 vehicular and 5 pedestrian gates which are locked 24 hours per day. Incorporated in the perimeter are Buildings 58 and 59 which also provide access through 2 doors. However, these 2 doors are also locked 24 hours per day. Access is by key only which is issued to authorized Operation and Support personnel. All visitors must be accompanied by authorized personnel and register prior to admittance to the yard.

Building 540 is located within an area that is surrounded by a locked security fence during off-duty hours. Building 540 is locked 24 hours per day. It has one entrance. The windows have been blocked to prevent unauthorized entry. Access is by key only which is issued to authorized Operation and Support personnel. All visitors must be accompanied by authorized personnel and register prior to admittance to Building 540.

The proposed covered storage facility adjacent to Building 540 will have one vehicular and one pedestrian gate. These gates will also be locked 24 hours per day and access conditions will be as outlined for Building 540 itself.

B-2a(5). Injection and Withdrawal Wells

There are no injection wells located at Scott AFB.

All water users on the base and in the vicinity are served by the Illinois- American Water Company. There are no known active wells in service in the immediate area.

CLIMATOLOGICAL DATA

	J	F	M	A	M	J	J	A	S	O	N	D	ANN	YRS REC
TEMPERATURE (°F)														
HIGHEST	75	81	85	90	97	104	110	104	103	95	84	75	110	35
MEAN DAILY MAX	39	44	53	66	76	85	88	87	80	70	54	43	65	35
MEAN DAILY MIN	22	26	34	46	55	64	67	66	58	47	35	27	46	35
LOWEST	-13	-11	-3	22	33	44	48	44	27	24	4	-7	-13	35
MEAN NO OF DAYS														
MAX TEMP ≥ 90 °F	0	0	0	*	1	9	13	11	5	*	0	0	39	35
MIN TEMP ≤ 32 °F	26	21	15	2	0	0	0	0	*	1	13	22	100	35
PRECIPITATION														
MEAN (INCHES)	2.10	2.25	3.04	3.87	3.89	4.23	3.58	3.59	3.18	2.47	2.87	2.70	37.77	35
MEAN NO OF DAYS ≥ 0.5 IN	1	2	2	3	3	3	2	2	2	2	2	2	26	35
SNOWFALL														
MEAN (INCHES)	3.9	3.3	3.8	.7	.0	.0	.0	.0	.0	T	1.3	2.2	15.2	27
MEAN NO. OF DAYS ≥ 6 IN.	*	*	*	*	0	0	0	0	0	0	*	0	*	27
RELATIVE HUMIDITY (%)														
MEAN	72	71	68	66	69	70	69	71	70	68	70	73	70	35

MAXIMUM 24 HOUR PRECIPITATION

9.22 INCHES 35 YEARS OF RECORD

MAXIMUM 24 HOUR SNOWFALL

12.1 INCHES 27 YEARS OF RECORD

FLYING WEATHER - ANNUAL PERCENTAGES FOR VARIOUS CATEGORIES

A. CEILING ≥ 1000 FEET AND VISIBILITY ≥ 3 MILES 90.4 %

B. CEILING 500-900 FEET AND VISIBILITY ≥ 1 MILE, OR VISIBILITY ≥ 1 MILE BUT < 3 MILES AND CEILING ≥ 1000 FEET 6.8 %

C. CEILING < 500 FEET AND OR VISIBILITY < 1 MILE 2.8 %

D INSTRUMENT: CEILING ≥ 200 FEET AND VISIBILITY ≥ 1/2 MILE, AND EITHER CEILING < 1500 FEET OR VISIBILITY < 3 MILES 11.2 %

SOURCE OF DATA: RUSSWO

* Denotes less than 0.5 day. T Denotes less than 0.05 inch.

ANNUAL WIND COVERAGE TABULATION

RUNWAYS OR COMBINATIONS FOR CROSSWIND COMPONENT 10 KNOTS OR LESS

RUNWAY DIAGRAM	MAGNETIC MARK	TRUE BEARING	LENGTH IN FEET	(1)	(2)
	13-31	N 43° 27' 19" W	7037	93.8	92.1

* INSTRUMENT RUNWAY
(1) WIND COVERAGE (%) - ALL WEATHER
(2) WIND COVERAGE (%) - INSTRUMENT

ADDITIONAL DATA

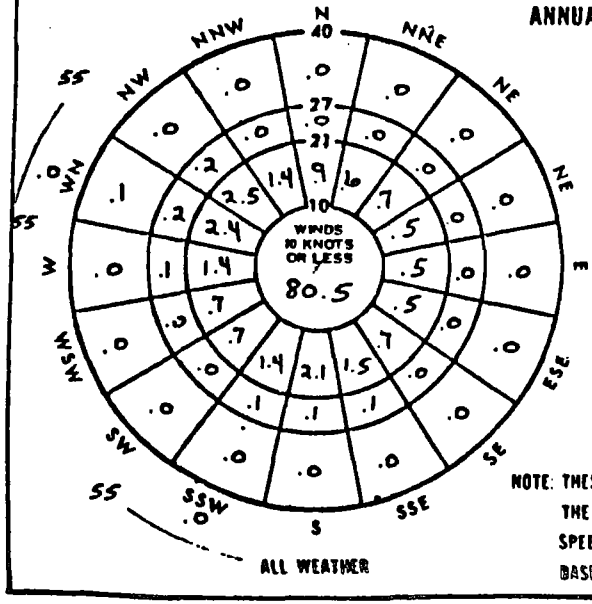
FIELD ELEVATION _____ FEET MSL

MAGNETIC VARIATION _____

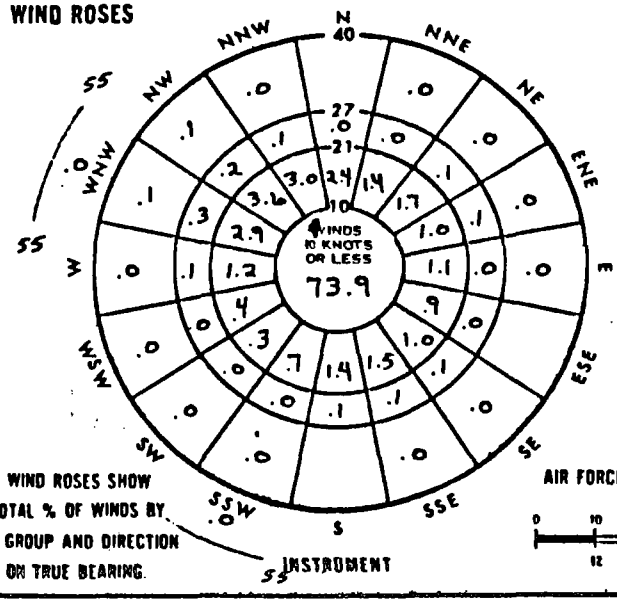
SOURCE _____

YEAR _____

ANNUAL WIND ROSES



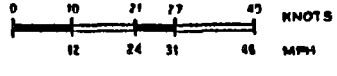
ALL WEATHER



INSTRUMENT

NOTE: THESE WIND ROSES SHOW THE TOTAL % OF WINDS BY SPEED GROUP AND DIRECTION BASED ON TRUE BEARING.

AIR FORCE RUNWAY WIND COMPUTER (SEE AFM 86-6)



ENGINEERING WEATHER DATA

AIR CONDITIONING DESIGN AND CRITERIA DATA (SEE AFM 88-8, CHAP 6)

WINTER HEATING DESIGN TEMPERATURE (SEE AFM 88-8, CHAP 6)

MEAN WINTER WIND SPEED 8.1 KNOTS

MEAN ANNUAL NUMBER OF HEATING DEGREE DAYS 4855 (SEE AFR 91-7)

PRESSURE ALTITUDE AND TEMPERATURE DATA FOR DETERMINING REQUIRED RUNWAY LENGTHS (SEE AFM 86-2)

EXTREME WIND DATA FOR CONSTRUCTION DESIGN (SEE AFM 88-3, CHAP 1)

SNOW LOAD DATA FOR ROOF CONSTRUCTION (SEE AFM 88-3, CHAP 1)

MAXIMUM FROST PENETRATION (SEE AFM 88-3, CHAP 1)

NOTICE: WHEN NECESSARY, INTERPRETATIONS OF THESE DATA SHOULD BE SECURED THROUGH THE LOCAL STAFF WEATHER OFFICER.

Scott AFB
Belleville IL
38° 33'N 89° 51'W
Field Elev. 453 ft.
Prepared by USAFETAC

AUG 1977

TAB D

FIGURE B-4

B-2a(6). Buildings, Treatment, Storage, Disposal Areas, and Other Structures

All buildings and structures in the vicinity of the Aqua Storage Yard and in the vicinity of Building 540 are shown on

Drawing 1. The Aqua storage yard facility is approximately 40,350 square feet in area and Building 540 is approximately 700 square feet. The proposed adjacent compound to Building 540 is an addition of 700 square feet. The floor plans for each of these are included as Drawings 4 and 5.

B-2a(7). Recreation Areas

Recreation areas are shown on Drawing 3. The nearest recreational area is approximately 950 feet northwest of the Aqua Storage Facility and 700 feet west of Building 540.

B-2a(8). Runoff Control Systems

The design of the HWSFs precludes runoff from the active areas. Both HWSF areas are covered. Each storage area will contain depressed floors to retain spills. The receiving areas will all incorporate a spill containment basin with valved control. The sump drainage valves are closed during loading and unloading operations to contain potential spills.

All spills and leaks will be contained within sumps to be removed with absorbent and pumps. There are no floor drains or unvalved gravity connections with the sanitary or storm drainage systems in the storage areas.

B-2a(9). Storm, Sanitary and Process Sewers

The sanitary sewer system for the areas of both HWSFs are shown of Drawing 6. There are no connections to the sanitary sewer system at either of the sites. The storm drainage system for the areas of both HWSFs are shown of Drawing 7.

All spills and leaks will be contained within sumps to be removed with absorbent and pumps. There are no floor drains or unvalved gravity connections with the sanitary or storm drainage systems in the storage areas.

There are no process water sewers located at or near the storage facilities.

All stormwater is conveyed away from the yard area by surface runoff, swales and culverts.

B-2a(10). Loading and Unloading Areas

Loading/unloading areas will be located at the storage facilities and will slope to valved spill containment basins.

B-2a(11). Fire Control Facilities

Fire extinguishers will be located in numerous locations in both the Aqua Storage Yard area and in Building 540. Fire hydrants are located 40 feet north and 50 feet west of the Aqua Storage covered structure, and 400 feet northwest of Building 540. Section G contains a detailed discussion of Emergency response procedures.

B-2a(12). Surface Waters

The nearest stream is named South Ditch, located approximately 1350 feet south of the Aqua Storage Yard. Building 540 is 150 feet north of South ditch. See Drawing 7 for the stream location.

B-2a(13). Flood Control/Drainage Barriers

The storage facilities are located above the 100 year floodplain. Drainage away from the buildings and yards is maintained by adequate slope away from the buildings, pads and structures.

B-3. Location Information [40CFR 270.14(b)(11)]

B-3a. Seismic Considerations [40 CFR 270.14(b)(11)(i) and (ii), 264.18(a) and 264 Appendix VI]

Scott AFB is located in seismic zone 2 which indicates a probability of seismic activity and earthquake-induced damage. Scott AFB is not within any political jurisdiction as noted in 40 CFR 270 requiring seismic information to be provided, however,

all US Armed forces facilities require seismic appropriate designs for new construction.

B-3b. Floodplain Standard [40 CFR 270.14 (b)(11)(iii) and 264.18 (b)]

No part of Scott AFB HWSFs are located within the 100-year floodplains. Figure B-5 and Drawing 8 are provided which show that the 100 year flood plain boundary is located on the extreme eastern side of the base which is currently undeveloped and the general drainage paths of the base.

The 100 year flood elevation in the base area is between 424 and 427 feet M.S.L. The two HWSF are at or above elevation 435 feet M.S.L.

B-4. Traffic Information [40 CFR 270.14(b)(10)]

Access to the Aqua Storage Yard HWSF is primarily through two gates, Shiloh Gate located at the northwest corner of the base and the Bellville Gate on the south boundary of the base. Both gates lead to Scott Drive. Following Scott Drive, traffic would turn east on Winters to the intersection of South Drive and then proceed south on South Drive one block to Hangar Road. Traffic would then proceed east on Hangar Road 1 block to the Aqua Storage Yard.

Access to Building 540 is by way of Scott Drive, turning east on Winters and then south on South Drive to Hangar Road. Traffic would proceed west on Winters one block and turn left at the Civil Engineering Squadron Building. The Compound is directly ahead. Building 540 is on the backside of the Compound. Figure B-6 indicates the existing street network on Scott AFB.

B-4a. Traffic Pattern

Access to each of the two sites is provided through a network of roads on Scott Air Force Base. Air Force and related personnel who transport hazardous waste to and from these facilities are familiar with roads and traffic patterns on these roads.

B-4b. Volume of Traffic

Traffic volumes are indicated on Figure B-7. The access roads are adequate to carry the average daily and peak hourly traffic on these roads.

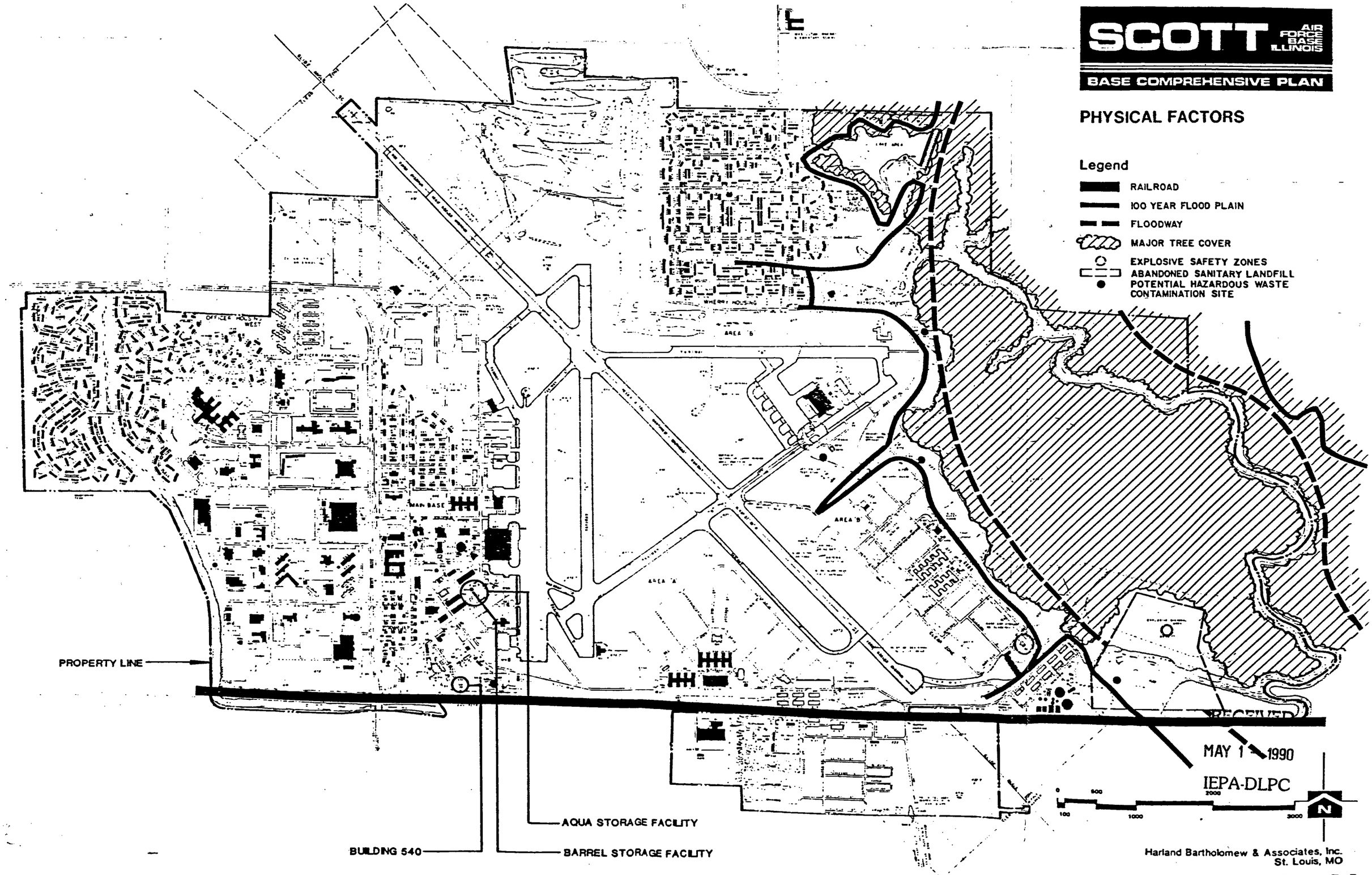
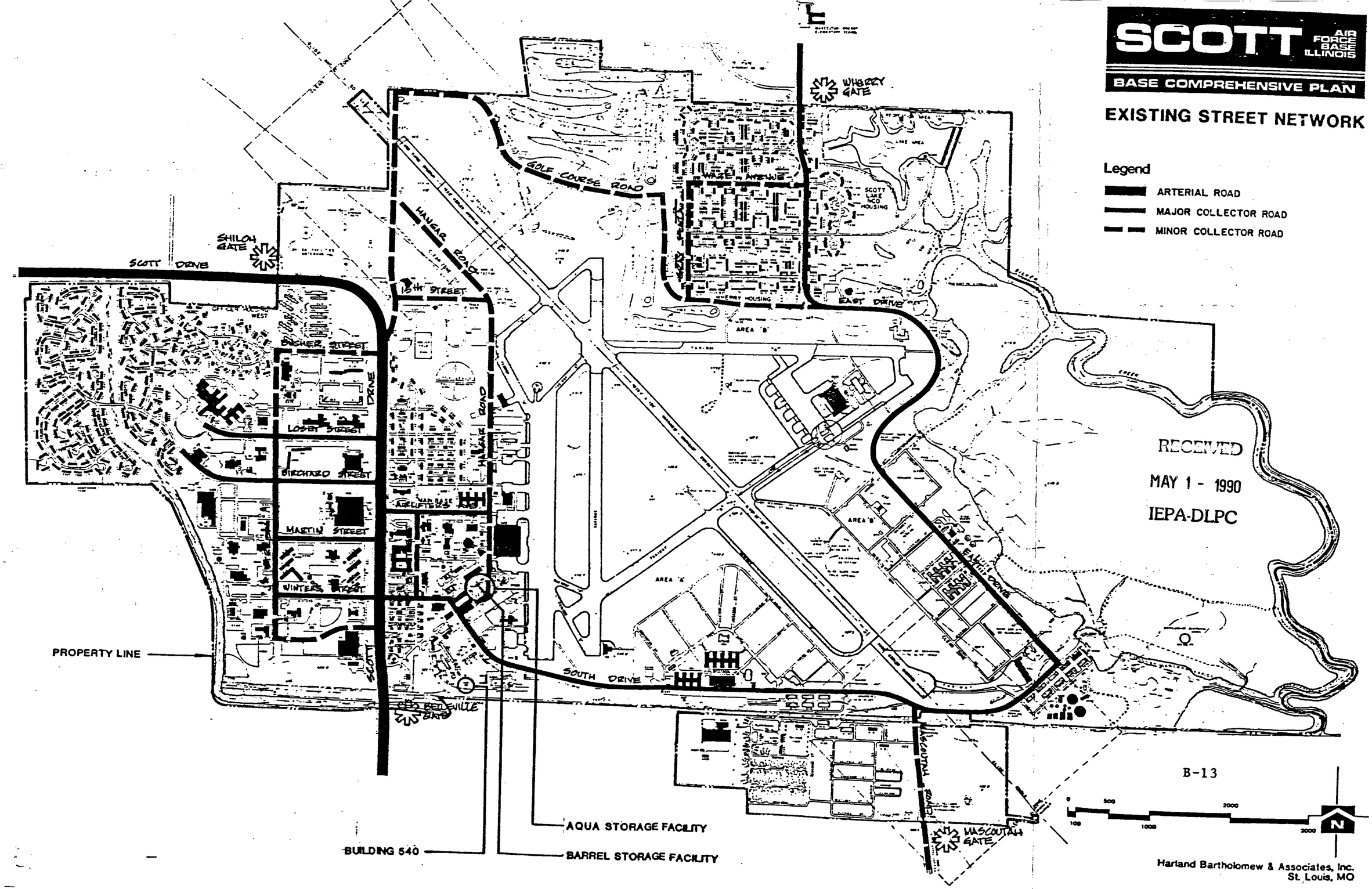

SCOTT AIR FORCE BASE ILLINOIS
BASE COMPREHENSIVE PLAN
PHYSICAL FACTORS
Legend
RAILROAD
100 YEAR FLOOD PLAIN
FLOODWAY
MAJOR TREE COVER
EXPLOSIVE SAFETY ZONES
ABANDONED SANITARY LANDFILL
POTENTIAL HAZARDOUS WASTE CONTAMINATION SITE
PROPERTY LINE
BUILDING 540
AQUA STORAGE FACILITY
BARREL STORAGE FACILITY
MAIN BASE
AREA 'A'
AREA 'B'
WHERRY HOUSING
OFFICER HOUSING WEST
RECEIVED
MAY 1 1990
IEPA-DLPC
0
500
2000
100
1000
3000
N
Harland Bartholomew & Associates, Inc.
St. Louis, MO

Figure B-5

SCOTT AIR FORCE BASE ILLINOIS

BASE COMPREHENSIVE PLAN

EXISTING STREET NETWORK



RECEIVED
MAY 1 - 1990
IEPA-DLPC

B-13

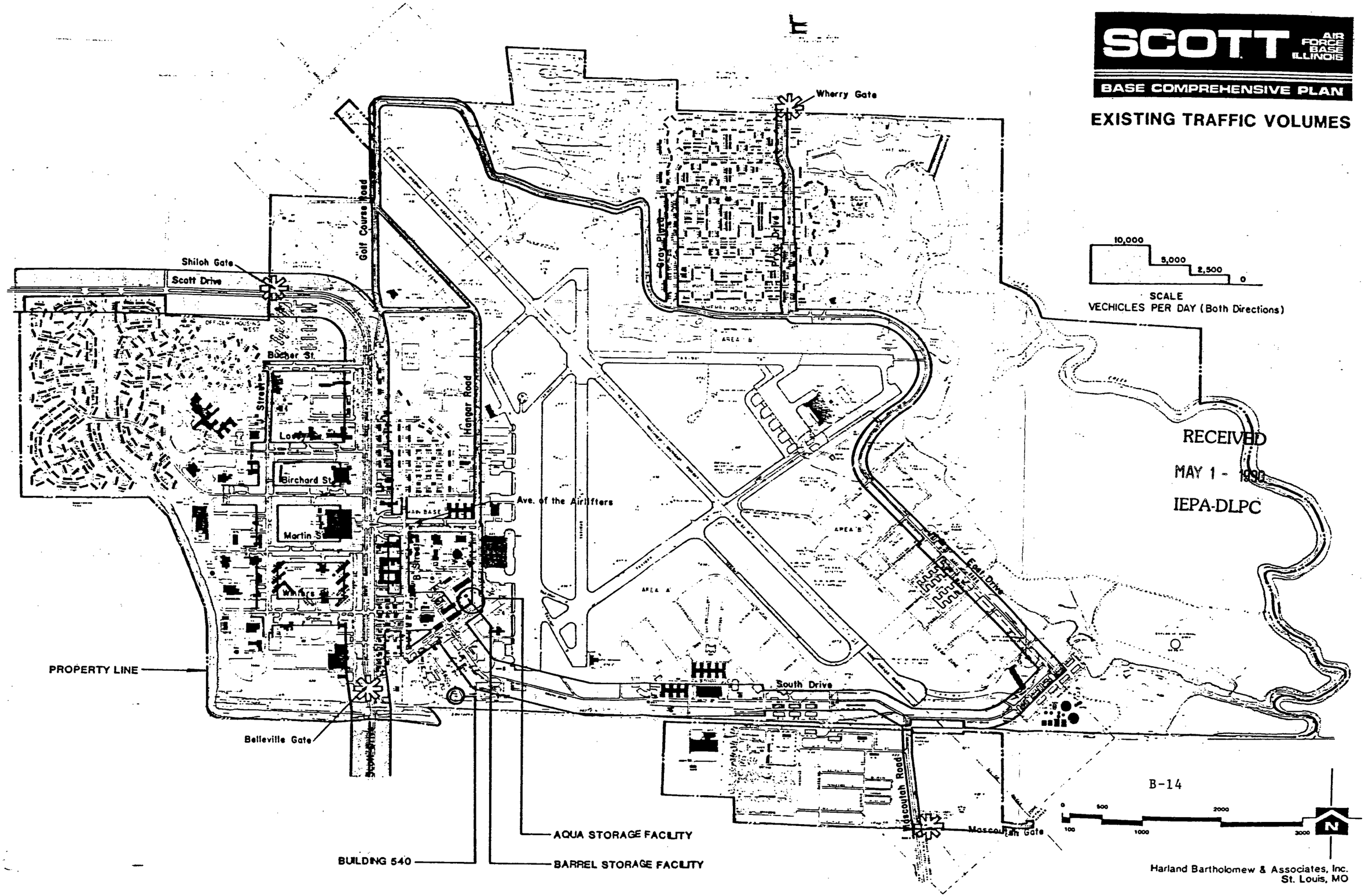
Harland Bartholomew & Associates, Inc.
St. Louis, MO

Figure B-6

SCOTT AIR FORCE BASE ILLINOIS

BASE COMPREHENSIVE PLAN

EXISTING TRAFFIC VOLUMES



RECEIVED
MAY 1 - 1990
IEPA-DLPC

B-14

Harland Bartholomew & Associates, Inc.
St. Louis, MO

Figure B-7

The type of vehicle varies from passenger car to large axle heavy transport truck and tractor trailer. Except for the main commuter routes, the most common vehicles are pick up trucks owned by the Air Force.

B-4c. Traffic Control

Traffic is controlled by means of gates, stop signs, yield signs, speed limit signs and traffic control lights. All intersections are provided with street signs, stop signs or yield signs. Scott Drive is the major road carrying traffic into the Air Base and serves as the major arterial street. This road is adequately provided with traffic control lights as well as directional traffic control lanes. The access roads to the storage sites are minor collector roads seldom traveled by anyone but Air Force personnel. The speed limit in the vicinity of the sites is 15 mph and 30 mph in other areas on Scott Air Force Base.

B-4d. Access Road Surfacing

All roads are constructed of asphalt overlaying a base of graded material. The AFB routinely maintains the roadway surface though its base maintenance personnel. The roads are in good condition.

B-4e. Load-Bearing Capacity

All roads at Scott Air Force Base are constructed with load bearing capacities sufficient to withstand normal loads of expected vehicular traffic. The roads are designed in accordance with standard engineering practices. Therefore the roads are capable of carrying loaded tractor trailers without damaging the road surface. Vehicles used for transportation of hazardous waste are not of different size and weight than other similar vehicles that use these roads on a day to day basis. These access roads have been used for years without any unusual wear. Therefore all roads at Scott Air Force Base are considered to be adequate to handle the vehicles used in hazardous waste management operations.

SECTION C
WASTE CHARACTERISTICS

The hazardous wastes that may be stored at the Aqua Storage Yard and at Building 540 are described in this section. Building 540 will house only replaced capacitors and transformers which contain PCB until such time as they can be safely transported to a certified disposal facility.

There are two groups of hazardous wastes that may be stored at the Aqua Storage Yard designated Group I and Group II. Group I consist of "expired shelf life materials" which have not been used. This Group is small in comparison to Group II wastes. Group II wastes consist of used materials and by-products. Typical of such wastes generated by aircraft and base maintenance are waste solvents, spent battery acid, waste paint and thinner materials, and methyl ethyl ketone contaminated with paint waste.

As required by 40 CFR 270.14(b)(2), the chemical and physical characteristics of these materials are included in the following sections. Also included is a Waste Analysis Plan for sampling, testing and evaluating these wastes.

C-1. Chemical and Physical Analyses [40 CFR 270.14(b)(2), 264.13(a)]

Appendix C-1 lists the wastes that may be stored as Group I items but will normally be components of a Group II waste stream, and also lists additional waste that may be stored as Group II items or Group II waste streams. In most cases, the hazardous designations are based upon the known characteristics of the waste such as ignitability, reactivity, corrosivity or EP toxicity. For listed waste, the hazardous designation is based upon the EPA listing.

Table C-1 Analytical Parameters for all Group II Wastes Stored at DRMO

Parameters	Rationale
pH	Necessary for storage bay segregation of acid and bases
Flashpoint	Necessary for flammability determination and segregation of flammable wastes from oxidizers
Reactivity, water	Necessary for proper storage identification and emergency response identification
Reactivity, cyanides	Necessary for proper storage identification and emergency response identification
EP Toxicity	Necessary to DRMO's determination of disposal options

C-1a. Containers [40 CFR 270.15(b)]

No wastes, regardless of whether they are solid or liquid, will be stored in an area that is not equipped with secondary containment systems, therefore, no documentation or information is provided to show that the wastes do not contain free liquids.

C-1b. Tanks [40 CFR 270.191 and 270.16]

This facility will not utilize storage tanks for hazardous wastes.

C-1c. Waste Piles [40 CFR 264.251 and 270.18]

No waste piles will be used at this facility.

C-1d. Surface Impoundments [40 CFR 264.221 and 270.17]

No surface impoundments will be used at this facility.

C-1e. Incinerators [40 CFR 270.62(b)(2)(i) and 270.17]

No wastes will be incinerated at this facility.

C-1f. Landfills [40 CFR 264.301 and 270.21]

No landfills will be used at this facility.

C-1g. Land Treatment [40 CFR 264.273 and 270.20]

No land treatment units will exist at this facility.

C-1h. Additional Requirements for Land Storage, Treatment, and Disposal Facilities [40 CFR 270.14(c)]

Since the facilities will not utilize hazardous waste tanks, waste piles, surface impoundments, incinerators, landfills or land treatment units, no additional procedures must be described.

C-2. Waste Analysis Plan[40 CFR 264.13(b) and (c) & 270.14(b)(3)]

The Aqua Storage Yard and Building 540 at Scott AFB will only accept hazardous wastes for which it is permitted. Periodically, each on base generator will be informed of the hazardous wastes the storage or treatment facilities are permitted to receive. DOD has issued specific regulations governing the transfer of hazardous wastes, which are applicable to all generators of hazardous wastes that transfer such wastes to DRMOs. These regulations require that activities transferring hazardous wastes to all HWMU sites must properly identify the property so that the hazardous characteristics of the waste are immediately apparent to the receiving personnel. Each different waste turned in must be accompanied by a completed Disposal Turn-In Document (DD Form 13480-1, Figure C-1) that includes a proper item identification. The DOD regulations state that proper identification of a hazardous waste identified by a National Stock Number (NSN), a unique 13-digit code assigned to each item in the Federal Supply System, will include the following:

(i) Noun name as catalogued in the Federal Supply System.

(ii) Chemical names of the hazardous contaminants and noun names of non-hazardous contaminants.

(iii) Amounts of hazardous and non-hazardous contaminants, based on user's knowledge of the items, expressed in a range of content by percentage or ppm, as appropriate.

Proper identification of hazardous waste without an NSN will include:

(i) Chemical names of the hazardous components.

(ii) Chemical names of the hazardous contaminants and noun names of non-hazardous contaminants.

(iii) Amounts of hazardous and non-hazardous contaminants, based on user's knowledge or tenting of the items, expressed in a range of content by percentage or ppm, as appropriate.

This information will allow HWSF-Scott personnel to use standard references in order to determine the chemical

characteristics and proper storage procedures for the hazardous wastes. Additionally, many Group I waste containers will have the original manufacturer's label affixed. Often information supplied on the label can assist in determining hazardous characteristics and proper storage for the item.

For items with an NSN, HWSF-Scott will then determine the hazardous characteristics by accessing DOD's Hazardous Materials Information System (HMIS). The HMIS is a computerized source of information that can cross-reference many NSN's to their particular chemical characteristics, such as flash point, specific gravity, special handling precautions and the hazardous ingredients contained in the NSN item.

Additionally, HWSF personnel may use the following references to determine hazardous characteristics:

(i) NFPA Book (Fire Protection Guide on Hazardous Materials.)

(ii) Chemical Dictionary.

(iii) DOT Guide (Emergency Response Guide No. DOT P. 5800.2).

(iv) NIOSH/OSHA: (1) Pocket Guide to Chemical Hazards.

(v) Industrial chart for Toxic and Hazardous Chemicals in Industry.

(vi) Environmental Considerations in the DPDS Disposal Process, DPDS-M 6050.1.

(vii) U.S. Coast Guard CHRIS Manual.

(viii) Regional Environmental Specialist (who has more reference documents on hand).

Figure C-2 is an example of the data output obtained from the HMIS for methyl ethyl ketone. It provides an example of the detail of information that can be obtained through HMIS, without requiring laboratory analysis of a sample of the item. The NSN for this item is 6810-00-281-2785, and it consists of 99 percent methyl ethyl ketone. HWSF Scott can identify this compound as ignitable. The handling and storage information indicates that methyl ethyl ketone should be stored in an area away from heat, sparks, and open flames and separated from strong oxidizers and corrosive materials. To fight fires involving this chemical, waster fog, alcohol foam, dry chemicals or carbon dioxide extinguisher should be used. Small spills can be removed

with absorbent materials while large spills should be contained and pumped into appropriate containers.

The previous discussion of methyl ethyl ketone is intended to meet the requirements of paragraph 40 CFR 264.13(a)(2), which indicates that existing, published or documented data on the hazardous waste may be used to meet the general waste analysis requirements.

Activities at Scott Air Force Base provide the necessary identification to allow HWSF Scott to properly store Group II hazardous wastes.

C-2a. Parameters and Rationale

Scott AFB turn-in activities provide all information required by DOD's standard turn-in requirements. This information, as stated in Section C-2, enables proper handling and storage of hazardous waste. Table C-1 identifies parameters for analyzing the Group II wastes and the rationale for their use.

C-2b. Test Methods

As noted in the above sections, activities at Scott Air Force Base provide the necessary identification to allow the HWSFs at Scott AFB to properly store Group I and II hazardous wastes without laboratory testing. However, in the unlikely event that a waste material or stream cannot be identified by documentation methods, the test methods summarized in Table C-2 would be implemented to measure the parameters listed in Table C-1. The physical characteristics outlined in Table C-1 would be assessed by visual observation. Density would be tested through volume-to-weight ratios. Analyses of wastes would be performed by commercial laboratories or the Air Force OVHL at Brooks Air Force Base, Texas.

C-2c. Sampling Methods

The sampling methods that will be used for the Group II wastes in the event of necessity are shown in Table C-3 for each type of waste which could be stored at the site.

C-2d. Frequency of Analysis: 724.113(b)(4)

The following is part of testing contingency plan to be used only under the circumstances as described in Section C-2b.

Initially, Schedule A of Table C-4 will be used to determine the number of samples to be taken from each generator's Group II waste upon receipt at the Aqua Storage Yard HWSF. If the analysis of these samples agrees with the generator's identification for three consecutive samplings, then sampling will be conducted in accordance with Schedule B of Table C-4. Schedule B will continue to be used for an additional 3 months, or until test results verify the accuracy of the generator's identification, whichever occurs later. At that time, the standard document identification procedures would be resumed for the remainder of the calendar year at which time sampling in accordance with Schedule B would be re-initiated. Thus, the frequency of sampling a given generator's waste depends upon his rate of waste generation. Since there is no addition to or mixing of wastes in the HWSF, additional sampling of stored wastes will not be required. As all waste generation activities are on-base and under military control and discipline, proper identification procedures can be enforced to a much greater extent than they can be off-base or civilian activities.

C-2e. Additional Requirements for Wastes Generated Off-Site

This section does not pertain to Scott's HWSFS due to no off-site waste accepted at Scott AFB.

C-2f. Additional Requirements for Ignitable, Reaction or Incompatible Wastes: 724.113(b)(6), 724.117

In addition to the parameters identified in Table C-1, Group II wastes should also be analyzed for the parameters in Table C-5 for reasons indicated.

C-3. Waste Analysis Requirements Pertaining to Land Disposal Restrictions

This section does not pertain to Scott's HWSFs since no wastes will be land disposed.

Table C-2. Test Methods To Be Used to Measure the Parameters Identified in Table C-1

Parameter	Test Method	Reference
pH	Electrometric methods 5.2, 5.3	Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods, EPA Publication #SW-846, Second Edition (1982)
Flashpoint	Pensky-Martens closed-cup tester	ASTM Standard D-93-79 or D-93-80
Reactivity	Water reactivity cyanides sulfides	EPA SW-846 Method 9010 EPA SW-846 Method 9030
EP Toxicity	Extraction, separation, structural integrity	40 CFR Part 261, Appendix II

Table C-3 Sampling Methods for Waste Stream Items Identified in Appendix C-2

Type of Waste	Guide Reference
1. Extremely viscous liquid	ASTM Standard D140-70
2. Crushed or powdered material	ASTM Standard D346-75
3. Soil or rock-like material	ASTM Standard D420-69
4. Soil-like material	ASTM Standard D1452-65
5. Fly ash-like material	ASTM Standard D2234-76
6. Containerized liquid waste	"COLIWASA" described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication #SW-846, Second Edition (1982), or "Samplers and Sampling Procedures for Hazardous Streams."

Table C-4. Number of Samples To Be Collected As a Function of the Number of Items in the Shipment

Schedule A

Lot Size	Number of Samples To Be Taken
2 to 8	2
9 to 15	3
16 to 25	5
26 to 50	8
51 to 90	13
91 to 150	20

Schedule B

Lot Size	Number of Samples To Be Taken
2 to 8	1
9 to 15	2
16 to 25	2
26 to 50	3
51 to 90	5
91 to 150	8

Table C-5. Additional Group II Waste Analysis Parameters

Parameters	Rationale
Btu/lb	Disposal determination
Heavy Metals	Disposal determination

SECTION D

PROCESS INFORMATION

The information provided in this section is submitted in accordance with the requirements of 40 CFR 270.15 and 246.170-176.

D-1. Containers [40 CFR 270.15]

The Environmental Coordinator at Scott will be responsible for providing guidance to on-base hazardous waste generators for packaging requirements in accordance with Department of Transportation (DOT) regulations (49 CFR Subchapter C-Hazardous Materials Regulations). No leaking or damaged containers will be accepted for storage unless they have been repackaged.

D-1a. Containers with Free Liquids

Because all storage areas at the Aqua Storage Yard and in Building 540 will be equipped with secondary containment devices, all containers will be handled as if they contain free liquids and, therefore, will not be tested for the presence of free liquids.

D-1a(1). Description of Containers

Containers used by the Scott AFB generators at the accumulation points are 55 gallon steel drums. Both removable head and non-removable head types are used depending upon the nature of the waste. These drums are 22.5 inches in diameter and 32 inches in height for a usable volume of 55 gallons. Only new or reconditioned drums provided to the generator through the Air Force Supply System are available for his use.

Table D-1 lists the applicable DOT packaging requirements for some of the chemicals listed in Appendix A. It should be noted that 49 CFR Section 173.7 (U.S. Government Material) describes packaging requirements for the Department of Defense (DoD); containers may be of strength and efficiency equal to or greater than DOT requirements. (Refer to Appendix D-1 for DOT and military container specifications.)

D-1a(2). Container Management Practices

D-1a(2)i. Aqua Storage Yard Facility

Chemically resistant plastic pallets, approximately 4 feet by 3.25 feet, loaded with one to two 55-gallon drums, will be placed in the HWSF either two-deep (i.e., two rows), one-high on the floor or two-deep, stacked two-high in steel racks designed for this purpose. These plastic pallets are designed to act as primary containment sumps. They will have solid bottoms and 9 inch high rims. This will provide 73 gallons of spill containment capacity.

The elevated storage racks will be placed at a height which will permit the lower pallets to be raised and withdrawn by forklift, clearing the concrete containment curbs.

This storage configuration facilitates material handling and container inspection by storing pallets only one deep per side. Visual inspection space will be maintained all around the storage structure.

A typical storage plan is shown on Drawing 4.

D-1a(2)ii. Building 540 PCB Transformer Storage Facility

Only transformers containing PCB laden oil will be stored at this facility. This will eliminate concerns in regard to incompatible wastes. The transformers will by placed in curbed containment storage areas. In the event of leakage, the spilled oil will be collected and transferred to DOT approved storage containers as listed in Table D-1.

Transformers will be conveyed within the facility by means of a one-ton overhead crane. Isle space will be a minimum of 8 feet to facilitate materials handling. The maximum number of transformers to be stored within Building 540 will be 20.

The adjacent proposed compound will consist of 493 square feet of covered storage area accessed by means of fork lifts. Aisle space will be approximately 9 feet (minimum of 8 feet) to facilitate materials handling. The maximum number of transformers to be stored within this compound is 20.

A typical storage plan is shown on Drawing 5.

D-1a(3). Secondary Containment System Design and Operation

D-1a(3)(a). Requirement for the Base or Liner to Contain Liquids 724.275(a)(1)

D-1a(3)(a)i Design and Construction

The Aqua Storage Yard HWSF has served a variety of storage activities over many years and its structural integrity has thus been adequately demonstrated. It will have all cracks and/or gaps filled in concurrent with construction of the replacement loading ramp, the new containment curbing as shown on Drawing 4. Design of the new concrete loading ramp will be in accordance with design requirements of U. S. Army Corps of Engineers and with AFM 88-15. It will be of concrete construction and shall conform to ACI 318-83 of the American Concrete Institute. It will have a design bearing capacity of 1.5 KSF.

Building 540 will have a 4" reinforced concrete slab poured over the existing base in the storage bays and a concrete cap poured over the aisle and existing loading dock. The loading dock will have a 6" curb installed around its perimeter and a new 210 gallon containment basin will be constructed adjacent to the loading dock as shown on Drawing 5. Design will be in accordance with design requirements of U. S. Army Corps of Engineers and with AFM 88-15. These additions will be of concrete construction and shall conform to ACI 318-83 of the American Concrete Institute. Floors will have a design bearing capacity of 1.5 KSF.

The HWSF adjacent to Building 540 is of new construction. Design will be in accordance with design requirements of U. S. Army Corps of Engineers and with AFM 88-15. The base, loading ramp, containment curbs and basin will all be of concrete construction and shall conform to ACI 318-83 of the American Concrete Institute. Storage floor and loading ramp will have a design bearing capacity of 1.5 KSF.

D-1a(3)(a)ii Resistance of Base to Wastes

Imperviousness of the Aqua Storage Yard HWSF's base will be provided by application of a sealing compound on the containment surfaces of the base, the new concrete loading ramp and curbs. The specified sealant, Phenoline 305 Finish (Appendix D-2), has very good resistance to acids and excellent resistance to alkalies, salts, and solvents.

Building 540 will have a concrete slab poured over the existing base in the storage bays and a concrete cap poured over the aisle and loading dock. Application of the Phenoline 305 Finish sealing compound over these new concrete surfaces, the new containment basin and the containment curbs will provide impervious containment surfaces in this building's storage and handling areas.

The new HWSF adjacent to Building 540 will have an application of the Phenoline 305 Finish sealing compound over the storage and loading areas, the new containment basin and containment curbs. The sealant will provide impervious containment surfaces in this HWSF's storage and handling areas.

D-1a(3)(b). Containment System Drainage

All HWSF's will be covered with a roof and have a concrete floor. The Aqua Storage Yard HWSF will have all its hazardous wastes stored in plastic pallets which have rims that will protect the drums from contact with accumulated wastes. The outside areas used for loading/unloading are sealed concrete. This is designed to control a spill during loading/unloading operations. The load/unload areas are designed to drain into its connecting catch basin; not the building. The outlet has a valve which is closed before hazardous property is handled outside. A sign placed at each load/unload area will read "CONTAINMENT SUMP VALVE MUST BE CLOSED DURING LOAD/UNLOAD OPERATIONS".

If a spill collects in the catch basin (designed to hold 220 gallons) that material will be pumped into another container and processed by the receiving personnel as the original substance would have been. Identification of the waste will be the same as the substance. If the amount of the spill is minor it will be removed using absorbent material.

All spills on the load/unload area will be immediately cleaned. If rainwater collects on the load/unload area where a spill has occurred, then the water mixture will be tested to determine if it is hazardous waste based on knowledge of the spilled material. During inclement weather loading/unloading operations will take place inside the structures to prevent any chance of rainwater mixing with a spilled material or the load/unload operations will be postponed. In the event of dire necessity, the load/unload operations will be conducted under tarpolian cover.

D-1a(3)(c). Containment System Capacity

The Aqua Storage Yard will store a maximum of 48 55-gallon drums in 3 storage bays which will be designated by floor markings so as to provide the necessary aisle space for proper handling. Each bay will have a storage capacity of 16 drums for a maximum HWSF storage capacity of 2640 gallons. Storage floor space is 248 sq ft for a total containment volume of 124 cu. ft or 930 gallons.

The drums are to be stored in pallets on racks in two tiers; however, in the worst case, which would be storage of the lower tier of pallets (total of 12) on the floor, each pallet would displace 48.75 gallons. Therefore, the total containment volume less the displaced volume of the 12 pallets leaves a net containment volume of 345 gallons.

Thus, the net containment volume of 345 gallons is much greater than 10% of the 2640 gallon maximum HWSF storage capacity or the volume of any container to be stored (55 gal).

Building 540 will store a maximum of 20 transformers. These transformers will vary in the amount of PCB oil contained; however, the maximum quantity per transformer will be 100 gallons. (example: 12.5 KVA, 2.4 ft diameter) The two storage bays in the building are 183.0 and 163.0 square feet, each with a 1.17 foot (1' - 2") (after addition of 4" concrete slab) containment wall. Thus, the total containment volume of these two bays is 214 cubic feet (1605 gallons) and 190.7 cubic feet (1430 gallons) respectively. With a maximum storage of 10 transformers in each bay, the maximum oil storage quantity would be 1000 gallons per bay. The displacement volume of 10 each, 2.4 foot diameter transformers (10 x 39.7 gal) would be 397 gallons. Thus, the containment volumes of the two bays, 1605 gallons and 1430 gallons, are well in excess of the 10% (100 gal) or maximum unit volume (100 gal) as required.

The PCB HWSF adjacent to Building 540 has storage floor space of 493 square feet contained by a 6 inch curb for a containment capacity of 246.5 cubic feet, or 1848.75 gallons. With a maximum storage capacity of 20 transformers at 100 gallons per transformer, the maximum storage would be 2000 gallons. Thus, the containment volume of 1848.75 gallons less the displaced volume of 20 each, 2.4 foot diameter transformers (20 x 34 gal) gives a net containment volume of 1170 gallons, well in excess of the 10% (200 gal) or maximum unit volume (100 gal) required.

D-1a(3)(d). Control of Run-On

The storage floor of the Aqua Storage Yard HWSF is above grade level and has a 6 inch concrete curb around its perimeter to prevent run-on

Building 540 is an enclosed building serviced by an above grade loading dock. The storage floor is at a higher level than the loading dock thus precluding the possibility of run-on.

The proposed HWSF adjacent to Building 540 is covered and will be built above grade with the surrounding grade sloping away from the pad. Also, it will have a 6 inch containment curb around its perimeter thereby precluding the possibility of run-on.

Finally, Scott AFB is well drained by a sophisticated drain system which is depicted on Drawing 7.

D-1a(3)(e). Removal of Liquids from Containment Systems

Spilled or leaked waste will be removed from the containment systems immediately upon detection. A portable 30 gpm diaphragm pump will be maintained both at the Aqua Storage Yard HWSF and at Building 540 for removal of liquids. A minimum of four empty drums will be kept available at each facility for collection of spilled or leaked waste.

Spilled liquids will be analyzed according to the hazardous designation of the particular bay in which the spill occurred and for the specific chemicals that resulted in the spill. The names of these chemicals will be evident from the container labels which record the name and location of all hazardous wastes stored at this facility. Civil Engineering - Environmental personnel assigned to handle hazardous materials and wastes will be trained to contain spills. (Refer to Section H - Personnel Training.)

D-1b. Containers without Free Liquids

As noted in Section D-1a, all hazardous wastes will be handled as though they contain free liquids, therefore this section does not apply.

D-2. Tank Systems

This section does not pertain to Scott AFB HWSFs because to no hazardous waste will be stored in tanks at these sites.

D-3. Waste Piles

This section does not pertain to Scott's HWSFs because no hazardous waste will be stored in waste piles at these sites.

D-4. Surface Impoundments

This section does not pertain to Scott's HWSFs because no hazardous waste will be stored in surface impoundments at these
sites.

D-5. Incinerators

This section does not pertain to Scott's HWSFs because no hazardous waste will be treated in incinerators at these sites.

D-6. Landfills

This section does not pertain to Scott's HWSFs because no hazardous waste will be disposed of in landfills at these sites.

D-7. Land Treatment

This section does not pertain to Scott's HWSFs because no hazardous waste will be land treated at these sites.

SECTION E

GROUNDWATER MONITORING

[40 CFR 264.90]

The requirements for groundwater monitoring are not applicable to the hazardous waste storage facility covered in this application for Scott AFB. All wastes will be containerized. No surface impoundments, landfills or land treatment activities will exist at this facility.

SECTION F

PROCEDURES TO PREVENT HAZARDS

The information provided in this section is submitted in accordance with the requirements of 40 CFR 270.14(B)(4), (5), (6), (8), and (9). Other regulations addressed to complete this section include 40 CFR 264.14, 264.15, 264.17, 264.194, and 264.254.

This section addresses general security provisions; inspection schedules; the spill prevention of accidental ignition or reaction of ignitable, reactive, or incompatible wastes.

F-1. Security

Security procedures to be implemented in order to prevent hazards are described below.

F-1a. Security Procedures and Equipment [40 CFR 270.14(b)(4) and 264.14]

F-1a(1). 24-Hour Surveillance System [40 CFR 264.14(b)(1)]

The Aqua Storage Yard HWSF is located within the fenced and secured area of the Aqua Storage Yard. In addition, the HWSF will be kept locked at all times when not in use.

Building 540 has only one locked entrance. Admittance is by key only. Windows have been blocked to prevent unauthorized entry.

Scott AFB Security Police are responsible for on-site security to control entry at all times through the secured gates or other entrances to the active portions of the entire installation. All entrances are manned when open and locked when closed. Proper identification is required for entry. All visitors must register and receive a pass prior to admittance to the base.

The Security Police will patrol the HWSF's and will control entry onto the active portion of the facilities during hours of non-operation. The patrol will be performed year-round, and will include checking the fence line and buildings. The procedures and personnel used will be determined by the Security Police.

F-1a(2). Barrier and Means to Control Entry [40 CFR 264.14(b)(2) (i) and (ii)]

The Aqua Storage Yard is surrounded by a 6 to 8 foot-high chain-link fence. There are 2 vehicular and 5 pedestrian gates which are locked 24 hours per day. Incorporated in the perimeter are Buildings 58 and 59 which also provide access through 2 doors. However, these 2 doors are also locked 24 hours per day. Access is by key only which is issued to authorized Operation and Support personnel. All visitors must be accompanied by authorized personnel and register prior to admittance to the yard.

Building 540 is locked 24 hours per day. It has one entrance. The windows have been blocked to prevent unauthorized entry. Access is by key only which is issued to authorized Operation and Support personnel. All visitors must be accompanied by authorized personnel and register prior to admittance to the yard.

The proposed covered storage facility adjacent to building 540 will have one vehicle and one pedestrian gate. These gates will also be locked 24 hours per day and access conditions will be as outlined for Building 540 itself.

F-1a(3). Warning Signs [40 CFR 264.14(c)]

Warning signs with the legend, "Danger -- Unauthorized Personnel Keep Out," will be posted at the entrances to all of the HWSFs. These signs will be visible from 25 feet and will be printed in English.

F-1b. Waiver [40 CFR 264.14(a)]

Scott AFB does not request a waiver.

F-2. Inspection Schedule [40 CFR 270.14(b)(5) and 264.15]

Table F-1 presents the General Inspection Schedule for inspecting safety and emergency equipment, security devices, operating and structural equipment, monitoring equipment, communication equipment, and mobile equipment. Items listed in Table F-1 are important because of their role in preventing, detecting or responding to environmental or human health hazards.

F-2a. General Inspection Requirements [40 CFR 264.15(a) and (b) and 270.14(b)(5)]

The 375th Civil Engineering Squadron will conduct regular inspections at its HWSFs for equipment malfunctions, structural deterioration, operator errors and discharges that could cause or lead to the release of hazardous waste constituents and adversely affect the environment or threaten human health. Inspection Log Sheets are shown in Appendix F-1.

F-2a(1). Types of Problems [40 CFR 264.15(b)(3)]

Table F-1 presents the schedule of inspection of monitoring equipment, safety and emergency equipment, security devices, operation and structural equipment and container storage areas. Items listed in the tables are considered important because of their role in preventing, detecting or responding to environmental or human health hazards. Provided with each item is a list of problems normally encountered.

F-2a(2). Frequency of Inspection [40 CFR 264.15(b)(4)]

Also provided in Table F-1 is the frequency of inspection for each item. The frequency depends upon equipment deterioration, environmental or human health incidents, or equipment malfunction between inspections. The frequency of inspection will increase when problems are discovered. THe loading/unloading dock will be constantly observed by HWSF personnel when in use. As a minimum, a complete visual inspection of the hazardous property, facility storage areas, personal protective clothing and equipment will be made weekly.

F-2b. Specific Process Inspection Requirements [40 CFR 270.14(b)(5) and 264.15(b)(4)]

The only specific process inspection item to be discussed below is container inspection. Table F-2 lists the Specific Process Inspection Schedule for the container storage area at the HWSFs. Inspections of tanks, waste piles, surface impoundments, incinerators, landfills, and land treatment facilities are not applicable to this permit application because none of these exist at Scott AFB HWSFs.

Table F-1. General Inspection Schedule

GENERAL INSPECTION SCHEDULE

Area/Equipment	Specific Item	Types of Problems	Frequency of Inspection
Safety and Emergency Equipment	Standard industrial absorbents (Sorb-all vermiculite, etc.)	Out of stock, saturated with water	Weekly
	Absorbent containment boom	Worn out, saturated with	Monthly/ as needed
	Flexible hoses with quick couple fittings tings	Cracks or holes, fittings stick	Monthly
	55-gallon drums (steel, stainless steel)	Corrosion, structural damage	Weekly
	Emergency shower and eyewash	Water pressure, leaking, drainage	Weekly
	Face shields and extra protective eye-glasses	Broken or dirty equipment	Weekly
	Disposable respirators	Out of stock, not designed to filter types of materials being stored	Weekly
	Chemical cartridge respirators with cartridges for organic vapors and acid gases: half-and full face types	Spent chemical absorbent seals	Weekly
	Self-contained breathing apparaturs (SCBA)	Air quantity in reserve air delivery in tank (cold weather), o-rings missing	Weekly

Table F-2. Specific Process Inspection Schedule

SPECIFIC PROCESS INSPECTION SCHEDULE

Area/Equipment	Specific Item	Types of Problems	Frequency of Inspection
Container Storage Area	Container placement and stacking	Aisle space, height of stacks	Weekly
	Sealing of containers	Open Lids	Weekly
	Labeling of containers	Improper identification data missing	Weekly
	Containers	Corrosion, leakage, structural defects	Weekly
	Segregation of incompatible wastes	Storage of incompatible wastes in same area	Weekly
	Pallets	Damaged	Weekly
	Fence, gate and lock	Corrosion, damage to chain-link fence; sticking or corroding lock	Weekly
	Base or foundation	Cracks, spalling, uneven settlement	Weekly
	Bermed foundation around containment bays	Cracks, deterioration	Weekly
	Debris and refuse	Aesthetics, possible reaction with leaks	Weekly
	Ramps	Cracks, spalling, uneven settlement, erosion	Weekly
	Warning signs	Damaged, illegible	Weekly

Table F-3. DOT Hierarchy
DOT HIERARCHY PER 49 CFR 173.2

(a) Radioactives

(b) Poison A

(c) Flammable Gas

(d) Non Flammable Gas

(e) Flammable Liquids

(f) Oxidizer

(g) Flammable Solids

(h) Corrosive Liquids

(i) Poison B

(j) Corrosive Solids

(k) Irritating Materials

(l) Combustible Liquids (110 gallons or more)

(m) ORM-B

(n) ORM-A

(o) Combustible Liquids (10 gallons or less)

(p) ORM-E

GENERAL INSPECTION SCHEDULE (CONT'd)

Area/Equipment	Specific Item	Types of Problems	Frequency of Inspection
	Portable sump pump	Power, cogging, not explosion-proof	Monthly
	Fire blankets	Torn, worn, or out of stock	Weekly
	Fire extinguishers	In need of recharging	Weekly
	Fire alarm system	Power failure	Weekly
	Telephone system	Power failure	Weekly
	Generators	Fuel supply, spark plugs, oil	As used
	First aid equipment and supplies	Items out of stock or inoperative	Weekly
	Protective clothing (Impermeable full body coveralls, gloves, and foot coverings	Holes, normal wear and tear	Weekly
Security devices	Facility fence	Corrosion, damage to chain-link fence or barbed wire	Weekly
	Signs	Illegible	Weekly
	Container storage building doors	Locks missing	Weekly
	Main gate	Locking mechanism jammed	Daily
	Lighting	Burned out	Upon failure

F-5
GENERAL INSPECTION SCHEDULE (CONT'd)

Area/Equipment Inspection	Specific Item	Types of Problems	of
Operating and structural equipment	Bermed foundation in Loading and Unloading Area, Storage Bays	Cracks, deterioration	Weekly
	Bases or foundation	Erosion; uneven settlement; cracks and spalling in concrete pads, base rings and piers; wet spots	Weekly
	Ramps	Erosion, uneven settlement, cracks and spalling in concrete	Weekly
	Containment trenches	Erosion uneven settlement, cracks and spalling in concrete, wet spots	Weekly
	Roofs	Leaks	Weekly
	Walls	Cracks	Weekly
Monitoring Equipment	Fire detection system	Power failure	Weekly
Communication Equipment	Telephones	Power failure	Weekly
	Fire alarms	Power failure	Weekly
Mobile Equipment	Brakes	Worn, pads, rotors	Per State Inspection Schedule
	Hydraulics	Leaking	Weekly
	Trainer hitches	Loose, missing safety chains	Prior to each use
	Lights-running/ Emergency	Burned out	Per State Inspection Schedule
	Horns/sirens	Inoperative	During use

F-2b(1). Container Inspection [40 CFR 264.174]

Inspections of the container storage area will be conducted weekly in accordance with Table F-2 by an employee trained in hazardous waste management procedures. (Refer to Section H of this document for details regarding personnel training.) Other information contained in Table F-2 includes a summary of the anticipated problems discovered during inspection of the containers and the frequency of inspection.

All results of the general (Section F-2a) and specific process (Section F-2b) inspections will be recorded on log sheets (Appendix F-1), that will be stored at the HWSF. Information on these log sheets includes the name of the inspector, date and time of inspection, item, problems observed, and the date and nature of repairs and remedial actions). All inspection logs will be maintained at the HWSF for a minimum of three years.

F-2b(2). Tank Inspection [40 CFR 264.194]

This section is not applicable, because this facility will not store hazardous wastes in tanks.

F-2b(3). Waste Pile Inspection [40 CFR 264.254, 270.14(b)(5) and 270.18(e)]

This section is not applicable, because this facility will not maintain any waste piles.

F-2b(4). Surface Impoundment Inspection [40 CFR 2670.14(b)(5) and 270.17(d) and 264.226(b)]

No surface impoundments will be maintained at this facility.

F-2b(5). Incinerator Inspection [40 CFR 264.347]

No incinerators will be maintained at this facility.

F-2b(6). Landfill Inspection [40 CFR 270.21(d), 264.15(a) and 264.303]

No landfills will be used at this facility.

F-2b(7). Land Treatment Inspection [40 CFR 270.20(c)(5) and 264.273(g)]

No land treatment of waste will occur at this facility.

F-2c. Remedial Action [40 CFR 264.15(c)]

If inspections reveal that non-emergency maintenance is needed, the HWSF will initiate immediately action to preclude further damage and to reduce the need for emergency repairs. If a hazard is imminent, or has already occurred, remedial action(s) will immediately be taken. Appropriate authorities will be notified according to the Contingency Plan (Section G). In the event of an emergency involving the release of hazardous substances to the environment, efforts will be directed towards containing the hazard, removing it, and subsequently decontaminating the affected area. These procedures are also outlined in Section G.

F-2d. Inspection Log [40 CFR 264.15(d) and 264.73(b)(5)]

Inspection log notebooks will be kept on-site at the HWSF for at least 3 years. Appendix F-1 indicates that the inspection log requires the date of inspection, the name of the inspector, the items inspected, a notation of the observations made, and the date and nature of any repairs or other remedial actions.

F-3. Waiver of Preparedness and Prevention Requirements [40 CFR 270.14(b)(6)]

This applicant does not request a waiver of the preparedness and prevention requirements under 40 CFR Part 264, Subpart C. Requirements of this subpart are addressed in Sections D, F, and G of this application.

F-3a. Equipment Requirements [40 CFR 264.32]

F-3a(1). Internal Communications

Immediate emergency instruction will be provided at the HWSF by voice.

F-3a(2). External Communications

Access to communications equipment is provided during normal operating hours by the base telephone system using the phone located in the HWSF 375th Civil Engineering Squadron Building. During non-operating hours, surveillance and emergency communications are provided by the Base Security Police two-way radio system.

F-3a(3). Emergency Equipment

Aqua Storage Yard HWSF has one 150 lb halon fire extinguisher. Building 540 has one BC chemical extinguisher. A BC dry chemical extinguisher will be located in the proposed HWSF adjacent to Building 540.

F-3a(4). Water for Fire Control

A fire hydrant is located 40 feet north and 50 feet west of the Aqua Storage Yard HWSF. This hydrant can deliver 1000 gpm. Another hydrant is located 400 feet northwest of Building 540 and is capable of delivering 945 gpm. Static pressure on the system is 50-55 psi. Section G contains a detailed discussion of Emergency response procedures.

F-3b. Aisle Space Requirement [40 CFR 264.35]

Storage in the Aqua Storage Yard HWSF is segregated into three storage areas or bays. Drums in each of these bays are stored in two rows stacked two high in storage racks. The aisles between these bays are 5.75 feet in width to facilitate handling and inspection. There is a 20 foot wide clear space maintained around the pad to further facilitate fire fighting or any other emergency response access.

Building 540 has an 8 foot aisle between its two storage bays which is more than adequate for both routine handling and emergency response.

The HWSF adjacent to Building 540 will store a maximum of 20 transformers and/or capacitors. These will be stored in five rows of up to four transformers per row. There will be an aisle approximately 9 feet in width which will have three rows on one side and two rows on the other. There will be a minimum of 2.5 feet between each transformer and 2.5 feet between each row. This aisle space and separation between individual transformers and rows is more than adequate for both routine handling and emergency response.

F-4. Preventive Procedures, Structures, and Equipment [40 CFR 270.14(b)(8)]

F-4a. Unloading Operations[40 CFR 270.14(b)(8)(i)]

All drums and/or containers will have secured lids and be securely palletized for all loading and unloading operations. Pallets to be used will be chemically resistant plastics pallets, approximately 4 feet by 3.25 feet. The plastic pallets will provide primary containment in the event of a spill or leaking drum since the pallets will have solid bottoms and 9 inch high rims giving each a capacity of 73 gallons.

F-4b. Runoff [40 CFR 270.14(b)(8)(ii)]

All hazardous waste/materials will be loaded and unloaded on the loading dock (building 540) or ramps adjacent to the HWSFs. In the event of a spill, the hazardous waste will be contained by a curb around the dock or ramp perimeter and they will be sloped to divert excess spilled liquids to a valved spill containment basin. A pump or absorbent material will be used to remove contaminated liquids. All contaminated spill materials will be drummed, labeled, and stored as appropriate while awaiting disposition.

All containerized wastes (except for PCB laden waste) will be stored on pallets inside the Aqua Storage Yard HWSF. Each pallet load of containers is primarily contained by the 9 inch pallet rim. Runoff from the HWSF is prevented by a 6 inch curb which encloses the perimeter of the HWSF concrete pad. Both pad and curb will be coated with a chemically impervious sealant.

Transformers/capacitors and/or containerized PCB laden wastes will be stored in Building 540 or the adjacent covered HWSF. Building 540 is a completely enclosed building with a storage bay on either side of an 8' wide aisle in the center of the building. Runoff is prevented by a 14 inch containment curb which encloses each of the storage bays.

The HWSF adjacent to Building 540 is also used for transformer or capacitor storage. It is covered 17' x 28' reinforced concrete pad. Runoff from this HWSF is prevented by a 6 inch containment curb around its perimeter.

F-4c. Water Supplies [49 CFR 270.14(b)(8)(iii)]

The water supply for the HWSF facilities is taken from the Scott AFB water distribution system. The supply source of this water is the Illinois-American Water Co. There are no direct connections to any hazardous waste storage containers or basins to eliminate to possibility of back flow.

The design of the storage facilities eliminates the likelihood of surface water or groundwater contamination.

F-4d. Equipment and Power Failure [40 CFR 270.14(b)(8)(iv)]

The Aqua Storage Yard HWSF will only store containerized waste; no automatic waste feed systems will exist. In the event of a brief power interruption at night, all storage activities will cease until power can be restored. During the day there is no effect due to power outages.

Building 540 addition will not be affected by brief power interruption during the day. In the event of brief power interruption at night, all storage activities will cease until power can be restored

F-4e. Personnel Protection Equipment [40 CFR 270.14(b)(8)(v)]

A description of available protective equipment at the HWSF is presented in Section G. The use of protective equipment is covered in the Personnel Training Program (Section H). The information in these two section indicates that any operations such as storing and consolidation of hazardous wastes will only be accomplished by personnel wearing the appropriate protective equipment. Equipment will include,

but not be limited to, protective gloves, eye and face guards, overalls and boots. Depending on the hazard associated with the particular material being handled and its volatility, self-contained breathing apparatus or masks equipped with chemical filtration cartridges will be required.

Prior to handling any hazardous wastes, the Disposal Turn-in Document (Figure C-1), HMIS data, chemical analysis, MSDS and/or other reference will be reviewed for the particular waste stream in question, to determine which safety equipment will be used.

F-5. Prevention of Reaction of Ignitable, Reactive, and Incompatible Wastes

F-5a. Precautions to Prevent Ignition or Reaction of Ignitable or Reactive Wastes [40 CFR 270.14(b)(9) and 264.17(a) and (c)]

Containers, as discussed in Section D-1, will be compatible with the contained wastes; therefore, the only source of ignition will be external to the containers.

Hazardous wastes received at the HWSF will be in non-leaking containers, safe to handle, and will comply with DOT container regulations (49 CFR Parts 173,178 and 179). This will further minimize the potential for ignition and reaction of hazardous wastes.

Wastes will be separated at the storage facility and protected from sources of ignition or reaction, such as open flames, smoking, cutting and welding, hot surfaces, frictional heat and sparks (static, electrical, or mechanical). Wastes will be classified as ignitables, reactives, corrosives, toxics, acids and bases. These determinations will be based upon HMIS information, other standard hazardous material reference data and/or lab analyses. (Refer to Section C-02 for more detail.) In order to prevent a possible source of external ignition, areas with drums containing ignitable and reactive wastes will prominently display a sign clearly marked with the legend "No Smoking". Spark-proof tools (brass hammers, wrenches, etc.) will be used on all containers storing ignitable material.

F-5b. General Precautions for Handling Ignitable or Reactive wastes and Mixing of Incompatible wastes [40 CFR 264.17(b) and (c) and 270.14(b)(9)]

To assure that an orderly procedure is used to determine the compatibility of hazardous materials/hazardous wastes to be stored in the HWSF, the Hazardous Materials Information System (HMIS) will be queried using the noun name or chemical name of the hazardous materials/hazardous waste being received, and storage will be determined by the major hazardous ingredient (by volume) of the substance. Classification of the hazardous waste will be made into one or more of the following basic storage groups: toxics, flammables and combustibles, acids, bases, oxidizers, water reactives, PCB's, and general hazardous. If a hazardous material/hazardous waste received for storage possesses two or more hazardous constituents, the DOT hierarchy set forth in Table F-3 will be used to determine where it is to be stored. An inventory list will be maintained for each storage bay within the HWSF, and upon receipt of a hazardous waste for storage, it will be screened against the inventory list of the bay in which it is to be stored to ascertain if any incompatibilities exist. A determination will be made using DPDS-M 6050.1, Ch 10, Storage Compatibility (see Appendix F-2) as the guidance document.

F-5c. Management of Ignitable or Reactive wastes in Containers [40 CFR 270.15(c) and 264.176]

Drawing 1 shows that the Aqua Storage Yard HWSF will be located approximately 1,350 feet north of the nearest property line of Scott AFB, and Building 540 is approximately 180 feet north of the nearest property line. Therefore, both HWSFs will be in compliance with the National Fire Code Standards for container storage holding ignitable or reactive wastes.

F-5d. Management of Incompatible wastes in Containers [40 CFR 270.15(d) and 264.177(a)]

A container color code system is used for the collection and segregation of wastes generated at each accumulation point to ensure compatible storage of all wastes generated. Only new or reconditioned containers issued through the Air Force Supply System will be used.

Incompatible wastes or materials will not be mixed at the HWSF. Containers will be segregated by waste type (Sections

C-2 and F-5a) and stored in container-pallets containing similar waste types. Each pallet will prevent mixing of spilled or leaked material. Containers will be stacked on specified pallet racks and will normally remain in the HWSF until removed by a contractor for disposal. Working space will be maintained to allow access for a hand truck and/or forklift in the event removal is required at any time due to corrosion or leakage.

F-5e. Management of Ignitable or Reactive Wastes in Tanks [40 CFR 270.16(b) and 264.198(a)]

This section is not applicable because The 375th Civil Engineering Squadron will not store hazardous wastes in tanks.

F-5f. Management of Incompatible Wastes in Tanks [40 CFR 264.199(b) and 270.16(f)]

This section is not applicable because The 375th Civil Engineering Squadron will not store hazardous wastes in tanks.

F-5g. Ignitable or Reactive Wastes in Waste Piles [40 CFR 264.17, 264.256 and 270.18(g)]

The 375th Civil Engineering Squadron will not have any waste piles; therefore, this section is not applicable.

F-5h. Incompatible Wastes in Waste Piles [40 CFR 264.257]

This section is not applicable because this facility will not store hazardous wastes in waste piles.

F-5i. Ignitable or Reactive Wastes in Surface Impoundments

This facility will not manage a surface impoundment for hazardous waste; therefore, this section is not applicable.

F-5j. Incompatible Wastes in Surface Impoundments

This facility will not manage a surface impoundment for hazardous waste; therefore, this section is not applicable.

F-5k. Ignitable or Reactive wastes in Landfills [40 CFR 264.312 and 270.21(f)]

This facility will not manage a landfill for hazardous waste; therefore, this section is not applicable.

F-5l. Incompatible Wastes in Landfills [40 CFT 264.313 and 270.21(g)]

This facility will not manage a landfill for hazardous waste; therefore, this section is not applicable.

F-5m. Liquid Wastes in Landfills [40 CFR 270.21(h) and 264.314(a)]

This facility will not manage a landfill for hazardous waste; therefore, this section is not applicable.

F-5n. Special Requirements for Containers Disposed in Landfills [40 CFR 264.314, 264.315, 264.316 and 270.21(i)]

This facility will not manage a landfill for hazardous waste; therefore, this section is not applicable.

F-5o. Ignitable or Reactive Wastes in Land Treatment [40 CFR 270.20(g), 264.281 and 264.17(b)]

This facility will not conduct any land treatment activities; therefore, 40 CFR 270.20(g) and (h) are not applicable.

SECTION G

CONTINGENCY PLAN

The information provided in this section is in response to the requirements for a Contingency Plan, as detailed in 40 CFR 270.14(b)(7), 264, Subpart D and 264.50 through 264.56. Appendix G-2 is the Scott Air Force Base Oil and Hazardous Substance Spill Prevention and Response Plan. This Plan describes the action facility personnel will take in response to fires, explosions, or any unplanned sudden or nonsudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.

G-1. General Information [40 CFR 264.52]

This Contingency Plan is for two proposed HWSF's. Both are operated by the 375th Civil Engineering Squadron at Scott Air Force Base. Copies of the approved plan will be provided to all agencies involved in support. The plan will be reviewed routinely on an annual basis and amended if defects are detected in the plan, or if it fails during an emergency situation.

The Aqua Storage Yard Facility is located between Hanger Road and "Q" Street (See Figure G-1, Site Plan, Aqua Storage Yard). The facility consists of an 8 feet by 32 feet curbed concrete slab covered by a 10 feet by 40 feet roof. This facility is used to store up to 3630 gallons of hazardous waste contained in 55 gallon drums. The hazardous wastes consist of Group I Wastes (expires shelf life materials) and Group II Wastes (used materials and by-products). Appendix G-3 lists the wastes that may be stored as Group I items, but will normally be components of a Group II waste stream, and also additional wastes that may be stored as Group II items or Group II waste streams.

The Building 540 Facility is located in the Civil Engineering Compound (See Figure G-2, Site Plan, Building 540 and Proposed Addition). The facility consists of an existing 20 feet by 35 feet concrete building with curbed storage areas and a proposed adjacent 17 feet by 29 feet curbed concrete slab covered by a 20 feet by 35 feet rod. This facility will be used to store up to 40 PCB containing transformers. Each transformer contains from 20 to 100 gallons of PCB contaminated oil.

G-2. Emergency Coordinators

For spills at the HWSFs, the primary Emergency Coordinator is the Environmental Coordinator (See Table G-1). If the Environmental Coordinator is not available, the secondary

Emergency Coordinator will take charge.

The Hazardous Waste Property Disposal Specialist is the secondary Emergency Coordinator. If containment and cleanup of the spill are beyond the capability of on-duty HWSF personnel, then the Civil Engineering Squadron personnel will contact the Fire Chief who will provide initial response outside the HWSF. The Fire Chief will evaluate the situation and protect against any fire hazard. He will call the Base Civil Engineer (BCE) if the incident is beyond the capabilities of the responsible agency. The BCE will act as the On-Scene Coordinator (OSC). If the incident requires notification of state or Federal officials, the Combat Support Group Commander (CSGC) will assure command from the BCE as the OSC. Table G-1 is a list of Emergency Coordinators and OSC's who are available 24 hours a day for emergency response at Scott AFB.

G-3. Implementation of the Contingency Plan [40 CFR 264.52(a) and 264.56(d)]

The decision to implement the Contingency Plan depends upon whether or not an imminent or actual incident could threaten human health or the environment.

The Contingency Plan will be implemented in the following situations:

1. Fire and/or Explosion

   a. A fire causes the release of toxic vapors.

   b. The fire spreads and could possible ignite materials at other locations onsite or could cause heat-induced explosions.

   c. The fire could possible spread to offsite areas.

   d. Use of water and/or chemical fire suppressant could result in contaminated runoff.

   e. An imminent danger exists that an explosion could occur, causing a safety hazard because of flying fragments or shock waves.

   f. An imminent danger exists that an explosion could ignite other hazardous waste at the facility.

   g. An imminent danger exists that an explosion could result in the release of toxic material.

h. An explosion has occurred.

2. Spills or Material Release

a. The spill could result in the release of flammable liquids or vapors, thus causing a fire or gas explosion hazard.

b. The spill could cause the release of toxic liquid or vapors.

c. The spill can be contained onsite, but the potential exists for groundwater contamination.

Table G-1. Emergency Coordinator for HWSFs - Scott AFB and On-Scene Coordinators for Scott Air Force Base

	DUTY PHONE
375th Air Base Group, Commander	256-3283
375th Civil Engineering Squadron, Commander	256-2701
375th Transportation Squadron, Commander	256-2004
375th Aeromedical Airlift Wing, Public Affairs	256-7301
USAF Medical Center Scott, Bio-environmental Engineer	256-7307
375th Security Police Squadron	256-4883
375th Air Base Group, Disaster Preparedness	256-4831
375th Air Base Group, Staff Judge Advocate	256-3542
375th Civil Engineering Squadron, Fire Chief	256-5130
375th Civil Engineering Squadron, Service Call Desk	256-1856
375th Civil Engineering Squadron, Environmental Coordinator (Primary Emergency Coordinator)	256-2092
375th Civil Engineering Squadron, Hazardous Waste Property Disposal Specialist (Secondary Emergency Coordinator)	256-2092
375th Civil Engineering Squadron, Hazardous Materials Team Leader	256-4226

Notes:

1. For 24 hour notification contact the CE Service Call Desk at 256-1856

2. At the direction of the 375th Aeromedical Airlift Commander, available resources will be committed as necessary to carry out the requirements of this plan

d. The spill cannot be contained onsite, resulting in offsite soil contamination and/or ground or surface water pollution.

Due to the diversity of materials stored on base and the variable severity of the hazards presented in the event of a spill, the response actions will vary. Phase I - Spill Discovery and Initial Notification of the Spill Prevention and Response Plan designates the initial response to spills or potential spills of oil or hazardous substances (See Appendix G-2, Oil and Hazardous Substance Spill Prevention and Response Plan). Phase I also designates the procedures to be followed by the Fire Department, Base Environmental Coordinator, Base Civil Engineer, and CE Service Call Desk in providing rapid notification of the spill to

the proper personnel and organizations. Phase II - Response Actions, then designates the general response actions to be taken by the On-Scene Coordinator in containing, clean up and restoring the spill site.

G-4. Emergency Response Procedures

G-4a. Notification [40 CFR 264.56(a)]

Upon discovery of a spill, initial defense actions will be started immediately by the person discovering the spill.

The person discovering the spill will notify the Base Fire Department and provide the following information:

1. Name of individual reporting spill.
2. Location of spill.
3. Number of injured personnel and nature of injuries.
4. Substance spilled.
5. Amount spilled (estimated).
6. Rate material currently spilling (estimated).
7. Time spill has traveled.
8. Extent spill has traveled.
9. Any additional pertinent information (i.e. other potential hazards).

Upon arrival, the Fire Chief or his designated representative will act as On-Scene Coordinator and direct any response actions.

In the event that the Fire Chief or his designated representative determines that a spill incident is beyond the containment and countermeasure ability of the responsible agency, he will notify the Base Civil Engineer (BCE), who will assume responsibilities as the On-Scene Coordinator.

The BCE will notify the Environmental Coordinator who will evaluate the severity of the spill and determine the response required (including activation of the Spill Response Team and notification of State, Federal, or local authorities) by the BCE. The BCE will notify the Combat Support Group Commander if any spill requires notification of State, Federal, or local authorities and/or if he determines the CSG commander will need to be delegated authority as OSC. All agencies that are requested to respond will be supplied with the following information:

a. Location of spill or discharge

b. Material spilled, if known

c. Estimated quantity spilled

The OSC will activate the Spill Response Team if necessary. This team is available for handling all hazardous material/hazardous waste spills at Scott AFB. They are a part of the Public Works Department and other Agencies and are available to the HWSFs through an Inner Service Support Agreement (ISSA).

G-4b. Identification of Hazardous Materials [40 CFR 264.56(b)]

HWSF personnel discovering a spill or leak will immediately identify the character, exact source, amount and area/extent of release. This will be accomplished by visual observation and/or review of records or manifests, and if necessary, by chemical analysis.

G-4c. Hazard Assessment [40 CFR 264.56(c) and (d)]

The Fire Chief, consulting with the BCE, and the Environmental Coordinator will assess the possible direct and indirect hazards to human health and/or the environment that may result from a chemical release, fire, or explosion.

The OSC will obtain the following information in order to assess the magnitude and potential seriousness of the spill or release:

1. Time and type of incident.

2. Name and quantity of material involved, to the extent known and the rate of release.

3. Direction of the spill, vapor, or smoke release.

4. Fire and/or explosion possibility.

5. Area and other materials involved and the intensity of the fire or explosion.

6. Toxicological hazards.

7. The extent of injuries, if any.

G-4d. Control Procedures [40 CFR 264.52(a)]

The initial response to any emergency will be to protect human health and safety and then the environment. Identification,

containment, treatment, and disposal assessment will be the secondary response.

The individual initially discovering any spill will immediately initiate the following spill response actions:

1. Alert facility personnel

2. Notify the facility manager

The facility manager or the individual discovering the spill will:

1. Evacuate the area if appropriate

2. Secure the spill site to prevent unauthorized entry

3. Respond, within their capability, with sufficient personnel and equipment to effect containment, cleanup and restoration of the landscape due to spills of hazardous substances.

4. Notify the Fire Department of assistance required if spill exceeds their personnel and/or equipment capability.

5. Support cleanup efforts as directed by the OSC.

(i) Fire and/or Explosion

The proposed HWSF can easily be accessed by fire fighting and other emergency vehicles and equipment. All Emergency Coordinators listed in Table G-1 are available 24 hours a day to respond to any emergency.

Whenever there is a fire or explosion, the emergency coordinator must:

1. Telephone the Fire Department at 256-5130.

2. Spread the alarm, pass the word and ensure all personnel, except fire parties, clear the area.

3. If time permits, close doors and windows to confine the fire an prevent drafts. He shall not endanger himself or others in this effort.

4. Upon notification of fire or release of hazardous waste, immediately evacuate an area 1,000 feet wide and 2,000 feet long in the direction of plume. This will ensure that personnel are protected from flying debris that may result from release of an explosion.

Until the Fire Department personnel arrive, the fire containment effort will be carried out by HWSF personnel. The fire chief will determine when the fire has been controlled and consult with the OSC to determine when activities in the area can resume.

(ii) Release of Hazardous Waste to Air, Land, or Water

In the even of a major emergency involving a chemical spill, the discoverer will immediately notify the Fire Department. The person reporting the spill should identify the location, material spilled, and amount. The notifier should then return to the scene and within their capability:

1. Halt the discharge of the spilled substance.

2. Contain the spilled substance by placing dikes or temporary barriers around the spill.

The OSC will:

1. Assume responsibility.

2. Respond to the spill and determine what personnel and equipment is required to contain and clean up the spill.

3. Assign the necessary base personnel and equipment to contain and clean up the spill.

4. If the spill is likely to reach navigable water, then obtain and contract assistance, and coordinate with other government agencies for assistance as required.

5. After the spill has been contained and cleaned up, indicate required actions to restore the affected area.

If the chemical spill is not contained within a bermed storage area, then an area of isolation will be established around the spill. The size of this area will generally depend upon the size of the spill and the chemicals involved. If the spill results in the formation of a toxic vapor cloud (by reaction with surrounding materials or by outbreak of fire) and its release (due to high vapor pressures under ambient conditions), then further evacuation efforts will be enforced. An area at least 500 feet wide and 1,000 feet long will be evacuated downwind if volatile materials are spilled.

When any spill occurs, only those persons involved in overseeing or performing emergency operations will be allowed within the designated hazard area. If possible, the area will be roped or

otherwise blocked off.

The Illinois Environmental Protection Agency and the National Response Center (1-800-424-8802) will be notified when:

1. The quantity of hazardous materials spilled is equal to or greater than the reportable quantity specified in 40 CFR Part 302.

2. One thousand gallons or more of oil is spilled in a single event. If a lesser quantity is spill but enters a storm sewer leading to a waterway, then it is advisable to contact local and site authorities for assistance if it is not possible to intercept the spill at the outfall or to prevent the oil slick from moving downstream.

3. The spill involves other hazardous materials not listed in this permit but which pose an actual or potential hazard to life or property.

Waste spills and leaks will be contained by depressed floor areas at the proposed facility. These wastes will be collected by absorbent materials or pumped into containers. The contaminated area will then be slushed with water, or some other appropriate solvent. The reinstate and any contaminated absorbents will also be containerized for disposal.

G-4e. Prevention of Recurrence or Spread of Fires, Explosions, or Releases [40 CFR 264.56(e)]

Procedures to be followed to prevent the spread of fires, explosions, or releases were discussed in Section G-4d.

Within 30 days after the conclusion of a spill removal action, the HWSF Chief will prepare a written completion report, which will asses the cause of the fire, explosion, or spill. This report will also indicate remedial actions that will be taken to prevent any recurrence of the hazardous situation.

G-4f. Storage and Treatment of Released Material [40 CFR 264.56(f) and (g)]

375th Civil Engineering Squadron will store all hazardous waste resulting from a spill, fire, or explosion in accordance with its characteristics, using procedures that are used for any waste received. Storage will be maintained at the HWSF.

G-4g. Incompatible Waste [40 CFR 264.56(h)(1)]

The OSC as appropriate will ensure that no wastes that may be incompatible with the released material are stored in the area of release, or disposed of until cleanup procedures are completed.

G-4h. Post-Emergency Equipment Maintenance [40 CFR 264.56(h)(2) and (i)]

After an emergency event, all emergency equipment listed in Section G-5 will be cleaned or replaced so that it will be fit for its intended use. An inspection of all safety equipment will be conducted as discussed in Section F-2 before operations are resumed. The Illinois Environmental Protection Agency, the U.S. Regional EPA Administrator, and local authorities will be notified that post-emergency equipment maintenance has been performed and operations will resume.

G-4i. Container Spills and Leakage [40 CFR 264.56(g) and 264.171]

Refer to Section G-4d for a discussion of emergency response procedures for container spills and leaks.

G-5. Emergency Equipment [40 CFR Section 264.52(e)]

Emergency equipment will be maintained in the HWSF and other surrounding areas. There will be several portable fire extinguishers within the facility.

Fire hydrants are located as listed in Section B-2a(1) HWSF. Portable fire extinguishers will be placed in strategic locations inside the facility. One emergency eyewash/shower units will be located in the HWSF.

Equipment for containing and cleaning up spilled hazardous waste will be maintained at the HWSF at all times. A list of fire and emergency response equipment and materials available at various locations and are shown in Table G-2, and in Table G-3 for Scott AFB. The equipment listed in Table G-3 is also available for response to emergencies at Scott AFB.

Protective clothing and equipment are provided to protect employees during normal and emergency operations. HWSF personnel are required to wear protective clothing when receiving, moving, or shipping hazardous waste items.

Fire aid supplies are available in the 375th Civil Engineering Squadron administrative office.

G-6. Support Agreements [40 CFR 264.52(c), 264.53(b), and 264.37(b)]

An Inner Service Support Agreement (ISSA) exists between the several local communities and Scott AFB. The agreement includes the lease on their existing facility, Fire Department Services, Hospital Services, and other activities. The Agreement describes each other's service and other related matters are shown in Appendix G-1.

G-7. Evacuation Plan

If an evacuation from the HWSF is necessary, the following actions will be taken:

1. Verbal signals will be given for evacuation if necessary. (See Figure G-3 & G-4 for evacuation routes.) Evacuation signals will be transmitted by base security police.

2. No further entry of visitors, contractors, or trucks will be permitted. All vehicle traffic within the HWSF property will cease, to allow the safe exit of personnel and the movement of emergency equipment.

3. ALL personnel, visitors, and contractors will immediately leave through the exit gate.

4. Security Police will be contacted.

5. No persons shall remain or re-enter the area unless specifically authorized by the OSC. In allowing this, the person in charge assumes responsibility for those persons within the perimeter. Those within the fenced area will normally only include spill response team members and fire department personnel.

6. ALL persons will be accounted for by their immediate supervisors, and will leave the HWSF complex through the nearest gate.

7. Re-entry into the facility will be made only after clearance is given by the OSC.

The OSC will determine the need for evacuation of additional personnel in the vicinity of the HWSF complex.

All personnel are trained in evacuation procedures and means of exit from their respective work areas. Drills are held regularly to practice these procedures.

G-8. Required Reports [40 CFR 264.56(j)]

375th Civil Engineering Squadron on Scott AFB has internal reporting requirements. Any emergency event (e.g., fire, explosion) that requires implementation of the Contingency Plan will be reported in writing within 15 days to Base Civil Engineer. The following incidents require that a completion report be filed:

Table G-2. Scott AFB Emergency Equipment List
Equipment at 130th HWSF Locations

Item	Quantity	Location
1. Fire Hydrants	1	See B-2a(11)
2. Portable Fire Extinguisher both	6	Distributed at HWSFs
3. Hard hats with face shields	4	Storage Locker
4. Chemical protective gloves	4 pr.	Storage Locker
5. Plastic aprons	4	Storage Locker
6. Safety eyeglasses	4 pr.	Storage Locker
7. First-Aid Supplies	Kit	One each HWSF
Bandage materials Band aids Gauze pads and rolls Adhesive tape Antibacterial ointments Eyewash bottle and solution		
8. Spill containment and clean-up industrial absorbents ,	1 drum ea. HWSF	HWSF
9. Hand-held pump	1 ea. HWSF	HWSF
10. Extra storage drums	2 ea. HWSF	HWSF

* All fires

* Chemical spills of more than five gallons (or smaller volumes if highly toxic materials are involved).

* All injuries except minor cuts and bruises.

* All burns and chemical irritations.

* All equipment damage due to malfunction or operating error.

* All "near misses" or the above that could have had serious consequences.

The requirements for the completion of this report (Form 1602, see Exhibit G-1) are located in PD Form 1602, Item 4 (see DPDS-M 6050.1, Section V, Chapter 4).

The On-Scene Coordinator is responsible for filing all reports concerning hazardous waste incidents at Scott AFB. The report format for notification of hazardous substance incidents is shown below:

1. Name of installation.

2. Date/time of incident.

3. Severity of incident. Specify degree (serious or minor) of potential or actual threat to human health and the environment.

4. Location of incident and the nature of the terrain at the location to include surface and subsurface drainage characteristics and relationships to water bodies (estimate extent of area affected, such as miles of stream or acre of lake).

5. Cause of incident.

6. Type and estimated amount (barrels/gallons/lbs) of pollutant.

7. Damage impact on the surroundings, including fish and wildlife. Include type of fish or wildlife affected and an estimate of number killed,

8. Corrective action taken to eliminate pollution source.

9. Corrective action to remove pollutant.

10. Assistance required.

11. Estimated completion date of remedial actions.

12. Anticipated or actual reaction by the news media and public to the incident. Specify potential for liability.

13. Notify MDEP, Regional EPA Administrator, or U.S. Coast Guard Office if required.

The information supplied in the hazardous substance release report will be forwarded to the following agencies if applicable:

ILLINOIS DEPARTMENT OF ENVIRONMENTAL PROTECTION, SPRINGFIELD, IL

U.S. COAST GUARD OFFICE

EPA REGION -, V

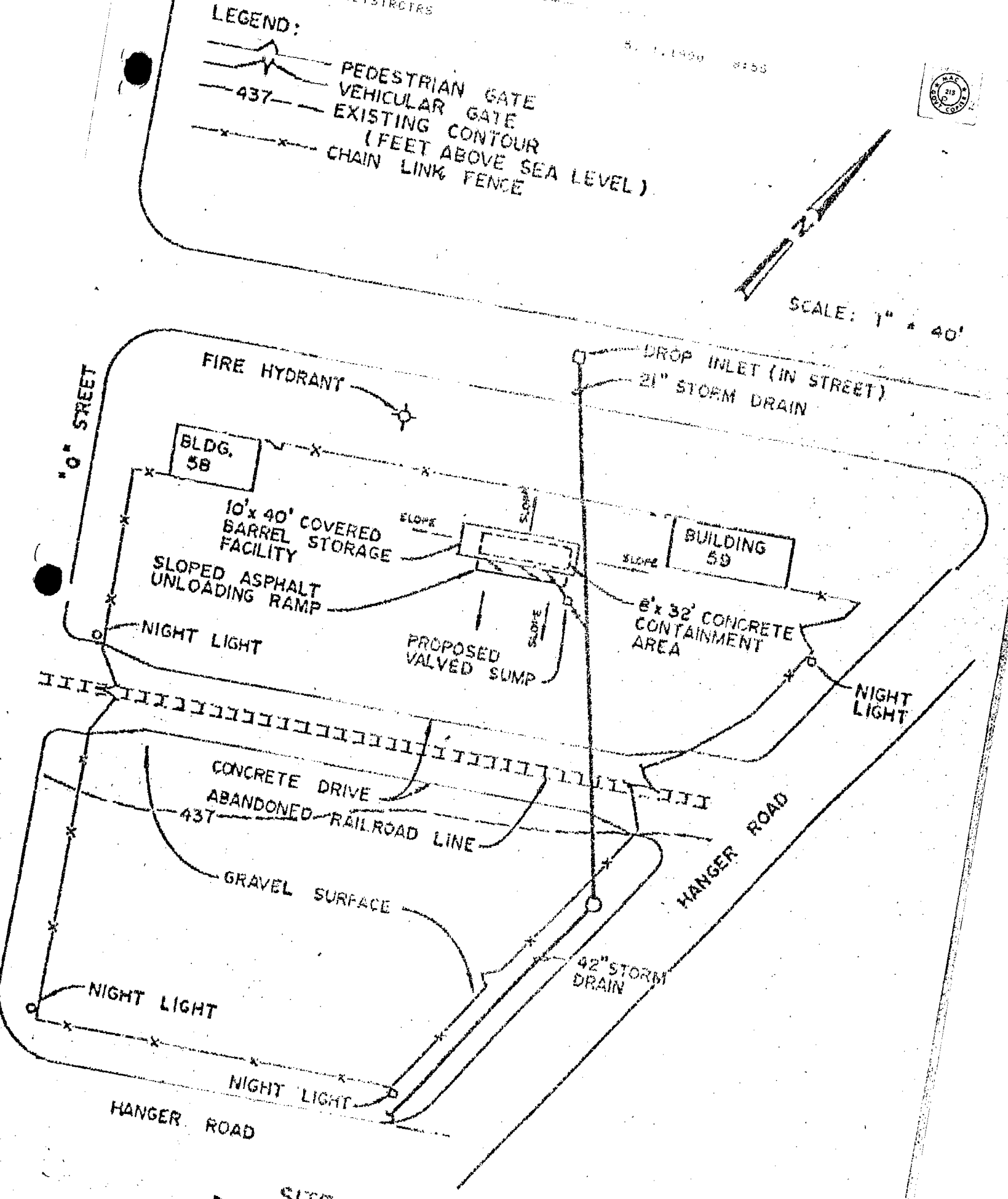
NATIONAL RESPONSE CENTER

HQ SV/DEV

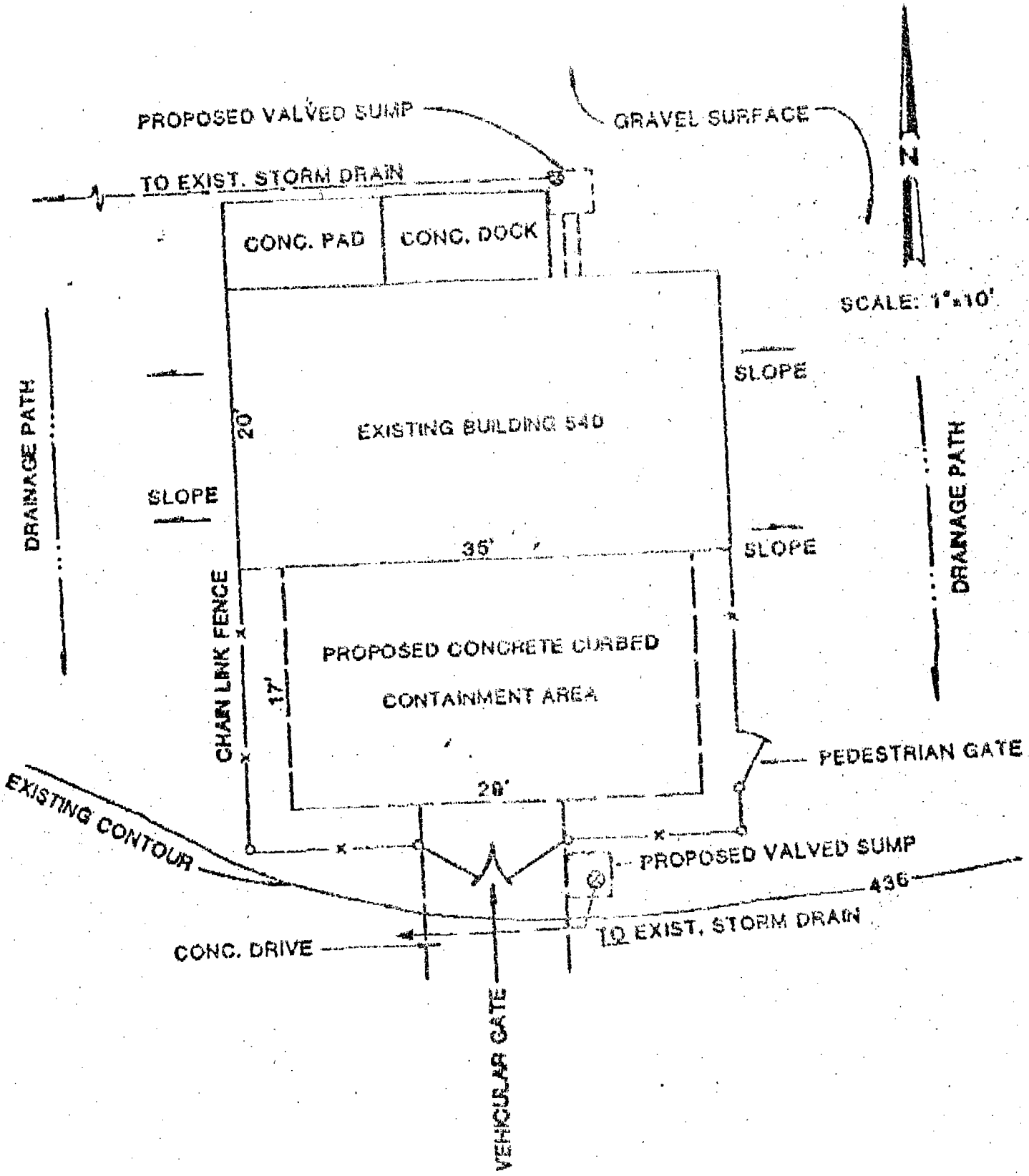
HQ MAC/LGSF/DEPV

DRMR-COLUMBUS

DRMS-HT

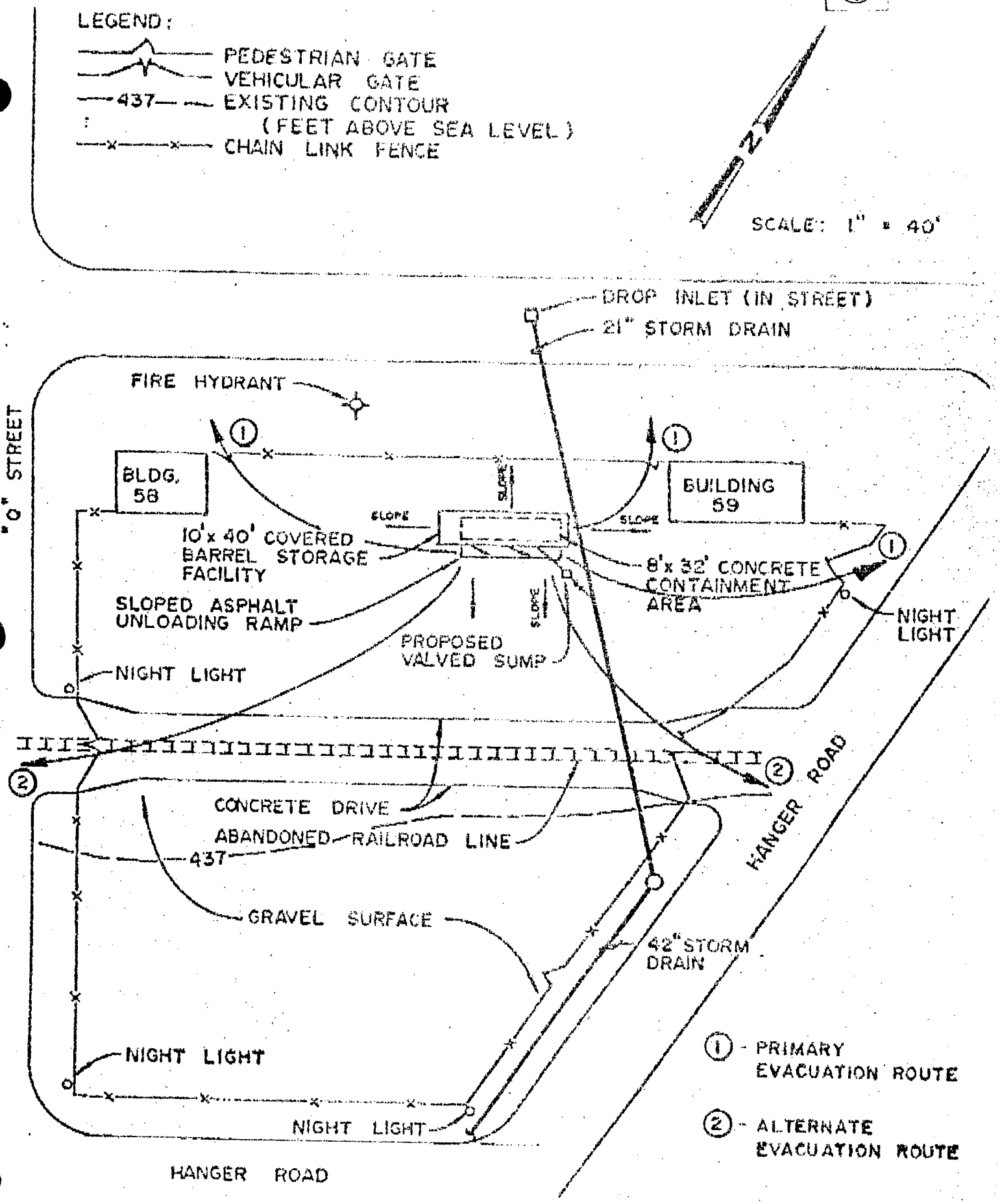


SITE PLAN
AQUA STORAGE YARD



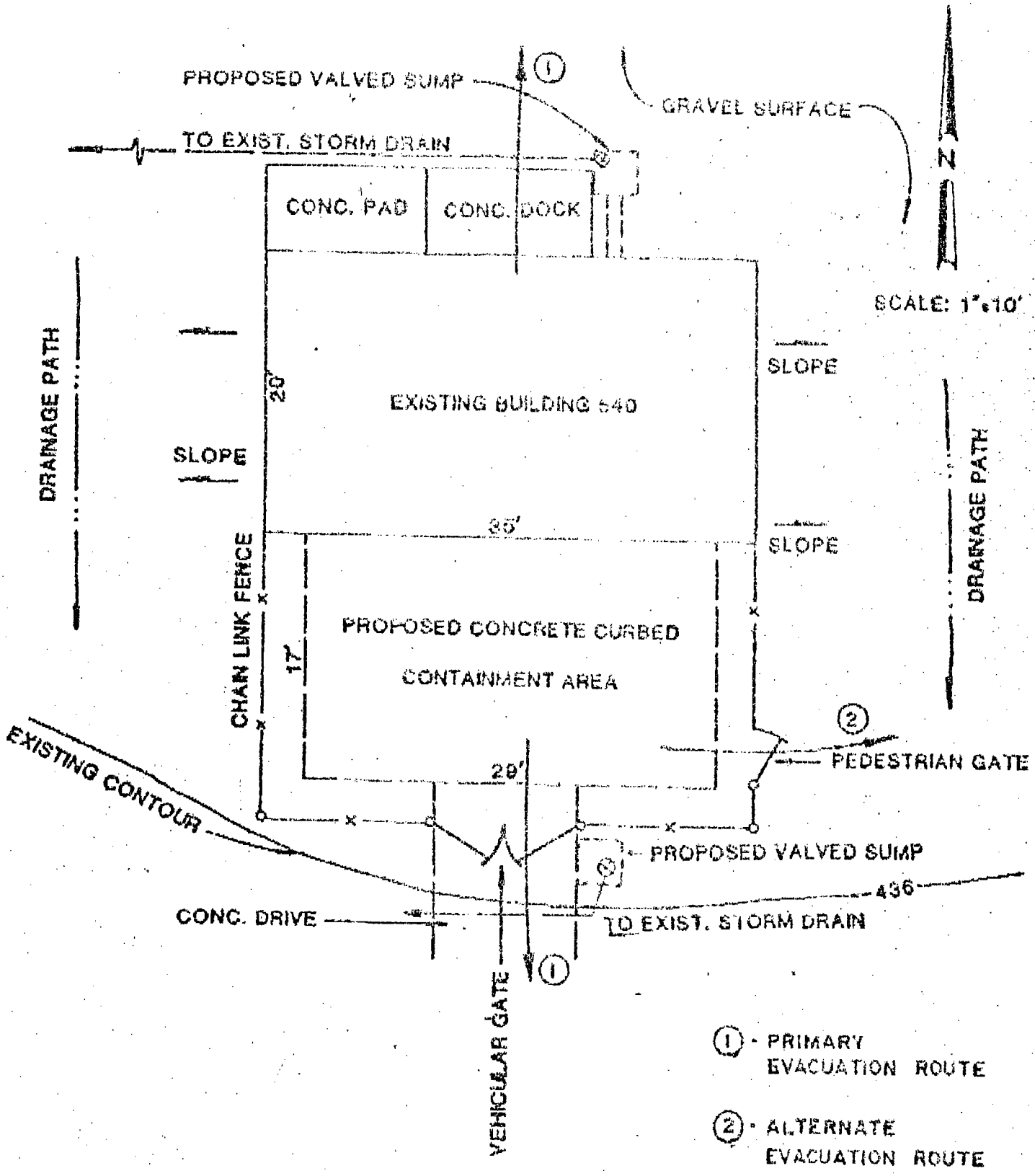
SITE PLAN
BUILDING 540 & PROPOSED ADDITION

FIGURE G - 2



EVACUATION ROUTES
AQUA STORAGE YARD

FIGURE G-3



EVACUATION ROUTES
BUILDING 540 & PROPOSED ADDITION

FIGURE G-4

SECTION H

PERSONNEL TRAINING

The information in this section outlines training programs for personnel at the Scott AFB who handle hazardous wastes in accordance with 40 CFR Sections 264.16 and 270.14(b)(12).. HWSF personnel must successfully complete a program of classroom instruction and/or on the job training.

H-1. Outline of the Training Program [40 CFR 270.14(b)(12)]

Facility personnel who handle hazardous wastes must successfully complete a program of classroom instruction and/or on-the-job training in order to prepare them to operate and maintain the facility. (See Appendix H-1, Outline of Training Program).

Relevant course selections for DRMO personnel are determined by DRMS Headquarters in Battle Creek, Michigan. Headquarters personnel review the content of available military, government, and professional hazardous waste management training courses in an effort to select the most appropriate training courses for each specific job task.

The training course for Temporary Hazardous Waste Storage Yard personnel will be prepared by the Environmental Coordinator (375 Civil Engineering Squadron).

H-1a. Personnel Description [40 CFR 264.16(d)(1) and (2)]

The duties and responsibilities of the positions directly responsible for handling hazardous wastes at the HWSF are as follows:

Position Title: Environmental Coordinator (375 Civil Engineering Squadron)

Responsibilities: provides assistance and guidance to commands served and is the technical authority on all hazardous waste storage matters. Ensures that personnel receive adequate training.

Major Duties: Interprets regulations and develops necessary operating procedures as required. Processes hazardous materials/wastes. Determines requirements for manpower, space, and equipment, and initiates required actions. Determines need for modifications to existing facilities and initiates action to improve economy, efficiency, safety, and physical security of

operations. Develops appropriate requirements and initiates requests for work.

Maintains personal contacts with local and State government agencies, military commands, and General Services Administration.

The duties and responsibilities of the positions directly responsible for handling hazardous wastes at the Hazardous Waste Storage Facilities are as follows:

Position Title: Hazardous Waste Storage Facility Manager (HWSFM)

Responsibilities: Provides primary management of the HWSFs.

Major Duties: Maintains all records of waste classification and generation, personnel training, and work orders. Initiates work order for environmental coordinator maintenance and serves as point of contact with the Environmental Coordinator. Reviews operation to see what alternatives are available to minimize the generation of hazardous waste, to maintain safety, and to ensure compliance with applicable regulations. Ensures all wastes are stored in proper containers, marked properly, and segregated as necessary. Supervises the Hazardous Waste Materials Sorter and Classifier personal.

Position Title: Hazardous Waste Materials Sorter and Classifier

Responsibilities: Responsible for proper receipt and storage of property. Verifies nomenclature, description quantities, and condition against those listed on documentation, classify items based on inspection of condition. Operates forklift, hand truck, motor vehicles, and overhead crane as required, to handle hazardous property.

Major Duties: Receives and unloads all incoming waste materials authorized for turn-in to the HWSFs. Insures that a properly prepared turn-in document accompanies each material turn-in. Routes materials in a manner which will permit required processing with a minimum of handling and transportation.

Stores all hazardous wastes physically received in the HWSFs from time of receipt at the receiving or inspection area until final disposition by the DRMO. Considers type of material handling equipment needed, fire and safety hazards involved, protection from damage,deterioration and pilferage, and ease of movement.

Arranges storage facilities for hazardous wastes to insure segregation of incompatible types.

Assists DRMO personnel in conducting sales or removal operations of hazardous wastes.

H-1b. Training Content, Frequency, and Techniques [40 CFR 264.16(c) and 264.16(d)(3)]

The training program to be used by HWSF for employees handling hazardous wastes combines supervised on-the-job instruction and formal classroom training. Each employee learns about the particular dangers associated with hazardous wastes typically stored at the DRMO and their storage requirements. On-the-job training provides DRMO employees with the following:

a. Physical layout of the DRMO facilities including location and use of emergency equipment.

b. Basic hazardous material/waste disposal policies of the DRMO (turn-in requirements, analysis, packaging, and recordkeeping).

c. Basic procedures in handling, storing, and manifesting of hazardous waste.

d. Inspection and procedures for correcting inadequacies found.

e. Emergency procedures, such as spill response, fires, or explosions.

f. Opportunity to read and understand Environmental Considerations in the DRMS Disposal Process, Publication DRMS-S 6050.1, Section V. which outlines procedures to ensure the safe management of hazardous waste storage facility and handling of hazardous wastes. See Exhibit H for outline of publication.

Training should also be provided by environmental specialists from DRMS-HT and DRMR-Columbus, who make periodic quality assurance visits throughout the year. These individuals provide guidance to personnel for the proper identification, handling, and storage of hazardous wastes.

After receiving sufficient on-the-job training, an employee should take the following formal courses:

1. Property Disposal Hazardous Materials Course, prepared by the Army Logistics Management Command (ALMC) consists of 40 hours of lecture and practical exercises. See Exhibit H-2 for course outline.

2. Contracting Officers Representative's Training, prepared by DRMS. (Exhibit H-3)

3. Defense Hazardous Materials Handling Correspondence Course, prepared by ALMC.

The topics covered in these courses provide the employee with an understanding of potential hazards inherent in the job, as with the precautions necessary to minimize these hazards. In addition, one of the following courses would be recommended for advanced hazardous waste management training for HWSF personnel

1. Hazardous Materials, Chemicals, and Waste Training and Compliance Course, Hazardous Materials & Waste Management Assoc.,Inc., Transportation Skills Program, Inc. (8 hrs)-(Exhibit H-4)

2. Hazardous Materials Incident Response Operations Course, Office of Emergency and Remedial Response, U.S. Environmental Protection Agency (Exhibit H-5)

3. Hazardous Materials Compliance and Enforcement Course, U.S. Department of Transportation (1 week)-(Exhibit H-6)

The Aqua Yard Hazardous Waste Storage Facility and the Building 540 facility is managed the Hazardous Waste Storage Facility Manager (HWSFM) and administered by the Environmental Coordinator (EC). The HWSFM and EC must successfully complete a 12-hour training course within six (6) months of being designated as a HWSFM or EC. They will attend a 4-hour refresher course each year. The course covers the following areas:

	Session Title	Instructor
1.	Federal Criteria for Hazardous Waste	375 ABG/JA (Judge Advocate)
2.	Identification of Typical MAC RCRA Regulated Compounds	USAF MED CENTER/SGPB (Bioenvironmental Eng.)
3.	Internal Surveys	USAF MED CENTER/SGPB
4.	Hazardous Substance Characterization and Compatibility	USAF MED CENTER/SGPB
5.	Accumulation Point Management	375 ABG/DEEV (Environmental Coord.)
6.	Transportation of Hazardous Waste	375 ABG/DEEV
7.	Containers and Container Management	375 ABG/DEEV
8.	Recordkeeping	375 ABG/DEEV
9.	Accumulation Point Operating Instructions	375 ABG/DEEV
10.	Conducting Shop Training	375 ABG/DEEV
11.	Treatment Storage and Disposal Facility	DRMO
12.	Turn-in Procedures	DRMO
13.	Organization/Activity Responsibility	375 ABG/DEEV
14.	Closure of Accumulation Points, Treatment, Storage, and Disposal Facilities	375 ABG/DEEV

15. Contingency Plans/Emergency Response	375 ABG/DEF (Base Fire Chief)
16. Fire Considerations	375 ABG/DEF
17. Safety Considerations	375 AAW/SEG (Chief of Ground Safety)
18. Contingency Exercise	375 ABG/DEF

Personnel who handle hazardous waste on the base must be trained in the following areas:

1. Federal Criteria for Hazardous Waste
2. Identification of Typical MAC RCS Regulated Compounds
3. Hazardous Substance Characteristics and Compatibility
4. Containers and Container Management
5. Turn-in Procedures
6. Contingency Plans/Emergency Response
7. Transportation of Hazardous Waste
8. Fire Considerations
9. Safety Considerations

These courses will be repeated annually with the exception of turn-in procedures. Turn-in procedures will be semi-annual. The HWSFM will conduct the training sessions for personnel.

In addition, HWSF personnel who handle hazardous wastes will meet annually to discuss the effectiveness of their training programs and recommended program needs. The Spill Response Plan for HWSF-Scott AFB will be executed at least once annually for training purposes.

After receiving sufficient on-the-job training, an employee would be recommended to participate in the following courses dealing with hazardous waste management:

1. Property Disposal Hazardous Materials Course, prepared by the Army Logistics Management Command (ALMC) consists of 40 hours of lecture and practical exercise. Exhibit H-2 outlines this course.

2. Contracting Officer's Representative's Training, prepared by DRMS. Exhibit H-3 is an outline of this course.

The topics covered in these courses provide the employee with an understanding of potential hazards inherent in the job, as well as with the precautions necessary to minimize these hazards.

H-1c. Training Director [40 CFR Section 264.16(a)(2)]

A DRMR-Columbus environmental specialist is responsible for ensuring that HWSF personnel at Scott AFB receive adequate training in handling hazardous wastes.

The DRMR environmental specialist responsible for training of personnel must take the following courses:

1. Defense Property Disposal Operations.
2. Contracting Officer's Representative Training (Exhibit H-3).
3. A course in spill control and response, e.g., Hazardous Material Incident Response Operations Course. (Exhibit H-5).
4. Property Disposal Hazardous Material Course (Exhibit H-2).
5. A course in DOT regulations, e.g., Hazardous Materials Compliance and Enforcement Course (Exhibit H-6).
6. A course in basic environmental concepts
7. Defense Hazardous Material Handling Correspondence course.

The training of personnel who work at the Aqua Storage Yard Hazardous Waste Storage Facility and the Building 540 PCB Storage Facility is the responsibility of the HWSFM. The training of the HWSFM is the responsibility of the Environmental Coordinator. The instructors for each area an HWSFM receives training in is listed in the previous section. Appendix H-2 is a certificate to document hazardous waste management training for the training director.

H-1d. Relevance of Training to Job Position [40 CFR 264.16(a)(2)]

Training is provided to all personnel who handle hazardous wastes/materials on Scott AFB. The courses discussed in the previous sections provide instruction in the safe storage, treatment, and handling of hazardous wastes. Training programs are designed to fully prepare personnel to safely handle the hazardous wastes that they will come in contact with during their jobs.

Course that offer more in-depth instruction on labeling and storage requirements include:

1. Hazardous Materials, Chemicals and Waste Training and compliance Course, Hazardous Materials & Waste Management Assoc., Inc., Transportation Skills Program, Inc. (8 hrs) - (Exhibit H-4).

2. Hazardous Materials Incident Response Operations Course, Office of Emergency and Remedial Response, U.S. Environmental Protection Agency, Edition, N.J. (5 days) - (Exhibit H-5).

3. Hazardous Materials Compliance and Enforcement Curse, U.S. Department of Transportation (1 week) - (Exhibit H-6).

Exhibit H-1. Environmental Considerations in the DPDS Disposal Process, DPDS-M #6050.1, Section V

Chapters

1. Asbestos Disposal Procedures

2. Containers

3. PCB Disposal Procedures

4. Oil and Hazardous Materials/Hazardous Waste (HM/HW) Spill Prevention and Response.

5. Transportation of Hazardous Material/Hazardous Waste

6. Batteries

7. Retrogrades

8. Chemical Handling Procedures

9. Packaging of Hazardous Materials/Hazardous Wastes

10. Pesticide Disposal PRocedures

11. Storage Compatibility

12. Spill Residue Disposal Procedures

13. Recordkeeping

Exhibit H-2 Property Disposal Hazardous Materials Course Army Logistics Management Command Ft. Lee, Virginia

Topics addressed are:

1. Identification, categorization, and recognition of hazardous waste that are the responsibility of Defense Reutilization and Marketing Service for disposal.

2. Safety and health hazards, both acute and chronic.

3. Personal protective equipment requirements and proper use.

4. Segregation and storage procedures for hazardous property.

5. Packing, marking, labeling, placarding, and transportation requirements.

6. Spill containment and control.

7. DRMS responsibilities with regard to current legislation in the environment arena, with particular emphasis on the ramifications of the Resource Conservation and Recovery Act of 1976.

8. Requirements of final disposal of wastes (includes, but is not limited to, recognition, manifesting, reporting, and recordkeeping.

Exhibit H-3. Contracting Officer's Representative's Training Course.

Topics covered are:

1. COR Letter

2. COR Handbook

3. COR Relationship with Contracting Office (CO)

4. Contract Interpretation

5. Delivery Order Requests and Their Preparation

6. Contractor Arrival

7. Manifesting

8. Packaging

9. Labeling

10. Placarding

11. Transportation

12. Recordkeeping and Reporting

13. Operations Plan

14. Surveillance

15. Checklist

16. Tour

17. Exercises

18. Discussion of Lessons Learned

Exhibit H-4. Hazardous Materials, Chemicals and Waste Training and Compliance Course

Hazardous Materials & Waste

Management Assoc., Inc., Transportation

Skills Program, Inc.

Seminar Content Covers:

1. The regulatory interface between DOT, EPA, and OSHA.

2. The current status of DOT, EPA, and OSHA. regulations affecting hazardous materials, substances, chemicals, and waste. (Two-part representation featuring an audio-visual presentation and a review of supporting Federal and State documentation.)

3. Training requirements of company personnel on all applicable DOT, EPA, and OSHA regulations.

4. RCRA contingency/emergency plans required for all generators and owners/operators of treatment, storage, and disposal facilities.

5. How to prepare "lab packs" and the new EPA regulations for recyclable hazardous waste.

6. New OSHA regulations for manufacturers, users, generators, transporters, and carriers for Material Safety Data Sheets.

7. Training required for all employees by the Hazard Determination and Communications Training Program. (This portion of the seminar features an audio-visual program and review of actual regulatory documentation.)

8. Current and proposed EPA and DOT regulations for handling "empties," "non-empties," and "leakers."

9. Emergency response requirements for hazardous materials, substances, chemicals, and waste under DOT, EPA, and OSHA.

10. Current and proposed DOT, EPA, and OSHA shipping papers and manifest requirements for hazardous materials, substances, chemicals, and waste. (This portion of the seminar features an audio-visual presentation and review of applicable documentation.)

11. Current and proposed DOT, EPA, and OSHA requirements for identifying, classifying, labeling, marking, placarding, and packaging of hazardous materials, substances, chemicals, and wastes.

Exhibit H-5. Hazardous Materials Incident Response Operations Course Office of Emergency and Remedial Response U.S. Environmental Protection Agency Edison, New Jersey

This course provides attendees with practical knowledge concerning incident response operations. The course focuses on response team function, methods, procedures, and safety in responding to hazardous substances spills or abandoned waste sites.

After completing the course, attendees should be more familiar with selection, use, and limitation of respiratory protection apparatus and protective clothing; site entry, control, and decontamination procedures; the use of field instruments and equipment; and response organization and management.

Approximately one-third of the course is classroom instruction. The remaining time is hands-on use of monitoring equipment, personal protective apparatus, and other applications of classroom topics. Decision making in incident response operations is practiced by responding as teams to a simulated vehicular accident and an abandoned waste site.

Course topics include: respiratory protection apparatus, protective clothing, field instruments, hazard analysis, response organization, and standard operation safety procedures.

Course No. 165.5

Continuing Education Units: 2.3
Length of Course: 5 days

Exhibit H-6 Hazardous Materials Compliance and Enforcement Course U.S. Department of Transportation

Course Content

Introduction and Legal Aspects	Cargo Tanks Specifications Inspection Procedures
Organization and Introduction to 49 CFR	
Procedure for Using HM Regulations	Roadside Inspection Procedures
Shipper Functions (All Modes)	Enforcement and Field Problems
Hazardous Substances and Wastes	Citing Noncompliance
Modal Requirements	Emergency Response
Overview: Int'l Civil Aviation Education Organization (ICAO)	Training and
Overview: Int'l Maritime Organization (IMO)	Inspection Procedures

Introduction to Radioactive Materials

Note: Prior to Phase I each course participant will receive:

49 CFR Parts 100-177, Phase I Student Text and Workbook, and a qualifying examination.

During Phase II (in-residence - 5 days) participants will receive:

49 CFR Parts 178-199, Phase II Student Workbook and other support material.

At least one of these courses would be recommended as advanced hazardous waste management training for HWSF Personnel.

H-1e. Training for Emergency Response [40 CFR 264.16(a)(3)]

The HWSF training program ensures that its employees receive emergency response training. On-the-job training requires that each employee read and understand Section V, Chapter 4 of Publication #DPDS-M 6050.1 entitled, "Oil and Hazardous Materials/Hazardous Wastes Spill Prevention and Response."

Emergency response is also covered in classroom instruction with lectures and practical exercises. The Property Disposal Hazardous Materials Course (Exhibit H-2, item 6) addresses the topic of spill containment and control.

H-1e(1). Procedures for Using, Inspection, Repairing, and Replacing Facility Emergency and Monitoring Equipment [40 CFR 264.16(a)(3)(i)]

Facility emergency and monitoring equipment is routinely inspected in accordance with the General Inspection Schedule (Table F-1). On-the-job training is provided as to the locations of equipment, how to inspect, maintain and use each item and replacement of equipment (if necessary) after the emergency is over.

H-1e(2). Key Parameters for Automatic Waste Feed Cutoff Systems [40 CFR 264.16(a)(3)(ii)]

No automatic waste feed cutoff system will exist at HWSF-Scott AFB. All hazardous wastes will be containerized in accordance with DOT specifications. No specialized training for an automatic waste feed cutoff system is required.

H-1e(3). Communications or Alarm Systems [40 CFR 264.16(a)(3)(iii)]

Areas of training with respect to communications or alarm systems include supervisor on-the-job training in types of equipment available at the site and how to use them, locations of equipment, emergency telephone numbers to be used to summon external assistance, alarm codes, how to maintain the equipment and frequency of serviceability checks.

H-1e(4). Response to Fires or Explosions [40 CFR 264.16(a)(3)(iv)]

To augment the capabilities of hazardous waste management personnel, the Fire Department on Scott Air Force Base is continuously prepared to respond to all fires involving hazardous wastes. Specific procedures that will be followed in the event of a fire or explosion are outlined in the Contingency Plan, Section G. All personnel are trained in evacuation procedures and
means of exit from their respective work areas. Drills are held regularly to practice these procedures.

H-1e(5). Response to Groundwater Contamination INcidents [40 CFR 264.16(a)(3)(v)]

The potential for groundwater contamination is low, because all hazardous wastes/materials will be stored in DOT-approved leakproof containers. The floors of the HWSF will be sealed with a chemically resistant sealant. Individual storage pallets and the curbed storage area floors will provide containment in the event of a leak or spill.

Storage area entrances will be equipped with concrete curbs and ramps. In addition, a pre-established Contingency Plan (Section G-4) will provide for swift cleanup, thereby minimizing the risk of an outside spill or leak. Personnel will be trained in spill response and Contingency Plan implementation. At a minimum, one simulated spill will be conducted each year to test the effectiveness and response of the emergency response team.

H-1e(6). Shut down of Operations [40 CFR 264.16(a)(3)(vi)]

When operations must shut down, no special actions are required; therefore, no specific training is required.

H-2. Implementation of Training Program [40 CFR 264.16(d)(4) and 264.16(b)]

Any current HWSF employee and future employees assigned to manage/handle hazardous materials and hazardous wastes will complete the training program discussed in Section H-1b within six months of their date of employment. At a minimum, these employees should attend the Contracting Officer's Representative's

Training Course an the Property Disposal Hazardous Materials Course offered by ALMC. If classroom instruction cannot be scheduled within six months, then it should be scheduled as soon thereafter as is possible.

No employee will work unsupervised with hazardous wastes until he/she successfully completes on-the-job training. This training will be provided by either the DRMS or DRMR environmental specialists during their periodic quality assurance visit throughout the year.

Additional formal training programs should be attended by personnel. The content of these programs is outlined in Exhibits H-3 through H-6.

All records documenting job title for each position, job description, employee names, and completed training programs will be kept for three years from the date of termination for former employees or until closure of the facility. (See Appendix H-2, Training Documentation on Courses Provided. Aqua Yard Hazardous Waste Storage and Building 540 PCB Storage Facility records may be found in the Environmental Coordinators office (375th Civil Engineering Squadron).

SECTION I

CLOSURE PLAN, POST-CLOSURE PLAN

This section is submitted in accordance with the requirements of 40 CFR 270.14(b)(13), 270.14(b)(15-18), 261.110-264.115, and 264.178.

I-1. Closure Plan [40 CFR 270.14(b)(13)]

Closure Plan - Aqua Storage Yard Facility

A. General

This plan delineates the steps required to completely close the Aqua Storage Yard Facility. This closure plan has as its objective a clean closure of this facility and is designed to ensure that the need for further maintenance and controls is minimized; the threat to human health and the environment is minimized or eliminated; and the escape of hazardous waste constituents, leachate, contaminated rainfall, or waste decomposition products to the ground or surface water or to the atmosphere is avoided. When approved, a copy of the closure plan will be maintained on site until certification of clean closure completeness has been accepted by Illinois Environmental Protection Agency.

B. Decontamination and Closure Procedure

This facility consists of an 8 feet by 32 feet concrete pad on which are stored up to fifty six 55 gallon drums. A 6 inch high curb extends around the perimeter of the pad, and a 10 feet by 40 feet roof covers the curbed pad. Access to the facility is provided by a 7 feet by 32 feet curbed concrete ramp with a valved sump. All foundation, ramp and sump surfaces that may come in contract with the stored wastes are coated with a sealer to render the concrete impervious to the stored wastes. All spent solvents, detergents, rinsate, all disposable materials (brushes, power towels, suits, gloves, etc.) used for decontamination and sampling and all excavated soil collected will be transfered to drums which will be removed in accordance with a contractual agreement to a state and/or EPA approved TSD facility or recycling site. If this process cannot be accomplished within the allotted time for closure, the hazardous waste will be transferred to an operational DRMO with a valid TSD permit. The procedures to be followed to decontaminate and close this facility are as follows:

1. Foundation, ramp and sump.

a. Upon formal notification to proceed with facility closure, no additional hazardous waste will be accepted. Furthermore, all hazardous waste property remaining in inventory will be removed in accordance with a contractual agreement to a State-and/or EPA-approved TSD facility or recycling site(s). If this process cannot be accomplished within the allotted time for closure, the hazardous waste will be transferred to an operational DRMO with a valid Treatment, Storage and Disposal (TSD) permit.

b. The surface of the foundation, ramp, and sump to be de contaiminated will be scrubbed first with a solvent as needed, then washed with a detergent, and then water rinsed twice.

c. A sample of the second rinsate will be collected and analyzed in accordance with the procedures in Section C, Sample Collection and Analysis.

d. If analysis indicates the rinsate sample is contaminated in accordance with the parameters in C.2, then decontamination procedures B.1.b and B.1.c will be repeated.

e. Procedures B.1.b, B.1.c, and B.1.d will be repeated until the analysis indicates the rinsate sample is not contaminated in accordance withe the parameters listed in C.2.

2. Soil

a. Soil samples will be collected as shown in Figure I-1, Soil Sampling Plan. One sample will be collected on each side and within 3 feet of the facility, and between the surface and 3 inches deep. A soil sample will also be collected at any location that shows evidence of a spill or leak.

b. Samples will be collected and analyzed in accordance with the procedures in Section C, Sample Collection and Analysis.

c. If analysis indicates a sample is contaminated in accordance with the parameters in C.2, then:

1.) Soil will be excavated to a depth of one foot below and a 2 feet radius around the sample location.

2.) A soil sample will be collected from the excavation and analyzed in accordance with the procedures in Section C, Sample Collection and Analysis.

3.) Procedures B.2.C.1 and B.2.C.2 will be repeated until analysis indicates the sample is not contaminated in accordance with the parameters C.2.

3. Equipment

a. Equipment used in the storage facility will be scrubbed with a solvent as needed, then washed with a detergent, and then water rinsed twice.

b. A sample of the second rinsate will be collected and analyzed in accordance with the procedure in Section C, Sample Collection and Analysis.

c. If analyis indicates the rinsate sample is contaminated in accordance with the parameters in C.2, then decontamination procedure B.3.a and B.3.b will be repeated.

e. Procedures B.3.a, B.3.b and B.3.c will be repeated until the analysis indicates the rinsate sample is not contaminated in accordance with the parameters listed in C.2.

C. Sample Collection and Analysis

1. Samples will be collected using the appropriate sampling protocol listed in 40 CFR 261 Appendix I, Representative Sampling Methods.

2. Samples will be analyzed for EP toxic metals (40 CFR 261, Appendix II), total hydrocarbons (EPA Method 503E), and total organic halogens (EPA Method 9020). The sample will be considered contaminated if:

a. The concentration of any EP toxic metal exceeds the concentration listed in CFR 261.24, Table I. or;
b. Total hydrogen concentration exceeds 25 mg/l or;
c. Total organic halogen concentration exceeds 25 mg/l.

3. Samples will be indentified and labeled with the sample number, sample location, sample type. date and time collected, and the person collecting.

4. Samples will be immediately placed on ice and maintained at 4 degrees Celcius for transport to the laboratory for analysis.

5. A chain-of-custody form identifying the samples wil be filled out as the samples are collected. The form will be transported with the samples and serve as the control document.

D. Safety Procedures

Personal protection gear required during decontamination will be Tyvek or comparable overall, boots, gloves, and safety glasses/splash proof goggles as a minimum.

E. Quality Control

1. A sample will be collected from the rinse water source as a means of verifying its purity should hazardous materials be detected in the rinsate analysis.

2. A duplicated sample of the rinsate and a duplicate soil sample will be collected.

F. Aqua Storage Yard Facility Closure Schedule

	Activity	Days
1.	Receipt of final volume of hazardous waste	0-10
2.	Conduct final drum inventory inspect and repack drums (if needed), prepare waste manifest, prepare drums for shipment	0-15
3.	Removal/disposal of final waste inventory	15-45
4.	Solvent wash and decontamination of drum storage areas	45-50
5.	Removal, manifesting and disposal of solvent washing	50-85
6.	Soil Sampling and analysis	80-110
7.	Removal, mainifesting and disposal of contaminated soil	110-140
8.	Accounting of all waste shipment manifest	170
9.	Completion of closure ánd certification submittal to Illinois Environmental Protection Agency	180

Closure Plan - Building 540 PCB Storage Facility

A. General

This plan delineates the steps required to completely close the Building 540 PCB Storage Facility. This closure plan has as its objective a clean closure of this facility and is designed to ensure that the need for further maintenance and controls is minimized; the threat to human health and the environment is minimized or eliminated; and the escape of hazardous waste constituents, leachate, contaminated rainfall, or waste decomposition products to the ground or surface water or to the atmosphere is avoided. When approved, a copy of the closure plan will be maintained on site until certification of clean closure completeness has been accepted by Illinois Environmental Protection Agency.

B. Decontamination and Closure Procedure

The facility consists of a 20 feet by 35 feet concrete block building with an adjacent 17 feet by 29 feet concrete pad covered by a 20 feet by 35 feet roof. This facility is designed for storage of up to 4000 gallons of PCB contaiminated oil in out-of-service electrical transformes. Access to the building is provided by an elevated curbed concrete loading dock with a valved sump, and access to the concrete pad is provided by a curbed concrete ramp with a valved sump. The building itself is divided into two curbed storage areas. The surface of a concrete curbed areas that may come in contract with the stored waste are coated with a concrete sealer to render the concrete impervious to the stored waste. All spent solvents, detergents, rinsate, all disposable materials (brushes, power towels, suits, gloves, etc.) used for decontamination and sampling and all excavated soil collected will be transfered to drums which will be removed in accordance with a contractual agreement to a state and/or EPA approved TSD facility or recycling site. If this process cannot be accomplished within the allotted time for closure, the hazardous waste will be transferred to an operational DRMO with a valid TSD permit. The procedures to be followed to decontaminate and close this facility are as follows:

1. Concrete Building, concrete pad, loading dock, concrete ramp and sumps.

a. Upon formal notification to proceed with facility closure, no additional hazardous waste will be accepted. Furthermore, all hazardous waste property remaining in inventory will be removed in accordance with a contractual agreement to a State-and/or EPA-approved TSD facility or recycling site(s). If this

process cannot be accomplished within the allotted time for closure, the hazardous waste will be transferred to an operational DRMO with a valid Treatment, Storage and Disposal (TSD) permit.

b. The surface of the concrete building, concrete pad, loading dock, concrete ramp and sumps to be contaiminated will be scrubbed first with a solvet as needed, then washed with a detergent, and then water rinsed twice.

c. A sample of the second rinsate will be collected and analyzed in accordance with the procedures in Section C, Sample Collection and Analysis.

d. If analysis indicates the rinsate sample is contaminated in accordance with the parameters in C.2, then decontamination procedures B.1.b and B.1.c will be repeated.

e. Procedures B.1.b, B.1.c, and B.1.d will be repeated until the analysis indicates the rinsate sample is not contaminated in accordance withe the parameters listed in C.2.

2. Soil

a. Soil samples will be collected as shown in Figure I-2, Soil Sampling Plan. One sample will be collected on each side and within 3 feet of the facility, and between the surface and 3 inches deep. A soil sample will also be collected at any location that shows evidence of a spill or leak.

b. Samples will be collected and analyzed in accordance with the procedures in Section C, Sample Collection and Analysis.

c. If analysis indicates a sample is contaminated in accordance dwith the parameters in C.2, then:

1.) Soil will be excavated to a depth of one foot below and a 2 feet radius around the sample location.

2.) A soil sample will be collected from the excavation and analyzed in accordance with the procedures in Section C, Sample Collection and Analysis.

3.) Procedures B.2.C.1 and B.2.C.2 will be repeated until analysis indicates the sample is not contaminated in accordance with the parameters C.2.

3. Equipment

a. Equipment used in the storage facility will be scrubbed with a solvent as needed, then washed with a detergent, and then water rinsed twice.

b. A sample of the second rinsate will be collected and analyzed in accordance with the procedure in Section C, Sample Collection and Analysis.

c. If analyis indicates the rinsate sample is contaminated in accordance with the parameters in C.2, then decontamination procedure B.3.a and B.3.b will be repeated.

e. Procedures B.3.a, B.3.b and B.3.c will be repeated until the analysis indicates the rinsate sample is not contaminated in accordance with the parameters listed in C.2.

C. Sample Collection and Analysis

1. Samples will be collected using the appropriate sampling protocol listed in 40 CFR 261 Appendix I, Representative Sampling Methods.

2. Samples will be analysed for PCB's using EPA Method 8080. The sample will be considered contaminated if the PCB concentration exceeds 12 PPM.

3. Samples will be indentified and labeled with the sample number, sample location, sample type. date and time collected, and the person collecting.

4. Samples will be immediately placed on ice and maintained at 4 degrees Celcius for transport to the laboratory for analysis.

5. A chain-of-custody form identifying the samples will be filled out as the samples are collected. The form will be transported with the samples and serve as the control document.

D. Safety Procedures

Personal protection gear required during decontamination will be Tyvek or comparable overall, boots, gloves, and safety glasses/splash proof goggles as a minimum.

E. Quality Control

1. A sample will be collected from the rinse water source as a means of verifying its purity should hazardous materials be detected in the rinsate analysis.

2. A duplicated sample of the rinsate and a duplicate soil sample will be collected.

F. Building 540 PCB Storage Facility Closure Schedule

Activity	Days
1. Receipt of final volume of hazardous waste	0-10
2. Conduct final drum inventory inspect and repack drums (if needed), prepare waste manifest, prepare drums for shipment	0-15
3. Removal/disposal of final waste inventory	15-45
4. Solvent wash and decontamination of drum storage areas	45-50
5. Removal, manifesting and disposal of solvent washing	50-85
6. Soil Sampling and analysis	80-110
7. Removal, mainifesting and disposal of contaminated soil	110-140
8. Accounting of all waste shipment manifest	170
9. Completion of closure and certification submittal to Illinois Environmental Protection Agency	180

I-1a. Closure Performance Standard [40 CFR 264.111]

This closure plan is designated to ensure that the facilities will not require further maintenance and controls; minimize and eliminate threats to human health and the environment upon completion of closure.

I-1b. Partial and Final Closure Activities [40 CFR 264.122(a)(1)(4)]

Partial closure of the Aqua Storage Yard Facility is not anticipated. Final closure will be initiated if Scott Air Force Base ceases operation, or if hazardous waste storage activities are discontinued. Closure procedures in the Aqua Storage Yard Facility Closure Plan will be followed for the final closure activities.

Partial closure of the Building 540 PCB Storage Facility is not anticipated. Final closure will be initiated if Scott Air Force Base ceases operation, or if PCB storage activities are discontinued Closure procedures in Building 540 PCB Storage Facility Closure Plan will be followed for the final closure activities.

I-1c. Maximum Waste Inventory [40 CFR 264.112(a)(2)]

The maximum inventory of wastes in storage at the Aqua Storage Yard Facility at any time during the life of the facility will be fifty-six (56) 55-gallon drums (3080 gallons).

The maximum inventory of waste in storage at the Building 540 PCB Storage Facility will be forty (40) 100 gallon transformers (4000 gallons).

I-1d. Inventory Disposal, Removal or Decontamination of Equipment structures, and soils[40 CFR 264.114]

Upon notification to proceed with final closure, all hazardous wastes remaining in inventory will be removed in accordance with a contractual agreement to a state and/or EPA approved TSD facility. If this cannot be accomplished within the allotted time for closure, the hazardous waste will be transferred to an operational DRMO with a valid TSD permit.

All facility equipment and structures will be decontaminated by using a solvent wash and detergent wash, followed by two water rinses. Samples of the final rinsate will be collected and analyzed to verify no contamination.

Soil samples will be collected and analyzed. If contaimination is detected, soil will be excavated around the sample location, and additional soil samples will be collected and analyzed. These procedures will be repeated until no contamination is detected. All excavated soil will be handled and disposed of as hazardous waste.

I-1d (1). Closure of Containers [40 CFR 264.178]

All hazardous wastes at the Aqua Storage Yard Facility will be stored in 55 gallon drums. Hazardous wastes at the Building 540 PCB Storage Facility will be contained in out-of-service transformers. At closure, all containers in inventory will be removed to a state and/or EPA approved TSD facility. If this cannot be accomplished within the allotted time for closure, the hazardous waste in inventory will be transferred to an operational DRMO with a valid TSD permit.

The facility containment, structures, and equipment will be decontaminated in accordance with the approved closure plans. Soils surrounding the facilities that are contaminated with the stored wastes or waste residues will be excavated and disposed of as hazardous wastes in accordance with the approved closure plans.

I-1d (2). Closure of Tanks [40 CFR 264.197]

No tanks will be used to store wastes at this facility.

I-1d(3). Closure of Waste Piles [40 CFR 270.18(i) and 264.258]

No waste piles will be located at this facility.

I-1d(4). Closure of Surface Impoundments [40 CFR 270.17(g) and 264.228]

No surface impoundments will be located at this facility.

I-1d(5). Closure of Incinerators [40 CFR 264.351]

No incinerators will be located at this facility.

I-1d(6). Closure of Landfills [40 CFR 270.21(e) and 264.310(a)]

No landfills will be located at this facility.

I-1d(7). Closure of Land Treatment [40 CFR 270.20(d)(6), 264.280(a) and (b)]

No land treatment activities will occur at this facility.

I-2. Post-Closure Plan [40 CFR 270.14(b)(13), 264.117 and 264.118]

A post-closure plan will not be needed because this permit only addresses a storage facility. All wastes will be removed and the storage areas will be decontaminated at closure.

I-3. Notice to Local Land Authority and Notice in Deed to Property [40 CFR 264.119 and 264.120]

The HWSFs at Scott AFB operate as a hazardous waste storage facilities, not as disposal facilities. Therefore, notice to the local land authority is not necessary and a notation is not necessary in the deed to inform potential purchasers of restrictions associated with a disposal site, as required by the regulations cited for this section.

I-4. Closure Cost Estimate [40 CFR 270.14(b)(15) and 264.142(a) and (b)]

The Federal Government is exempt from the financial requirementsof hazardous waste regulation. The HWSFs at Scott AFB is owner and operated by the Federal government, therefore closure costs and insurance documentations are not required, and Sections I-4 through I-9 to not apply to this facility.

I-5. Financial Assurance Mechanism for Closure [40 CFR 264.143 and 264.150]

Not required.

I-6. Post-Closure Estimate [40 CFR 264.144]

Not required.

I-7. Financial Assurance Mechanism for Post-Closure [40 CFR 264.145]

Not required.

I-8. Liability Insurance [40 CFR 264.147]

Not required.

I-9. State Assumption of Responsibility [40 CFR 265.150]

Not required.

I-1f. Schedule for Closure [40 CFR 264.112(a)(4)]

Scott AFB is major Air Force Command Headquarter; it is not anticipated that closure will occur. As long as it continues in operation, some amount of hazardous waste materials will be generated and require storage and the Aqua Storage Yard Facility will be required. However, a closure date of 2020 can be estimated for the purposes of development of a contingency closure plan.

The Building 540 storage facility is anticipated to be closed out by the year 2005.

Notification of intent to close for either facility will be sent to the Illinois Environmental Protection Agency 180 days before beginning final closure. Final closure will be supervised and certified by an independent registered professional engineer.

Within 90 days after the receipt of the final volume of hazardous waste, final closure activities will be initiated. Table I-1 presents an estimated schedule for closure which gives an estimate of the total time required to close either of the facilities and the time required for intervening closure activities.

I-1g(1). Extensions for Closure Time [40 CFR 264.113(a) and (b)]

No extension for closure time is anticipated. If, however, an extension would be necessary to properly close either of

the HWSFs, then a petition will be sent to the Illinois Environmental Protection Agency, amending the closure schedule listed in Table I-1.

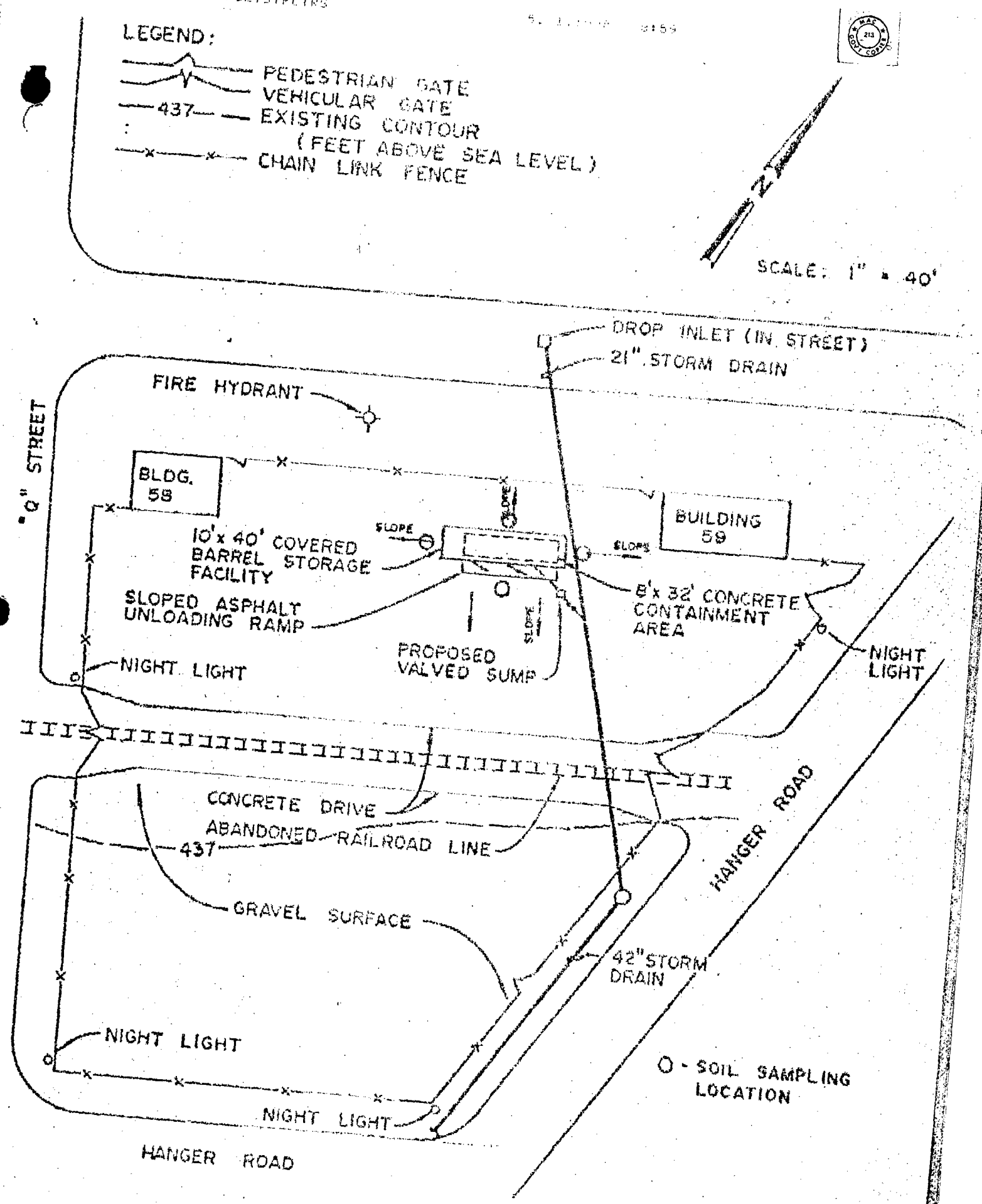
This petition will demonstrate:

(i) The need for more than 180 days to close the facility.

(ii) There is a reasonable likelihood that a person other than the owner/operator will recommence operation of the site.

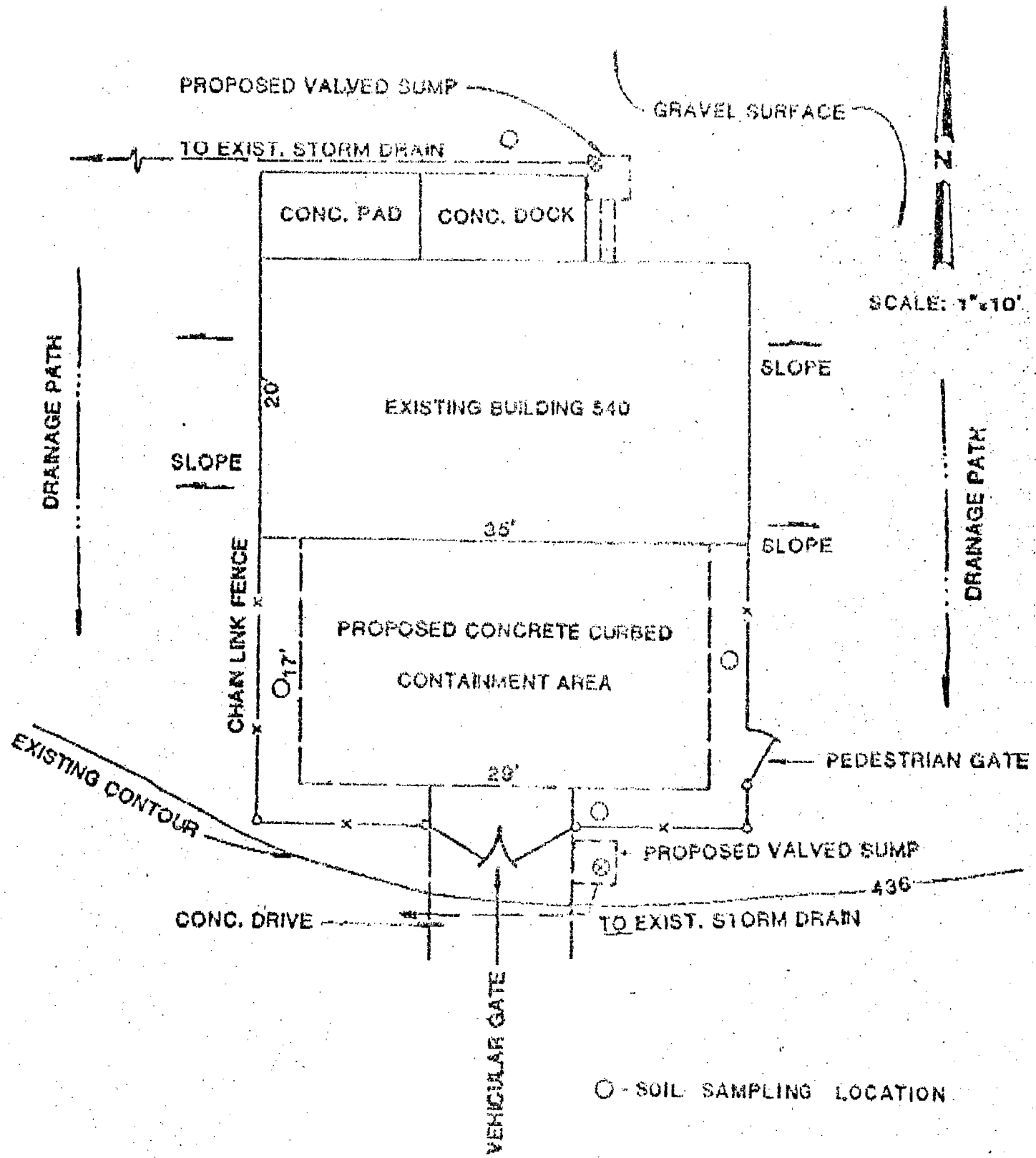
(iii) Closure would be incompatible with continued operation.

(iv) All steps have and will be taken to prevent threats to human health and the environment from the unclosed but inactive facility.



SOIL SAMPLING PLAN
AQUA STORAGE YARD

FIGURE I-1



SOIL SAMPLING PLAN
BUILDING 540 & PROPOSED ADDITION

FIGURE I-2

SECTION J

OTHER FEDERAL LAWS

The Wild and Scenic Rivers Act is not applicable to Scott AFB.

A survey has determined that no historical preservation sites exist on Scott AFB; therefore the National Historical Preservation Act of 1966 in not applicable.

There are no endangered species on Scott AFB; therefore the Endangered Species Act is not applicable.

Scott AFB currently has a program in effect that is overseen by the Department of the Interior, and in accordance with the Fish and Wildlife Coordination Act.

Scott AFB is not in a coastal zone; therefore the Coastal Zone Management Act is not applicable.

CERTIFICATION

[40 CFR 270.11]

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those person directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Date: _____ Signature: _____

Owner, Scott Air Force Base

Date: _____ Signature: _____

SECTION L

INFORMATION CONCERNING PRIOR RELEASES

AND CLOSED SITES

Scott AFB has begun an Installation Restoration Program (IRP) which consists of the following four phases. Phase I includes records search and an evaluation of relevant extant data to identify potential uncontrolled hazardous waste disposal sites.
Phase II incorporates follow-up field investigations and assessments, such as surveys, monitoring and laboratory analyses at problem sites. Development of new technology and additional field studies are covered in Phase III. Phase IV consists of remedial actions and any further efforts required to control identified hazards.

The record search report (Phase I) has been completed and submitted to the Illinois Department of Environmental Protection and to EPA Region V. As further studies in this effort become available, they will be forwarded to the above mentioned agencies.

L-1. Solids Waste Management Units

Solid Waste Management Units are areas in or near the workplace where hazardous waste or acutely hazardous waste are stored prior to transfer to the hazardous waste storage facility on the base. Appendix L-1 identifies the Solid Waste Management Units at Scott Air Force Base.

L-1a. Characterize the Solid Waste Management Unit

The type of Solid Waste Management Unit is identified in Appendix 1-1. Less than 55 gallons of hazardous waste or one quart of acutely hazardous waste will be stored at each satellite accumulation point. Waste containers will be delivered to the accumulation point or hazardous waste storage facility no later than three days after the container is filled. Appendix 1-2 identifies the wastes handled at the accumulation points.

L-1b. No Solid Waste Management Units

Not applicable.

L-2. Releases

Appendix L-3 is a section of a report that describes leaks and spills from the Solid Waste Management Units.

L-2a. Characterize Releases

Appendix L-3 is a section of a report that describes leaks and spills from the Solid Waste Management Units.

L-2b. No Releases

Not applicable.

Chemical	Hazard	Basis for Hazard Designation
Methyl ethyl ketone	Toxic	Listed Waste U159
Naptha	Ignitable	Characteristic Waste D001
Battery acid	Corrosive	Characteristic Waste D002
Dry cleaning solvent (PD-680)	Ignitable	Characteristic Waste D001
Perchloroethylene	Toxic	Listed Waste U210
Methyl methacrylate	Ignitable, Toxic	Listed Waste U162
Methyl ethyl ketone peroxide	Toxic, Reactive	Listed Waste U160
Toluene	Toxic	Listed Waste U220
1,1,1-trichloroethane	Toxic	Listed Waste U226
Trichloroethene	Toxic	Listed Waste U228
Xylene	Ignitable	Listed Waste U239
Denatured alcohol	Ignitable	Characteristic Waste D001
Ammonium hydroxide	Corrosive	Characteristic Waste D002
Dichloromethane	Toxic	Listed Waste U080
Methanol	Ignitable	Listed Waste U154
Primer	Ignitable	Characteristic Waste D001
Paint	Ignitable, Toxic	Characteristic Waste D001
Acetone	Ignitable	Listed Waste U002
Adhesive	Ignitable	Characteristic Waste D001
Carbon removing compound	Ignitable	Characteristic Waste D001
Cleaning compound	Ignitable, Corrosive	Characteristic Waste D001, D002
Enamel	Ignitable	Characteristic Waste D001
Epoxy remover	Ignitable, Toxic	Characteristic Waste D001

Chemical	Hazard	Basis for Hazard Designation
Spent methyl ethyl ketone mixed with paint	Toxic, Ignitable Ep Toxic	Characteristic Waste D001, D007, D008
Used degreasing solvent	Toxic, Ignitable	Listed Waste F001, F002, F003, F004
Waste battery acid	Corrosive	Characteristic Waste D002
Used dry cleaning solvent	Toxic, Ignitable	Characteristic Waste D001
Waste paint, thinner, and related materials	Toxic, Ignitable Ep Toxic	Characteristic Waste D001, D007, D008
Methyl methacrylate mixed with waste materials	Ignitable, Toxic	Characteristic Waste D001
Methylene chloride and waste paint materials	Toxic	Listed Waste F001, F002
Waste corrosive paint materials	Corrosive, Toxic, Ep Toxic, Ignitable	Characteristic Waste, D001 D002, D007, D008
Spent sulfuric acid	Toxic, Corrosive	Characteristic Waste D002
Used naphtha degreasing materials	Ignitable	Characteristic Waste D001
Spent 1,1,1-trichloroethane	Toxic	Listed Waste F001, F002
Solvent still bottoms	Toxic, Ep Toxic	Characteristic Waste D007, D008, Listed Waste F001, F002, F003, F004, F005
Waste combustible materials	Ignitable, Toxic	Characteristic Waste D001

Chemical	Hazard	Basis for Hazard Designation
Hydrochloric acid	Corrosive	Characteristic Waste D002
Mercury	Ep Toxic	Characteristic Waste D009
Methylene chloride	Toxic	Listed Waste U080
Paint remover	Ignitable	Characteristic Waste D001
Potassium nitrate	Ignitable	Characteristic Waste D001
Sealing compound	Ignitable	Characteristic Waste D001
Tetrachloroethylene	Toxic	Listed Waste U210
Paint thinner	Ignitable, Toxic	Characteristic Waste D001

SPECIAL WASTE, INC.
P.O. BOX 909
ATHENS, TN 37303

SWI USE ONLY	(A) R
Date Received 4/26/89	177024
ODW	

GENERATOR WASTE CHARACTERIZATION REPORT (Separate report required for each waste stream)

INSTRUCTIONS: Please complete all applicable sections of this report. Print legibly or use a typewriter. If shipping by U.S. Postal Service send to the address above, if shipping by UPS or an express service send to: Special Waste, Inc., Old Niota Road, Athens, TN 37303, Attn: Lab. Supply a representative one-pint sample of the waste. **Do not ship waste for disposal until the generator has received an approval letter from Special Waste, Inc.**

Facility Information

US EPA ID# IL7570024177
Company Name Scott AFB
Plant etc.
Address
City, State, Zip Scott AFB, IL 62225
Contact Person Roger Wilson
Telephone (AC) 618-256-3105 (Ext)

Waste Characterization

Waste Common Name paint thinners
Description of process generating this waste: outdated material

Is this waste a Land Ban material? [ ]Yes [X]No

Have you supplied SWI with a representative sample of this waste?
☐ Yes ☒ No ☐ MSDS Analysis Attached ☐ Yes ☒ No

Business/Mailing Information

Business/Plant Name GSX, Gov't Services
Address PO Box 140
City, State, Zip Saukville WI 53080
Contact Lee Bosch Phone 414-284-3427

Constituent Composition Information (include all hazardous constituents)

Major Constituents (Specify %)

petroleum distillates	100%

Metals	☐ TOTAL (PPM)	☒ EPA EXTRACTION PROCEDURE (mg/L)			
ARSENIC (As)	<5	SELENIUM (Se)	<1	MERCURY (Hg)	<.2
BARIUM (BA)	<800	SILVER (Ag)	<5	LEAD (Pb)	<5
CADMIUM (Cd)	<1	COPPER (Cu)	<5	ZINC (Zn)	<5
CHROMIUM (Cr)	<5	NICKEL (Ni)	<5	THALLIUM (Tl)	<5
				OTHER	

RCRA INFORMATION

Is this a USEPA hazardous waste? ☒ Yes ☐ No
Please give USEPA hazardous waste codes:
D001
Describe nature of reactivity if D003 waste:

SHIPPING INFORMATION

PROPER SHIPPING NAME Waste Flammable liquid NOS
HAZARD CLASS flammable liq. ID# UN1993 R/Q 100
ANTICIPATED VOLUME 3 DRUMS ____ GAL. ____ YDS. ____ LBS.
Specify type and size of container: 5 gallon pail
PER: ☐ ONE TIME ☐ WK. ☐ MO. ☒ QTR. ☐ YR. ☐ OTHER

GENERAL CHARACTERISTICS (at 70°F unless otherwise specified)

COLOR amber
ODOR petroleum
☐ NONE ☒ STRONG
☒ MILD

☒ LIQUID ____% FREE
☐ SOLID
☐ SLUDGE
☐ POWDER

PHASES
☒ NONE
☐ TWO
☐ MULTI-LAYER

☐ Reactive
☐ Explosive
☐ Shock sensitive
N/A
☐ FREE CYANIDE ____ppm
REACTIVE WITH

☐ Pyrophoric
☐ Strong Oxidizer
☐ Auto Ignitable
N/A
☐ FREE SULFIDE ____ppm
☐ PCB's ____ppm conc.

SPECIFIC GRAVITY	VISCOSITY	ASH (% WT.)	TOTAL SOLIDS (%WT.)	pH	BTU's 1000/lbs.
☒ <0.8	☒ THIN	☒ <0.1	☒ <0.5	☐ <2	☐ <1
☐ 0.8-1.0	☐ MEDIUM	☐ 0.1-1.0	☐ 0.5-2.0	☐ 2-6	☐ 1-4
☐ 1.0-1.2	☐ THICK	☐ 1-5	☐ 2-5	☒ 6-8	☐ 4-8
☐ 1.2-1.4	☐ STICKY	☐ 5-20	☐ 5-20	☐ 8-10	☒ 8-12
☐ 1.4-1.7		☐ >20	☐ >20	☐ 10-12.5	☒ 12-16
☐ >1.7				☐ >12.5	☐ >16
☐ ____ Actual		☐ ____ Actual	☐ ____ Actual	☐ ____ Actual	☐ ____ Actual
				☐ ____ Consistent	

FLASH POINT (closed cup)	SULFUR (% WT.)
☒ <60°F	☒ <0.5
☐ 61°-100°F	☐ 0.5-2.0
☐ 101°-140°F	☐ 2-5
☐ 141°-199°F	☐ >5
☐ >200°F	
☐ ____ Actual	☐ ____ Actual

NSN# ____ CODE# ____
CAS#
CLIN# 2315 Yes

Certification I certify that all information on this form is complete and factual (including attached information) and is an accurate representation of the known and suspected hazards of the waste to be disposed.

Name James Ward (Print or Type)
Title Field Chemist
James Ward (Signature)
Date 4-24-89

SWI SPECIAL WASTE, INC.
P.O. BOX 909
ATHENS, TN 37303

SWI USE ONLY
Date Received 4/26/89 (A) R 177023
DDW

GENERATOR WASTE CHARACTERIZATION REPORT (Separate report required for each waste stream)

INSTRUCTIONS: Please complete all applicable sections of this report. Print legibly or use a typewriter. If shipping by U.S. Postal Service send to the address above, if shipping by UPS or an express service send to: Special Waste, Inc., Old Niota Road, Athens, TN 37303, Attn: Lab. Supply a representative one-pint sample of the waste. **Do not ship waste for disposal until the generator has received an approval letter from Special Waste, Inc.**

Facility Information
US EPA ID# IL7570024177
Company Name Scott AFB
Plant etc.
Address
City, State, Zip Scott AFB, IL 62225
Contact Person Roger Wilson
Telephone (AC) 618-256-3105 (Ext)

Waste Characterization
Waste Common Name Latex paint
Description of process generating this waste: outdated material

Is this waste a Land Ban material? [ ]Yes [X]No

Have you supplied SWI with a representative sample of this waste?
☐ Yes ☒ No ☐ MSDS Analysis Attached ☐ Yes ☒ No

Business/Mailing Information
Business/Plant Name GSX, Gov't Services
Address PO Box 140
City, State, Zip Saukville WI 53080
Contact Lee Bosch Phone 414-284-3427

Constituent Composition Information (include all hazardous constituents)

Major Constituents (Specify %)

Latex paint	100%

Metals ☐ TOTAL (PPM) ☐ EPA EXTRACTION PROCEDURE (mg/L)

ARSENIC (As)	<5	SELENIUM (Se)	<1	MERCURY (Hg)	<.2
BARIUM (BA)	<100	SILVER (Ag)	<5	LEAD (Pb)	<5
CADMIUM (Cd)	<1	COPPER (Cu)	<5	ZINC (Zn)	<5
CHROMIUM (Cr)	<5	NICKEL (Ni)	<5	THALLIUM (Tl)	<1
				OTHER	

RCRA INFORMATION
Is this a USEPA hazardous waste? ☐ Yes ☒ No
Please give USEPA hazardous waste codes:
None

Describe nature of reactivity if D003 waste:

SHIPPING INFORMATION
PROPER SHIPPING NAME Non-Hazardous Waste Liquid
HAZARD CLASS — ID# — R/Q —
ANTICIPATED VOLUME 4 DRUMS ___ GAL. ___ YDS. ___ LBS.
Specify type and size of container: 4-5gallon pails-plastic
PER: ☐ ONE TIME ☐ WK. ☐ MO. ☒ QTR. ☐ YR. ☐ OTHER

GENERAL CHARACTERISTICS (at 70°F unless otherwise specified)

COLOR Varies
ODOR Paint
☐ NONE ☐ STRONG ☒ MILD

☒ LIQUID ___ % FREE
☐ SOLID
☐ SLUDGE
☐ POWDER

PHASES
☒ NONE
☐ TWO
☐ MULTI-LAYER

☐ Reactive
☐ Explosive
☐ Shock sensitive
☐ FREE CYANIDE ___ ppm
REACTIVE WITH

N/A

☐ Pyrophoric
☐ Strong Oxidizer
☐ Auto Ignitable
☐ FREE SULFIDE ___ ppm
☐ PCB's ___ ppm conc.

N/A

SPECIFIC GRAVITY	VISCOSITY	ASH (% WT.)	TOTAL SOLIDS (%WT.)	pH	BTU's 1000/lbs.
☐ <0.8	☐ THIN	☐ <0.1	☐ <0.5	☐ <2	☒ <1
☐ 0.8-1.0	☒ MEDIUM	☐ 0.1-1.0	☐ 0.5-2.0	☐ 2-6	☐ 1-4
☐ 1.0-1.2	☐ THICK	☐ 1-5	☒ 2-5	☒ 6-8	☐ 4-8
☐ 1.2-1.4	☐ STICKY	☐ 5-20	☐ 5-20	☐ 8-10	☐ 8-12
☐ 1.4-1.7		☒ >20	☐ >20	☐ 10-12.5	☐ 12-16
☒ >1.7			☐ ___ Actual	☐ >12.5	☐ >16
☐ ___ Actual		☐ ___ Actual		☐ ___ Actual	☐ ___ Actual
				☐ ___ Consistent	

FLASH POINT (closed cup)	SULFUR (% WT.)
☐ <60°F	☒ <0.5
☐ 61°-100°F	☐ 0.5-2.0
☐ 101°-140°F	☐ 2-5
☐ 141°-199°F	☐ >5
☒ >200°F	
☐ ___ Actual	☐ ___ Actual

NSN# CODE# TN6048
CAS#
CLIN# 6048 CM

Certification I certify that all information on this form is complete and factual (including attached information) and is an accurate representation of the known and suspected hazards of the waste to be disposed.

Name James Ward (Print or Type)
Signature James Ward
Title Field Chemist
Date 4-24-89

SWI SPECIAL WASTE, INC.
P.O. BOX 909
ATHENS, TN 37303

SWI USE ONLY
Date Received 4/26/89 A R 177022
DOW

GENERATOR WASTE CHARACTERIZATION REPORT (Separate report required for each waste stream)

INSTRUCTIONS: Please complete all applicable sections of this report. Print legibly or use a typewriter. If shipping by U.S. Postal Service send to the address above, if shipping by UPS or an express service send to: Special Waste, Inc., Old Niota Road, Athens, TN 37303, Attn: Lab. Supply a representative one-pint sample of the waste. **Do not ship waste for disposal until the generator has received an approval letter from Special Waste, Inc.**

Facility Information
US EPA ID# IL7570024177
Company Name Scott AFB
Plant etc.
Address
City, State, Zip Scott AFB, IL 62225
Contact Person Roger Wilson
Telephone (AC) 618-256-3105 (Ext)

Waste Characterization
Waste Common Name Lacquer paint
Description of process generating this waste: Unused prod.

Is this waste a Land Ban material? [ ]Yes [X]No

Have you supplied SWI with a representative sample of this waste?
☐ Yes ☒ No ☐ MSDS Analysis Attached ☐ Yes ☒ No

Business/Mailing Information
Business/Plant Name GSX, Gov't Services
Address PO Box 140
City, State, Zip Saukville WI 53080
Contact Lee Bosch Phone 414-284-3427

Constituent Composition Information (include all hazardous constituents)

Major Constituents (Specify %)	
Paint Pigments	20-30%
Lacquer	30-50%
thinners	10-25%

Metals	☐ TOTAL (PPM)	☒ EPA EXTRACTION PROCEDURE (mg/L)			
ARSENIC (As)	<5	SELENIUM (Se)	<1	MERCURY (Hg)	<.2
BARIUM (BA)	<100	SILVER (Ag)	<5	LEAD (Pb)	<5
CADMIUM (Cd)	<1	COPPER (Cu)	<5	ZINC (Zn)	<5
CHROMIUM (Cr)	<5	NICKEL (Ni)	<5	THALLIUM (Tl)	<1
				OTHER	

RCRA INFORMATION
Is this a USEPA hazardous waste? ☒ Yes ☐ No
Please give USEPA hazardous waste codes:
D001
Describe nature of reactivity if D003 waste:

SHIPPING INFORMATION
PROPER SHIPPING NAME Waste Flammable Liquid N
HAZARD CLASS flammable liq ID# UN1993 R/Q 100
ANTICIPATED VOLUME 2 DRUMS ____ GAL. ____ YDS. ____ LBS.
Specify type and size of container: 2-5 gallon cans
PER: ☐ ONE TIME ☐ WK. ☐ MO. ☒ QTR. ☐ YR. ☐ OTHER

GENERAL CHARACTERISTICS (at 70°F unless otherwise specified)

COLOR Varies ☒ LIQUID >95% FREE
ODOR solvent ☐ SOLID
☐ NONE ☐ STRONG ☐ SLUDGE
☒ MILD ☐ POWDER

PHASES: ☒ NONE ☐ TWO ☐ MULTI-LAYER

☐ Reactive
☐ Explosive
☐ Shock sensitive
☐ FREE CYANIDE ____ ppm
REACTIVE WITH

N/A

☐ Pyrophoric
☐ Strong Oxidizer
☐ Auto Ignitable
☐ FREE SULFIDE ____ ppm
☐ PCB's ____ ppm conc.

N/A

SPECIFIC GRAVITY	VISCOSITY	ASH (% WT.)	TOTAL SOLIDS (% WT.)	pH	BTU's 1000/lbs.
☐ <0.8	☐ THIN	☐ <0.1	☐ <0.5	☐ <2	☐ <1
☐ 0.8-1.0	☒ MEDIUM	☐ 0.1-1.0	☐ 0.5-2.0	☐ 2-6	☐ 1-4
☐ 1.0-1.2	☐ THICK	☐ 1-5	☐ 2-5	☐ 6-8	☐ 4-8
☐ 1.2-1.4	☐ STICKY	☒ 5-20	☒ 5-20	☒ 8-10	☒ 8-12
☐ 1.4-1.7		☐ >20	☐ >20	☐ 10-12.5	☐ 12-16
☒ >1.7				☐ >12.5	☐ >16
☐ ____ Actual		☐ ____ Actual	☐ ____ Actual	☐ ____ Actual	☐ ____ Actual
				☐ ____ Constituent	

FLASH POINT (closed cup)	SULFUR (% WT.)
☐ <60°F	☐ <0.5
☒ 61°-100°F	☒ 0.5-2.0
☐ 101°-140°F	☐ 2-5
☐ 141°-199°F	☐ >5
☐ >200°F	
☐ ____ Actual	☐ ____ Actual

NSN# ____ CODE# ____
CAS#
CLIN# 3110 Sys. Res

Certification I certify that all information on this form is complete and factual (including attached information) and is an accurate representation of the known and suspected hazards of the waste to be disposed.

Name James Ward (Print or Type) Title Field Chemist
James Ward (Signature) Date 4-24-89

SPECIAL WASTE, INC.
P.O. BOX 909
ATHENS, TN 37303

SWI USE ONLY	(A) R
Date Received 4/26/89	177021
DDW	

GENERATOR WASTE CHARACTERIZATION REPORT (Separate report required for each waste stream)

INSTRUCTIONS: Please complete all applicable sections of this report. Print legibly or use a typewriter. If shipping by U.S. Postal Service send to the address above, if shipping by UPS or an express service send to: Special Waste, Inc., Old Niota Road, Athens, TN 37303, Attn: Lab. Supply a representative one-pint sample of the waste. **Do not ship waste for disposal until the generator has received an approval letter from Special Waste, Inc.**

Facility Information

US EPA ID# IL7570024177
Company Name Scott AFB
Plant etc.
Address
City, State, Zip Scott AFB, IL 62225
Contact Person Roger Wilson
Telephone (AC) 618-256-3105 (Ext)

Business/Mailing Information

Business/Plant Name GSX, Gov't Services
Address PO Box 140
City, State, Zip Saukville WI 53080
Contact Lee Bosch Phone 414-284-3427

Waste Characterization

Waste Common Name Epoxy Curing agent

Description of process generating this waste: Out dated material

Constituent Composition Information (include all hazardous constituents)

Major Constituents (Specify %)	
Epoxy Resin	85-90%
Toluene	5%
asbestos	2%
Oil	<5%
Water	<5%

Is this waste a Land Ban material? [ ]Yes [ ]No

Have you supplied SWI with a representative sample of this waste?
☐ Yes ☒ No ☐ MSDS Analysis Attached ☐ Yes ☒ No

Metals	☐ TOTAL (PPM)	☒ EPA EXTRACTION PROCEDURE (mg/L)			
ARSENIC (As)	<5	SELENIUM (Se)	<1	MERCURY (Hg)	<.2
BARIUM (BA)	<100	SILVER (Ag)	<5	LEAD (Pb)	<5
CADMIUM (Cd)	<1	COPPER (Cu)	<5	ZINC (Zn)	<5
CHROMIUM (Cr)	<5	NICKEL (Ni)	<5	THALLIUM (Tl)	<1
				OTHER	

RCRA INFORMATION

Is this a USEPA hazardous waste? ☒ Yes ☐ No

Please give USEPA hazardous waste codes:
D001 F005

Describe nature of reactivity if D003 waste:

SHIPPING INFORMATION

PROPER SHIPPING NAME Waste Flammable Liquid NOS
HAZARD CLASS Flammable liq ID# UN1993 R/Q 100
ANTICIPATED VOLUME 2 DRUMS ____ GAL. ____ YDS. ____ LBS.
Specify type and size of container: 2-5 gallon
PER: ☐ ONE TIME ☐ WK. ☐ MO. ☒ QTR. ☐ YR. ☐ OTHER

GENERAL CHARACTERISTICS (at 70°F unless otherwise specified)

COLOR Brown
ODOR resin
☐ NONE ☐ STRONG ☒ MILD

☒ LIQUID ____ % FREE
☐ SOLID
☐ SLUDGE
☐ POWDER

PHASES
☒ NONE
☐ TWO
☐ MULTI-LAYER

☐ Reactive
☐ Explosive
☐ Shock sensitive
☐ FREE CYANIDE ____ ppm
REACTIVE WITH ____

N/A

☐ Pyrophoric
☐ Strong Oxidizer
☐ Auto Ignitable
☐ FREE SULFIDE ____ ppm
☐ PCB's ____ ppm conc.

N/A

SPECIFIC GRAVITY	VISCOSITY	ASH (% WT.)	TOTAL SOLIDS (%WT.)	pH	BTU's 1000/lbs.
☐ <0.8	☐ THIN	☐ <0.1	☐ <0.5	☐ <2	☐ <1
☐ 0.8-1.0	☒ MEDIUM	☐ 0.1-1.0	☐ 0.5-2.0	☐ 2-6	☒ 8-12
☐ 1.0-1.2	☐ THICK	☐ 1-5	☒ 2-5	☒ 6-8	☐ 1-4
☒ 1.2-1.4	☐ STICKY	☒ 5-20	☐ 5-20	☐ 8-10	☐ 4-8
☐ 1.4-1.7		☐ >20		☐ 10-12.5	☐ 12-16
☐ >1.7					☐ > 16
☐ ____ Actual		☐ ____ Actual	☐ ____ Actual	☐ ____ Actual / Consistent	☐ ____ Actual

FLASH POINT (closed cup)	SULFUR (% W T.)
☐ <60°F	☐ <0.5
☒ 61°-100°F	☒ 0.5-2.0
☐ 101°-140°F	☐ 2-5
☐ 141°-199°F	☐ >5
☐ >200°F	
☐ ____ Actual	☐ ____ Actual

NSN# ____ CODE# ____
CAS# ____
CLIN# 2305 RES. Sys

Certification I certify that all information on this form is complete and factual (including attached information) and is an accurate representation of the known and suspected hazards of the waste to be disposed.

Name James Ward (Print or Type)
Signature James Ward
Title Field Chemist
Date 4-24-89

SPECIAL WASTE, INC.
P.O. BOX 909
ATHENS, TN 37303

SWI USE ONLY (A) R
Date Received 4/26/89 977020
DDW

GENERATOR WASTE CHARACTERIZATION REPORT (Separate report required for each waste stream)

INSTRUCTIONS: Please complete all applicable sections of this report. Print legibly or use a typewriter. If shipping by U.S. Postal Service send to the address above, if shipping by UPS or an express service send to: Special Waste, Inc., Old Niota Road, Athens, TN 37303, Attn: Lab. Supply a representative one-pint sample of the waste. **Do not ship waste for disposal until the generator has received an approval letter from Special Waste, Inc.**

Facility Information

US EPA ID# IL7570024177
Company Name Scott AFB
Plant etc.
Address
City, State, Zip Scott AFB, IL 62225
Contact Person Roger Wilson
Telephone (AC) 618-256-3105 (Ext)

Waste Characterization

Waste Common Name Epoxy Paint

Description of process generating this waste:

Is this waste a Land Ban material? [ ]Yes [X]No

Have you supplied SWI with a representative sample of this waste?
☐ Yes ☒ No ☐ MSDS Analysis Attached ☐ Yes ☒ No

Business/Mailing Information

Business/Plant Name GSX, Gov't Services
Address PO Box 140
City, State, Zip Saukville WI 53080
Contact Lee Bosch Phone 414-284-3427

Constituent Composition Information (include all hazardous constituents)

Major Constituents (Specify %)

epoxy paint pigments	85-90%
thinners (paint)	10-15%

Metals ☐ TOTAL (PPM) ☒ EPA EXTRACTION PROCEDURE (mg/L)

ARSENIC (As)	<5	SELENIUM (Se)	<1	MERCURY (Hg)	<0.2
BARIUM (BA)	<100	SILVER (Ag)	<5	LEAD (Pb)	<5
CADMIUM (Cd)	<1	COPPER (Cu)	<5	ZINC (Zn)	<5
CHROMIUM (Cr)	<5	NICKEL (Ni)	<5	THALLIUM (Tl)	<1
				OTHER	

RCRA INFORMATION

Is this a USEPA hazardous waste? ☒ Yes ☒ No
Please give USEPA hazardous waste codes:
D001

Describe nature of reactivity if D003 waste:

SHIPPING INFORMATION

PROPER SHIPPING NAME Waste Paint related Materia
HAZARD CLASS Flammable liq ID# ~~UN~~1263 R/Q 100
ANTICIPATED VOLUME 2 DRUMS NA GAL. ____ YDS. ____ LBS.
Specify type and size of container: 2-5 gallon
PER: ☐ ONE TIME ☐ WK. ☐ MO. ☒ QTR. ☐ YR. ☐ OTHER

GENERAL CHARACTERISTICS (at 70°F unless otherwise specified)

COLOR Varies
ODOR Paint
☐ NONE ☐ STRONG
☒ MILD

☒ LIQUID 295 % FREE
☐ SOLID
☐ SLUDGE
☐ POWDER

PHASES
☒ NONE
☐ TWO
☐ MULTI-LAYER

☐ Reactive
☐ Explosive N/A
☐ Shock sensitive
☐ FREE CYANIDE ____ ppm
REACTIVE WITH ____

☐ Pyrophoric
☐ Strong Oxidizer N/A
☐ Auto Ignitable
☐ FREE SULFIDE ____ ppm
☐ PCB's ____ ppm conc.

SPECIFIC GRAVITY	VISCOSITY	ASH (% WT.)	TOTAL SOLIDS (% WT.)	pH	BTU's 1000/lbs.
☐ <0.8 ☐ 1.4-1.7	☐ THIN	☐ <0.1	☐ <0.5 ☐ >20	☐ <2 ☐ >12.5	☐ <1 ☒ 8-12
☐ 0.8-1.0 ☒ >1.7	☒ MEDIUM	☐ 0.1-1.0	☐ 0.5-2.0 ☐ ____ Actual	☐ 2-6 ☐ ____ Actual	☐ 1-4 ☐ 12-16
☐ 1.0-1.2 ☐ ____ Actual	☐ THICK	☐ 1-5	☒ 2-5	☒ 6-8	☐ 4-8 ☐ >16
☐ 1.2-1.4	☐ STICKY	☐ 5-20 ☐ ____ Actual	☐ 5-20	☐ 8-10 ☐ ____ Constituent	☐ ____ Actual
		☒ >20		☐ 10-12.5	

FLASH POINT (closed cup)	SULFUR (% W T.)
☐ <60°F	☐ <0.5 ☐ >5
☒ 61°-100°F ☐ >200°F	☒ 0.5-2.0 ☐ ____ Actual
☐ 101°-140°F ☐ ____ Actual	☐ 2-5
☐ 141°-199°F	

NSN# ____ CODE# ____
CAS# ____
CLIN# 3302 Sys, RES

Certification I certify that all information on this form is complete and factual (including attached information) and is an accurate representation of the known and suspected hazards of the waste to be disposed.

Name James Ward
Print or Type
James Ward
Signature

Title Field Chemist
Date 4-24-89

SPECIAL WASTE, INC.
P.O. BOX 909
ATHENS, TN 37303

SWI USE ONLY (A) (R)
Date Received 4/26/89 177019
DOW

GENERATOR WASTE CHARACTERIZATION REPORT (Separate report required for each waste stream)

INSTRUCTIONS: Please complete all applicable sections of this report. Print legibly or use a typewriter. If shipping by U.S. Postal Service send to the address above, if shipping by UPS or an express service send to: Special Waste, Inc., Old Niota Road, Athens, TN 37303, Attn: Lab. Supply a representative one-pint sample of the waste. **Do not ship waste for disposal until the generator has received an approval letter from Special Waste, Inc.**

Facility Information

US EPA ID# IL7570024177
Company Name Scott AFB
Plant etc.
Address
City, State, Zip Scott AFB, IL 62225
Contact Person Roger Wilson
Telephone (AC) 618-256-3105 (Ext)

Waste Characterization

Waste Common Name enamel paint

Description of process generating this waste: waste unused product

Is this waste a Land Ban material? [ ]Yes [X]No

Have you supplied SWI with a representative sample of this waste?
☐ Yes ☒ No ☐ MSDS Analysis Attached ☐ Yes ☒ No

Business/Mailing Information

Business/Plant Name GSX, Gov't Services
Address PO Box 140
City, State, Zip Saukville WI 53080
Contact Lee Bosch Phone 414-284-3427

Constituent Composition Information (include all hazardous constituents)

Major Constituents (Specify %)	
enamel Paint	85-95%
pigments & thinners	5-10%
Water	5-10%

Metals	☐ TOTAL (PPM)	☒ EPA EXTRACTION PROCEDURE (mg/L)			
ARSENIC (As)	<5	SELENIUM (Se)	<1	MERCURY (Hg)	<.2
BARIUM (BA)	<100	SILVER (Ag)	<5	LEAD (Pb)	<5
CADMIUM (Cd)	<1	COPPER (Cu)	<5	ZINC (Zn)	<5
CHROMIUM (Cr)	<5	NICKEL (Ni)	<5	THALLIUM (Tl)	<1
				OTHER	

RCRA INFORMATION

Is this a USEPA hazardous waste? ☒ Yes ☐ No

Please give USEPA hazardous waste codes:
D001

Describe nature of reactivity if D003 waste:

SHIPPING INFORMATION

PROPER SHIPPING NAME Waste Paint related Material
HAZARD CLASS Flammable liq ID# ~~UN1263~~ R/Q 100
ANTICIPATED VOLUME 1 DRUMS NA GAL. YDS. LBS.
Specify type and size of container: 1-55 gallons steel - 1 gallon plastic
PER: ☐ ONE TIME ☐ WK. ☐ MO. ☐ QTR. ☐ YR. ☐ OTHER

GENERAL CHARACTERISTICS (at 70°F unless otherwise specified)

COLOR Varies
ODOR paint
☐ NONE ☐ STRONG ☒ MILD

☒ LIQUID 75% FREE
☐ SOLID
☐ SLUDGE
☐ POWDER

PHASES
☒ NONE
☐ TWO
☐ MULTI-LAYER

☐ Reactive
☐ Explosive
☐ Shock sensitive
☐ FREE CYANIDE ____ ppm
REACTIVE WITH

N/A

☐ Pyrophoric
☐ Strong Oxidizer
☐ Auto Ignitable
☐ FREE SULFIDE ____ ppm
☐ PCB's ____ ppm conc.

N/A

SPECIFIC GRAVITY	VISCOSITY	ASH (% WT.)	TOTAL SOLIDS (%WT.)	pH	BTU's 1000/lbs.
☐ <0.8	☐ THIN	☐ <0.1	☐ <0.5	☐ <2	☐ <1
☐ 0.8-1.0	☒ MEDIUM	☐ 0.1-1.0	☐ 0.5-2.0	☐ 2-6	☒ 8-12
☐ 1.0-1.2	☐ THICK	☐ 1-5	☐ 2-5	☒ 6-8	☐ 1-4
☐ 1.2-1.4	☐ STICKY	☒ 5-20	☐ 5-20	☐ 8-10	☐ 12-16
☐ 1.4-1.7		☐ >20	☐ >20	☐ 10-12.5	☐ 4-8
☒ >1.7			☐ ____ Actual	☐ >12.5	☐ > 16
☐ ____ Actual		☐ ____ Actual		☐ ____ Actual	☐ ____ Actual
				☐ ____ Consistent	

FLASH POINT (closed cup)	SULFUR (% W T.)
☐ <60°F	
☒ 61°-100°F	☒ <0.5
☐ 101°-140°F	☐ 0.5-2.0
☐ 141°-199°F	☐ 2-5
☐ >200°F	☐ >5
☐ ____ Actual	☐ ____ Actual

NSN# CODE#
CAS#
CLIN# 3108 Sys, RES

Certification I certify that all information on this form is complete and factual (including attached information) and is an accurate representation of the known and suspected hazards of the waste to be disposed.

Name James Ward (Print or Type)
Title field Chemist
James Ward (Signature)
Date 4-24-89

SWI SPECIAL WASTE, INC.
P.O. BOX 909
ATHENS, TN 37303

SWI USE ONLY (A) R
Date Received 4/24/89 177018
DDW

GENERATOR WASTE CHARACTERIZATION REPORT (Separate report required for each waste stream)

INSTRUCTIONS: Please complete all applicable sections of this report. Print legibly or use a typewriter. If shipping by U.S. Postal Service send to the address above, if shipping by UPS or an express service send to: Special Waste, Inc., Old Niota Road, Athens, TN 37303, Attn: Lab. Supply a representative one-pint sample of the waste. **Do not ship waste for disposal until the generator has received an approval letter from Special Waste, Inc.**

Facility Information
US EPA ID# IL7570024177
Company Name Scott AFB
Plant etc.
Address
City, State, Zip Scott AFB, IL 62225
Contact Person Roger Wilson
Telephone (AC) 618-256-3105 (Ext)

Waste Characterization
Waste Common Name adhesive
Description of process generating this waste: unused, outdated product

Is this waste a Land Ban material? [ ]Yes [X]No

Have you supplied SWI with a representative sample of this waste?
☐ Yes ☒ No ☐ MSDS Analysis Attached ☐ Yes ☒ No

Business/Mailing Information
Business/Plant Name GSX, Gov't Services
Address PO Box 140
City, State, Zip Saukville WI 53080
Contact Lee Bosch Phone 414-284-3427

Constituent Composition Information (include all hazardous constituents)
Major Constituents (Specify %)
Epoxy Resins
Glues
Poly resins
surfacants
100%

Metals ☐ TOTAL (PPM) ☒ EPA EXTRACTION PROCEDURE (mg/L)

ARSENIC (As)	<5	SELENIUM (Se)	<1	MERCURY (Hg)	<.2
BARIUM (BA)	<100	SILVER (Ag)	<5	LEAD (Pb)	<5
CADMIUM (Cd)	<1	COPPER (Cu)	<5	ZINC (Zn)	<5
CHROMIUM (Cr)	<5	NICKEL (Ni)	<5	THALLIUM (Tl)	<1
				OTHER	

RCRA INFORMATION
Is this a USEPA hazardous waste? ☒ Yes ☐ No
Please give USEPA hazardous waste codes:
D001
Describe nature of reactivity if D003 waste:

SHIPPING INFORMATION
PROPER SHIPPING NAME Waste Flammable liquid, NOS
HAZARD CLASS Flammable liq ID# UN 1993 R/Q 100
ANTICIPATED VOLUME 2 DRUMS ____ GAL. ____ YDS. ____ LBS.
Specify type and size of container: 2-55 gallon drums steel
PER: ☐ ONE TIME ☐ WK. ☐ MO. ☒ QTR. ☐ YR. ☐ OTHER

GENERAL CHARACTERISTICS (at 70°F unless otherwise specified)
COLOR Varies
ODOR
☐ NONE ☐ STRONG
☒ MILD
☒ LIQUID ____ % FREE
☐ SOLID
☐ SLUDGE
☐ POWDER
PHASES
☒ NONE
☐ TWO
☐ MULTI-LAYER
☐ Reactive
☐ Explosive N/A
☐ Shock sensitive
☐ FREE CYANIDE ____ ppm
REACTIVE WITH
☐ Pyrophoric
☐ Strong Oxidizer N/A
☐ Auto Ignitable
☐ FREE SULFIDE ____ ppm
☐ PCB's ____ ppm conc.

SPECIFIC GRAVITY	VISCOSITY	ASH (% WT.)	TOTAL SOLIDS (% WT.)	pH	BTU's 1000/lbs.
☐ <0.8 ☐ 1.4-1.7	☐ THIN	☐ <0.1	☐ <0.5 ☐ >20	☐ <2 ☐ >12.5	☐ <1 ☒ 8-12
☐ 0.8-1.0 ☒ >1.7	☒ MEDIUM	☐ 0.1-1.0	☐ 0.5-2.0 ☐ ____ Actual	☐ 2-6 ☐ ____ Actual	☐ 1-4 ☐ 12-16
☐ 1.0-1.2 ☐ ____ Actual	☒ THICK	☐ 1-5	☐ 2-5	☒ 6-8	☐ 4-8 ☐ >16
☐ 1.2-1.4	☐ STICKY	☐ 5-20 ☐ ____ Actual	☒ 5-20	☐ 8-10 ☐ ____ Constituent	☐ ____ Actual
		☒ >20		☐ 10-12.5	

FLASH POINT (closed cup)	SULFUR (% W T.)
☐ <60°F	☐ <0.5 ☐ >5
☒ 61°-100°F ☐ >200°F	☒ 0.5-2.0 ☐ ____ Actual
☐ 101°-140°F ☐ ____ Actual	☐ 2-5
☐ 141°-199°F	

NSN# ____ CODE# ____
CAS#
CLIN# 2308 Sys, RES

Certification I certify that all information on this form is complete and factual (including attached information) and is an accurate representation of the known and suspected hazards of the waste to be disposed.

Name James Ward (Print or Type) Title Field Chemist
James Ward (Signature) Date 4-24-89

SPECIAL WASTE, INC.
P.O. BOX 909
ATHENS, TN 37303

SWI USE ONLY
Date Received 4/26/89 A R 177017
OOW

GENERATOR WASTE CHARACTERIZATION REPORT (Separate report required for each waste stream)

INSTRUCTIONS: Please complete all applicable sections of this report. Print legibly or use a typewriter. If shipping by U.S. Postal Service send to the address above, if shipping by UPS or an express service send to: Special Waste, Inc., Old Niota Road, Athens, TN 37303, Attn: Lab. Supply a representative one-pint sample of the waste. **Do not ship waste for disposal until the generator has received an approval letter from Special Waste, Inc.**

Facility Information

US EPA ID# IL7570024177
Company Name Scott AFB
Plant etc.
Address
City, State, Zip Scott AFB, IL 62225
Contact Person Roger Wilson
Telephone (AC) 618-256-3105 (Ext)

Waste Characterization

Waste Common Name Nickel-Cadmium batteries
Description of process generating this waste: Spent batteries

Is this waste a Land Ban material? [X] Yes [ ] No

Have you supplied SWI with a representative sample of this waste?
☐ Yes ☐ No ☐ MSDS Analysis Attached ☐ Yes ☒ No

Business/Mailing Information

Business/Plant Name GSX, Gov't Services
Address PO Box 140
City, State, Zip Saukville WI 53080
Contact Lee Bosch Phone 414-284-3427

Constituent Composition Information (include all hazardous constituents)

Major Constituents (Specify %)	
Potassium Hydroxide	10-15%
Nickel Salts	5-10%
Cadmium Salts	5-10%
Plastic/metal casings	65-80%

Metals	☐ TOTAL (PPM)	☒ EPA EXTRACTION PROCEDURE (mg/L)			
ARSENIC (As)	<5	SELENIUM (Se)	<1	MERCURY (Hg)	<0.2
BARIUM (BA)	<100	SILVER (Ag)	<5	LEAD (Pb)	<5
CADMIUM (Cd)	<500	COPPER (Cu)	<5	ZINC (Zn)	<5
CHROMIUM (Cr)	<5	NICKEL (Ni)	<500	THALLIUM (Tl)	<1
				OTHER	

RCRA INFORMATION

Is this a USEPA hazardous waste? ☒ Yes ☐ No
Please give USEPA hazardous waste codes:
D002 D006
Describe nature of reactivity if D003 waste:

SHIPPING INFORMATION

PROPER SHIPPING NAME Waste Battery Dry
HAZARD CLASS Corrosive Mat ID# NA1813 R/Q 1
ANTICIPATED VOLUME 1 DRUMS ____ GAL. ____ YDS. ____ LBS.
Specify type and size of container: 1-55 gallon drum
PER: ☐ ONE TIME ☐ WK. ☐ MO. ☒ QTR. ☐ YR. ☐ OTHER

GENERAL CHARACTERISTICS (at 70°F unless otherwise specified)

COLOR Varies
ODOR None
☒ NONE ☐ STRONG ☐ MILD

☐ LIQUID ____% FREE
☒ SOLID
☐ SLUDGE
☐ POWDER

PHASES
☒ NONE
☐ TWO
☐ MULTI-LAYER

☐ Reactive
☐ Explosive N/A
☐ Shock sensitive
☐ FREE CYANIDE ____ ppm
REACTIVE WITH

☐ Pyrophoric
☐ Strong Oxidizer N/A
☐ Auto Ignitable
☐ FREE SULFIDE ____ ppm
☐ PCB's ____ ppm conc.

SPECIFIC GRAVITY	VISCOSITY	ASH (% WT.)	TOTAL SOLIDS (%WT.)	pH	BTU's 1000/lbs.
☐ <0.8 ☐ 1.4-1.7	Solid,	☐ <0.1	☐ <0.5 ☐ >20	☐ <2 ☒ >12.5	☒ <1 ☐ 8-12
☐ 0.8-1.0 ☒ >1.7	☐ THIN	☐ 0.1-1.0	☐ 0.5-2.0 ☒ 100 Actual	☐ 2-6 ☐ Actual	☐ 1-4 ☐ 12-16
☐ 1.0-1.2 ☐ Actual	☐ MEDIUM	☐ 1-5	☐ 2-5	☐ 6-8	☐ 4-8 ☐ > 16
☐ 1.2-1.4	☐ THICK	☐ 5-20 ☐ Actual	☐ 5-20	☐ 8-10 ☐ Constituent	☐ Actual
	☐ STICKY	☒ > 20		☐ 10-12.5	

FLASH POINT (closed cup)	SULFUR (% W T.)
☐ <60°F	
☐ 61°-100°F ☒ >200°F	☐ <0.5 ☐ >5
☐ 101°-140°F ☐ Actual	☒ 0.5-2.0 ☐ Actual
☐ 141°-199°F	☐ 2-5

NSN#
CODE#
CAS#
CLIN# 0503 Cr, Cu, M

Certification I certify that all information on this form is complete and factual (including attached information) and is an accurate representation of the known and suspected hazards of the waste to be disposed.

Name James Ward (Print or Type)
Title Field Chemist
James Ward (Signature)
Date 4-24-89

SWI

SPECIAL WASTE, INC.
P.O. BOX 909
ATHENS, TN 37303

SWI USE ONLY	
Date Received 4/26/89	A R 177015
DOW	

GENERATOR WASTE CHARACTERIZATION REPORT (Separate report required for each waste stream)

INSTRUCTIONS: Please complete all applicable sections of this report. Print legibly or use a typewriter. If shipping by U.S. Postal Service send to the address above, if shipping by UPS or an express service send to: Special Waste, Inc., Old Niota Road, Athens, TN 37303, Attn: Lab. Supply a representative one-pint sample of the waste. **Do not ship waste for disposal until the generator has received an approval letter from Special Waste, Inc.**

Facility Information

US EPA ID# IL7570024177
Company Name Scott AFB
Plant etc.
Address
City, State, Zip Scott AFB, IL 62225
Contact Person Roger Wilson
Telephone (AC) 618-256-3105 (Ext)

Waste Characterization

Waste Common Name Antifreeze and Oil

Description of process generating this waste: used product

Is this waste a Land Ban material? [ ]Yes [X]No

Have you supplied SWI with a representative sample of this waste?
☐ Yes ☒ No ☐ MSDS Analysis Attached ☐ Yes ☒ No

Business/Mailing Information

Business/Plant Name GSX, Gov't Services
Address PO Box 140
City, State, Zip Saukville WI 53080
Contact Lee Bosch Phone 414-284-3427

Constituent Composition Information (include all hazardous constituents)

Major Constituents (Specify %)	
Antifreeze and water	95%
Oil	5%

Metals	☐ TOTAL (PPM)	☒ EPA EXTRACTION PROCEDURE (mg/L)			
ARSENIC (As)	<5	SELENIUM (Se)	<1	MERCURY (Hg)	<0.2
BARIUM (BA)	<100	SILVER (Ag)	<5	LEAD (Pb)	<5
CADMIUM (Cd)	<5	COPPER (Cu)	<5	ZINC (Zn)	<5
CHROMIUM (Cr)	<5	NICKEL (Ni)	<5	THALLIUM (Tl)	<5
				OTHER	

RCRA INFORMATION

Is this a USEPA hazardous waste? ☐ Yes ☒ No

Please give USEPA hazardous waste codes:
None

Describe nature of reactivity if D003 waste:

SHIPPING INFORMATION

PROPER SHIPPING NAME Non-Hazardous waste Liquid
HAZARD CLASS None ID# — R/Q —
ANTICIPATED VOLUME 7 DRUMS ____ GAL. ____ YDS. ____ LBS.
Specify type and size of container: 6-55 gallon 1-85 gallon O/P
PER: ☐ ONE TIME ☐ WK. ☐ MO. ☒ QTR. ☐ YR. ☐ OTHER

GENERAL CHARACTERISTICS (at 70°F unless otherwise specified)

COLOR green/brown
ODOR ethylene glyc
☐ NONE ☐ STRONG ☒ MILD

☒ LIQUID ____% FREE
☐ SOLID
☐ SLUDGE
☐ POWDER

PHASES
☐ NONE
☒ TWO
☐ MULTI-LAYER

☐ Reactive
☐ Explosive N/A
☐ Shock sensitive
☐ FREE CYANIDE ____ppm
REACTIVE WITH

☐ Pyrophoric
☐ Strong Oxidizer N/A
☐ Auto Ignitable
☐ FREE SULFIDE ____ppm
☐ PCB's ____ppm conc.

SPECIFIC GRAVITY	VISCOSITY	ASH (% WT.)	TOTAL SOLIDS (%WT.)	pH	BTU's 1000/lbs.
☐ <0.8	☒ THIN	☒ <0.1	☒ <0.5	☐ <2	☐ <1
☐ 0.8-1.0	☐ MEDIUM	☐ 0.1-1.0	☐ 0.5-2.0	☐ 2-6	☐ 1-4
☒ 1.0-1.2	☐ THICK	☐ 1-5	☐ 2-5	☒ 6-8	☒ 4-8
☐ 1.2-1.4	☐ STICKY	☐ 5-20	☐ 5-20	☐ 8-10	☐ 8-12
☐ 1.4-1.7		☐ >20	☐ >20	☐ 10-12.5	☐ 12-16
☐ >1.7				☐ >12.5	☐ >16
☐ ____ Actual		☐ ____ Actual	☐ ____ Actual	☐ ____ Actual	☐ ____ Actual
				☐ ____ Constituent	

FLASH POINT (closed cup)	SULFUR (% WT.)
☐ <60°F	☒ <0.5
☐ 61°-100°F	☐ 0.5-2.0
☐ 101°-140°F	☐ 2-5
☐ 141°-199°F	☐ >5
☒ >200°F	
☐ ____ Actual	☐ ____ Actual

NSN# CODE# TN6012
CAS#
CLIN# 6012 CM

Certification I certify that all information on this form is complete and factual (including attached information) and is an accurate representation of the known and suspected hazards of the waste to be disposed.

Name James Ward (Print or Type)
Signature James Ward
Title Field Chemist
Date 4-24-89

SPECIAL WASTE, INC.
P.O. BOX 909
ATHENS, TN 37303

SWI USE ONLY (A) R
Date Received 4/26/89 770014
DOW

GENERATOR WASTE CHARACTERIZATION REPORT (Separate report required for each waste stream)

INSTRUCTIONS: Please complete all applicable sections of this report. Print legibly or use a typewriter. If shipping by U.S. Postal Service send to the address above, if shipping by UPS or an express service send to: Special Waste, Inc., Old Niota Road, Athens, TN 37303, Attn: Lab. Supply a representative one-pint sample of the waste. **Do not ship waste for disposal until the generator has received an approval letter from Special Waste, Inc.**

Facility Information

US EPA ID# IL7570024177
Company Name Scott AFB
Plant etc.
Address
City, State, Zip Scott AFB, IL 62225
Contact Person Roger Wilson
Telephone (AC) 618-256-3105 (Ext)

Business/Mailing Information

Business/Plant Name GSX, Gov't Services
Address PO Box 140
City, State, Zip Saukville WI 53080
Contact Lee Bosch Phone 414-284-3427

Waste Characterization

Waste Common Name Solvents & Water

Description of process generating this waste: Unused product

Constituent Composition Information (include all hazardous constituents)

Major Constituents (Specify %)	
Petroleum distillates	10-15 %
toluene	10-15 %
Water	70-75

Is this waste a Land Ban material? [X] Yes [ ] No

Have you supplied SWI with a representative sample of this waste?
☐ Yes ☒ No ☐ MSDS Analysis Attached ☐ Yes ☒ No

Metals	☐ TOTAL (PPM)	☒ EPA EXTRACTION PROCEDURE (mg/L)			
ARSENIC (As)	<5	SELENIUM (Se)	<1	MERCURY (Hg)	<0.2
BARIUM (BA)	<100	SILVER (Ag)	<5	LEAD (Pb)	<5
CADMIUM (Cd)	<5	COPPER (Cu)	<5	ZINC (Zn)	<5
CHROMIUM (Cr)	<5	NICKEL (Ni)	<5	THALLIUM (Tl)	<5
				OTHER	

RCRA INFORMATION

Is this a USEPA hazardous waste? ☒ Yes ☐ No

Please give USEPA hazardous waste codes:
F005 D001

Describe nature of reactivity if D003 waste:

SHIPPING INFORMATION

PROPER SHIPPING NAME Waste Flammable Liquid, NOS
HAZARD CLASS Flammable liq ID# UN1993 R/Q 100
ANTICIPATED VOLUME 1 DRUMS ____ GAL. ____ YDS. ____ LBS.
Specify type and size of container: 1-55 gallon steel
PER: ☐ ONE TIME ☐ WK. ☐ MO. ☒ QTR. ☐ YR. ☐ OTHER

GENERAL CHARACTERISTICS (at 70°F unless otherwise specified)

COLOR Clear → amber ODOR Solvent
☐ NONE ☐ STRONG ☒ MILD
☒ LIQUID ____ % FREE ☐ SOLID ☐ SLUDGE ☐ POWDER
PHASES: ☒ NONE ☐ TWO ☐ MULTI-LAYER

☐ Reactive ☐ Explosive ☐ Shock sensitive N/A
☐ FREE CYANIDE ____ ppm
REACTIVE WITH ____
☐ Pyrophoric ☐ Strong Oxidizer N/A ☐ Auto Ignitable
☐ FREE SULFIDE ____ ppm
☐ PCB's ____ ppm conc.

SPECIFIC GRAVITY	VISCOSITY	ASH (% WT.)	TOTAL SOLIDS (% WT.)	pH	BTU's 1000/lbs.
☐ <0.8	☒ THIN	☒ <0.1	☒ <0.5	☐ <2	☐ <1
☒ 0.8-1.0	☐ MEDIUM	☐ 0.1-1.0	☐ 0.5-2.0	☐ 2-6	☒ 8-12
☐ 1.0-1.2	☐ THICK	☐ 1-5	☐ 2-5	☒ 6-8	☐ 1-4
☐ 1.2-1.4	☐ STICKY	☐ 5-20	☐ 5-20	☐ 8-10	☐ 12-16
☐ 1.4-1.7		☐ >20	☐ >20	☐ 10-12.5	☐ 4-8
☐ >1.7				☐ >12.5	☐ > 16
☐ ____ Actual		☐ ____ Actual	☐ ____ Actual	☐ ____ Actual	☐ ____ Actual

FLASH POINT (closed cup)	SULFUR (% W T.)
☐ <60°F	☒ <0.5
☒ 61°-100°F	☐ 0.5-2.0
☐ 101°-140°F	☐ 2-5
☐ 141°-199°F	☐ >5
☐ >200°F	☐ ____ Actual
☐ ____ Actual	

NSN# ____ CODE# ____
CAS# ____
CLIN# 4527 RES. Sys

Certification I certify that all information on this form is complete and factual (including attached information) and is an accurate representation of the known and suspected hazards of the waste to be disposed.

Name James Ward (Print or Type) Title Field Chemist
James Ward (Signature) Date 4-24-89

SWI

SPECIAL WASTE, INC.
P.O. BOX 909
ATHENS, TN 37303

SWI USE ONLY	
Date Received 4/26/89	R 177013
DOW	

GENERATOR WASTE CHARACTERIZATION REPORT (Separate report required for each waste stream)

INSTRUCTIONS: Please complete all applicable sections of this report. Print legibly or use a typewriter. If shipping by U.S. Postal Service send to the address above, if shipping by UPS or an express service send to: Special Waste, Inc., Old Niota Road, Athens, TN 37303, Attn: Lab. Supply a representative one-pint sample of the waste. **Do not ship waste for disposal until the generator has received an approval letter from Special Waste, Inc.**

Facility Information

US EPA ID# IL7570024177
Company Name Scott AFB
Plant etc.
Address
City, State, Zip Scott AFB, IL 62225
Contact Person Roger Wilson
Telephone (AC) 618-256-3105 (Ext)

Business/Mailing Information

Business/Plant Name GSX, Gov't Services
Address PO Box 140
City, State, Zip Saukville WI 53080
Contact Lee Bosch Phone 414-284-3427

Waste Characterization

Waste Common Name Xylene & Paint

Description of process generating this waste: Paint Stripping

Constituent Composition Information (include all hazardous constituents)

Major Constituents (Specify %)	
Xylene	85-90%
Paint	10-15%

Is this waste a Land Ban material? [X] Yes [ ] No

Have you supplied SWI with a representative sample of this waste?
☐ Yes ☒ No ☐ MSDS Analysis Attached ☐ Yes ☒ No

Metals	☐ TOTAL (PPM)	☒ EPA EXTRACTION PROCEDURE (mg/L)			
ARSENIC (As)	<5	SELENIUM (Se)	<1	MERCURY (Hg)	<.2
BARIUM (BA)	<100	SILVER (Ag)	<5	LEAD (Pb)	<5
CADMIUM (Cd)	<5	COPPER (Cu)	<5	ZINC (Zn)	<5
CHROMIUM (Cr)	<5	NICKEL (Ni)	<5	THALLIUM (Tl)	<5
				OTHER	

RCRA INFORMATION

Is this a USEPA hazardous waste? ☒ Yes ☐ No

Please give USEPA hazardous waste codes:
F003 D001

Describe nature of reactivity if D003 waste:

SHIPPING INFORMATION

PROPER SHIPPING NAME Waste Flammable Liquid, NOS
HAZARD CLASS Flammable Liq ID# UN1993 R/Q 100
ANTICIPATED VOLUME 1 DRUMS ____ GAL. ____ YDS. ____ LBS.
Specify type and size of container: 1-55 gallon O/P
PER: ☐ ONE TIME ☐ WK. ☐ MO. ☒ QTR. ☐ YR. ☐ OTHER

GENERAL CHARACTERISTICS (at 70°F unless otherwise specified)

COLOR Varies
ODOR Xylene
☐ NONE ☐ STRONG
☒ MILD

☒ LIQUID 295% FREE
☐ SOLID
☐ SLUDGE
☐ POWDER

PHASES
☒ NONE
☐ TWO
☐ MULTI-LAYER

☐ Reactive
☐ Explosive
☐ Shock sensitive
☐ FREE CYANIDE ____ ppm
REACTIVE WITH ____

N/A

☐ Pyrophoric
☐ Strong Oxidizer
☐ Auto Ignitable
☐ FREE SULFIDE ____ ppm
☐ PCB's ____ ppm conc.

N/A

SPECIFIC GRAVITY	VISCOSITY	ASH (% WT.)	TOTAL SOLIDS (%WT.)	pH	BTU's 1000/lbs.
☐ <0.8	☒ THIN	☒ <0.1	☐ <0.5	☐ <2	☐ <1
☐ 0.8-1.0	☐ MEDIUM	☐ 0.1-1.0	☐ >20	☐ 2-6	☐ 1-4
☐ 1.0-1.2	☐ THICK	☐ 1-5	☒ 0.5-2.0	☐ >12.5	☐ 4-8
☐ 1.2-1.4	☐ STICKY	☐ 5-20	☐ 2-5	☐ 2-6	☐ 8-12
☐ 1.4-1.7		☐ >20	☐ 5-20	☐ 6-8	☒ 12-16
☐ >1.7				☐ 8-10	☐ >16
☐ ____ Actual		☐ ____ Actual	☐ ____ Actual	☐ 10-12.5	☐ ____ Actual
				☐ ____ Constituent	

FLASH POINT (closed cup)	SULFUR (% W T.)
☐ <60°F	☐ <0.5
☒ 61°-100°F	☒ 0.5-2.0
☐ 101°-140°F	☐ 2-5
☐ 141°-199°F	☐ >5
☐ >200°F	☐ ____ Actual
☐ ____ Actual	

NSN# ____ CODE# ____
CAS# ____
CLIN# 4505 Sys

Certification I certify that all information on this form is complete and factual (including attached information) and is an accurate representation of the known and suspected hazards of the waste to be disposed.

Name James Ward (Print or Type) Title Field Chemist

James Ward (Signature) Date 4-24-89

SWI SPECIAL WASTE, INC.
P.O. BOX 909
ATHENS, TN 37303

SWI USE ONLY	A	R
Date Received 4/20/89	17701a	
DOW		

GENERATOR WASTE CHARACTERIZATION REPORT (Separate report required for each waste stream)

INSTRUCTIONS: Please complete all applicable sections of this report. Print legibly or use a typewriter. If shipping by U.S. Postal Service send to the address above, if shipping by UPS or an express service send to: Special Waste, Inc., Old Niota Road, Athens, TN 37303, Attn: Lab. Supply a representative one-pint sample of the waste. **Do not ship waste for disposal until the generator has received an approval letter from Special Waste, Inc.**

Facility Information

US EPA ID# IL7570024177
Company Name Scott AFB
Plant etc.
Address
City, State, Zip Scott AFB, IL 62225
Contact Person Roger Wilson
Telephone (AC) 618-256-3105 (Ext)

Business/Mailing Information

Business/Plant Name GSX, Gov't Services
Address PO Box 140
City, State, Zip Saukville WI 53080
Contact Lee Bosch Phone 414-284-3427

Waste Characterization

Waste Common Name Naptha and Water

Description of process generating this waste: Used product

Constituent Composition Information (include all hazardous constituents)

Major Constituents (Specify %)

Naptha	70-75%
Water	25-30%

Is this waste a Land Ban material? [ ]Yes [X]No

Have you supplied SWI with a representative sample of this waste?
☐ Yes ☒ No ☐ MSDS Analysis Attached ☐ Yes ☒ No

Metals ☐ TOTAL (PPM) ☒ EPA EXTRACTION PROCEDURE (mg/L)

ARSENIC (As)	<5	SELENIUM (Se)	<1	MERCURY (Hg)	<0.2
BARIUM (BA)	<1	SILVER (Ag)	<5	LEAD (Pb)	<5
CADMIUM (Cd)	<5	COPPER (Cu)	<5	ZINC (Zn)	<5
CHROMIUM (Cr)	<5	NICKEL (Ni)	<5	THALLIUM (Tl)	<5
				OTHER	

RCRA INFORMATION

Is this a USEPA hazardous waste? ☒ Yes ☐ No

Please give USEPA hazardous waste codes:
D001

Describe nature of reactivity if D003 waste:

SHIPPING INFORMATION

PROPER SHIPPING NAME Waste Flammable Liquid, NOS
HAZARD CLASS Flammable liq ID# UN 1993 R/Q 100
ANTICIPATED VOLUME 10 DRUMS ____ GAL. ____ YDS. ____ LBS.
Specify type and size of container: 10-55 gallon steel
PER: ☐ ONE TIME ☐ WK. ☐ MO. ☒ QTR. ☐ YR. ☐ OTHER

GENERAL CHARACTERISTICS (at 70°F unless otherwise specified)

COLOR amber
ODOR naptha
☐ NONE ☐ STRONG ☒ MILD

☒ LIQUID ____% FREE
☐ SOLID
☐ SLUDGE
☐ POWDER

PHASES
☒ NONE
☐ TWO
☐ MULTI-LAYER

☐ Reactive
☐ Explosive
☐ Shock sensitive
N/A
☐ FREE CYANIDE ____ppm
REACTIVE WITH

☐ Pyrophoric
☐ Strong Oxidizer
☐ Auto Ignitable
N/A
☐ FREE SULFIDE ____ppm
☐ PCB's ____ppm conc.

SPECIFIC GRAVITY	VISCOSITY	ASH (% WT.)	TOTAL SOLIDS (%WT.)	pH	BTU's 1000/lbs.
☐ <0.8	☒ THIN	☒ <0.1	☒ <0.5	☐ <2	☐ <1
☒ 0.8-1.0	☐ MEDIUM	☐ 0.1-1.0	☐ 0.5-2.0	☐ 2-6	☐ 1-4
☐ 1.0-1.2	☐ THICK	☐ 1-5	☐ 2-5	☒ 6-8	☐ 4-8
☐ 1.2-1.4	☐ STICKY	☐ 5-20	☐ 5-20	☐ 8-10	☐ 8-12
☐ 1.4-1.7		☐ >20	☐ >20	☐ 10-12.5	☒ 12-16
☐ >1.7		☐ ____ Actual	☐ ____ Actual	☐ >12.5	☐ > 16
☐ ____ Actual				☐ ____ Actual	☐ ____ Actual
				☐ ____ Constituent	

FLASH POINT (closed cup)	SULFUR (% W T.)
☐ <60°F	☒ <0.5
☒ 61°-100°F	☐ 0.5-2.0
☐ 101°-140°F	☐ 2-5
☐ 141°-199°F	☐ >5
☐ >200°F	☐ ____ Actual
☐ ____ Actual	

NSN# ____ CODE# ____
CAS#
CLIN# 3905 Sys

Certification I certify that all information on this form is complete and factual (including attached information) and is an accurate representation of the known and suspected hazards of the waste to be disposed.

Name James Ward (Print or Type)
Signature James Ward
Title Field Chemist
Date 4-24-89

SPECIAL WASTE, INC.
P.O. BOX 909
ATHENS, TN 37303

Date Received 4/24/89 | 177010
DDW

GENERATOR WASTE CHARACTERIZATION REPORT (Separate report required for each waste stream)

INSTRUCTIONS: Please complete all applicable sections of this report. Print legibly or use a typewriter. If shipping by U.S. Postal Service send to the address above, if shipping by UPS or an express service send to: Special Waste, Inc., Old Niota Road, Athens, TN 37303. Attn: Lab. Supply a representative one-pint sample of the waste. **Do not ship waste for disposal until the generator has received an approval letter from Special Waste, Inc.**

Facility Information

US EPA ID# IL7570024177
Company Name Scott AFB
Plant etc.
Address
City, State, Zip Scott AFB, IL 62225
Contact Person Roger Wilson
Telephone (AC) 618-256-3105 (Ext)

Business/Mailing Information

Business/Plant Name GSX, Gov't Services
Address PO Box 140
City, State, Zip Saukville WI 53080
Contact Lee Bosch Phone 414-284-3427

Waste Characterization

Waste Common Name Varnish

Description of process generating this waste: Outdated material

Constituent Composition Information (include all hazardous constituents)

Major Constituents (Specify %)	
Varnish	75-80%
denatured Alcohol	20-25%

Is this waste a Land Ban material? [ ]Yes [ ]No

Have you supplied SWI with a representative sample of this waste? ☐ Yes ☐ No ☐ MSDS Analysis Attached ☐ Yes ☐ No

Metals	☐ TOTAL (PPM)	☒ EPA EXTRACTION PROCEDURE (mg/L)			
ARSENIC (As)	<5	SELENIUM (Se)	<1	MERCURY (Hg)	<0.2
BARIUM (BA)	<100	SILVER (Ag)	<5	LEAD (Pb)	<5
CADMIUM (Cd)	<1	COPPER (Cu)	<5	ZINC (Zn)	<5
CHROMIUM (Cr)	<5	NICKEL (Ni)	<5	THALLIUM (Tl)	<1
				OTHER	

RCRA INFORMATION

Is this a USEPA hazardous waste? ☒ Yes ☐ No

Please give USEPA hazardous waste codes: D001

Describe nature of reactivity if D003 waste:

SHIPPING INFORMATION

PROPER SHIPPING NAME Waste Flammable Liquid, NOS
HAZARD CLASS Flammable liquid ID# UN1993 R/Q 100
ANTICIPATED VOLUME 1 DRUMS ____ GAL. ____ YDS. ____ LBS.
Specify type and size of container: 1-5 gallon pail
PER: ☐ ONE TIME ☐ WK. ☐ MO. ☒ QTR. ☐ YR. ☐ OTHER

GENERAL CHARACTERISTICS (at 70°F unless otherwise specified)

COLOR Varies→amber ☒ LIQUID 795 % FREE
ODOR alcohol
☐ NONE ☐ STRONG ☒ MILD
☐ SOLID ☐ SLUDGE ☐ POWDER

PHASES: ☐ NONE ☒ TWO ☐ MULTI-LAYER

☐ Reactive ☐ Explosive ☐ Shock sensitive N/A
☐ FREE CYANIDE ____ ppm
REACTIVE WITH

☐ Pyrophoric ☐ Strong Oxidizer ☐ Auto Ignitable N/A
☐ FREE SULFIDE ____ ppm
☐ PCB's ____ ppm conc.

SPECIFIC GRAVITY	VISCOSITY	ASH (% WT.)	TOTAL SOLIDS (% WT.)	pH	BTU's 1000/lbs.
☐ <0.8	☐ THIN	☐ <0.1	☐ <0.5	☐ <2	☐ <1
☐ 0.8-1.0	☒ MEDIUM	☐ 0.1-1.0	☐ >20	☐ 2-6	☒ 8-12
☐ 1.0-1.2	☒ THICK	☒ 1-5	☒ 0.5-2.0	☒ 6-8	☐ 1-4
☐ 1.2-1.4	☐ STICKY	☐ 5-20	☐ 2-5	☐ 8-10	☐ 12-16
☐ 1.4-1.7		☐ >20	☐ 5-20	☐ 10-12.5	☐ 4-8
☒ >1.7				☐ >12.5	☐ >16
☐ ____ Actual		☐ ____ Actual	☐ ____ Actual	☐ ____ Actual	☐ ____ Actual
				☐ ____ Consistent	

FLASH POINT (closed cup)	SULFUR (% W T.)
☐ <60°F	☒ <0.5
☒ 61°-100°F	☐ 0.5-2.0
☐ 101°-140°F	☐ 2-5
☐ 141°-199°F	☐ >5
☐ >200°F	
☐ ____ Actual	☐ ____ Actual

NSN# CODE#
CAS#
CLIN# 2305 Sys

Certification I certify that all information on this form is complete and factual (including attached information) and is an accurate representation of the known and suspected hazards of the waste to be disposed.

Name James Ward (Print or Type) Title Field Chemist

James Ward (Signature) Date 4-25-89

SWI

SPECIAL WASTE, INC.
P.O. BOX 909
ATHENS, TN 37303

SWI USE ONLY	R
Date Received 4/26/89	17700
DGW	

GENERATOR WASTE CHARACTERIZATION REPORT (Separate report required for each waste stream)

INSTRUCTIONS: Please complete all applicable sections of this report. Print legibly or use a typewriter. If shipping by U.S. Postal Service send to the addres above, if shipping by UPS or an express service send to: Special Waste, Inc., Old Niota Road, Athens, TN 37303, Attn: Lab. Supply a representative one-pir sample of the waste. **Do not ship waste for disposal until the generator has received an approval letter from Special Waste, Inc.**

Facility Information

US EPA ID# IL7570024177
Company Name Scott AFB
Plant etc.
Address
City, State, Zip Scott AFB, IL 62225
Contact Person Roger Wilson
Telephone (AC) 618-256-3105 (Ext)

Business/Mailing Information

Business/Plant Name GSX, Gov't Services
Address PO Box 140
City, State, Zip Saukville WI 53080
Contact Lee Bosch Phone 414-284-3423

Waste Characterization

Waste Common Name MEK and Paint

Description of process generating this waste: Paint Stripping

Constituent Composition Information (include all hazardous constituents

Major Constituents (Specify %)	
Methyl Ethyl Ketone	20-25%
Toluene	20%-25%
Lacquer Thinner	20-25%
Paint	25-35%

Is this waste a Land Ban material? [X] Yes [ ] No

Have you supplied SWI with a representative sample of this waste?
☐ Yes ☒ No ☐ MSDS Analysis Attached ☐ Yes ☒ No

Metals	☐ TOTAL (PPM)	☐ EPA EXTRACTION PROCEDURE (mg/L)			
ARSENIC (As)	<5	SELENIUM (Se)	<1	MERCURY (Hg)	<.2
BARIUM (BA)	<100	SILVER (Ag)	<5	LEAD (Pb)	<5
CADMIUM (Cd)	<5	COPPER (Cu)	<5	ZINC (Zn)	<5
CHROMIUM (Cr)	<5	NICKEL (Ni)	<5	THALLIUM (Tl)	<5
				OTHER	

RCRA INFORMATION

Is this a USEPA hazardous waste? ☒ Yes ☐ No

Please give USEPA hazardous waste codes:
F005 D001

Describe nature of reactivity if D003 waste:

SHIPPING INFORMATION

PROPER SHIPPING NAME Waste Flammable Liquid NOS
HAZARD CLASS Flammable Liq ID# UN 1993 R/Q 100
ANTICIPATED VOLUME 52 DRUMS ____ GAL. ____ YDS. ____ LBS
Specify type and size of container: 2-55 gallon steel
PER: ☐ ONE TIME ☐ WK. ☐ MO. ☒ QTR. ☐ YR. ☐ OTHER

GENERAL CHARACTERISTICS (at 70°F unless otherwise specified)

COLOR Varies
ODOR Solvent
☐ NONE ☐ STRONG
☒ MILD

☒ LIQUID 75-85% FREE
☐ SOLID
☐ SLUDGE
☐ POWDER

PHASES
☒ NONE
☐ TWO
☐ MULTI-LAYER

☐ Reactive
☐ Explosive
☐ Shock sensitive
☐ FREE CYANIDE ____ ppm
REACTIVE WITH ____

N/A

☐ Pyrophoric
☐ Strong Oxidizer
☐ Auto Ignitable
☐ FREE SULFIDE ____ ppm
☐ PCB's ____ ppm conc.

N/A

SPECIFIC GRAVITY	VISCOSITY	ASH (% WT.)	TOTAL SOLIDS (%WT.)	pH	BTU's 1000/lbs.
☐ <0.8	☐ THIN	☐ <0.1	☐ <0.5	☐ <2	☐ <1
☐ 0.8-1.0	☒ MEDIUM	☐ 0.1-1.0	☐ 0.5-2.0	☐ 2-6	☒ 8-12
☐ 1.0-1.2	☒ THICK	☐ 1-5	☐ 2-5	☒ 6-8	☐ 1-4
☐ 1.2-1.4	☐ STICKY	☐ 5-20	☒ 5-20	☐ 8-10	☐ 4-8
☐ 1.4-1.7		☒ >20	☐ >20	☐ 10-12.5	☐ 12-16
☒ >1.7			☐ ____ Actual	☐ >12.5	☐ >16
☐ ____ Actual		☐ ____ Actual		☐ ____ Actual	☐ ____ Actual
				☐ ____ Constituent	

FLASH POINT (closed cup)	SULFUR (% W T.)
☐ <60°F	☐ <0.5
☒ 61°-100°F	☒ 0.5-2.0
☐ 101°-140°F	☐ 2-5
☐ 141°-199°F	☐ >5
☐ >200°F	☐ ____ Actual
☐ ____ Actual	

NSN# ____ CODE# ____
CAS# ____
CLIN# 4704 Sys.RES

Certification I certify that all information on this form is complete and factual (including attached information) and is an accurate representation of the know and suspected hazards of the waste to be disposed.

Name James Ward (Print or Type)
Title Field Chemist
James Ward (Signature)
Date 4-24-89

SPECIAL WASTE, INC.
P.O. BOX 909
ATHENS, TN 37303

Date Received 4/26/89 17700
DOd

GENERATOR WASTE CHARACTERIZATION REPORT (Separate report required for each waste stream)

INSTRUCTIONS: Please complete all applicable sections of this report. Print legibly or use a typewriter. If shipping by U.S. Postal Service send to the address above, if shipping by UPS or an express service send to: Special Waste, Inc., Old Niota Road, Athens, TN 37303, Attn: Lab. Supply a representative one-pint sample of the waste. **Do not ship waste for disposal until the generator has received an approval letter from Special Waste, Inc.**

Facility Information

US EPA ID# IL7570024177
Company Name Scott AFB
Plant etc.
Address
City, State, Zip Scott AFB, IL 62225
Contact Person Roger Wilson
Telephone (AC) 618-256-3105 (Ext)

Waste Characterization

Waste Common Name JP4 Spill clean-up

Description of process generating this waste: Spill clean-up

Is this waste a Land Ban material? [ ]Yes [X]No

Have you supplied SWI with a representative sample of this waste?
☐ Yes ☒ No ☐ MSDS Analysis Attached ☐ Yes ☒ No

Business/Mailing Information

Business/Plant Name GSX, Gov't Services
Address PO Box 140
City, State, Zip Saukville WI 53080
Contact Lee Bosch Phone 414-284-3427

Constituent Composition Information (include all hazardous constituents)

Major Constituents (Specify %)

Oil absorbant	75-80%
JP-4	20-25%

Metals	☐ TOTAL (PPM)	☒ EPA EXTRACTION PROCEDURE (mg/L)			
ARSENIC (As)	<5	SELENIUM (Se)	<1	MERCURY (Hg)	<0.2
BARIUM (BA)	<100	SILVER (Ag)	<5	LEAD (Pb)	<5
CADMIUM (Cd)	<5	COPPER (Cu)	<5	ZINC (Zn)	<5
CHROMIUM (Cr)	<5	NICKEL (Ni)	<5	THALLIUM (Tl)	<5
				OTHER	

RCRA INFORMATION

Is this a USEPA hazardous waste? ☒ Yes ☐ No

Please give USEPA hazardous waste codes: D001

Describe nature of reactivity if D003 waste:

SHIPPING INFORMATION

PROPER SHIPPING NAME Waste Flammable Solid, NOS
HAZARD CLASS Flammable Solid ID# UN1325 R/Q 100
ANTICIPATED VOLUME 2 DRUMS ____ GAL. ____ YDS. ____ LBS.
Specify type and size of container: 2-85 gallon
PER: ☐ ONE TIME ☐ WK. ☐ MO. ☒ QTR. ☐ YR. ☐ OTHER

GENERAL CHARACTERISTICS (at 70°F unless otherwise specified)

COLOR gray
ODOR fuel
☐ NONE ☐ STRONG ☒ MILD

☐ LIQUID ____% FREE
☒ SOLID
☐ SLUDGE
☐ POWDER

PHASES
☒ NONE
☐ TWO
☐ MULTI-LAYER

☐ Reactive
☐ Explosive N/A
☐ Shock sensitive
☐ FREE CYANIDE ____ppm
REACTIVE WITH

☐ Pyrophoric
☐ Strong Oxidizer N/A
☐ Auto Ignitable
☐ FREE SULFIDE ____ppm
☐ PCB's ____ppm conc.

SPECIFIC GRAVITY	VISCOSITY	ASH (% WT.)	TOTAL SOLIDS (%WT.)	pH	BTU's 1000/lbs.
	Solid,				
☐ <0.8	☐ THIN	☐ <0.1	☐ <0.5	☐ <2	☐ <1
☐ 0.8-1.0	☐ MEDIUM	☐ 0.1-1.0	☐ 0.5-2.0	☐ 2-6	☐ 1-4
☐ 1.0-1.2	☐ THICK	☐ 1-5	☐ 2-5	☒ 6-8	☐ 4-8
☐ 1.2-1.4	☐ STICKY	☐ 5-20	☐ 5-20	☐ 8-10	☒ 8-12
☐ 1.4-1.7		☒ >20	☒ >20	☐ 10-12.5	☐ 12-16
☒ >1.7				☐ >12.5	☐ >16
☐ ____ Actual		☐ ____ Actual	☐ ____ Actual	☐ ____ Actual	☐ ____ Actual

FLASH POINT (closed cup)	SULFUR (% W T.)
☐ <60°F	
☒ 61°-100°F	☐ <0.5
☐ 101°-140°F	☒ 0.5-2.0
☐ 141°-199°F	☐ 2-5
☐ >200°F	☐ >5
☐ ____ Actual	☐ ____ Actual

NSN#
CODE#
CAS#
CLIN# 5500 (W)M

Certification I certify that all information on this form is complete and factual (including attached information) and is an accurate representation of the known and suspected hazards of the waste to be disposed.

Name James Ward (Print or Type)
Title Field Chemist
James Ward (Signature)
Date 4-24-89

SWI SPECIAL WASTE, INC.
P.O. BOX 909
ATHENS, TN 37303

SWI USE ONLY
Date Received 4/26/89 R 17700
DBW

GENERATOR WASTE CHARACTERIZATION REPORT (Separate report required for each waste stream)

INSTRUCTIONS: Please complete all applicable sections of this report. Print legibly or use a typewriter. If shipping by U.S. Postal Service send to the address above, if shipping by UPS or an express service send to: Special Waste, Inc., Old Niota Road, Athens, TN 37303, Attn: Lab. Supply a representative one-pint sample of the waste. **Do not ship waste for disposal until the generator has received an approval letter from Special Waste, Inc.**

Facility Information

US EPA ID# IL7570024177
Company Name Scott AFB
Plant etc.
Address
City, State, Zip Scott AFB, IL 62225
Contact Person Roger Wilson
Telephone (AC) 618-256-3105 (Ext)

Waste Characterization

Waste Common Name Paint thinners -
Description of process generating this waste: Paint Stripping

Is this waste a Land Ban material? [X] Yes [ ] No

Have you supplied SWI with a representative sample of this waste?
☐ Yes ☒ No ☐ MSDS Analysis Attached ☐ Yes ☒ No

Business/Mailing Information

Business/Plant Name GSX, Gov't Services
Address PO Box 140
City, State, Zip Saukville WI 53080
Contact Lee Bosch Phone 414-284-3427

Constituent Composition Information (include all hazardous constituents)

Major Constituents (Specify %)	
Methyl Ethyl Ketone	10-25%
Toluene	10-25%
Petroleum Distillates	10-25%
Paint	25-30%

Metals	☐ TOTAL (PPM)	☐ EPA EXTRACTION PROCEDURE (mg/L)			
ARSENIC (As)	<5	SELENIUM (Se)	<1	MERCURY (Hg)	<.2
BARIUM (BA)	<100	SILVER (Ag)	<5	LEAD (Pb)	<5
CADMIUM (Cd)	<5	COPPER (Cu)	<5	ZINC (Zn)	<5
CHROMIUM (Cr)	<5	NICKEL (Ni)	<5	THALLIUM (Tl)	<5
				OTHER	

RCRA INFORMATION

Is this a USEPA hazardous waste? ☒ Yes ☐ No
Please give USEPA hazardous waste codes:
F005 D001
Describe nature of reactivity if D003 waste:

SHIPPING INFORMATION

PROPER SHIPPING NAME Waste Flammable liquid NOS
HAZARD CLASS Flammable liq ID# UN1993 R/Q 100
ANTICIPATED VOLUME 2 DRUMS ____ GAL. ____ YDS. ____ LBS.
Specify type and size of container: 2-55 gallon steel
PER: ☐ ONE TIME ☐ WK. ☐ MO ☒ QTR. ☐ YR. ☐ OTHER

GENERAL CHARACTERISTICS (at 70°F unless otherwise specified)

COLOR Varies
ODOR Solvent
☐ NONE ☐ STRONG ☒ MILD

☒ LIQUID 75-80% FREE
☐ SOLID
☐ SLUDGE
☐ POWDER

PHASES
☐ NONE
☒ TWO
☐ MULTI-LAYER

☐ Reactive
☐ Explosive N/A
☐ Shock sensitive
☐ FREE CYANIDE ____ ppm
REACTIVE WITH

☐ Pyrophoric
☐ Strong Oxidizer N/A
☐ Auto Ignitable
☐ FREE SULFIDE ____ ppm
☐ PCB's ____ ppm conc.

SPECIFIC GRAVITY	VISCOSITY	ASH (% WT.)	TOTAL SOLIDS (%WT.)	pH	BTU's 1000/lbs.
☐ <0.8	☐ THIN	☐ <0.1	☐ <0.5	☐ <2	☐ <1
☐ 0.8-1.0	☒ MEDIUM	☐ 0.1-1.0	☐ 0.5-2.0	☐ 2-6	☐ 1-4
☒ 1.0-1.2	☒ THICK	☐ 1-5	☐ 2-5	☒ 6-8	☐ 4-8
☐ 1.2-1.4	☐ STICKY	☐ 5-20	☒ 5-20	☐ 8-10	☒ 12-16
☐ 1.4-1.7		☒ >20	☐ >20	☐ 10-12.5	☐ >16
☐ >1.7				☐ >12.5	
☐ ____ Actual		☐ ____ Actual	☐ ____ Actual	☐ ____ Actual	☐ ____ Actual
				☐ ____ Constituent	

FLASH POINT (closed cup)	SULFUR (% W T.)	NSN#	CODE#
☐ <60°F		CAS#	
☒ 61°-100°F	☐ <0.5	CLIN# 4731 Sys, RES	
☐ 101°-140°F	☒ 0.5-2.0		
☐ 141°-199°F	☐ 2-5		
☐ >200°F	☐ >5		
☐ ____ Actual	☐ ____ Actual		

Certification I certify that all information on this form is complete and factual (including attached information) and is an accurate representation of the known and suspected hazards of the waste to be disposed.

Name James Ward (Print or Type) Title Field Chemist

James Ward (Signature) Date 4-24-89

SPECIAL WASTE, INC.
P.O. BOX 909
ATHENS, TN 37303

Date Received 4/26/89 177008
ADW

GENERATOR WASTE CHARACTERIZATION REPORT (Separate report required for each waste stream)

INSTRUCTIONS: Please complete all applicable sections of this report. Print legibly or use a typewriter. If shipping by U.S. Postal Service send to the address above, if shipping by UPS or an express service send to: Special Waste, Inc., Old Niota Road, Athens, TN 37303, Attn: Lab. Supply a representative one-pint sample of the waste. **Do not ship waste for disposal until the generator has received an approval letter from Special Waste, Inc.**

Facility Information

US EPA ID# IL7570024177
Company Name Scott AFB
Plant etc.
Address
City, State, Zip Scott AFB, IL 62225
Contact Person Roger Wilson
Telephone (AC) 618-256-3105 (Ext)

Waste Characterization

Waste Common Name paint Stripper, water and paint
Description of process generating this waste: paint Stripping

Is this waste a Land Ban material? [X] Yes [ ] No

Have you supplied SWI with a representative sample of this waste?
☐ Yes ☒ No ☐ MSDS Analysis Attached ☐ Yes ☒ No

Business/Mailing Information

Business/Plant Name GSX, Gov't Services
Address PO Box 140
City, State, Zip Saukville WI 53080
Contact Lee Bosch Phone 414-284-3427

Constituent Composition Information (include all hazardous constituents)

Major Constituents (Specify %)	
paint stripper	60%
methylene chloride	
1,1,1 trichloroethane	
paint	30%
water	10%

Metals	☐ TOTAL (PPM)	☒ EPA EXTRACTION PROCEDURE (mg/L)			
ARSENIC (As)	<5	SELENIUM (Se)	<1	MERCURY (Hg)	<0.2
BARIUM (BA)	<100	SILVER (Ag)	<5	LEAD (Pb)	<5
CADMIUM (Cd)	<5	COPPER (Cu)	<5	ZINC (Zn)	<5
CHROMIUM (Cr)	<5	NICKEL (Ni)	<5	THALLIUM (Tl)	<5
				OTHER	

RCRA INFORMATION

Is this a USEPA hazardous waste? ☒ Yes ☐ No

Please give USEPA hazardous waste codes:
F002

Describe nature of reactivity if D003 waste:

SHIPPING INFORMATION

PROPER SHIPPING NAME Hazardous Waste Liquid, NOS
HAZARD CLASS ORM-E ID# NA9189 R/Q
ANTICIPATED VOLUME 2 DRUMS ____ GAL. ____ YDS. ____ LBS.
Specify type and size of container: 2-55 gallon - steel
PER: ☐ ONE TIME ☐ WK. ☐ MO. ☒ QTR. ☐ YR. ☐ OTHER

GENERAL CHARACTERISTICS (at 70°F unless otherwise specified)

COLOR Varies
ODOR Solvent
☐ NONE ☐ STRONG ☒ MILD

☒ LIQUID 50-70% [illegible] E
☐ SOLID
☐ [illegible]E
☐ [illegible]ER

PHASES
☒ NONE
☐ TWO
☐ MULTI-LAYER

☐ Reactive
☐ Explosive
☐ Shock sensitive
☐ FREE CYANIDE ____ ppm
REACTIVE WITH

N/A

☐ Pyrophoric
☐ Strong Oxidizer
☐ Auto Ignitable
☐ FREE SULFIDE ____ ppm
☐ PCB's ____ ppm conc.

N/A

SPECIFIC GRAVITY	VISCOSITY	ASH (% WT.)	TOTAL SOLIDS (%WT.)	pH	BTU's 1000/lbs.
☐ <0.8 ☒ 1.4-1.7	☐ THIN	<0.1	☐ <0.5 ☐ >20	☐ <2 ☐ >12.5	☐ <1 ☐ 8-12
☐ 0.8-1.0 ☐ >1.7	☒ MEDIUM	☐ 0.1-1.0	☐ 0.5-2.0 ☐ ____ Actual	☐ 2-6 ☐ ____	☐ 1-4 ☐ 12-16
☐ 1.0-1.2 ☐ ____ Actual	☒ THICK	☐ 1-5	☐ 2-5	☒ 6-8	☒ 4-8 ☐ > 16
☐ 1.2-1.4	☐ STICKY	☐ 5-20 ☐ ____ Actual	☒ 5-20	☐ 8-10 ☐ ____ Constituent	☐ ____ Actual
		☒ > [illegible]		☐ 10-12.5	

FLASH POINT (closed cup) Sulfur % WT.)

☐ <60°F
☐ 61°-100°F ☒ >200°F
☐ 101°-140°F ☐ ____ Actual
☐ 141°-199°F

☐ <0.[illegible]
☒ 0.5-2.0
☐ 2-5

☐ >5
☐ ____ Actual

NSN# CODE#
CAS#
CLIN# 4705 RES, Sys

Certification I certify that all information this form complete actual (including attached information) and is an accurate presentation of the known and suspected hazards of the waste to be disposed.

Name James Ward (Print) Title Field Chemist

James Ward (Sign) 4-24-89

SWI SPECIAL WASTE, INC.
P.O. BOX 909
ATHENS, TN 37303

Date Received 4/26/89 (A) R 177005
DOW

GENERATOR WASTE CHARACTERIZATION REPORT (Separate report required for each waste stream)

INSTRUCTIONS: Please complete all applicable sections of this report. Print legibly or use a typewriter. If shipping by U.S. Postal Service send to the address above, if shipping by UPS or an express service send to: Special Waste, Inc., Old Niota Road, Athens, TN 37303, Attn: Lab. Supply a representative one-pint sample of the waste. **Do not ship waste for disposal until the generator has received an approval letter from Special Waste, Inc.**

Facility Information

US EPA ID# IL7570024177
Company Name Scott AFB
Plant etc.
Address
City, State, Zip Scott AFB, IL 62225
Contact Person Roger Wilson
Telephone (AC) 618-256-3105 (Ext)

Business/Mailing Information

Business/Plant Name GSX, Gov't Services
Address PO Box 140
City, State, Zip Saukville WI 53080
Contact Lee Bosch Phone 414-284-3427

Waste Characterization

Waste Common Name hydraulic fluid and MEK
Description of process generating this waste: used prod.

Constituent Composition Information (include all hazardous constituents)

Major Constituents (Specify %)	
hydraulic fluid	50%
Methyl Ethyl Keton	50%

Is this waste a Land Ban material? [X] Yes [ ] No

Have you supplied SWI with a representative sample of this waste?
☐ Yes ☒ No ☐ MSDS Analysis Attached ☐ Yes ☒ No

Metals	☐ TOTAL (PPM)	☒ EPA EXTRACTION PROCEDURE (mg/L)			
ARSENIC (As)	<5	SELENIUM (Se)	<1	MERCURY (Hg)	<0.2
BARIUM (BA)	<100	SILVER (Ag)	<5	LEAD (Pb)	<5
CADMIUM (Cd)	<1	COPPER (Cu)	<5	ZINC (Zn)	<5
CHROMIUM (Cr)	<5	NICKEL (Ni)	<5	THALLIUM (Tl)	<1
				OTHER	

RCRA INFORMATION

Is this a USEPA hazardous waste? ☒ Yes ☐ No
Please give USEPA hazardous waste codes:
D001 F005
Describe nature of reactivity if D003 waste:

SHIPPING INFORMATION

PROPER SHIPPING NAME Waste Flammable liquid NOS
HAZARD CLASS Flammable liq ID# UN1993 R/Q 100
ANTICIPATED VOLUME 1 DRUMS ____ GAL. ____ YDS. ____ LBS.
Specify type and size of container: 1-55 gallon
PER: ☐ ONE TIME ☐ WK. ☐ MO. ☒ QTR. ☐ YR. ☐ OTHER

GENERAL CHARACTERISTICS (at 70°F unless otherwise specified)

COLOR red
ODOR MEK
☐ NONE ☒ STRONG ☒ MILD

☒ LIQUID ____% FREE
☐ SOLID
☐ SLUDGE
☐ POWDER

PHASES
☐ NONE
☒ TWO
☐ MULTI-LAYER

☐ Reactive
☐ Explosive N/A
☐ Shock sensitive
☐ FREE CYANIDE ____ ppm
REACTIVE WITH

☐ Pyrophoric
☐ Strong Oxidizer N/A
☐ Auto Ignitable
☐ FREE SULFIDE ____ ppm
☐ PCB's ____ ppm conc.

SPECIFIC GRAVITY	VISCOSITY	ASH (% WT.)	TOTAL SOLIDS (%WT.)	pH	BTU's 1000/lbs.
☐ <0.8	☒ THIN	☒ <0.1	☒ <0.5	☐ <2	☐ <1
☐ 0.8-1.0	☐ MEDIUM	☐ 0.1-1.0	☐ 0.5-2.0	☐ 2-6	☒ 8-12
☒ 1.0-1.2	☐ THICK	☐ 1-5	☐ 2-5	☒ 6-8	☐ 12-16
☐ 1.2-1.4	☐ STICKY	☐ 5-20	☐ 5-20	☐ 8-10	☐ 4-8
☐ 1.4-1.7		☐ >20	☐ >20	☐ 10-12.5	☐ > 16
☐ >1.7				☐ >12.5	
☐ ____ Actual		☐ ____ Actual	☐ ____ Actual	☐ ____ Actual	☐ ____ Actual

FLASH POINT (closed cup)	SULFUR (% W T.)
☐ <60°F	☒ <0.5
☒ 61°-100°F	☐ 0.5-2.0
☐ 101°-140°F	☐ 2-5
☐ 141°-199°F	☐ >5
☐ >200°F	
☐ ____ Actual	☐ ____ Actual

NSN# ____ CODE# ____
CAS#
CLIN# 4731 Sys

Certification I certify that all information on this form is complete and factual (including attached information) and is an accurate representation of the known and suspected hazards of the waste to be disposed.

Name James Ward (Print or Type)
Title Field Chemist
James Ward (Signature)
Date 4-24-89

SWI SPECIAL WASTE, INC.
P.O. BOX 909
ATHENS, TN 37303

SWI USE ONLY	
Date Received 4/26/89	R 177004
DAW	

GENERATOR WASTE CHARACTERIZATION REPORT (Separate report required for each waste stream)

INSTRUCTIONS: Please complete all applicable sections of this report. Print legibly or use a typewriter. If shipping by U.S. Postal Service send to the address above, if shipping by UPS or an express service send to: Special Waste, Inc., Old Niota Road, Athens, TN 37303, Attn: Lab. Supply a representative one-pint sample of the waste. **Do not ship waste for disposal until the generator has received an approval letter from Special Waste, Inc.**

Facility Information

US EPA ID# IL7570024177
Company Name Scott AFB
Plant etc.
Address
City, State, Zip Scott AFB, IL 62225
Contact Person Roger Wilson
Telephone (AC) 618-256-3105 (Ext)

Waste Characterization

Waste Common Name Oil and Water
Description of process generating this waste: Spent Mat.

Is this waste a Land Ban material? [ ]Yes [X]No

Have you supplied SWI with a representative sample of this waste?
[X]Yes [ ]No [ ] MSDS Analysis Attached [ ] Yes [X] No

Business/Mailing Information

Business/Plant Name GSX, Gov't Services
Address PO Box 140
City, State, Zip Saukville WI 53080
Contact Lee Bosch Phone 414-284-3427

Constituent Composition Information (include all hazardous constituents)

Major Constituents (Specify %)	
Water Soluble Oil	85-90%
Water	10-15%

Metals	[ ] TOTAL (PPM)	[X] EPA EXTRACTION PROCEDURE (mg/L)			
ARSENIC (As)	<5	SELENIUM (Se)	<1	MERCURY (Hg)	<.2
BARIUM (BA)	<100	SILVER (Ag)	<5	LEAD (Pb)	<5
CADMIUM (Cd)	<5	COPPER (Cu)	<5	ZINC (Zn)	<5
CHROMIUM (Cr)	<5	NICKEL (Ni)	<5	THALLIUM (Tl)	<5
				OTHER	

RCRA INFORMATION

Is this a USEPA hazardous waste? [X] Yes [ ] No
Please give USEPA hazardous waste codes:
None

Describe nature of reactivity if D003 waste:

SHIPPING INFORMATION

PROPER SHIPPING NAME Waste Oil
HAZARD CLASS Combustible liq ID# NA1270 R/Q —
ANTICIPATED VOLUME 1 DRUMS ____ GAL. ____ YDS. ____ LBS.
Specify type and size of container: 1-55 gallon steel
PER: [ ] ONE TIME [ ] WK [ ] MO. [X] QTR. [ ] YR. [ ] OTHER

GENERAL CHARACTERISTICS (at 70°F unless otherwise specified)

COLOR dark
ODOR Oil
[ ] NONE [ ] STRONG
[X] MILD

[X] LIQUID 75%
[ ] SOLID
[ ] SLUDGE
[ ] POWDER

PHASES
[X] NONE
[ ] TWO
[ ] MULTI-LAYER

[ ] Reactive
[ ] Explosive N/A
[ ] Shock sensitive
[ ] FREE CYANIDE ____ ppm
REACTIVE WITH

[ ] Pyrophoric
[ ] Strong Oxidizer N/A
[ ] Auto Ignitable
[ ] FREE SULFIDE ____ ppm
[ ] PCB's ____ ppm conc.

SPECIFIC GRAVITY	VISCOSITY	ASH (% WT.)	TOTAL SOLIDS (% WT.)	pH	BTU's 1000/lbs.
[X] <0.8	[X] THIN	[ ] <0.1	[X] <0.5	[ ] >12.5	[ ] <1
[ ] 0.8-1.0	[ ] MEDIUM	[X] 0.1-1.0	[ ] >20	[ ] ____ Actual	[ ] 8-12
[ ] 1.0-1.2	[ ] THICK	[ ] 1-5	[ ] 0.5-2.0	[X] 6-8	[ ] 1-4
[ ] 1.2-1.4	[ ] STICKY	[ ] 5-20	[ ] ____ Actual	[ ] 8-10	[ ] 12-16
[ ] 1.4-1.7		[ ] >20	[ ] 2-5	[ ] ____ Constituent	[X] 4-8
[ ] >1.7		[ ] ____ Actual	[ ] 5-20	[ ] 10-12.5	[ ] >16
[ ] ____ Actual					[ ] ____ Actual

FLASH POINT (closed cup)	SULFUR (WT)
[ ] <60°F	[ ] <0.5
[ ] 61°-100°F	[ ] >5
[ ] 101°-140°F	[X] 0.5-2.0
[X] 141°-199°F	[ ] 2-5
[ ] >200°F	[ ] ____ Actual
[ ] ____ Actual	

NSN# ____ CODE# TN6053
CAS#
CLIN# 3921 Sys

Certification I certify that all information on this form is complete and factual including attached information and is an accurate representation of the known and suspected hazards of the waste to be disposed.

Name James Wand (Print or Type) Title Field Chemist
James Wand (Sig.) Date 4-24-89

SWI

SPECIAL WASTE, INC.
P.O. BOX 909
ATHENS, TN 37303

SWI USE ONLY
Date Received 4/26/89 R 177003
MW

GENERATOR WASTE CHARACTERIZATION REPORT (Separate report required for each waste stream)

INSTRUCTIONS: Please complete all applicable sections of this report. Print legibly or use a typewriter. If shipping by U.S. Postal Service send to the address above. If shipping by UPS or an express service send to: Special Waste, Inc., Old Niota Road, Athens, TN 37303, Attn: Lab. Supply a representative one-pint sample of the waste. **Do not ship waste for disposal until the generator has received an approval letter from Special Waste, Inc.**

Facility Information

US EPA ID# IL7570024177
Company Name Scott AFB
Plant etc.
Address
City, State, Zip Scott AFB, IL 62225
Contact Person Roger Wilson
Telephone (AC) 618-256-3105 (Ext)

Waste Characterization

Waste Common Name Synthetic Oil

Description of process generating this waste: Used Oil

Is this waste a Land Ban material? ☐ Yes ☒ No

Have you supplied SWI with a representative sample of this waste?
☒ Yes ☐ No ☐ MSDS Analysis Attached ☐ Yes ☒ No

Business/Mailing Information

Business/Plant Name GSX, Gov't Services
Address PO Box 140
City, State, Zip Saukville WI 53080
Contact Lee Bosch Phone 414-284-3427

Constituent Composition Information (include all hazardous constituents)

Major Constituents (Specify %)	
Synthetic Oil	90-95%
dirt/Scale	5-10%

Metals	☐ TOTAL (PPM)	☒ EPA EXTRACTION PROCEDURE (mg/L)			
ARSENIC (As)	<5	SELENIUM (Se)	<1	MERCURY (Hg)	<0.2
BARIUM (BA)	<100	SILVER (Ag)	<5	LEAD (Pb)	<5
CADMIUM (Cd)	<1	COPPER (Cu)	<5	ZINC (Zn)	<5
CHROMIUM (Cr)	<5	NICKEL (Ni)	<5	THALLIUM (Tl)	<5
				OTHER	

RCRA INFORMATION

Is this a USEPA hazardous waste? ☒ Yes ☐ No

Please give USEPA hazardous waste codes:
None

Describe nature of reactivity if D003 waste:

SHIPPING INFORMATION

PROPER SHIPPING NAME Waste Oil
HAZARD CLASS Combustible liq ID# NA1270 R/Q —
ANTICIPATED VOLUME 2 DRUMS ____ GAL. ____ YDS. ____ LBS.
Specify type and size of container: 2-55 gallon steel
PER: ☐ ONE TIME ☐ WK. ☐ MO. ☒ QTR. ☐ YR. ☐ OTHER

GENERAL CHARACTERISTICS (at 70°F unless otherwise specified)

COLOR dark
ODOR oil
☐ NONE ☐ STRONG
☒ MILD

☒ LIQUID >95% FREE
☐ SOLID
☐ SLUDGE
☐ POWDER

PHASES
☒ NONE
☐ TWO
☐ MULTI-LAYER

☐ Reactive
☐ Explosive
☐ Shock sensitive
N/A
☐ FREE CYANIDE ____ ppm
REACTIVE WITH

☐ Pyrophoric
☐ Strong Oxidizer
☐ Auto Ignitable
N/A
☐ FREE SULFIDE ____ ppm
☐ PCB's ____ ppm conc.

SPECIFIC GRAVITY	VISCOSITY	ASH (% WT.)	TOTAL SOLIDS (%WT.)	pH	BTU's 1000/lbs.
☒ <0.8	☒ THIN	☐ <0.1	☐ <0.5	☐ <2	☐ <1
☐ 0.8-1.0	☐ MEDIUM	☒ 0.1-1.0	☐ 0.5-2.0	☐ 2-6	☒ 8-12
☐ 1.0-1.2	☐ THICK	☐ 1-5	☐ 2-5	☒ 6-8	☐ 1-4
☐ 1.2-1.4	☐ STICKY	☐ 5-20	☐ 5-20	☐ 8-10	☐ 4-8
☐ 1.4-1.7		☐ >20	☐ >20	☐ 10-12.5	☐ 12-16
☐ >1.7				☐ >12.5	☐ > 16
☐ ____ Actual		☐ ____ Actual	☐ ____ Actual	☐ ____ Actual	☐ ____ Actual
				☐ ____ Constituent	

FLASH POINT (closed cup)	SULFUR (% W T.)
☐ <60°F	☐ <0.5
☐ 61°-100°F	☒ 0.5-2.0
☐ 101°-140°F	☐ 2-5
☒ 141°-199°F	☐ >5
☐ >200°F	☐ ____ Actual
☐ ____ Actual	

NSN# ____ CODE# TN1053
CAS#
CLIN# 3926 Sys

Certification I certify that all information on this form is complete and factual (including attached information) and is an accurate representation of the known and suspected hazards of the waste to be disposed.

Name James Ward (Print or Type) Title Field Chemist

James Ward (Signature) Date 4-24-89

SPECIAL WASTE, INC.
P.O. BOX 909
ATHENS, TN 37303

SWI USE ONLY	
Date Received 4/26/89	R 177002
DDW	

GENERATOR WASTE CHARACTERIZATION REPORT (Separate report required for each waste stream)

INSTRUCTIONS: Please complete all applicable sections of this report. Print legibly or use a typewriter. If shipping by U.S. Postal Service send to the address above, if shipping by UPS or an express service send to: Special Waste, Inc., Old Niota Road, Athens, TN 37303, Attn: Lab. Supply a representative one-pint sample of the waste. **Do not ship waste for disposal until the generator has received an approval letter from Special Waste, Inc.**

Facility Information

US EPA ID# IL7570024177
Company Name Scott AFB
Plant etc.
Address
City, State, Zip Scott AFB, IL 62225
Contact Person Roger Wilson
Telephone (AC) 618-256-3105 (Ext)

Business/Mailing Information

Business/Plant Name GSX, Gov't Services
Address PO Box 140
City, State, Zip Saukville WI 53080
Contact Lee Bosch Phone 414-284-3427

Waste Characterization

Waste Common Name Hydraulic fluid

Description of process generating this waste: Spent material

Constituent Composition Information (include all hazardous constituents)

Major Constituents (Specify %)

hydraulic fluid	85-90%
oil/dirt/scale	10-15%

Is this waste a Land Ban material? [ ]Yes [X]No

Have you supplied SWI with a representative sample of this waste?
[X]Yes [ ] No [ ] MSDS Analysis Attached [ ] Yes [X] No

Metals	[ ] TOTAL (PPM)	[ ] EPA EXTRACTION PROCEDURE (mg/L)			
ARSENIC (As)	<5	SELENIUM (Se)	<1	MERCURY (Hg)	<.2
BARIUM (BA)	<100	SILVER (Ag)	<5	LEAD (Pb)	<5
CADMIUM (Cd)	<1	COPPER (Cu)	<5	ZINC (Zn)	<5
CHROMIUM (Cr)	<5	NICKEL (Ni)	<5	THALLIUM (Tl)	<5
				OTHER	

RCRA INFORMATION

Is this a USEPA hazardous waste? [ ] Yes [X] No

Please give USEPA hazardous waste codes:
None

Describe nature of reactivity if D003 waste:

SHIPPING INFORMATION

PROPER SHIPPING NAME Non-Regulate Material
HAZARD CLASS — ID# — R/Q —
ANTICIPATED VOLUME 2 DRUMS ____ GAL. ____ YDS. ____ LBS.
Specify type and size of container: 2-55 gallon steel
PER: [ ] ONE TIME [ ] WK. [ ] MO. [X] QTR. [ ] YR. [ ] OTHER

GENERAL CHARACTERISTICS (at 70°F unless otherwise specified)

COLOR Reddish
ODOR hydraulic
[ ] NONE [ ] STRONG
[X] MILD

[X] LIQUID 95-100% FREE
[ ] SOLID
[ ] SLUDGE
[ ] POWDER

PHASES
[X] NONE
[ ] TWO
[ ] MULTI-LAYER

[ ] Reactive
[ ] Explosive N/A
[ ] Shock sensitive
[ ] FREE CYANIDE ____ ppm
REACTIVE WITH

[ ] Pyrophoric
[ ] Strong Oxidizer N/A
[ ] Auto Ignitable
[ ] FREE SULFIDE ____ ppm
[ ] PCB's ____ ppm conc.

SPECIFIC GRAVITY	VISCOSITY	ASH (% WT.)	TOTAL SOLIDS (%WT.)	pH	BTU's 1000/lbs.
[ ] <0.8	[X] THIN	[X] <0.1	[ ] <0.5	[ ] <2	[ ] <1
[X] 0.8-1.0	[ ] MEDIUM	[ ] 0.1-1.0	[ ] >20	[ ] 2-6	[ ] 8-12
[ ] 1.0-1.2	[ ] THICK	[ ] 1-5	[X] 0.5-2.0	[ ] >12.5	[ ] 1-4
[ ] 1.2-1.4	[ ] STICKY	[ ] 5-20	[ ] 2-5	[ ] ____ Actual	[ ] 12-16
[ ] 1.4-1.7		[ ] >20	[ ] 5-20	[X] 6-8	[X] 4-8
[ ] >1.7		[ ] ____ Actual	[ ] ____ Actual	[ ] 8-10	[ ] > 16
[ ] ____ Actual				[ ] 10-12.5	[ ] ____ Actual
				[ ] ____ Constituent	

FLASH POINT (closed cup)	SULFUR (% W T.)
[ ] <60°F	
[ ] 61°-100°F	[ ] <0.5
[ ] 101°-140°F	[X] 0.5-2.0
[ ] 141°-199°F	[ ] 2-5
[X] >200°F	[ ] >5
[ ] ____ Actual	[ ] ____ Actual

NSN# CODE# TN6026
CAS#
CLIN# 3930 Sys

Certification I certify that all information on this form is complete and factual (including attached information) and is an accurate representation of the known and suspected hazards of the waste to be disposed.

Name James Ward (Print or Type)
Signature James Ward
Title Field Chemist
Date 4-24-89

SPECIAL WASTE, INC.
P.O. BOX 909
ATHENS, TN 37303

SWI USE ONLY	R
Date Received 4/26/89	17700
DMW	

GENERATOR WASTE CHARACTERIZATION REPORT (Separate report required for each waste stream)

INSTRUCTIONS: Please complete all applicable sections of this report. Print legibly or use a typewriter. If shipping by U.S. Postal Service send to the address above, if shipping by UPS or an express service send to: Special Waste, Inc., Old Niota Road, Athens, TN 37303, Attn: Lab. Supply a representative one-pint sample of the waste. **Do not ship waste for disposal until the generator has received an approval letter from Special Waste, Inc.**

Facility Information

US EPA ID# IL7570024177
Company Name Scott AFB
Plant etc.
Address
City, State, Zip Scott AFB, IL 62225
Contact Person Roger Wilson
Telephone (AC) 618-256-3105 (Ext)

Waste Characterization

Waste Common Name Used anti Freeze and Oil
Description of process generating this waste: Used product

Business/Mailing Information

Business/Plant Name GSX, Gov't Services
Address PO Box 140
City, State, Zip Saukville WI 53080
Contact Lee Bosch Phone 414-284-3427

Constituent Composition Information (include all hazardous constituents)

Major Constituents (Specify %)	
anti-freeze	85-90%
motor oil	10-15%

Is this waste a Land Ban material? [ ]Yes [X]No

Have you supplied SWI with a representative sample of this waste?
[X] Yes ☐ No ☐ MSDS Analysis Attached ☐ Yes [X] No

Metals	☐ TOTAL (PPM)	[X] EPA EXTRACTION PROCEDURE (mg/L)			
ARSENIC (As)	<5	SELENIUM (Se)	<1	MERCURY (Hg)	<0.2
BARIUM (BA)	<100	SILVER (Ag)	<5	LEAD (Pb)	<5
CADMIUM (Cd)	<1	COPPER (Cu)	<5	ZINC (Zn)	<5
CHROMIUM (Cr)	<5	NICKEL (Ni)	<5	THALLIUM (Tl)	<5
				OTHER	

RCRA INFORMATION

Is this a USEPA hazardous waste? ☐ Yes [X] No
Please give USEPA hazardous waste codes: None
Describe nature of reactivity if D003 waste:

SHIPPING INFORMATION

PROPER SHIPPING NAME Non Regulated liquid
HAZARD CLASS None ID# — R/Q —
ANTICIPATED VOLUME 3 DRUMS ____ GAL. ____ YDS. ____ LBS.
Specify type and size of container: 3-55 gallon steel
PER: ☐ ONE TIME ☐ WK. ☐ MO. [X] QTR. ☐ YR. ☐ OTHER

GENERAL CHARACTERISTICS (at 70°F unless otherwise specified)

COLOR Varies
ODOR anti freeze
☐ NONE ☐ STRONG
[X] MILD

[X] LIQUID 95-100% FREE
☐ SOLID
☐ SLUDGE
☐ POWDER

PHASES
☐ NONE
☐ TWO
[X] MULTI-LAYER

☐ Reactive
☐ Explosive N/A
☐ Shock sensitive
☐ FREE CYANIDE ____ ppm
REACTIVE WITH

☐ Pyrophoric
☐ Strong Oxidizer N/A
☐ Auto Ignitable
☐ FREE SULFIDE ____ ppm
☐ PCB's ____ ppm conc.

SPECIFIC GRAVITY	VISCOSITY	ASH (% WT.)	TOTAL SOLIDS (%WT.)	pH	BTU's 1000/lbs.
☐ <0.8 ☐ 1.4-1.7	[X] THIN	☐ <0.1	[X] <0.5 ☐ >20	☐ <2 ☐ >12.5	☐ <1 ☐ 8-12
[X] 0.8-1.0 ☐ >1.7	☐ MEDIUM	[X] 0.1-1.0	☐ 0.5-2.0 ☐ ____ Actual	☐ 2-6 ☐ ____ Actual	[X] 1-4 ☐ 12-16
☐ 1.0-1.2 ☐ ____ Actual	☐ THICK	☐ 1-5	☐ 2-5	[X] 6-8	☐ 4-8 ☐ > 16
☐ 1.2-1.4	☐ STICKY	☐ 5-20 ☐ ____ Actual	☐ 5-20	☐ 8-10 ☐ ____ Constituent	☐ ____ Actual
		☐ >20		☐ 10-12.5	

FLASH POINT (closed cup)	SULFUR (% W T.)
☐ <60°F	[X] <0.5 ☐ >5
☐ 61°-100°F [X] >200°F	☐ 0.5-2.0 ☐ ____ Actual
☐ 101°-140°F ☐ ____ Actual	☐ 2-5
☐ 141°-199°F	

NSN# CODE# TN6012
CAS#
CLIN# 6012 CM

Certification I certify that all information on this form is complete and factual (including attached information) and is an accurate representation of the known and suspected hazards of the waste to be disposed.

Name James Ward (Print or Type) Title Field Chemist
James Ward (Signature) Date 4/24/89

DEPARTMENT OF THE AIR FORCE

HEADQUARTERS 375 AEROMEDICAL AIRLIFT WING (MAC)

SCOTT AIR FORCE BASE, ILLINIOS 62225-5000

375 Aeromedical Airlift Wing Operations Plan 198-85

HAZARDOUS WASTE MANAGEMENT PLAN

January 1990

OPR: 375 ABG/DE

Headquarters 375 Aeromedical Airlift Wing (MAC)
Scott Air Force Base, Illinios 62225-5000
January 1990

RECORD OF CHANGES

CHANGE NUMBER	COPY NUMBER	DATE ENTERED	POSTED BY

RECORD OF ANNUAL REVIEW

REVIEWED BY	DATE	REVIEWED	REMARKS

After posting, file change sheets immediately behind front cover of the basic plan with most recent change on top.

Headquarters 375 Aeromedical Airlift Wing (MAC)
Scott Air Force Base, Illinios 62225-5000
January 1990

375 AAW OPLAN 198-85
PLAN SUMMARY

1. PURPOSE. The purpose of the 375 AAW OPLAN 198-85 is to establish procedures, assign responsibilities, and provides guidance for environmentally acceptable storage, transportation, and disposal of hazardous wastes on Scott AFB.

2. CONDITIONS FOR IMPLEMENTATION. This plan and its existing procedures will be followed by any organization that generates hazardous waste.

3. OPERATIONS TO BE CONDUCTED. Any organization generating hazardous waste must follow those actions stated in this plan.

4. KEY ASSUMPTIONS:

a. Adequate personnel and material will be available to support this plan.

b. Implementation of this plan will bo by any organization generating hazardous waste.

5. OPERATIONAL CONSTRAINTS. In the event of a major hazardous waste spill, the present storage area (Bldg 59, Aqua Yard) may not have adequate storage space once clean-up operations are completed. The storage capacity of the aqua yard is 1980 gallons (36 -55 gal drums)

6. COMMAND RELATIONSHIPS. The Base Environmental Engineering Section (DEEV) is responsible for overall management of the hazardous waste management program. The Operations Branch (DEM) is responsible for the operational aspects of the hazardous waste management program and the Defense Reutilization and Marketing Office (DRMO)-Scott is responsible for contracting the final disposal of hazardous wastes.

7. LOGISTIC APPRAISAL. This plan is logistically feasible.

8. PERSONNEL APPRAISAL. Adequate trained personnel are available.

9. CONSOLIDATE LISTING AND IMPACT ASSESSMENT OF SHORTFALLS AND LIMITING FACTORS. Removal of hazardous waste from Scott AFB is limited by the following:

a. Type of hazardous waste to be removed.

b. Timely and adequate test results of potential hazardous waste.

c. Coordination with general contractor to pick-up and remove hazardous waste in a timely manner.

Headquarters 375 Aeromedical Airlift Wing (MAC)
Scott Air Force Base, Illinios 62225-5000
January 1990

375 AAW OPLAN 198-85 - Hazardous Waste Management

TABLE OF CONTENTS

ITEM	PAGE
Cover Page	
Security Instructions	i
Record of Changes/Review	ii
Plan Summary	iii
Table of Contents	iv
Basic Plan	1-5
Annex A Tasked Organizations	A-1
Annex B Accumulation Point Management	B-1
Appendix 1 Hazardous Materials Map	B-1-1
Appendix 2 Location of Hazardous Waste Generators and Accumulation Points	B-2-1
Annex C Storage Facilities Management	C-1
Appendix 1 Soil Removal Procedure	C-1-1
Annex D Hazardous Waste Packaging Guidance	D-1
Appendix 1 Typical Hazardous Waste Drum	D-1-1
Appendix 2 Typical Labels and Hazardous Waste Markings	D-2-1
Annex E Hazardous Waste Inspection Log	E-1
Annex F Procedures for Disposal Of Hazardous Waste	F-1
Annex Z Distribution	Z-1

Headquarters 375 Aeromedical Airlift Wing (MAC)
Scott Air Force Base, Illinios 62225-5000
January 1990

375 AAW OPLAN 198-85 (OPR: 375 ABG/DE)
BASIC PLAN

REFERENCES: OPLAN 355-85, Base Disaster Preparedness Operations Plan
OPLAN 932-85, Base Recovery Plan
OPLAN 192-85, Spill Prevention Control and Countermeasures (SPCC) Plan

1. Resource Conservation and Recovery Act (RCRA) of 1976 - This is the legislation which is the basic rules generating document for the Management of Hazardous Waste.

2. 40 Code of Federal Regulations (CFR) 260, 261, 262, 263, 264, and 265 - These are rules issued by the Environmental Protection Agency (EPA) to define the standards for Hazardous Waste Management.

3. 49 CFR 171, 172, 173, 178 and 179 - These are rules issued by the Department of Transportation (DOT) which defines the standards for packaging and transporting of hazardous materials and waste.

4. Air Force Implementing Instructions 1 thru 4 issued by Headquarters Air Force Engineering and Services Center.

5. Defense Logistics Agency (DLA) guidance issued as a series of messages.

6. Illinois Environmental Protection Act, Public Act 76-2429, 1 July 1970.

NOTE: The above references,1-6, were used for the preparation of this plan. These references may be obtained for use, by any hazardous waste manager, or from 375 ABG/JA.

TASKED ORGANIZATIONS. Annex A.

1. SITUATION.

a. General. It is the policy of Scott AFB to store, transport, and dispose of hazardous wastes in accordance with environmentally acceptable standards, rules, and regulations. Among the requirements of this policy are the following: (1) Minimize hazardous waste generation at the source by improving operations and maintenance procedures; (2) segregate storage of hazardous waste (separate 55 gallon drums) to minimize disposal problems; (3) prevent accidental spillage of hazardous wastes into floor drains or onto the ground; (4) follow the guidelines established by this plan in the storing, transporting, and disposing of hazardous wastes.

b. Enemy Forces. See referenced OPLANS.

c. Friendly Forces. See referenced OPLANS.

d. Definitions:

(1). Hazardous Waste. A hazardous waste is a hazardous material that no longer has a legitimate use on the installation or has become a waste product. The Resource Conservation and Recovery Act of 1976 provides the basic definition of a hazardous waste. This is further defined by 40 CFR Part 261 to include wastes specifically listed by the EPA and wastes that exhibited certain characteristics of ignitability, corrosivity, reactivity, or EP toxicity.

(2). Generator or Generating Activity. Any activity such as 375 AAW/MA, 375 ABG/DE, 375 AAW/LGS which utilizes hazardous materials and accumulates excesses due to overage, other product contamination, or by not being consumed in a finished product.

(3). Satellite Accumulation Point. That area in or near the work place where hazardous wastes are accumulated prior to transfer to the interim storage location.

(4). Accumulation Point. An area that has been inspected and is approved in writting by the Base Environmental Coordinator. This area must be managed by a trained Accumulation Point Manager. Hazardous waste may be stored in this area for up to 90 days before it is turned in to the Hazardous Waste Storage Manager for disposal.

(5). Hazardous Waste Manager. A single point of contact for each generating activity who is responsible for records keeping, organizational management, unit training, and liaison with other elements or organizations.

(6). Records Keeping. The process of implementing maintaining written data to track the storage and disposition of hazardous wastes.

(7). Disposal Agency. The Defense Reutilization and Marketing Office (DRMO) Scott is the agency responsible for the final disposal of hazardous wastes.

(8). Disposal and Turn In Document (DTID) DD Form 1348-1. This is the document required to transfer accountability and/or physical custody of hazardous wastes to the disposal agency.

(9). Labeling. The process of container identification. The hazardous waste generating activity is responsible for properly labeling and identifying containers.

(10). Manifest. The document required to transport hazardous waste to and from the installation. (excludes on-base transportation)

(11). Recoverable Waste. Any waste which can be reclaimed under a plan or program such as the Scott Air Force Base Waste Petroleum Product Recovery Plan. Hazardous Waste managers must ensure that recoverable wastes are segregated and not contaminated with hazardous wastes.

(12). Exclusions. The following wastes are excluded management under this plan:

(a). Garbage

(b). Radioactive wastes

(c). Asbestos

(d). Recoverable petroleum products

(e). Munitions and explosives

(f). Domestic sewage

(g). Mining wastes

(h). Fly ash

(i). Drilling wastes

(j). Irrigation wastewater

2. MISSION. To insure all generators and/or generating activities at Scott AFB store, transport, and dispose of hazardous wastes in accordance with environmentally acceptable standards, rules, and regulations.

3. EXECUTION:

a. Hazardous Waste Characteristics

(1). Hazardous wastes (HW) are identified in two different ways, by listing and by characteristics. Several wastes are listed as being hazardous in 40 CFR 261. Included in this list are solvents, degreasers, and electroplating wastes. A waste can also qualify as hazardous if it meets any of these characteristics:

a. IGNITABLE. A waste is considered ignitable if it possesses at least one of the following characteristics:

(1) A liquid having a flash point less that 140 degrees Fahrenheit

(2) A non-liquid capable of causing fire through friction absorption of moisture, or spontaneous chemical changes, and when ignited, burns vigorously and persistently.

(3) An ignitable compressed gas.

(4) An oxidizer listed in 49 CFR 173.151

b. CORROSIVE. A waste is considered corrosive if it possesses at least one of the following characteristics:

(1). Liquid having a pH of 2.0 or less (acid), or 12.5 or greater (alkaline), as determined by a pH meter.

(2) - Liquid and corrodes steel (SAE 1020) at a rate greater than 0.25 inches per year.

c. REACTIVE: A waste is considered reactive if it possesses at least one of the following characteristics:

(1) Normally unstable and readily undergoes violent change

(2) Reacts violently with water

(3) Capable of explosive reaction if it is subjected to a strong initiating source or heated under confinement.

(4) A cyanide or sulfide bearing waste which, when exposed to pH conditions between 2 and 12.5, can generate toxic vapors.

d. EXTRACTION PROCESS (EP) TOXIC. The fourth characteristic of HW is EPtoxicity, which is a measure of how readily a material will leach certain metals and pesticides. The contaminants of concern are: arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, endrin, lindane, methoxychlor, toxaphene, "2,4D" and "2,4,5-TP" (silvex).

(2). Once the generator/generating activity has an identified hazardous waste, the packaging, storing, and disposing of that waste must be accomplished according to the guidance contained in this plan.

4. <u>LOGISTICS AND ADMINISTRATION</u>:

a. <u>Logistics</u>. All hazardous waste generators and generating activities will store hazardous waste in 55-gal drums until they are ready to be transported to the hazardous waste storage facility. Once the 55-gal drums have been received at the storage facility, personnel from the Base Civil Engineering Water and Waste Section, will transfer the 55-gal drum, if necessary, into a 85-gal recovery drum. These 85-gal drums will be stored until arrangements have been made, through the Defense Reutilization and Marketing Office (DRMO), for final removal from Scott AFB.

b. <u>Records Keeping Procedures</u>.

(1). Chronological Log. This is a manual log of all hazardous waste transactions using the DD Form 1348-1 (Turn-In-and-Disposal Document) as the initiating document. The log will be kept at each hazardous waste storage facility (Bldg 540 and Aqua Yard) and will consist of the following information:

(a) Date waste initially received.

(b) Date waste dispatched from storage facility. (c) Copy of DD Form 1348-1.

The information will be kept in a weatherproof container or inside the building for a period of three years or until the waste is removed from the storage site, whichever comes last.

(2). File of Completed DD Forms 1348-1. A file of completed DD Form 1348-1's, indicating final disposal of the hazardous waste, will be kept by the Defense Reutilization and Marketing Office (DRMO). If other manifest forms are used by disposal contractors, copies of these forms shall be maintained by DRMO for a three year period.

(3). Site Document File. This file will contain an accumulation of documents that are required to determine the status of the hazardous waste facility. The file of information, maintained by the Engineering and Environmental Planning Branch, Base Civil Engineering, will include:

(a) Operating permit.

(b) Procedures for closure and post-closure monitoring.

(c) Sampling results on hazardous wastes stored in the facilities.

(d) Annual reports and copies of inspection results.

5. COMMAND AND CONTROL. Overall management of the hazardous waste program for Scott AFB is the responsibility of the 375 ABG Civil Engineering Environmental Engineering Section (DEEV). It is their responsibility to monitor the program, provide updated EPA regulations, distribute and review this plan, and provide technical assistance to other organizations when requested. Operation of the Hazardous Waste Storage Facility will be the responsibility of the 375 ABG Civil Engineering Chief, Operations Division. It is their responsibility to operate the facilities in accordance with EPA regulations and guidance provided by DEEV and this plan.

OFFICIAL:

WINGFIELD
Colonel
COMMANDER

GIRARD
Base Civil Engineer

Headquarters
375 Aeromedical Airlift Wing (MAC)
Scott Air Force Base,
Illinios 62225-5000 January 1990

ANNEX A 375 AAW OPLAN 198-85(OPR: 375 ABG/DE)
TASKED ORGANIZATIONS

375 AAW/CAMS
375 AAW/LGS
375 AAW/LGT
375 ABG/DEEV
375 ABG/DEMRG
375 ABG/DFMPA
375 ABG/DEMET
375 ABG/DEMHZ
375 ABG/DEMWW
375 ABG/DA
375 ABC/SS
USAF Scott Med Ctr/SGPB
Defense Reutilization and Marketing Office (DRMO)
Gates Learjet Aircraft Services Corporation
Beech Aerospace Services Incorporated
102 Army Air Reserve

WINGFIELD
COLONEL
COMMANDER

Headquarters 375 Aeromedical Airlift Wing (MAC)
Scott Air Force Base, Illinios 62225-5000
January 1990

ANNEX B TO 375 AAW OPLAN 198-85 (OPR: 375 ABG/DE)
SATELLITE ACCUMULATION POINT MANAGEMENT (SAP)

1. General. The satellite accumulation point is an area in or near the work place where less than 55 gallons of hazardous waste or one quart of acutely hazardous waste is stored prior to transfer to the accumulation point or hazardous waste storage facility on the base. Storage in the satellite accumulation point is temporary. Waste containers must be delivered to the accumulation point or hazardous waste storage facility no later than three days after the container is filled. This activity does not require a permit under RCRA, but it is subject to certain procedural requirements. Appendix 2 to this annex shows the location of all hazardous waste satellite accumulation points.

2. Organizational Hazardous Waste Manager. Generating activities must identify in writing, a hazardous waste manager and alternate responsible for each satellite accumulation point. A copy of this letter must be sent to the Base Environmental Coordinator, 375 ABG/DEEV. The hazardous waste manager/alternate has the following duties and responsibilities:

a. Assurance that wastes are placed in proper containers and date accumulation begins is posted on the container.

b. Assurance that the container is marked "HAZARDOUS WASTE". A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste.

c. Assurance that wastes are kept segregated and that hazardous wastes are not comingled with non hazardous wastes i.e. trichloroethylene is not mixed in the same drum as PD 680. The manager must use a container made of or lined with materials which will not react with, the hazardous waste to be stored, so that hte ability of the container to contain the waste is not impaired.

d. Inspection of containers on a weekly basis and remedial action initiated for leaks, spills, or improper storage.

e. Documentation of weekly inspections on the Hazardous Waste Management Inspection Log shown in Annex E.

f. Notification of proper installation authority in event of spills. Refer to Scott AFB OPLAN 191-85 to implement spills control plan.

g. Assurance that the hazardous wastes generated at that facility are transferred to a Base Designated Accumulation Point or the Base Hazardous Waste Storage Facility within three calender days of the date maximum quantity is reached. The maximum quantity of acutely hazardous wastes is one quart and of other hazardous wastes is 55 gallons.

3. Transferring of Hazardous Waste. Generators/generating activities shall comply with the following procedures prior to transferring hazardous wastes to an accumulation point:

a. All requirements of Paragraph 2. Organizational Hazardous Waste Manager will be met prior to the transferring of hazardous waste.

b. Complete AF Form 2005, Turn-in Request to provide information to inable Supply Customer Service to complete the Disposal and Turn In Document (DTID), DD Form 1348-1, in accordance with Annex F. The DD Form 1348-1, document also serves as the manifest for the hazardous waste and must accompany the waste material to the storage site and on all future transactions.

c. Contact the Base Environmental Coordinator (extension 62092) prior to transferring the hazardous waste.

e. Make all necessary arrangements to transport the waste to the accumulation point.

d. If the transfer of hazardous waste is to be made to the hazardous waste storage facility follow the transfer requirement as listed for the accumulation point.

4. Records Keeping. Inspection records must be kept by the generating activity for a period of at least three years. These records will be kept by the hazardous waste manager. The records must include as a minimum: (See Annex E)

a. Date of inspection.

b. Number of containers and listing of each waste stored.

c. Date waste accumulation began for each container.

d. Contents of each container identified in accordance with the hazardous waste nomenclature and EPA hazardous waste number.

e. Condition of container i.e. good condition, rusting, leaking.

f. Any special handling instructions.

Headquarters 375 Aeromedical Airlift Wing (MAC) Scott Air Force Base, Illinios 62225-5000 January 1990

Headquarters 375 Aeromedical Airlift Wing (MAC)
Scott Air Force Base, Illinios 62225-5000
January 1990

ANNEX C TO 375 AAW OPLAN 198-85 (OPR: 375 ABG/DE)
ACCUMULATION POINT MANAGEMENT

1. General. The accumulation point is an area where hazardous waste is temporary stored in tanks or containers for 90 days or less on an installation. This activity does not require a permit under RCRA, but it is strictly regulated by both the state and federal levels. Appendix 2 to this annex shows the location of all hazardous waste accumulation points.

2. Accumulation Point Manager. Generating activities must identify in writing, a hazardous waste manager and alternate responsible for each accumulation point. A copy of this letter must be sent to the Base Environmental Coordinator, 375 ABG/DEEV. The hazardous waste manager/alternate has the following duties and responsibilities:

a. Assurance that wastes are placed in proper containers and date accumulation begins is posted on the container.

b. Assurance that the container is marked "HAZARDOUS WASTE". A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste.

c. Assurance that wastes are kept segregated and that hazardous wastes are not comingled with non hazardous wastes i.e. trichloroethylene is not mixed in the same drum as PD 680. The manager must use a container made of or lined with materials which will not react with, the hazardous waste to be stored, so that the ability of the container to contain the waste is not impaired.

d. Inspection of containers on a weekly basis and remedial action initiated for leaks, spills, or improper storage.

e. Documentation of weekly inspections on the Hazardous Waste Management Inspection Log shown in Annex E.

f. Notification of proper installation authority in event of spills. Refer to Scott AFB OPLAN 191-85 to implement spills control plan.

g. Assurance that the hazardous wastes generated at that facility are transferred to a Base Designated Accumulation Point or the Base Hazardous Waste Storage Facility within three calendar days of the date maximum quantity is reached. The maximum quantity of acutely hazardous wastes is one quart and of other hazardous wastes is 55 gallons.

3. Transferring of Hazardous Waste. Generators/generating activities shall comply with the following procedures prior to transferring hazardous wastes to the hazardous waste interim storage facilities:

a. All requirements of Paragraph 2. Organizational Hazardous Waste Manager will be met prior to the transferring of hazardous waste.

b. Complete AF Form 2005 providing information to enable Supply to complete the Disposal and Turn In Document (DTID), DD Form 1348-1, in accordance with Annex F. The DD Form 1348-1 also serves as the manifest for the hazardous waste and must accompany the waste material to the storage site and on all future transactions.

c. Forward the Disposal and Turn-In Document (DTID) DD Form 1348-1 to the servicing Defense Reutilization and Marketing Office for continued action.

d. Contact the Base Environmental Coordinator (extension 62092) prior to transferring the hazardous waste.

e. Make all necessary arrangements to transport the waste to the accumulation point or the hazardous waste storage site.

4. Records Keeping. Inspection records must be kept by the generating activity for a period of at least three years. These records will be kept by the hazardous waste manager. The records must include as a minimum: (See Annex E)

a. Date of inspection.

b. Number of containers and listing of each waste stored.

c. Date waste accumulation began for each container.

d. Contents of each container identified in accordance with the hazardous waste nomenclature and EPA hazardous waste number.

e. Condition of container i.e. good condition, rusting, leaking.

f. Any special handling instructions.

Appendices:

1. Hazardous Materials Map 2. Hazardous Waste Generators and Accumulation Points

WINGFIELD
COLONEL
COMMANDER

ROGER J. GIRARD
Colonel, USAF
Base Civil Engineer

Headquarters 375 Aeromedical Airlift Wing (MAC)
Scott Air Force Base, Illinois 62225-5000
January 1990

ANNEX D TO 375 AAW OPLAN 198-85 (OPR: 375 ABG/DE)
HAZARDOUS WASTE INTERIM STORAGE FACILITIES MANAGEMENT

1. General. Annex B identified the procedures and requirements to follow to accummulate hazardous wastes at the work place. The Environmental Protection Agency has published regulations which establish requirements to follow for facilities which store hazardous wastes in excess of 90 days or which receive waste from off site facilities. Scott AFB operates two facilities as hazardous waste storage facilities. These facilities, operating under EPA ID No. IL 7570024177, are Building 540 and the Aqua Yard. These are interim storage facilities and are being utilized until the DRMO constructs permanent hazardous waste storage facilities. Appendix 1 to Annex B is a location map showing the location of these facilities on the base.

2. Physical Facility Requirements. Both facilities meet the interim storage requirements of 40 CFR, Part 265, Subpart B, General Facility Standards. These facilities are adequately secured, signed, and marked.

3. Waste Storage Procedures. Generators/generating activities shall comply with the following procedures prior to transferring hazardous wastes to the interim storage facilities:

a. All requirements of Annex B, Accumulation Point Management will be met prior to the transferring of hazardous waste.

b. Complete the Disposal and Turn In Document (DTID), DD Form 1348-1, in accordance with Annex F. This document also serves as the manifest for the hazardous waste and must accompany the waste material to the storage site and on all future transactions.

c. Forward the Disposal and Turn-In Document (DTID) DD Form 1348-1 to the servicing Defense Reutilization and Marketing Office (DRMO) for continued action.

d. Contact the Base Environmental Coordinator (extension 62092) prior to transferring the hazardous waste.

e. Make all necessary arrangements to transport the waste to the hazardous waste storage site.

4. Inspection Procedures. Both hazardous waste interim storage sites will be inspected on an annual basis. This inspection will be accomplished on the form shown on Annex E by the Base Environmental Coordinator and records will be kept of the inspection (records must be kept for a minimum of three years). The inspection will provide the following information:

a. Date of inspection.

b. Number of containers and listing of each waste stored.

c. Contents of each container identified in accordance with the hazardous waste nomenclature and EPA hazardous waste number.

d. Condition of each container.

5. Training Procedures. Training for those personnel required to enter or work in the two hazardous waste disposal sites will be conducted on an annual basis. The training will consist of the following:

a. Facility operations.

b. Emergency response.

c. Use of emergency equipment.

Records of the training will be kept by the employees' supervisor. Individual employee records (AF Form 971 for civilians, and AF Form 1098 for military) shall be annotated to reflect completion of training.

6. Fire Protection Procedures.

a. General. Extreme caution and care must be exercised at both interim hazardous waste storage sites to insure adequate fire protection. Adequate aisle space will be maintained to insure access for emergency personnel and equipment. Containers for ignitable or reactive waste must not be comingled, signs must be posted prohibiting smoking or open flame, and adequate fire extinguishers must be available to assist in fire fighting.

b. Fire protection personnel shall inspect the hazardous waste sites on an annual basis to insure appropriate fire protection actions are being taken and to recommend improvements in storage or operational procedures that will improve fire protection.

c. Any individual that notices a fire in either of the hazardous waste interim storage sites shall notify the base Fire Department extension 117 immediately. The fire department shall follow Standard Operating Procedures for fighting and containing a fire in a hazardous waste storage

site. To assist the fire department in fighting fires at these locations, an up to date list of the hazardous waste stored in the storage sites will be furnished to the fire department on a quarterly basis.

7. Emergency Assistance Procedures. Emergency assistance procedures have been well documented in two existing contingency plans. These plans are:

a. Scott AFB OPLAN 355-85, Base Disaster Preparedness Operations Plan, is the overall guideline that directs the activities to manage a disaster on the base. This plan is implemented by the commander whenever a potential disaster may threaten the primary mission, injure lives, property, or facilities, or cause a natural or manmade threat to Scott AFB. On the event of a threat from a hazardous waste mishap, the plan will be implemented.

b. Scott AFB OPLAN 191-85, Spill Prevention Control and Countermeasures Plan (SPCC), addresses the necessary actions, both normal operating and emergency, to take in the event of a spill or mishap with a hazardous waste.

NOTE: Both of these plans address the full range of emergency response assistance available from non-Air Force agencies, available equipment, and will be implemented in the event emergency actions are necessary.

8. Contingency Plan Procedures. Scott AFB OPLAN:s 355-85 and 191-85 both adequately address contingency actions that have to be taken in the event of a spill or accident. The plans also address the on-scene coordinators role in directing implementation of the plan. Either one or both of these plans will be implemented in the event of a spill or accident involving hazardous waste.

9. Closure Plan.

a. General. This plan identifies all steps that will be necessary to partially close the facility at any point during the intended operating life and to completely close the facility at the end of its intended operating life. Scott AFB will maintain an on-site copy of the approved closure plan and all revisions to the plan until certification of closure completeness has been submitted and accepted by the State of Illinois. The plan is designed to minimize or eliminate releases of hazardous wastes and hazardous waste constituents to the air, groundwater, surface water, and surrounding land.

b. Partial Closure and Final Closure Activities. It may be necessary or desirable to close all or part of the hazardous waste management facilities on Scott AFB. Areas that may close are as follows:

1. Bldg 540 PCB storage area.

2. 8' x 32' drum storage area.

Partial closure of either facility is not anticipated.

c. Closure Cost Estimate. For the purpose of this plan, it is assumed that 20 - 25 KVA (20 gals) PCB transformers are stored in Bldg 540 and the number of drums in storage at the Aqua Yard is the design maximum of 36 - 55 gallon drums. Closure costs are subsequently estimated at $40,000.

d. Schedule for Closure. Closure of this installation will require an Act of Congress and cannot be predicted by anyone on Scott AFB with any degree of accuracy. We will estimate closure to be in 2090 A.D. for the purpose of this plan. The schedule for closure of container storage facilities will be applicable regardless of what year the Base closes. Scott AFB will notify the Secretary of the State of Illinios EPA (hence the Secretary) at least 180 days prior to the date closure activities are anticipated to begin. This date shall be within 30 days after Scott AFB accepts the final volume of waste. Closure activities will be completed within 180 days from receipt of the final volume of waste. It is anticipated that 90 days will be required for closure of both the Aqua Yard drum storage area and Bldg 540 PCB storage area. This time estimate includes contract procurement for closure activities.

e. Inventory Disposal, Removal, or Decontamination of Equipment. It is assumed that the maximum waste inventory (36 drums and 20 PCB transformers) will be in storage. A private contractor will remove the containers for off-site storage or disposal. All work will be supervised and performed by either outside vendor or base personnel. Personnel will be equipped with acid/solvent resistant coveralls, hard hats, neoprene coated gloves, and boots resistant to solvents and acids. Air sampling of the facility will be performed by Bio-Environmental Engineering to determine if full face respirators are required. The floors and walls of the container storage areas will be cleaned with water and the wash water collected into 55-gallon drums. Grab samples from each drum collected will be analyzed. If the water meets current standards and permission to discharge is granted by Illinois State authorities, the water will be discharged into the sanitary sewer for treatment and disposal at our Base Waste Water Treatment Plant. If the water is contaminated, the waste water will be shipped offsite for treatment and disposal. A second washing of the building will follow. This rinse/sample analysis process will be repeated until all traces of contaminants removed from the wash water collected from the wash process are below detection limits.

f. Certification of Closure. When closure is completed, Scott AFB will provide to the Secretary certification by both the Installation Commander and an independent registered professional engineer that the facility has been closed in accordance with the specifications in the approved closure plan.

APPENDIX:
1. Soil Removal Procedures

WINGFIELD
COLONEL
COMMANDER

ROGER J. GIRARD, Col, USAF
Base Civil Engineer

Headquarters 375 Aeromedical Airlift Wing (MAC)
Scott Air Force Base, Illinios 62225-5000
January 1990

APPENDIX 1 TO ANNEX D TO 375 AAW OPLAN 198-85(OPR: 375 ABG/DE)
SOIL REMOVAL PROCEDURE

Soil will be removed by manual labor using shovels and picks if less than 5 cubic yards of soil is to be moved. The soil will be stored in pnlyethylene lined roller beds until further testing can be conducted to determine the extent of the contamination. The liner and covering will prevent rainwater from percolating through the soil during storage.

For soil removal of greater than 5 cubic yards, a backhoe, front-end loader will be used to move the soil into a polyethylene lined dump truck. The truck will be equipped with a covering tarp. Manifests and placards will be as per EPA and DOT state and federal regulations. The soil will then be transported to an approved hazardous waste landfill or to an approved treatment facility.

If preliminary tests show that the soil is combustible, all equipment used will be non-sparking. Shovels and picks will be made of brass should combustion be suspected.

All equipment used for removal of contaminated soil will be cleaned with sprayed water and the water collected and checked for the suspected contamination. If the water is not found to be contaminated, the equipment will be declared clean and usable for other work. If the water is contaminated, subsequent washing and analysis will be conducted in order to ensure cleanliness of the equipment prior to any future use.

Headquarters 375 Aeromedical Airlift Wing (MAC)
Scott Air Force Base, Illinios 62225-5000 January 1990

ANNEX E TO 375 AAW OPLAN 198-85 (OPR: 375 ABG/DE)
HAZARDOUS WASTE PACKAGING GUIDANCE

1. Purpose. This guidance is to provide assistance to generating activities in complying with hazardous waste packaging requirements prescribed under 40 CFR, Part 262, Subpart C of EPA's implementing regulations. Proper packaging is required for accumulation, storage, and transportation of any hazardous waste. This implementing guidance covers only common packaging requirements.

2. Packaging Reference Material.

a. 40 CFR, Part 262, Subpart C. This subpart gives general pre-transportation requirements covering packaging, labeling, marking, placarding, and temporary storage containers.

b. 49 CFR, Parts 171, 172, 173, 178, 179. EPA has indicated that hazardous waste will be packaged in accordance with Department of Transportation (DOT) regulations. On 22 May 1980, the DOT promulgated rules to insure proper transportation of hazardous waste.

(1) 49 CFR, Part 172.101 is a DOT Hazardous Materials Table which references applicable packaging requirements for specific hazardous materials.

(2) 49 CFR, Part 173 provides the actual packaging requirements identifying the types of containers acceptable.

(3) 49 CFR, Part 178 describes the required specifications for each type of container.

3. Marking and Labeling Guidance. No person may offer or accept a hazardous waste for transport in the United States unless that material is properly classed, described, packaged, marked, labeled, and in good condition for shipment in accordance with DOT Transportation of Hazardous Materials regulations. It is the duty of the generator of a hazardous waste to insure that it is placed in a proper container, marked, and labeled. This requirement applies as soon as one starts accumulating hazardous waste.

a. Marking and Labeling. Marking and labeling is required by DOT regulations in addition to the hazardous waste marking and labeling required by EPA. Labeling should be accomplished in accordance with the appropriate 40 CFR regulations. Marking shall be as follows:

(1) The words "HAZARDOUS WASTE" marked on the container by container or by by using a Hazardous Waste Label.

(2) Waste contents, for example : "METHYL ETHYL KENTONE 80-88% CONTAMINATED WITH 8-15% TOLUENE".

(3) Date upon which the period of accumulation began. For example, the date you put the first drop of waste oil in the container.

(4) Unit office symbol and phone number of Unit Hazardous Waste Manager.

(5) Date contents were sampled and sample No (if applicable).

Appendix 2 to this annex shows typical examples of labels and hazardous waste markings that are available and used.

b. Containers.

(1) The waste must be place into containers meeting the requirements of Subpart I and J of 40 CFR 265. This requires use of containers compatible with the waste, in good condition, handled properly, inspected for leaks weekly, and proper seperation and segeregation of incompatible wastes.

(2) Each container used for shipping wastes must meet DOT specifications. Specifications are listed in 49 CFR Part 178. If an existing container was previously authorized for use, it may continue to be used under most conditions. Also, a container that is damaged or leaking hazardous wastes may be placed in a metal, removable-head salvage drum that has equal or greater structural integrity than the original container. Containers that hazardous materials were shipped in should be retained because they will generally meet the packaging requirements for that material when it becomes a hazardous waste. Appendix 1 to this annex shows a typical steel drum used for shipping hazardous wastes. The regulations governing the reuse of containers are given in 49 CFR, Part 173.28. Special attention should be given to paragraph (p) of this reference as it authorizes use of single-trip containers (STC) and nonreusable containers (NRC) for hazardous waste under specified conditions.

(3) Empty containers or container liners are not regulated as hazardous wastes if all of the waste has been removed by the normal emptying procedures and no more than one inch of residue remains. Containers which previously held acutely hazardous wastes as listed in 40 CFR 261.33(e) must by triple rinsed with an appropriate solvent before they are considered empty. If the container meets these definitions of empty, it can be disposed of in the normal manner.

4. Generating activities should contact the Base Environmental Coordinator, 62029, for information and guidance on proper packaging of hazardous wastes.

APPENDICES:
1. Typical Hazardous Waste Drum 2. Typical Labels and Hazardous Waste Markings

WINGFIELD
COLONEL
COMMANDER

ROGER J. GIRARD
Civil Engineer

SOME OVERPACK CONTAINERS AND ACCESSORIES

DOT Container Specification	National Stock Number	Item Description
17C	8110-00128-6819	1 gallon steel drum
17C	8110-00574-9641	5 gallon steel drum
17C	8110-00-519-5618*	10 gallon steel drum
17C	8110-00-366-6809*	30 gallon steel drum
17C	8110-00-418-1634*	55 gallon steel drum
17C	8110-00-030-7780*	55 gallon steel drum
17E	8110-00-282-2520**	5 gallon steel drum
17E	8110-00-292-9783**	55 gallon steel drum
17M	8110-00-030-7779	30 gallon steel drum
17M	8110-00-823-8121	55 gallon steel drum
	8110-01-101-4055	85 gallon steel drum
	5640-00-801-4176	Bag of Vermiculite
	1930-00-269-1272	Absorbent Clay

* Containers approved under US requirements for storage and transportation of non-liquid PCBs.

** Containers approved under US requirements for storage and transportation of liquid PCBs.

Headquarters 375 Aeromedical Airlift Wing
(MAC) Scott Air Force Base, Illinios
62225-5000 January 1986

ANNEX F TO 375 AAW OPLAN 198-85 (OPR: 375 ABG/DE)
PROCEDURES FOR DISPOSAL OF HAZARDOUS WASTE: CONTENTS KNOWN

WASTE GENERATOR: The waste generator wants to dispose of hazardous waste and knows the contents of the waste. He completes one AF Form 2005 for the waste (4 copies each). He handcarries these forms to Supply Costomer Service, Building 4001.

BASE SUPPLY: Base Supply Customer Service Section uses the information on the AF Form 2005 to generate at least six copies of the disposal documentation, DD Form 1348-1. The waste generator lists the waste contents on each copy and signs the certification statement. Base Supply keeps one copy.

BASE ENVIRONMENTAL COORDINATOR (BEC): The waste generator hand carries 5 copies of the DD Form 1348-1 and 1 copy of the 2005 to the Base Environmetal Coordinator (BEC), Building 528, for funds certification. The BEC keeps one copy of the DD Form 1348-1, and returns four copies to the generator.

DEFENSE REUTILIZATION AND MARKETING OFFICE (DRMO): The waste generator contacts the Environmental Protection Specialist at DRMO , extension 63105, to make arrangements for pre-inspection and receipt of accountability. Turn-ins and accountability are by appointment only.

HAZARDOUS WASTE STORAGE FACILITY MANAGER: The waste genarator contacts the Hazardous Waste Storage Facility Manager at extension 64226 to set up an appointment to turn in his waste (at least 24 hours before the 90th day of accumulation). The waste generator will then transport his waste to the storage facility, located on Winters Street betwwen "D" Street and Hanger Road, at the scheduled time. The Hazardous Waste Storage Facility Manager will take one copy of the DD Form 1348-1. The remaining copy of the DD Form 1348-1 is to be filed by the waste generator.

Headquarters 375 Aeromedical Airlift Wing
(MAC) Scott Air Force Base, Illinios
62225-5000 January 1986

ANNEX G TO 375 AAW OPLAN 198-85 (OPR: 375 ABG/DE)
PROCEDURES FOR DISPOSAL OF HAZARDOUS WASTE: CONTENTS UNKNOWN

WASTE GENERATOR: The waste generator wants to dispose of hazardous waste, but does not know waste contents. Generator contacts Bioenvironmetal Enginnering (BEE) at extension 67307, to sample his wastes will in advance of the 90th day of accumulation.

BIOENVIRONMETAL ENGINEERING: Bioenvironmetal engineering samples wastes on site and mails samples to testing laboratory.

DEFENSE REUTILIATION AND MARKETING OFFICE: The hazardous waste generator contacts the Environmental Protection Specialist at DRMO, extension 63105, to make arrangements for pre-inspection and receipt of accountablility. Turn-ins and accountability are by appointment only.

HAZARDOUS WASTE STORAGE FACILITY MANAGER: After the wastes are sampledand pre-inspection complete, the waste generator contacts the Hazardous Waste Storage Facility Manager at extension 64226, to set up an appointment to turn in his waste. The waste generator will transport his waste to the storage facility located on Winters Streer between "D" Street and Hanager Road, at the scheduled time. The waste must be in the storage facility by the 90th day of accumulation. The Hazardous Waste Storage Facility Manager notifies the Base Environmental Coordinator (BEC) that there is a container of hazardous waste of unknown content in the storage facility.

BIOENVIRONMENTAL ENGINEERING: When the results from the sampling arrive, the BEE will forward them to the Base Environmetal Coordinator(BEC). The BEC notifies the Hazardous Waste Storage Facility Manager and forwards copies of the results to the waste generator.

WASTE GENERATOR: The waste generator uses these test results to complete an AF Form 2005 for the wastes (4 copies each) and hand carries them to Supply Customer Service, Building 4001.

BASE SUPPLY: Base Supply uses the information on the AF Form 2005 to generate at least six copies of the disposal documentation, DD Form 1348-1. The Waste generator lists the waste contents on each copy of the DD Form 1348-1 and signs the certification statements. Base Supply keeps a copy.

BASE ENVIRONMENTAL COORDINATOR: The waste generator hand carries 5 copies of the DD Form 1348-1 and 1 copy of the AF Form 2005to the Base Environmental Coordinator (BEC) for funds certification. The BEC keeps one copy of the DD Form 1348-1. The waste generator keeps the four copies.

Headquarters 375 Aeromedical Airlift Wing
(MAC) Scott Air Force Base, Illinios
62225-5000 January 1986

ANNEX H TO 375 AAW OPLAN 198-85 (OPR: 375 ABG/DE)
PROCEDURES FOR PREPARATION OF AF FORM 2005 TURN-IN REQUEST

Standard Procedures for preparation of the AF Form 2005 Turn-in Request are provided in paragraph X-X of AFM XXXXXXXX. The TIN for hazardous materials and hazardous wastes to Base Supply using the format below.

Blocks 1-3. Document Identifier - Always enter "TIN"

Blocks 4-7. Leave Blank

Blocks 8-22. Stock Number (See note 1).

Blocks 8-11. Federal Stock Class (FSC) of the orginal or parent stock number (See note 1)

Blocks 12-14. Enter "PHW"

Blocks 15-18. EPA Hazardous Waste Number (See notes 2 & 3)

Blocks 19-22. Four Digit Contract Line Number (CLIN) for Hazardous Waste (See notes 2 & 3)

Blocks 23-24. Unit of Issue (See notes 2 & 3).

Blocks 25-29. Quantity

Blocks 30. Enter "R"

Blocks 31-35. Enter Organization/Shop Code (See note 2).

Blocks 36-43. Leave Blank

Blocks 44. Enter "H"

Blocks 45-61. Leave Blank

Blocks 62. Enter "9".

Blocks 63-80. Leave Blank.

Block B. Name/Organization/Office Symbol/Phone Number (See Note 2).

Block E. Unit Price (See notes 2 & 3).

Block J. Enter "Hazardous Waste".

NOTE 1: If the original material does not have a stock number assigned; for example, waste water or sludge, these positions will contain "9999". Also enter parent stock number (if known) which produced waste in "part number " field.

NOTE 2: Provided by the generator.

Note 3: May be obtained from DRMO disposal contract or contact Environmental Coordinator at extension 62092.

NOTE 4: Distribution of TIN: Copy 1 & 2 - Base Supply
Copy 3 - Environmental Coordinator
Copy 4 - Generator

WINGFIELD
COLONEL
COMMANDER

ROGER J GIRARD
Base Civil Engineer

Headquarters 375 Aeromedical Airlift Wing
(MAC) Scott Air Force Base, Illinios
62225-5000 January 1990

ANNEX Z TO 375 AAW OPLAN 198-85 (OPR: 375 ABG/DE)
DISTRIBUTION

DISTRIBUTION	Copies
USEPA, Region V 230 S. Dearborn Street Chicago, IL 60604	2
IL EPA 2200 Churchill Rd. Springfield, IL 62706	2
Defense Reutilization and Marketing Region DRMW-COH P.O. Box 3990, Columbus, Ohio 43216-5000	1
HQ MAC/DEEE, Scott AFB, IL 62225-5000	3
375 AAW/375 ABG Scott AFB, IL 62225-5000	
375 AAW/DOX	1
375 AAW/CAMS	1
375 AAW/DOC	1
375 AAW/PA	1
375 AAW/LGS	1
375 AAW/LGSF	1
375 AAW/SEG	1
375 ABG/CC	1
375 ABG/DA	1
375 ABG/DE	2
375 ABG/DEM	10
375 ABG/DEMR	1
375 ABG/DEMRC (Service Call Desk)	1
375 ABG/DEE	20
375 ABG/DEEV	5
375 ABG/DEF	2
375 ABG/DW	1
375 ABG/SPO	1
375 ABG/SV	1
375 ABG/JA	1
USAF Med Ctr Scott/SGPM, Scott AFB, IL 62225-5000	2
Defense Reutilization and Marketing Office, Scott AFB,IL	1
Gates Learjet Aircraft Services Corporation, Scott AFB, IL	1
Boech Aerospace Services Incorporated, Scott AFB, IL	
102 Army Air Reserve, Scott AFB, IL	1

WINGFIELD
COLONEL
COMMANDER

Roger J. Girard Col, USAF
Base Civil Engineer

CONTAINER SPECIFICATIONS

DOT Specification	DOT Section	Federal and Military Specifications	DOT Title of Specification
1A	178.1	PPP-B-585, PPP-B-621	Boxed carboys.
1B	178.2	none	Boxed lead carboys.
1C	178.3	none	Carboys in kegs.
1D	178.4	PPP-B-621, PPP-B-601	Boxed glass carboys.
1E	178.7	MIL-D-112	Glass carboys in plywood drums.
1EX	178.6	MIL-D-112	Glass carboys in plywood drums.
1H	178.13	none	Polyethylene carboys in low carbon steel of equivalent metal crates.
1K	178.14	none	Glass carboys cushioned with expandable polystyrene in wooden wire-bound box outside container.
1X	178.5	PPP-B-601, PPP-B-621	Boxed carboys, 5 to 6½ gallons, for export only.
2A	178.20	MIL-C-38756	Inside containers; metal cans, pails and kits.
2C	178.22	PPP-B-636, Type CF-DW 275	Inside containers, corrugated fiberboard carton.
2D	178.23	UU-S-48	Inside containers, duplex paper bags.
2F	178.25	PPP-C-96	Inside metal containers and liners.
2G	178.26	MIL-C-3955, MIL-C-12804	Inside containers, fiber cans and boxes.
2J	178.28	PPP-B-1055	Inside containers, waterproof paper bags for linings.
2K	178.29	none	Inside containers, paper bags for lining.
2L	178.30	none	Lining for boxes.
2M	178.31	none	Waterproof paper lining.
2N	178.32	none	Inside containers, metal can.
2P	178.33	none	Inside nonrefillable metal containers.
2Q	178.33A	none	Inside nonrefillable metal containers.
2R	178.34	none	Inside metal containers, metal tubes.
2S	178.35	MIL-D-40030, Styles AAB	Polyethylene containers.
2SL	178.35a	PPP-C-569	Molded or thermoformed polyethylene container.
2TL	178.27	none	Polyethylene container.
2T	178.21	none	Polyethylene container.
2U	178.24	none	Molded or thermoformed polyethylene containers having rated capacity of over 1 gallon, removable head containers, etc.
3A	178.36	MIL-C-7905, MIL-C-11732	Seamless steel cylinders, or 3AX; seamless steel cylinders of capacity over 1,000 pounds water volume.

DOT Specification	DOT Section	Federal and Military Specifications	DOT Title of Specification
3AA	178.37	RR-C-901, MIL-C-11732, MIL-C-7905	Seamless steel cylinders made of definitely prescribed steels or 3AAX; seamless steel cylinders made of definitely prescribed steels of capacity over 1,000 pounds water volume.
3B	178.38	none	Seamless steel cylinders.
3BN	178.39	none	Seamless nickel cylinders.
3C	178.40	none	Seamless steel cylinders.
3D	178.41	none	Seamless steel cylinders.
3E	178.42	none	Seamless steel cylinders.
3A 480X	178.43	none	Seamless steel cylinders.
3HT	178.44	none	Inside containers, seamless steel cylinders for aircraft use made of definitely prescribed steel.
4	178.48	none	Forge-welded steel cylinders.
4A	178.49	none	Forge-welded steel cylinders.
4AA 480	178.56	MIL-C-11733	Welded steel cylinders made of definitely prescribed steels.
4B	178.50	RR-C-910	Welded and brazed steel cylinders.
4BA	178.51	none	Welded or brazed steel cylinders made of definitely prescribed steels.
4B-240-ET	178.55	none	Welded and brazed cylinders made from electric resistance welded tubing.
4B-240-FLW	178.54	none	Welded or welded and brazed cylinders with fusion-welded longitudinal seam.
4BW	178.61	none	Welded steel cylinders made of definitely prescribed steels with electric arc welded longitudinal seams.
4C	178.52	none	Welded and brazed steel cylinders.
4D	178.53	none	Inside containers, welded steel for aircraft use.
4DA	178.58	none	Inside containers, welded steel for aircraft use.
4DS	178.47	none	Inside containers, welded stainless steel for aircraft use.
4E	178.68	RR-C-910	Welded aluminum cylinders.
4L	178.57	none	Welded cylinders, insulated.
5	178.80	PPP-P-704,Type I,Class 8 and 12	Steel barrels or drums.
5A	178.81	PPP-D-700, Type I	Steel barrels or drums.
5B	178.82	PPP-D-729,Type I;PPP-D-705,Type I;Class 8 & 12	Steel barrels or drums.
5C	178.83	PPP-D-700, Type II	Steel barrels or drums.
5D	178.84	PPP-D-700, Type III	Steel barrels or drums, lined.

DOT Specification	DOT Section	Federal and Military Specifications	DOT Title of Specification
5F	178.85	none	Steel drums.
5H	178.87	none	Steel drums or drums, lead-lined.
5K	178.88	none	Nickel barrels or drums.
5L	178.89	MIL-C-1283, 5 gal cans	Steel barrels or drums.
5M	178.90	none	Monel drums.
5P	178.92	none	Lagged steel drums.
5X	178.91	none	Steel drums, aluminum-lined.
6A	178.97	PPP-D-736	Steel barrels or drums.
6B	178.98	PPP-D-736	Steel barrels or drums.
6C	178.99	none	Steel barrels or drums.
6D	178.102	none	Cylindrical steel overpack, straight sided for inside plastic container
6J	178.100	none	Steel barrels or drums.
6K	178.101	none	Steel barrels or drums.
6L	178.103	none	Metal container for fissile radioactive material.
7A	178.350	none	General packaging, Type A
8	178.59	MIL-C-3701	Steel cylinders with approved porous filling for acetylene.
8AL	178.60	MIL-C-3701	Steel cylinders with approved porous filling for acetylene.
9	178.63	none	Inside containers, seamless or welded or brazed steel cylinders.
10A	178.155	none	Wooden barrels and kegs (tight).
10B	178.156	none	Wooden barrels and kegs (tight).
10C	178.157	none	Wooded barrels and kegs (tight).
11A	178.160	NN-K-231	Wooden barrels and kegs (slack).
11B	178.161	NN-K-231	Wooden barrels and kegs (slack).
12A	178.210	none	Fiberboard boxes.
12B	178.205	PPP-B-636,Type CF or SF	Fiberboard boxes.
12C	178.206	PPP-B-636,Type CF or SF	Fiberboard boxes.
12D	178.207	none	Fiberboard boxes.
12E	178.208	none	Fiberboard boxes.
12H	178.209	none	Fiberboard boxes.
12P	178.211	none	Fiberboard boxes, nonreusable containers for one inside plastic container greater than 1 gallon capacity, etc.
12R	178.212	none	Paper-faced expanded Polystrene board boxes, nonreusable containers.
13	178.140	none	Metal kegs.
13A	178.141	none	Metal drums.
14	178.165	none	Wooden boxes, nailed.
15A	178.168	PPP-B-621,Styles 1,2,2½, 3,6,and 7.	Wooden boxes, nailed.
15B	178.169	PPP-B-621,Styles 1,2,2½, 3,6,and 7.	Wooden boxes, nailed.
15C	178.170	PPP-B-621,Styles 1,2,2½, 3,6,and 7.	Wooden boxes, nailed.

DOT Specification	DOT Section	Federal and Military Specifications	DOT Title of Specification
15D	178.171	PPP-B-621, Styles 1, 2, 2½, 3, 6, and 7.	Wooden boxes, nailed.
15E	178.172	none	Wooden boxes, fiberboard lined.
15L	178.176	none	Wooden boxes with inside containers for desensitized liquid explosive
15M	178.177	none	Wooden boxes, metal lined, with inside containers for desensitized liquid explosives.
15P	178.182	none	Glued plywood, or wooden box for inside containers.
15X	178.181	none	Wooden boxes for two 5 gallon cans.
16A	178.185	PPP-B-585	Plywood or wooden boxes, wirebound.
16B	178.186	PPP-B-585	Wooden boxes, wirebound.
16D	178.187	PPP-B-585	Wooden wirebound overwrap for inside containers.
17C	178.115	PPP-P-704; Type I, Class 4 and 11	Steel drums.
17E	178.116	PPP-D-729; PPP-D-705, Type I and II; PPP-P-704, Type I, Class 3 & 9.	Steel drums.
17F	178.118	none	Steel drums.
17H	178.118	PPP-D-729, Type IV; PPP-D-705, Type V; PPP-P-704, Type II, Class 8.	Steel barrels or drums.
17X	178.119	none	Steel barrels or drums.
18B	178.193	none	Wooden kits.
19A	178.190	PPP-B-601	Wooden boxes, glued plywood, cleated.
19B	178.191	none	Wooden boxes, glued plywood, nailed.
21P	178.225	none	Fiber drum, overpack for inside plastic container.
21C	178.224	none	Fiber drums.
22A	178.196	none	Wooden drums, glued plywood.
22B	178.197	none	Wooden drums, glued plywood.
22C	178.198	none	Plywood drum for plastic inside container.
23F	178.214	PPP-B-636, Type CF & SF	Fiberboard boxes.
23G	178.218	none	Special cylindrical fiberboard box for high explosives.
23H	178.219	PPP-B-636, Type SF	Fiberboard boxes.
28	178.8	none	Metal jacketed lead carboys.
28A	178.9	none	Metal jacketed lead carboys.
29	178.226	PPP-T-495, Type I	Marking tubes.
31	178.15	none	Jugs in tubs.
32A	178.146	MIL-C-3082, Style C	Metal cans, riveted or locked seamed.
32B	178.147	none	Metal cases, welded or riveted.
32C	178.149	none	Metal trunks.
32D	178.148	none	Metal boxes for old and worn-out motion picture film no longer exhibitable.

DOT Specification	DOT Section	Federal and Military Specifications	DOT Title of Specification
33A	178.150	none	Polystyrene cases, nonreusable containers.
34	178.19	MIL-D-43703	Reusable molded Polyethylene container for use without overpack, removable head not authorized.
34B	178.12	none	Aluminum carboys.
36A	178.230	PPP-B-35	Lined cloth bags (triplets).
36B	178.233	PPP-B-35	Burlap bags, lined.
36C	178.234	PPP-B-35	Burlap bags, paper lined.
37A	178.131	PPP-D-705;PPP-P-704, Type II,Class 1,3,& 5.	Steel drums.
37B	178.132	none	Steel drums.
37C	178.135	none	Steel drums.
37K	178.130	none	Steel drums.
37M	178.134	none	Cylindrical steel overpack, straight sided for inside plastic container; nonreusable containers.
37P	178.133	PPP-C-1337	Steel drums with polyethylene liner.
40	178.66	none	Inside containers, non-refillable seamless or welded or brazed steel cylinders.
41	178.67	none	Inside containers, non-refillable seamless or welded or brazed steel cylinders.
42B	178.107	none	Aluminum drums.
42C	178.108	none	Aluminum barrels or drums**.
42D	178.109	none	Aluminum drums.
42E	178.136	none	Aluminum drums.
42F	178.110	none	Aluminum barrels or drums.
42G	178.111	none	Aluminum drums.
42H	178.112	none	Aluminum drums, removable head containers not authorized.
43A	178.18	none	Rubber drums.
44B	178.236	none	Multiwall paper bags.
44C	178.237	none	Multiwall paper bags.
44D	178.238	none	Multiwall paper bags.
44E	178.239	none	Multiwall paper bags.
44P	178.241	none	All plastic bags.
45B	178.240	none	Bags, cloth and paper, lined.

Source: DLAM 4145.3 (CH-4) Attachment 2, 6 November 1981.

carboline®

PHENOLINE® 305 FINISH

CARBOLINE COMPANY • 1401 S. HANLEY ROAD • ST. LOUIS, MO. 63144 • 314-644-1000

607

SELECTION DATA

GENERIC TYPE: Modified phenolic. Part A and Part B mixed prior to application.

GENERAL PROPERTIES: A heavy-duty topcoat, PHENOLINE 305 Finish sets to a hard, tough, smooth finish having very good abrasion resistance. The surface is glossy and easily cleaned. Has excellent resistance to a wide range of solvents, caustics, cleaning solutions and acid entrained vapors of high concentration. PHENOLINE 305 Finish has outstanding chemical, physical and application properties. PHENOLINE 305 Finish is easily repaired, has excellent resistance to hydraulic fluids and meets the applicable performance criteria of the American National Standards Institute ANSI N101.2-1972 and ANSI N5.12-1974. It has performed satisfactorily in radiation resistance and decontamination testing at Oak Ridge National Laboratory.

RECOMMENDED USES: PHENOLINE 305 Finish is an excellent coating for the protection of steel and concrete surfaces in nuclear power plants. Because of its glossy appearance and excellent physical properties, PHENOLINE 305 Finish is an excellent topcoat for use by manufacturers of industrial equipment and components. Also used in chemical processing plants, pulp and paper mills for the protection of structural steel and concrete against severe splash, spillage and fume conditions. The addition of 50 mesh silica provides a non-skid surface, making an excellent floor coating.

NOT RECOMMENDED FOR: Immersion service or continuous spillage of hot or concentrated acids.

CHEMICAL RESISTANCE GUIDE:

Exposure	Splash and Spillage	Fumes
Acids	Very Good	Excellent
Alkalies	Excellent	Excellent
Solvents	Excellent	Excellent
Salt	Excellent	Excellent
Water	Excellent	Excellent

TEMPERATURE RESISTANCE: (non-immersion)
Continuous: 200°F (93°C)
Non-continuous 250°F (121°C)

FLEXIBILITY: Fair **WEATHERING:** Very Good

ABRASION RESISTANCE: Very good

SUBSTRATES: Apply over suitably primed metal or cementitious surfaces. Surfacer may be required for concrete surfaces, depending on roughness and texture.

TOPCOAT REQUIRED: Normally none

COMPATIBILITY WITH OTHER COATINGS: May be applied over inorganic zincs, catalyzed epoxies, modified phenolics or others as recommended. Acceptable primers are CARBO ZINC® 11, CARBO ZINC 12, CARBOLINE® 195 Surfacer, CARBOLINE 295WB Surfacer, PHENOLINE 305 Primer, PHENOLINE 305 Concrete Primer, PHENOLINE 307 or others as recommended. A mist coat may be required when applied over inorganic zinc.

SPECIFICATION DATA

THEORETICAL SOLIDS CONTENT OF MIXED MATERIAL:

	By Volume
PHENOLINE 305 Finish	64% ± 2%

RECOMMENDED DRY FILM THICKNESS PER COAT:
4-6 mils (100-150 microns)

THEORETICAL COVERAGE PER MIXED KIT*:

1 gal. kit (yields 1.25 gal.)
1283 mil sq. ft. (25.6 m/l at 25 microns)
320 sq. ft. at 4 mils (6.4 sq. m/l at 100 microns)

5 gal. kit (yields 6.25 gal.)
6416 mil sq. ft. (25.6 sq. m/l at 25 microns)
1603 sq. ft. at 4 mils (6.4 sq. m/l at 100 microns)

*NOTE: Material losses during mixing and application will vary and must be taken into consideration when estimating job requirements.

SHELF LIFE: 24 months minimum

COLORS: Available in a variety of colors. Consult your local Carboline representative or Carboline Customer Service for availability.

GLOSS: Glossy

ORDERING INFORMATION

Prices may be obtained from Carboline sales representative or main office.

APPROXIMATE SHIPPING WEIGHT:

	1 Gal. Kit (1.25 gal.)	5 Gal. Kit (6.25 gal.)
PHENOLINE 305 Finish	17 lbs. (7.7 kg)	80 lbs. (36.3 kg)
PHENOLINE Thinner	9 lbs. (4.1 kg)	45 lbs. (20.5 kg)
CARBOLINE Thinner #2	9 lbs. (4.1 kg)	45 lbs. (20.5 kg)

FLASH POINT: (Pensky-Martens Closed Cup)

PHENOLINE 305 Finish Part A	68°F (20°C)
PHENOLINE 305 Finish Part B	60°F (16°C)
PHENOLINE Thinner	77°F (25°C)
CARBOLINE Thinner #2	30°F (-1°C)

March 84 Replaces May 83

To the best of our knowledge the technical data contained herein are true and accurate at the date of issuance and are subject to change without prior notice. User must contact Carboline to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to Carboline quality control. We assume no responsibility for coverage, performance or injuries resulting from use. Liability, if any, is limited to replacement of products. Prices and cost data if shown, are subject to change without prior notice. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY THE SELLER, EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OR LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

APPLICATION INSTRUCTIONS

These instructions are not intended to show product recommendations for specific service. They are issued as an aid in determining correct surface preparation, mixing instructions, and application procedure. It is assumed that the proper product recommendations have been made. These instructions should be followed closely to obtain the maximum service from the materials.

607

SURFACE PREPARATION: Remove any oil or grease from surface to be coated with clean rags soaked in CARBOLINE Thinner #2 or toluol in accordance with SSPC-SP1-82.

Steel/Concrete: Apply over clean, dry, recommended primer or surfacer. Application over inorganic zincs may require a mist coat.

MIXING: Mix separately, then combine and mix thoroughly in the following proportions:

	1 Gal. Kit	5 Gal. Kit
PHENOLINE 305 Finish Part A	1 Gal.	5 Gal.
PHENOLINE 305 Finish Part B	1 Qt.	1.25 Gal.
	1.25 gal.	6.25 gal.

Thin up to 25% by volume with PHENOLINE Thinner.

NOTE: Use of thinners other than those supplied or approved by Carboline may adversely affect product performance and void product warranty, whether express or implied.

POT LIFE: One and one half hours at 75°F (24°C) and less at higher temperatures. Pot life ends when coating loses body and begins to sag.

APPLICATION TEMPERATURES:

	Material	Surfaces
Normal	65-85°F (18-29°C)	65-85°F (18-29°C)
Minimum	55°F (13°C)	50°F (10°C)
Maximum	90°F (32°C)	120°F (49°C)

	Ambient	Humidity
Normal	65-85°F (18-29°C)	30-60%
Minimum	50°F (10°C)	0%
Maximum	110°F (43°C)	90%

Do not apply when the surface temperature is less than 5°F (2°C) above the dew point.

Special thinning and application techniques may be required above or below normal conditions and when applying over inorganic zinc primers.

SPRAY: Use sufficient air volume for correct operation of equipment.

Use a 50% overlap with each pass of the gun. On irregular surfaces, coat the edges first, making an extra pass later.

NOTE: The following equipment has been found suitable; however, equivalent equipment may be substituted.

Conventional: Use a 3/8" minimum I.D. material hose. Hold gun approximately 12-14 inches from the surface and at a right angle to the surface.

Mfr. & Gun	Fluid Tip	Air Cap
Binks #18 or #62	66	63PB
DeVilbiss P-MBC or JGA	E	704
	approx. .070" I.D.	

Airless: Use a 3/8" minimum I.D. material hose. Hold gun approximately 18-20 inches from the surface and at a right angle to the surface.

Mfr. & Gun	Pump*
DeVilbiss JGB-507	QFA-519
Graco 205-591	President 30:1 or Bulldog 30:1
Binks Model 700	B8-36 37:1

*Teflon packings are recommended and are available from pump manufacturer.

Use a .015-.017" tip with 2200 psi.

BRUSH OR ROLLER: For touch-up only. Use natural bristle brush applying with full coat. Avoid rebrushing. Use lambswool roller with phenolic core. Avoid rerolling. Two coats may be required for proper hiding and film build.

APPLICATION FOR NON-SKID SURFACES:
For non-skid surfaces, mix Part A and Part B as usual and add, under agitation, 2½ pints (approximately 4.33 lbs.) of 50 mesh Ottawa Silica for each one-gallon kit of PHENOLINE 305 Finish. Thin up to 25% by volume with PHENOLINE Thinner. Keep material under mild agitation during application.

Conventional: Use a ½" minimum I.D. material hose and an agitated bottom outlet pot with ½" minimum I.D. outlet equipped with dual regulators. Hold gun approximately 12-14 inches from the surface and at a right angle to the surface.

Mfr. & Gun	Fluid Tip	Air Cap
Binks Model 18 or 62	68	68 PB
DeVilbiss P-MBC or JGA	AC	62
	approx. . 110" I.D.	

Airless: Not recommended (abrades tip).

DRYING TIMES:

Temperature	Between Coats	Final Cure
50°F (10°C)	72 hrs.	12 days
60°F (16°C)	36 hrs.	8 days
75°F (24°C)	18 hrs.	4 days
90°F (32°C)	12 hrs.	2 days

CLEAN UP: Use CARBOLINE Thinner #2 or xylol.

STORAGE CONDITIONS:
Temperature: 45-110°F (7-43°C) Humidity: 0-100%

For specific recommendations, consult Carboline Technical Service.

CAUTION: CONTAINS FLAMMABLE SOLVENTS. KEEP AWAY FROM SPARKS AND OPEN FLAMES. IN CONFINED AREAS WORKMEN MUST WEAR FRESH AIRLINE RESPIRATORS. HYPERSENSITIVE PERSONS SHOULD WEAR GLOVES OR USE PROTECTIVE CREAM. ALL ELECTRIC EQUIPMENT AND INSTALLATIONS SHOULD BE MADE AND GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. IN AREAS WHERE EXPLOSION HAZARDS EXIST, WORKMEN SHOULD BE REQUIRED TO USE NONFERROUS TOOLS AND TO WEAR CONDUCTIVE AND NONSPARKING SHOES.

1401 SOUTH HANLEY ROAD carboline ST. LOUIS, MO. 63144 • 314-644-1000
CARBOLINE COMPANY

PERSONAL PROTECTIVE EQPT/SPILL SUPPLIES CON'T (Weekly)	SAT	UNSAT	NA	NI	LOCATION AND PROBLEMS OBSERVED	DATE & NATURE OF CORRECTIVE ACTION TAKEN
Fire Extinguishers						
MHE Operable/Safe for HM/HW						
Absorbents Available						
Eye Shields Available/in use						
Emergency Clothing Available						
Deluge Shower Operation						
Other						
Other						
HAZARDOUS MATERIAL AND/OR WASTES (Weekly)						
Leaks/Spills Detected or Observed						
Odors/Fumes Detected or Observed						
Evidence of Tampering/Damage						
Evidence Property Stolen or Missing						
Other – Deterioration of Drums						
Other						
Other						
OPERATIONS REVIEW (Daily/Weekly						
Awareness of HM/HW Procedures						
Handling of HM/HW						
Storage (compatibility) of HM/HW						
Use of PPE When Required						

INSPECTION LOG

*LEGEND
NA – Not applicable NI – If not inspected

DATE/TIME	AREA/BLDG *(Specify when HM/HW is stored off-site of DRMO)*	SIGNATURE OF INSPECTOR	SIGNATURE OF DRMO

HAZARDOUS PROPERTY STORAGE FACILITIES (Weekly) (Daily when loading/unloading)	SAT	UNSAT	NA	NI	LOCATION AND PROBLEMS OBSERVED	DATE & NATURE OF CORRECTIVE ACTION TAKEN
Security of Doors						
Security of Windows						
Security of Gates						
Security of Fences/Warning Signs						
Evidence of Leaks (Drums/ Containers)						
Evidence of Tampering						
Evidence of Damage						
Temperature Control						
Drainage and Spill Containment						
Water Pressure/Volume						
Sprinkler Systems (Flammables)						
"No Smoking" Signs						
Other – Deterioration of Concrete						
Other						
Other						
PERSONAL PROTECTIVE EQPT/SPILL SUPPLIES (Weekly)						
Eye Wash Operation						
Alarm Operation						
Communication System Operation						

Continued on reverse side.

NAMES	SYNONYMS	BG
Bromoacetylene		T
Bromobenzoyl acetanilide		T
Bromobenzyl trifluoride		T**
Bromodiborane		T
Bromodiethylaluminum		T
Bromodimethoxyaniline		F
Bromoform	Tribromomethane	T
Bromomethane	Methyl bromide	T
Bromophenol		O
Bromopropene	Allyl bromide	F
Bromopropyne		F**
Bromosilane		O
Bromotoluene	Benzyl bromide	G
Bromotrichloromethane		T
Bromotrifluomethane		T
Bromoxynil	3,5-Dibromo-4hydroxy benzonitrile	T
Bronze		F
Bunker fuel oil		F
Butacarb		T
Butadiene		F***
Butadiyne	Diacetylene	G
Butanal	Butyraldehyde	F
Butane		F
Butanediol		F
Butanethiol	Butyl mercaptan	F
Butanetriol trinitrate		F
Butanol	Butyl alcohol	T
Butanone	Methyl ethyl ketone	F
Butenal	Crotonaldehyde	F
Butene		F
Butene-2-one	Methyl vinyl ketone	F
Butyl acetate	Acetoxybutane	F
n-Butyl acrylate		F***
Butylamine	Aminobutane	F
Butyl alcohol	Butanol	F
t-Butyl azidoformate		F
Butyl benzene	Phenylbutane	T
Butyl benzyl phthalate		G
Butyl cellusolve*	Ethylene glycol monobutyl ether	F**
Butyl dichloroborane		F
Butyl ether	Dibutyl ether	F
Butyl formate		F
Butyl fluoride		T
Butyl glycidyl ether		F
Butyl hydroperoxide		O
t-Butyl hypochlorite		E

NAMES	SYNONYMS	BG
n-Butyl lithium		R**
Butyl mercaptan	Butanethiol	F
Butyl peroxide		O
Butyl peroxyacetate	t-Butyl perbenzoate	O
Butyl peroxbenzoate		O
Butyl peroxypivalate		O
t-Butyl perbenzoate	Butyl peroxyacetate	O
t-Butyl-3-Phenyl oxazirane		R
Butyl trichlorosilane		R
Butyramide		F
Butyraldehyde	Butanol	F
Butyric acid		F
Butyronitrile		F
Bux*	Bufencarb	T
Cacodylic acid	Dimethylarsenic acid	T
Cadmium		T
Cadmium acetylide		R**
Cadmium amide		R
Cadmium azide		E
Cadmium bromide		T
Cadmium chlorate		O
Cadmium chloride		T
Cadmium cyanide		T
Cadmium fluoride		T
Cadmium hexamine chlorate		E
Cadmium hexamine perchlorate		E
Cadmium iodide		T
Cadmium nitrate		O
Cadmium nitride		E
Cadmium oxide		T
Cadmium phosphate		T
Cadmium sulfide		T**
Cadmium trihydrazine chlorate		E
Cadmium trihydrazine perchlorate		E
Calcium		R
Calcium arsenate		T
Calcium arsenite		T
Calcium bromate		O
Calcium carbide		R**
Calcium chlorate		O
Calcium chlorite		O
Calcium fluoride		T
Calcium hexammonite		F**
Calcium hydride		R**
Calcium hydroxide	Hydrated lime	B
Calcium hypochlorite	Calcium oxychloride (chlorinated lime)	O

SYNONYMS	BG
	F**
	O
	T
Lime nitrate, nitrocalcite	O
Slaked lime	R
Calcium hypochlorite	O
	O
	O
	O
	R
	F**
	G
	T
	G
Hexanoic acid	A
Octyl peroxide	O
	T
Sevin*	T
	T
Banol	T
Furandan*	T
F[illegible]ol	T
	T
	F
Carbon bisulfide	F
	G
Carbon disulfide	F
Tetrachloromethane	T
	T
	T
Crimidine	F
Pyrocatechol	T
Potassium hydroxide	B
Sodium hydroxide	B
	T
	F
Nitro cellulose	E
	G
	R**
	F**
	F**
	T
	F
	R
	E
	T
	T**

NYMS	BG
	R**
	R
	R**
roacetaldehyde	F
	T
orinated biphenyl	T
	T
	O
	O
	O
	E
	E
	E
	R
	O
	R
	R
	E
roacetic acid	T
roacetone	A
hloromethyl ketone	T
	T
	R
	E
	G
	F
	G
	E
	G
	G
chloride	R
3-methylphenol	T
	F**
	R**
	F**
hlorobenzene	T
	T
	F**
loride	F
	T
	F
omethane	T
	T
hloride	F
	F
	G
	T

NAMES	SYNONYMS	BG
Chloronitrobenzene	Nitrochlorobenzene	T
Chloropentane	Amyl chloride	F
Chlorophenol		T
Chlorophenyl isocyanate		G
Chloropicrin	Chloropicrin, Trichloronitromethane	T
Chloropropane	Isopropyl chloride	F
Chloropropene	Allyl chloride	F
Chloropropylene oxide	Epichlorohydrin	F
Chlorosilane		F**
Chlorosulfonic acid		A
Chlorothion*		T
Chlorotoluene	Benzyl chloride	F
Chlorotoluidine		T
Chlorotrinitrobenzene	Picryl chloride	E
B-Chlorovinyldichloroarsine	Lewisite	T
Chlorpicrin	Trichloronitromethane	E
Chromic acid	Chromic anhydride, Chromium trioxide	O
Chromic anyhdride	Chromium trioxide, Chromic acid	O
Chromic chloride	Chromium trichloride	T
Chromic fluoride	Chromium trifluoride	C
Chromic oxide		T
Chromic sulfate	Chromium sulfate	G
Chromic sulfide		T**
Chromium sulfate	Chromic sulfate	A
Chromium trichloride	Chromic chloride	T
Chromium trifluoride	Chromic fluoride	A
Chromium trioxide	Chromic acid, Chromic anhydride	O
Chromyl chloride	Chloro chromic anhydride	R
Chrysene		T
CMME	Methyl chloromethyl ether	F
Coal oil		F
Coal tar		F
Cobalt		G
Cobalt bromide	Cobaltous bromide	G
Cobalt chloride	Cobaltous chloride	G
Cobalt nitrate	Cobaltous nitrate	O
Cobaltous bromide	Cobalt bromide	G
Cobaltous chloride	Cobalt chloride	G
Cobaltous nitrate	Cobalt nitrate	O
Cobaltous resinate	Cobalt resinate	F
Cobaltous sulfate	Cobalt sulfate	G
Cobalt resinate	Cobaltous resinate	F
Cobalt sulfate	Cobaltous sulfate	G

NAMES	SYNONYMS	BG
Collodion	Pyroxylin cellulose nitrate	E
Copper		G
Copper acetoarsenite	Paris green	R**
Copper acetylide		E
Coper arsenate	Cupric arsenate	T
Copper arsenite	Cupric arsenite	T
Copper chloride	Cupric chloride	G
Copper chlorotetrazole		
Copper cyanide	Cupric cyanide	T
Copper nitrate	Cupric nitrate	O
Copper nitride		O
Copper sulfate	Cupric sulfate, Blue vitriol	T
Copper sulfide		T**
Compound 1836	Diethyl chlorvinyl phosphate	T
Coroxon*	Fungicide-insecticide	T
Coumafuryl	Fumarin	T
Coumatetralyl		T
Cresol		T
Cresol glydieyl ether		F
Cresote		F
Crimidine	Castrix	T
Crotonaldehyde	Butenal	F
Crotyl alcohol		F
Crotyl bromide		F
Crotyl chloride		F
Cumene	Isopropyl benzene	F
Cumene hydroperoxide	Dimethyl hydroperoxide	O
Cupric arsenate	Copper arsenate	T
Cupric arsenite	Copper arsenite	T
Cupric chloride	Copper chloride	G
Cupric cyanide	Copper cyanide	T
Cupric nitrate	Copper nitrate	O
Cupric sulfate	Copper sulfate	T
Cupriethylenediamine		A
Cyanoacetic acid	Malonic nitrile	F
Cyanochloropentane		T
Cyanogen		F
Cyanogen bromide	Bromine cyanide	T
Cyanopenphos	Surecide*	T
Cyanuric triazide	(Explosive)	E
Cycloheptane		F
Cyclohexane		F
Cyclohexanol		F
Cyclohexanone		F
Cyclohexanone peroxide		O
Cyclohexylamine		R
Cyclohexenyl trichlorosilane		A

NAMES	SYNONYMS	BG
Cyclohexyl phenol		R
Cyclohexyl trichlorosilane		A
Cyclopentane		F
Cyclopentanol		F
Cyclopentene		F
Cyclopropane		F
Cyclotrimethylene trinitraamine	RDX (Explosive)	E
Cymene		E
Cyolan*	Phospolan	T
2,4-D	Dichlorophenoyacetic acid	G
Dasanit*	Fensulfothion	T
DBCP	Dibromochlorpropane	G
DCB	Dichlorobenzene	F
DDD		T
DDMP	Diazodinitrophenol	E
DDT		T
DDVP	Dichlorovos, vapona*	T
DEAC	Diethylaluminum chloride	R**
Decaborane		R
Decahydronaphthalene	Decalin	O
Decalin	Decahydronaphthalene	F
Decane		F
Decanol		F
Decene		F
Decyl benzene		F
Delnav*	Dioxathion	T
Demeton-S-methyl sulfoxide	Metasystox R*	T
Diacetone alcohol		F
Diacetyl		F
Diacetylene	Butadiyne	F
Diamine	Hydrazine	F**
Diaminobenzene	Phenylene diamine	F
Diaminohexane	Hexamethylenediamine	F
Diazidoethane		E
Diazinon*		T
Diazodinitrophenol	DDNP	E
Dibenzoyl peroxide	Benzoyl peroxide	O
Diborane	Diboron hexahydride	R**
Dibutyl ether	Butyl ether	R**
Dibutyl phthalate		F
3,5-Dibromo-4-hydrobenzonitrile	Bromoxynil	T
Dibromochloropropane	DBCP, fumazone*, nemagon*	T
Dibromoethane	Ethylene dibromide	T
Dichloroacetone		F
Dichloroamine		O
Dichlorobenzene	DCB	T
Dichlorobenzidine		T

NAMES	SYNONYMS	BG
Dichlorodimethylsilane	Dimethyl dichlorosilane	F
Dichloroethane	Ethylene dichloride	F
Dichloroethene	Dichloroethylene	F
Dichloroether	Dichloroethyl ether	F
Dichloroethylarsine		R
Dichloroisocyanuric acid	Dichloro-s-triazine-2,4,5-trione	O
Dichloromethane	Methylene chloride	T
Dichlorophene		T
Dichlorophenol		T
Dichlorophenoxyacetic acid	2,4-D	T
Dichloropropane	Propylene dichloride	F
Dichloropropanol		F
Dichloropropene	Dichloropropylene	F
Dichloro-s-trizine-2,4,5-trione	Dichloroisocyanuric acid	O
Dichlorovos	DDVP	
Dicumyl peroxide		O
Dicyclopentadiene		F
Dieldrin		T
Diethanolamine		T
Diethylaluminum chloride	Aluminum diethylmonochloride	R**
Diethylamine		F
Diethyl benzene		F
Diethyl chlorovinyl phosphate	Compound 1836	T
Diethyl dichlorosilane		R
Diethylene dioxide	Dioxane	F
Diethylene glycol dinitrate		E
Diethylene glycol monobutyl ether acetate		F
Diethylene triamine		T
Diethyl ether		F
Diethyl ketone		F
Diethyltoluamide		G
Diethyl zinc	Zinc ethyl	R**
Diesel oil		F
Difluorophosphoric acid		A
Diglycidyl ether	Bis (2,3-epoxypropyl) ether	F
Diisobutylene		F
Diisobutyl ketone		F
Diisopropanolamine		B
Diisopropylbenzene hydroperoxide		F
Diisopropyl beryllium		R
Diisopropyl ether	Isopropyl ether	F
Diisopropyl peroxidicarbonate	Isopropyl percarbonate	O
Dimecon*	Phosphamidon	T
Dimefox	Hanane*	T
Dimethyl acetylene		F

NAMES	SYNONYMS	BG
Dimethyl amine		B
Dimethylamino azobenzene	Methyl yellow	F
Dimethyl arsenic acid	Cacodylic acid	A
Dimethylbenzyl hydroperoxide	Cumene hydroperoxide	O
Dimethyl butane	Neohexane	F
Dimethyl butyne		F
Dimethyl dichlorosilane	Dichlorodimethylsilane	R
Dimethyldithiophosphoric acid		T
Dimethyl ether		F
Dimethyl formal		F
Dimethyl formamide		G
Dimethylhexane dihydroperoxide		O
Dimethyl hydrazine	UDMH	F
Dimethyl ketone	Acetone	F
Dimethyl magnesium		R**
Dimethylnitrobenzene	Nitroxylene	G
Dimethylnitrosoamine	N-Nitrosodimethyl amine	T
Dimethyl sulfide	Methyl sulfide	F
Dimeton		T
Dinitrobenzene		E
Dinitrochlorobenzene	Chlorodinitrobenzene	E
2,4-Dinitro-6-sec-butyl phenol	Dinoseb	T
Dinitrocresol	DNOC, Elgetol 30	T
Dinitrophenol		T
Dinitrophenyl hydrazine		E
Dinitrotoluene		T
Dinoseb	2,4-Dinitro-6-sec-butylphenol	T
Dioxacarb		T
Dioxane	Diethylene dioxide	F
Dioxathion	Delnav*	T
Dipentaerythritol hexanitrate		E
Dipentene		F
Dipehnamide		G
Diphenyl	Phenylbenzene	G
Diphenyl acetylene	Tolan	G
Diphenylamine		T
Diphenylamine chloroarsine	Phenarsazine chloride	T
Diphenyl ethane		G
Diphenyl ethylene	Stilbene	G
Diphenyl methane	Benzylbenzene	R
Diphenylmethane diisocyanate		R
Diphenyl oxide		F
Dipicryl amine	Hexanitrodiphenylamine	E
Dipropyl amine		F
Disulfoton	Disyston*	T
Disulfuric acid		A
Disulfur dinitride		E

NAMES	SYNONYMS	BG
Disulfuryl chloride		R
Disyston*	Disulfoton	T
Dithane* M-45		T
Dithione*	Sulfotepp	T
DNOC	Dinitrocresol	T
Dodecene		F
Dodecyl benzene		T
Dodecyl trichlorosilane		R
Dowco-139*	Mexacarbate	T
Dowicide I	o-Phenyl phenol	T
Dowtherm		F
Durene		F
Dyfonate*	Fonofos	T
Dynes Thinner		F
Elgetol 30	Dinitorcresol	T
Endosulfan	Thiodan*	T
Endothall		T
Endothion	Exothion	T
Endrin		T
EPN		T
Epichlorohydrin	Chloropropylene oxide	T
Epoxybutane		F
Epoxybutene		F
Epoxyethane	Ethylene oxide	F
Epoxyethylbenzene		F
Bis (2-2-Epoxypropyl) ether	Diglycidyl ether	F
Ethane		F
Ethanethiol	Ethyl mercaptan	F
Ethanol	Ethyl alcohol	F
Ethion*	Nialate	T
Ethoxyethanol		T
Ethyl acetate		F
Ethyl acetylene		F
Ethyl acrylate		F***
Ethyl alcohol	Ethanol	F
Ethylamine	Aminoethane	F
Ethyl benzene	Phenylethane	F
Ethyl butanoate	Ethyl butyrate	F
Ethyl butyrate	Ethyl butanoate	F
Ethyl chloride	Chloroethane	F
Ethyl chloroformate		F
Ethyl dichloroarsine	Dichloroethylarsine	T
Ethyl dichlorosilane		T
Ethyl ether	Diethyl ether	F
Ethylene		F
Ethylene chromic oxide		O
Ethylene chlorohydrin		T

NAMES	SYNONYMS	BG
Ethylene cyanohydrin	Hydroxypropionitrile	T
Ethylene diamine		T
Ethylene dibromide	Dibromoethane	T
Ethylene dichloride	Dichloroethane	F
Ethylene glycol		G
Ethylene glycol dinitrate	Glycol dinitrate	E
Ethylene glycol monomethyl ether		F
Ethyleneimine	Aziridine	F***
Ethylene oxide	Epoxyethane	F***
Ethyl formate		F
2-Ethylhexyl acrylate		F***
Ethyl mercaptan	Ethanethiol	F
Ethyl nitrate		E
Ethyl nitrite		E
Ethyl propionate		F
Ethyl trichlorosilane		R
Exothion	Endithion	T
Eugenol		F
Fensulfothion	Bayer 25141, Dasanit*	T
Ferbam		T
Ferric arsenate		T
Ferric sulfide		G
Ferrous sulfide		F**
Flouranthrene		F
Fluorent		F
Fluorine		R
Fluorine azide		E
Fluorine monoxide	Oxygen difluoride	R
Fluoroacetanilide		T
Fluoroacetic acid		A
Fluoroboric acid		A
Fluorosulfonic acid	Fluosulfonic acid	R
Fluosulfonic acid	Fluorosulfonic acid	R
Flusilicic acid		A
Fonofos	Dyfonate*	T
Formaldehyde	Methanal	F
Formamide		T
Formetanate hydrochloride		T
Formic acid	Methanoic acid	A
Fostion*	Prothoate	T
Freon*		T
Fumaric acid		A
Fumarin	Coumafuryl	T
Fumazone*	Dibromochloropropane	T
Furadan*	Carbofuran	T
Furan	Furfuran	F
Furfural		F

NAMES	SYNONYMS	BG
Furfuran		F
Gas oil, cracked		F
Gasoline		F
Germanium sulfide		T**
Glutaraldehyde		F
Glycerin		F
Glycidol		F
Glycol diacetate		F
Glycol dinitrate	Ethylene glycol dinitrate	E
Glycol ether		F
Glycolic acid		A
Glycol monolactate trinitrate		E
Glycolonitrile		T
Gold acetylide		R
Gold cyanate	Gold fulminate	E
Gold fulminate	Gold cyanate	E
Gold sulfide		F**
Grease		F
Guaiacol		T
Guanyl nitrosaminoguanylidene hydrazine		E
Guanidine nitrate		E
Gun cotton	Nitrocellulose	E
Guthion*		T
Hafnium		E
Hanane*	Dimefox	T
Hemimellitene		F
Heptachlor		T
Heptane		F
Heptanal		F
Heptanol		F
Heptanone		F
Heptene		F
Hexaborane		F**
Hexachlorobenzene		T
Hexadecyl trichorosilane		R
Hexaethyl tetraphosphate		T
Hexafluorophosphoric acid		R**
Hexahydride diborane	Diborane	R
Hexamethyl benzene		F
Hexamethylenediamine	Diaminohexane	F
Hexamethylenetetraamine		F
Hexanal		F
Hexanitrodiphenylamine	Dipicrylamine	E
Hexanol		F
Hexanoic acid	Caproic acid	A
Hexene		F

NAMES	SYNONYMS	BG
Hexylamine	Aminohexane	F
Hexyl trichlorosilane		R
Hexyne		F
HMX		E
Hopcide*		T
Hydrated lime	Calcium hydroxide	B
Hydrazine	Diamine	F**
Hydrazine azide		E
Hydrazoic acid	Hydrogen azide	E
Hydriodic acid	Hydrogen iodide	A
Hydrobromic acid	Hydrogen bromide	R
Hydrochloric acid	Muriatic acid	A
Hydrocyanic acid	Hydrogen cyanide	T
Hydrofluoric acid	Hydrogen fluoride	A
Hydrogen azide	Hydrazoic acid	E
Hydrogen bromide	Hydrobromic acid	R
Hydrogen cyanide	Hydrocyanic acid	A
Hydrogen fluoride	Hydrofluoric acid	A
Hydrogen iodide	Hydroiodic acid	A
Hydrogen peroxide		O
Hydrogen phosphide	Phosphine	F
Hydrogen selenide		F
Hydrogen sulfide		F**
Hydroquinone		T**
Hydroxyacetophenone		F
Hydroxydibromobenzoic acid		A
Hydroxydiphenol		F
Hydroxydroquinone		F
Hydroxyisobutyronitirile	Acetone cyanobydrin	T
Hydroxyl amine		F**
Hydroxypropionitrile	Ethylene cyanohydrin	T
Hypochlorous acid		O
Indene		F
Indium		T
Interteen	Polychlorinated biphenyl	PCB
Iodine monochloride		R
Iodine pentoxide		O
Iron arsenate	Ferrous arsenate	T
Isobutane		F
Isobutanol		F
Isobutyl acetate		F
Isobutyl acrylate		F***
Isobutylene		F
Isodecyl acrylate		F
Isodurene		F
Isoeugenol		T
Isohexane		F

NAMES	SYNONYMS	BG
Isooctane	Trimethylpentane	F
Isoocetene		F
Isopentane	Methylbutane	F
Isophorone		F
Isoprene	Methyl butadiene	F***
Isopropanol		F
Isopropyl acetate		F
Isopropyl acetylene		F
Isopropylamine	Aminopropane	B
Isopropyl benzene	Cumene	F
Isopropyl chloride	Chloropropane	F
Isopropyl ether	Diisopropyl ether	F
Isopropyl mercaptan		F
N-Isopropylemthylcarbamate		F
a-Isopropyl methylphosphoryl fluoride		T
Isopropyl percarbonate	Diisopropyl peroxydicarbonate	O
Isotactic propylene		O
J-100		F
Jet oil		F
Kerosene		F
Lacquer thinner		F
Landrin*		T
Lannate*	Methomyl	T
Lauroyl peroxide		O
Lead		T
Lead acetate		T
Lead arsenate	Lead orthorarsenate	T
Lead arsenite		T
Lead azide		T
Lead carbonate		T
Lead chloride		O
Lead cyanide		T
Lead dinitroesorcinate		E
Lead mononitroresorcinate		E
Lead nitrate		O
Lead orthoarsenate	Lead arsenate	T
Lead oxide		T
Lead styphnate	Lead trinitroresorcinate	E
Lead sulfide		O
Lead trinitroresorcinate	Lead styphnate	E
Lewisite	B-Chlorovinyldichloroarsine	T
Lime nitrate	Calcium nitrate	O
Lindane		T
Lithium		R
Lithium aluminum hydride		R**
Lithium amide		R

NAMES	SYNONYMS	BG
Lithium ferrosilicon		R
Lithium hydride		R**
Lithium hydroxide		B
Lithium hypochlorite		O
Lithium nitride		E
Lithium peroxide		R
Lithium silicon		R
Lithium sulfide		R**
London purple		T
Lye	Sodium hydroxide	B
Magnesium		F
Magnesium arsenate		T
Magnesium arsenite		T
Magnesium chlorate		O
Magnesium fluoride		T
Magnesium nitrate		O
Magnesium perchlorate		O
Magnesium peroxide		O
Magnesium sulfide		R**
Malathion		T
Maleic acid		T
Malonic nitrile	Cyanoacetic acid	T
Maneb		T
Manganese		T
Manganese acetate		G
Manganese arsenate	Mangous arsenate	T
Manganese bromide	Manganous bromide	T
Manganese chloride	Manganous chloride	G
Manganese methylcyclopentadienyl-tricarbonyl		T
Manganese nitrate	Manganous nitrate	O
Manganese sulfide		R**
Manganous arsenate	Manganese arsenate	T
Manganous bromide	Manganese bromide	T
Manganous chloride	Manganese chloride	G
Manganous nitrate	Manganese nitrate	O
Mannitol hexanitrate	Nitromannite	E
Matacil*		T
Mayer's reagent	Mercuric potassium iodide	T
kerdinoterb acetate		F
Meobal		T
Mercaptobenzothiazole		G
Mercatoethanol		F
Mercabam		T
Mercuric acetate		T
Mercuric ammonium chloride	Mercury ammonium chloride	T
Mercuric benzoate	Mercury benzoate	T

NAMES	SYNONYMS	BG
Mercuric bromide		T
Mercuric chloride	Mercury chloride	T
Mercuric cyanide	Mercury cyanide	T
Mercuric dioxysulfate	Mercuric subsulfate	T
Mercuric iodide	Mercury iodide	T
Mercuric nitrate	Mercury nitrate	O
Mercuric oleate	Mercury oleate	T
Mercuric oxide		T
Mercuric oxycyanide		E
Mercuric salicylate	Salicylated mercury	T
Mercuric subsulfate	Mercuric dioxysulfate	T
Mercuric sulfate	Mercury sulfate	T
Mercuric sulfide		T**
Mercuric thiocyanate	Mercury thiocyanide	T
Mercuric thiocyanide	Mercury thiocyanate	T
Mercurol	Mercury nucleate	T
Mercurous bromide		T
Mercurous gluconate		T
Mercurous iodide		T
Mercurous nitrate		R
Mercurous oxide		T
Mercurous sulfate	Mercury bisulfate	T
Mercury		T
Mercury (vapor)		T
Mercury acetate	Mercuric acetate	T
Mercury ammonium chloride	Mercuric ammonium chloride	T
Mercury benzoate	Mercuric benzoate	T
Mercury bisulfate	Mercurous sulfate	T
Mercury chloride	Mercuric chloride	T
Mercury cyanide	Mercuric cyanide	T
Mercury fulminate		E
Mercury iodide	Mercuric iodide	T
Mercury nitrate	Mercuric nitrate	O
Mercury nucleate	Mercurol	T
Mercury oleate	Mercuric oleate	T
Mercury sulfate	Mercuric sulfate	T
Mesitylene	1,3,5-trimethylbenzene	F
Mesityl oxide		F
Mesurol*		T
Metasystox-R*	Demeton-S-methyl sulfoxide	T
Metham		T
Methanal	Formaldehyde	F
Methane		F
Methanethiol	Methyl mercaptan	F
Methanoic acid	Formic acid	A
Methanol	Methyl alcohol	F
Methomyl	Lannate*	T

	SYNYNYMS	BG		BG
				F
oride	Agallolaretan*	T		F
		F		T
		F		F
	Methyl butyne	F		F
		F***		F
	Methanol	F		F***
omide		R**	e	F
loride		R**		R
	Aminomethane	B	ce	F
		F		F
		F	robenzene	T
	Propyleneimine			T
	Toluene	F		T
	Bromomethane	G		F
	Isoprene	F		T
	Isopentane	F		T
		F		T
		F		T
		F		F
	Isopropyl acetylene	F	ride	T
		F		G
	Chloromethane	G	lride	R**
	Methyl chloroformate	F		F
		G		F
	Methyl chlorocarbonate	E	l	A
	CMME	F		T
	Acetonitrile	F		F
		F		A
		T		G
		R		F
	Dichloromethane	G		F
		R		F
roaniline)		G	d	A
		F		T
		F	l alloy	R
	Butanone	F	l alloy	R
de		O		F
		G		F
		F		F
	Monomethyl hydrazine	F	line	T
		T		T
		F	ene	E
		R**	pane	T
		R**		F
		R**	NB	T
		R	arbamates (mix)	G
	Methanethiol	F***		

NAMES	SYNONYMS	BG
Nialate	Ethion-NIA 12,14-Diethion	T
Nickel (dus or fume)		F
Nickel acetate		T
Nickel antimonide	Breithauptite (reacts w/H_2O)	R
Nickel arsenate	Nickelous arsenate	T
Nickel arsenite	Nickelous arsenite	T
Nickel carbonyl	Nickel tetracarbonyl	F
Nickel chloride	Nickelous chloride	G
Nickel cyanide	Reacts w/Mg	T
Nickel nitrate	Nickelous nitrate	O
Nickelous arsenate	Nickel arsenate, toxic	T
Nickelous arsenite	Nickel arsenite, toxic	T
Nickelous chloride	Nickel chloride	T
Niclelous nitrate	Nickel nitrate	T
Nickel selenide		T
Nickel subsulfide		T**
Nickel sulfate		G
Nickel tetracarbonyl	Nickel carbonyl	F
o-Nitraniline	o-Nitroaniline MOD toxic	T
Nitric acid		O
p-Nitroaniline	p-Nitraniline	T
Nitrobenzene	Nitrobenzol	T
Nitrobenzol	Nitrobenzene	T
Nitrobiphenyl	4-NBP	T
Nitrocalcity	Calcium nitrate	O
Nitrocellulose	Cellulose nitrate, gun cotton	E
Nitrochlorobenzene	Chloronitrobenzene	T
Nitrogen dioxide	Nitrogen tetroxide, peroxide	O
Nitromannite	Mannitol hexanitrate	E
Nitrogen mustard	HN-1	T
Nitrogen tetroxide	Nitrogen dioxide, peroxide	O
Nitroglycerin	Trinitroglycerin	R
Nitrohydrochloric acid	Aquaregia	O
Nitrophenol	m-Hydroxynitrobenzene	T
2-Nitropropane	2-NP, isonitropropane	F
Nitrosodimethylamine	Dimethylnitrosoamine	T
Nitroxylene	Nitroxylol, dimethyl-nitrobenzene	E
Nitrolos	Nitroxylene, dimethyl-nitrobenzene	E
N-Nitrosodimethylamine	Dimethylnitrosoamine	T
Nonane	n-Nonane	F
Nonanone		F
Nonanal	Pelargonic alhchyde, aldchyde C-9	F
Nonanol	Nonyl alcohol, octyl carbinol	F
Nonene	Propylene trimer, n-Heptylethylene	F

NAMES	SYNONYMS	BG
Nonyl phenol		T
Nonyl trichlorosilane		R
Octadecyl trichlorosilane		R
Octadecyne	1-Octa decene, hexadecyl acetylene	G
Octamethylpyrophosphoramide	Schradan (insecticide)	T
Octanal	n-Octyl aldehyde, caprylic aldehyde	F
Octane		F
Octanone	Methyl hexyl ketone	F
Octanol	Octyl alcohol, hexylcarbinol	F
Octene		F
Octyl peroxide	Caprylyl peroxide	O
Octyl trichlorosilane	Trichlorooctosilane	R
Oil of bergamot		F
Oil of vitriol	Sulfuric acid, hydrogen sulfate	A
Oleum	Sulfuric acid, battery acid	O
Orris root	White flag	F
Orthoxenol	o-Phenyl phenol	T
Osmium		T
Osmium amine nitrate		O
Osmium amine perchlorate		O
Oxamyl		T
Oxalic acid	Ethanedioic acid	A
Oxygen difluoride	Oxygen fluoride, fluorine monoxide	R
PCB	Polychlorinated biphenyl	PCB
Paraoxon	Mintacol*, Diethyl-p-nitrophenyl-phosphate	T
Parathion		T
Paris green	Copper acetoarsenite	T
Pentaborane		F**
Pentachlorophenol		T
Pentaerythritol tetranitrate	Pentaerythrityl tetranitrate PETN	E
Pentamethyl benzene		F
Pentane		F
Pentanethiol	Amyl mercaptan	F
Pentanal	n-Valeraldehyde amyl aldehyde	F
Pentanone	Methyl propyl ketone, diethyl ketone	F
Pentene	Amylene propylethylene	F
Pentylamine	n-Amylamine, aminopentane	F
Pentyne	n-Propyl acetylene	F
Peracetic acid	Peroxyacetic acid	O
Perbromic acid		O
Perchloric acid		O

NAMES	SYNONYMS	BG
Perchloroethylene	Tetrachloroethylene	T
Perchloromethyl mercaptan	Trichloromethylsulfenylchloride	T
Perchlorous acid		O
Perchloryl fluoride		O
Periodic acid		O
Permonosulfuric acid	Caro's acid	A
Peroxyacetic acid	Peracetic acid	O
PETD	Polyram combi*	T
PETN ("primacord")	Pentaerythrityl tetranitrate, Pentaerythritol tetranitrate	E
Petroleum naphtha	Petroleum solvent	F
Petroleum oil		F
Phenanthrene		T
Phenarazine chloride	Diphenylamine chloroarsine	T
Phenol	Carbolic	F
Phenyl acetic acid	Alpha-toluic acid	T
Phenyl acetonitrile	Benzyl cyanide	T
Phenyl acetylene		F
Phenylaniline	Diphenylamine anilinobenzene	G
Phenylbenzene	Diphenyl biphenyl	T
Phenylbutane	Butylbenzene	F
Phenylchloromethyl ketone	Chloroacetophenone "tear gas"	T
Phenyl dichloroarsine	Phenylarsenic dichloride	T
Phenylene diamine	Diaminobenzene	T
Phenylethane	Ethylbenzene	F
Phenyl hydrazine hydrochloride		T
o-Phenyl phenol	Orthozenol, dowicide 1	F
Phenyl trichlorosilane		R
Phenyl valerylnitrile		F
Phenylpropane	Propylbenzene	F
Phloroglucinol		F
Phorate	Timet*	T
Phosdrin*	Mevinphos	T
Phosphamidon	Dimecron*	T
Phosphine	Hydrogen phosphide	F**
Phospholan	Cyolan*	F
Phosphonium iodide		R**
Phosphoric acid		A
Phosphoric anhydride	Phosphorus pentoxide	A
Phosphoric sulfide	Phosphorus pentasulfide	R**
Phosphorus (amorphous red)		R**
Phosphorus (white-yellow)		F**
Phosphorus heptasulfide		F**
Phosphorus oxybromide	Phosphoryl bromide	R
Phosphorus oxychloride	Phosphoryl chloride	R
Phosphorus pentachloride	Phosphoric chloride	R
Phosphorus pentasulfide	Phosphoric sulfide	R**

NAMES	SYNONYMS	BG
Phosphorus pentoxide	Phosphoric anydride	R
Phosphorus sesquisulfide	Tetraphosphorus trisulfide	R**
Phosphorus tribromide		R
Phosphorus trichloride		R
Phosphorus trisulfide		R**
Phosphoryl bromide	Phosphorus oxybromide	R
Phosphoryl chloride	Phosphorus oxychloride	R
Phthlic acid		A
Picramide	Trinitroaniline	E
Picric acid	Trinitrophenol	E
Picridine		B
Picryl chloride	Chlorotrinitrobenzene	E
Piperdine		T
Pirimicarb		T
Polyglycol ether		F
Polyamide resin		F
Polybrominated biphenyl		T
Polybutene		G
Polychlorinated biphenyls	PCB, Askarel, Arochlor*, Chlorextol, Inerteen	PCB
Polychlorinated triphenyls		F
Polyethylene	Propene polymer	F
Polyester resin		F
Polyram combi*	PETD	R
Polysulfide polymer		R
Polystyrene		R
Polyurethane		R
Polyvinyl acetate		F
Polyvinyl chloride		F
Polyvinyl nitrate		E
Potasan		E
Potassium		E
Potassium acid fluoride	Potassium fluoride	R
Potassium aluminate		B
Potassium arsenate		T
Potassium arsenite		T
Potassium bifluoride	Potassium fluoride	B
Potassium bichromate	Potassium dichromate	O
Potassium bromate		O
Potassium butoxide		B
Potassium cyanide		T
Potassium dichloroisocyanurate		O
Potassium dichromate	Potassium bichromate	O
Potassium dinitrobenzfuroxan		E
Potassium fluoride	Potassium acid fluoride	B
Potassium hydride		R**
Potassium hydroxide	Caustic potash	B

NAMES	SYNONYMS	BG
Potassium nitrate	Saltpeter	E
Potassium nitride		B
Potassium nitrite		O
Potassium oxide		R
Potassium perchlorate		O
Potassium permanganate		O
Potassium peroxide		O
Potassium sulfide		F
Promecarb		T
Propanal	Propionaldehyde	F
Propane		F
Propanethiol	Propyl mercaptan	F
Propanoic acid	Propionic acid	A
Propanol	Propyl alcohol	F
Propargyl bromide		F
Propargyl chloride		G
2-Propen-1-ol	Allyl alcohol	F
Propioacetone		F
Propionaldehyde	Propanol	F
Propionamide		F
Propionic acid	Propanoic acid	A
Propionitrile		F
Propyl acetate		F
Propyl alcohol		F
Propylamine		B
Propyl benzene	Phenyl propane	F
Propylene dichloride	Dichloropropane	F
Propylene glycol		F
Propylene glycol monomethyl ether		F
Propylene oxide		F***
Propyleneimine	Methyl aziridine	F
Propyl ether		T
Propyl formate		F
Propyl mercaptan	Porpanethiol	F
Propyl trichlorosilane		R
Prothoate	Fostion*	F
Pseudocumene	1,2,4 trimethylbenzene	T
Pyridine		F
Pyrogallol		F
Pyrosulfuryl chloride	Disulfuryl chloride	R
Pyroxylin	Collodion	F
Quinone	Benzoquinone	F
Raney nickel		T
RDX	Cyclomethylene trinitramine	E
Resins		F
Resorcinol		T
Rubidium		E

NAMES	SYNONYMS	BG
Salicylated mercury	Mercuric salicylate	T
Saligenin	Salicyl alcohol	F
Saltpeter	Potassium nitrate	E
Schradan	Octamethyl pyrophosphoramide, OMPA	T
Selenious acid	Selenous acid	T
Selenium		G
Selenium diethyldithiocarbamate		T
Selenium fluoride		T
Selenous acid	Selenious acid	T
Silicochloroform	Trichlorosilane	R
Silicon tetrachloride	Silicon chloride	R
Silicon tetrafluoride		R**
Silver acetylide		E
Silver azide		E
Silver chloride		G
Silver cyanide, reagent		T
Silver cyanite, technical		T
Silver nitrate		O
Silver nitride		E
Silver styphnate	Silver trinitroresorcinate	E
Silver sulfide		T**
Silver tetrazene		E
Silver trinitroresorcinate	Silver styphnate	E
Slaked lime	Calcium oxide	R
Smokeless powder		E
Sodamide	Sodium amide	R
Soda niter	Sodium nitrate	O
Sodium		R**
Sodium acid fluoride	Sodium difluoride	T
Sodium aluminate		B**
Sodium aluminum hydride		R**
Sodium amide	Sodamide	R
Sodium arsenate		T
Sodium arsenite		T
Sodium azide		E
Sodium bichromate	Sodium dichromate	O
Sodium bifluoride	Sodium difluoride	T
Sodium bromate		O
Sodium cacodylate	Sodium dimethylarsenate	T
Sodium carbonate		B
Sodium carbonate peroxide		O
Sodium chlorate		O
Sodium chlorite		O
Sodium chromate		T
Sodium cyanide		T
Sodium dichloroisocyanurate		O

NAMES	SYNONYMS	BG
Sodium dichromate	Sodium bichromate	O
Sodium dimethylarsenate	Sodium cacodylate	T
Sodium fluoride		R**
Sodium hydride		F
Sodium hydroxide	Caustic soda, Lye	B
Sodium hypochlorite		O
Sodium hyposulfite	Sodium thiosulfate	G
Sodium methylate	Sodium methoxide	R
Sodium methoxide	Sodium methylate	R
Sodium molybdate		T
Sodium monoxide	Sodium oxide	R
Sodium nitrate	Soda niter	O
Sodium nitride		E
Sodium oxide	Sodium monoxide	R
Sodium pentachlorophenate		R
Sodium perchlorate		O
Sodium permanganate		O
Sodium peroxide		R
Sodium phenolsulfonate	Sodium sulfocarbonate	G
Sodium picramate		E
Sodium polysulfide		F
Sodium potassium alloy	Nak, Nack	E
Sodium selenate	Selenious acid	T
Sodium sulfide		T**
Sodium thiosulfate		T**
Stannic chloride	Tin tetrachloride	R
Stannic sulfide	Tin bronze, Tin disulfide	T**
Starch nitrate	Nitrostarch	E
Stilbene	Diphenyl ethylene, Toluelene	F
Stoddard solvent		F
Strontium		F
Strontium arsenate		T
Strontium dioxide	Strontium peroxide	E
Strontium monosulfide	Strontium sulfide	F
Strontium nitrate		T**
Strontium peroxide	Strontium dioxide	O
Strontium tetrasulfide		T**
Styphnic acid	Trinitroresorcinol	E
Styrene	Vinylbenzene	F***
Succinic acid		F
Succinic acid peroxide		O
Sulfonyl chloride	Sulfuryl chloride	R
Sulfonyl fluoride		R
Sulfotepp	Dithione*, Blada-Fum*	T
Sulfur chloride	Sulfur monochloride	R
Sulfur (elemental)		G
Sulfuric acid	Oil of Vitriol, Oleum	O

NAMES	SYNONYMS	BG
Sulfuric anhydride	Sulfur trioxide	R
Sulfur monochloride	Sulfur chloride	R
Sulfur oxychloride	Thionyl chloride	R
Sulfur pentafluoride		R
Sulfur trioxide	Sulfuric anhydride	R
Sulfuryl chloride	Sulfonyl chloride	R
Sulfuryl fluoride	Sulfonyl fluoride	R
Supracide*	Ultracide*	T
Surecide*	Cyanofenphos	T
Synthetic rubber		G
Tall oil		F
Tar		F
TCDD	Tetrachlorodibenzo-p-dioxin	T
TEDP	Tetraethyl dithiopyrophosphate	T
TEL	Tetraethyl lead	T
Tellurium hexafluoride		T
Temik*	Aldicarb	T
TEPP	Tetraethyl pyrophosphate	T
Tetrachlorodibenzo-p-dioxin	TCDD	T
Tetrachloroethane		A
Tetrachloroethylene	Perchloroethylene	T
Tetrachloromethane	Carbon tetrachloride	G
Tetrachlorophenol		T
Tetrachloropropyl ether		F
Tetradecene		G
Tetraethyl dithiopyrophosphate	TEDP	B
Tetraethyl lead	TEL	F
Tetraethyl pyrophosphate	TEPP	T
Tetrahydrofuran	THF	F
Tetramethylenedimine		G
Tetramethyl lead	TML	F
Tetramethyl succinonitrile		T
Tetraphenyl ethylene		F
Tetraphosphorus trisulfide	Phosphorus sesquisulfide	R**
Tetraselenium tetranitride		E
Tetrasul	Animert* V-101	T
Tetrasulfur tetranitride		E
Thallium		T
Thallium nitride		R
Thallium sulfide		T**
Thallous sulfate		T
THF	Tetrahydrofuran	F
Thimet*	Phorate	T
Thionyl chloride	Sulfur oxychloride	R
Thiocarbonyl chloride	Thiophosgene	R
Thiodan*	Endosulfan	T
Thionazin	Zinophos*	T

NAMES	SYNONYMS	BG
Thionyl chloride	Sulfur oxychloride	R
Thiophosgene	Thiocarbonyl chloride	R
Thiophosphoryl chloride		R
Thiram		T
Tin tetrachloride	Stannic chloride	R
Titanic chloride	Titanium tetrachloride	R
Titanium		E
Titanium sesquisulfide		T**
Titanium sulfate		T
Titanium sulfide		T**
Titanium tetrachloride	Titanic chloride	R
TMA	Trimethylamine	F
TML	Tetramethyl lead	F
TNB	Trinitrobenzene	E
TNT	Trinitrotoluene	E
Tolualdehyde		F
Toluene	Toluol, Methylbenzene	F
Toluene diisocyanate		R
Toluic acid		A
Toluidine	Aminotoluene	F
Toluol	Tonuene, Methylbenzene	F
Topcide*	Benzadox	F
Triamiphos	Wepsyn* 155	T
Tribromoethane	Bromoform	G
Tri-n-butylaluminum		R
Tricadmium dinitride		O
Tricalcium dinitride		O
Tricesium nitride		O
Trichloroacetaldehyde	Chloral hydrate	T
Trichloroborane		R
Trichloroethane		T
Trichloroethene	Trichloroethylene	T
Trichloroisocyanuric acid		O
Trichloromethane	Chloroform	T
Trichloromethyl sulfenyl chloride	Perchloromethyl mercaptan	T
Trichloronitromethane	Chloropicrin	E
Trichlorophenoxyacetic acid		T
Trichloropropane		T
Trichlorosilane	Silicochloroform	R
Tridecene		F
Triethanolamine		G
Triethyl aluminum		R**
Triethyl antimony	Triethylstibine	R**
Triethyl arsine		R
Triethyl bismuthine		E
Triethylamine		E
Triethylene phosphoramide	Tris (1-aziridinyl) phosphine oxide	T

NAMES	SYNONYMS	BG
Triethylene tetraamine		T
Triethyl stibine	Triethyl antimony	R**
Trifluoroethane		T
Trifluoromethylbenzene	Benzotrifluoride	E
Triisobutyl aluminum		R**
Trilead dinitride		E
Trimercury dinitride		E
Trimethyl aluminum		R**
Trimethylamine	TMA	F
Trimethyl antimony	Trimethylstibine	F**
Trimethyl arsenic	Trimethylarsine	R
1,2,4-Trimethylbenzene	Pseudocumene	F
1,3,5-Trimethylbenzene	Mesitylene	F
Trimethyl bismuthine		F
Trimethyl pentane	Isooctane	F
Trimethylstibine	Trimethyl antimony	R**
Tri-n-butylborane		R**
Trinitroaniline	Picramide	E
Trinitroanisole	Trinitrophenylmethyl ether	E
Trinitrobenzene	TNB	E
Trinitrobenzoic acid		E
Trinitroglycerin	Nitroglycerin	E
Trinitronaphthalene	Naphtite	E
Trinitrophenol	Picric acid	E
Trinitrophenyl methyl ether	Trinitroanisole	E
Trinitroresorcinol	Styphnic acid	E
Trinitrotoluene	TNT	E
Trioctyl aluminum		R**
Triphenyl ethylene		G
Triphenyl methane		G
Tripropylamine		G
Tripropyl stibine		R
Trisilyl arsine		R
Tris-(1-aziridinyl) phosphine oxide	TEPA, Triethylene phosphoramide	T
Trithion		T
Trithorium tetranitride		O
Trivinyl stibine		R
Tsumacide*		T
Turpentine		F
UDMH	Dimethyl hydrazine	F
Ultracide*	Supracide*	T
Undecene	Hendecane	G
Unisolve		T**
Uranium nitrate	Uranyl nitrate	O
Uranium sulfide	Uranyl sulfide	F
Uranyl nitrate	Uranium nitrate	O

NAMES	SYNONYMS	BG
Urea formaldehyde	Melamine resin	G
Urea nitrate		E
VC	Vinylidene chloride	F
Valeraldehyde	Pentanal	F
Valeramide		G
Valeric acid		A
Vanadic acid anhydride	Vanadium pentoxide	T
Vanadium oxytrichloride		A
Vanadium pentoxide	Vanadic acid anhydride	A
Vanadium sulfate	Vanadyl sulfate	T
Vanadium tetroxide		T
Vanadium trichloride		R
Vanadium trioxide		T
Vanadyl sulfate	Vanadium sulfate	T
Vapona*	DDVP	T
Vinyl acetate		F***
Vinyl azide		E
Vinylbenzene	Styrene	F
Vinyl chloride		F***
Vinyl cyanide		F***
Vinyl ethyl ether		F
Vinyl ispropyl ether		F
Vinylidene chloride	VC	F***
Vinyl toluene		F***
Vinyl trichlorosilane		R
VX		T
Water		G
Waxes		F
Wepsyn* 155	Triamiphos	T
Wood		G
Xylene		F
Zectran*	Dowco 139*	T
Zinc		E
Zinc acetylide		R**
Zinc ammonium nitrate		O
Zinc arsenate		T
Zinc arsenite		T
Zinc chloride		A
Zinc dioxide	Zinc peroxide	E
Zinc ethyl	Diethyl zinc	R**
Zinc cyanide		T
Zinc fluoborate		T
Zinc nitrate		O
Zinc permanganate		O
Zinc peroxide	Zinc dioxide	R
Zinc phosphide		R
Zinc salts of dimethyl Dithiocarbamic acid		R

NAMES	SYNONYMS	BG
Zinc sulfate		T
Zinc sulfide		G
Zineb*		T
Zinophos*	Thioazin	T
Ziram*		T
Zirconium		F
Zirconium chloride	Zirconium tetrachloride	R
Zirconium picramate		O
Zirconium tetrachloride	Zirconium chloride	R

STORAGE COMPATIBILITY

A. PURPOSE

1. This chapter provides guidance for the storage of hazardous material/hazardous waste (HM/HW) in a compatible manner. It is applicable to all levels of DPDS and supersedes all prior guidance.

2. Although many of the items handled by DPDOs are considered hazardous materials and not always hazardous wastes, the subsequent discussions on 40 CFR Parts 264.17 and 264.177 will be considered applicable for both. In order that the DPDO stay in compliance with the regulations cited below, this chapter will be used as a guide to storing hazardous materials and hazardous wastes in a compatible manner.

3. 40 CFR 264.17 General requirements for ignitable, reactive or incompatible wastes states:

"a. The owner or operator must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste must be separated and protected from sources of ignition or reaction including but not limited to: open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat. While ignitable or reactive waste is being handled, the owner or operator must confine smoking and open flames to specially designated locations. 'No Smoking' signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste."

"b. Where specifically required by other sections of this part, the treatment, storage, or disposal of ignitable or reactive waste, and the mixture or commingling of incompatible wastes, or incompatible wastes and materials, must be conducted so that it does not:

(1) Generate extreme heat or pressure, fire or explosion, or violent reaction;

(2) Produce uncontrolled toxic mists, fumes, dust, or gases in sufficient quantities to threaten human health;

(3) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;

(4) Damage the structual integrity of the device or facility containing the waste; or

(5) Through other like means threaten human health or the environment."

CH 10
DPDS-M 6050.1

NOTE: DPDS policy is that there shall be no mixing of HM/HW in a single container after being accepted by the DPDO.

4. 40 CFR 264.177 Special requirements for incompatible wastes states: "(a) Incompatible wastes or incompatible wastes and materials, . . . must not be placed in the same container, unless 264.17(b) is complied with." "(c) A storage container holding a hazardous waste that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks, or surface impoundments must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device."

B. PREFACE TO PROCEDURE

1. Materials of a hazardous nature should be stored in facilities where adequate measures have been taken to assure personal safety, accident prevention, and detection of potential environmental damages which might occur. When applicable, storage facilities should be weatherproofed to the extent that damage to the container or contents cannot occur due to outside factors.

2. Rigid containers should be stored in an upright position and off the ground or floor in an orderly way so as to permit ready access and inspection.

3. Containers should be inspected at least weekly (40 CFR 264.174) for corrosion and leaks. If leakers are found, they should be placed into overpack drums immediately (as provided for in Section V, Chapter 4, Oil and Hazardous Materials/Hazardous Wastes (HM/HW) Spill Prevention and Response guidance of DPDS-M 6050.1). Materials such as adsorptive clay, hydrated lime, and 5% sodium hypochlorite (clorox) should be available for use as an emergency treatment or detoxification of spills or leaks.

4. The following procedures are applicable to the storage of all DPDO hazardous property to ensure that only compatible materials are stored together. Due to the inherent danger involved in the storage of these materials, and to ensure the safety of both personnel and facilities there shall be no deviation from these procedures without written permission.

C. PROCEDURES FOR DETERMINING COMPATIBILITY

1. To assure that an orderly procedure is used to determine the compatibility of HM/HW being turned in to the DPDO, the following steps should be followed:

a. Identification of Hazardous Material/Hazardous Waste (HM/HW)

(1) Effective 2 Jan 84, all Hazardous Property (HP) turned into the DPDO must be identified in one of the following ways:

(a) With a valid NSN, a noun name as cataloged in the supply system, the chemical name of hazardous contaminants, noun name of all the nonhazardous components, and the amount of hazardous and nonhazardous contaminants expressed in a range of content by percentage or parts per million (based on user's knowledge or testing of the item).

(b) When turned in under an LSN it will list the chemical names of hazardous components, the chemical name of all hazardous contaminants, the noun name of the nonhazardous contaminants, and the amounts of all hazardous and nonhazardous contaminants expressed in a range of percentage or parts per million (based on user's knowledge or testing of the item).

(2) If the DTID shows a complete NSN, then item X "Item Nomenclature" on the DTID must give the noun name of the item being turned in. If the noun name of the item is not the chemical name, then the NSN can be used to locate the item in the Hazardous Materials Information System (HMIS) microfiche and the chemical name should be available there. If the NSN for the item is not in the HMIS then contact your regional environmentalist for assistance. The storage code will also be available from page 2 of the HMIS microfiche for each item. If the material turned in lists only an LSN or FSC, then blocks W thru Y must contain a complete description of the material. When a substance is contaminated, identification of the contaminant and the amount present must be given. Storage of the Hazardous Property (HP) received will be determined by the major hazardous ingredient (by volume) of the substance. This should provide sufficient information for classification of the HM/HW into one or more of the basic groups. These basic groups include: Toxics; Flammables and Combustibles; Acids; Bases; Oxidizers; Water Reactives; PCBs; and General Hazardous Warehousing. If a HM/HW item being turned in possess two or more hazards, the DOT hierarchy as set forth in 49 CFR 173.2 will be used to determine where it is to be stored. This hierarchy is as follows:

(a) Radioactives

(b) Poison A

(c) Flammable Gas

(d) Non Flammable Gas

(e) Flammable Liquids

(f) Oxidizer

(g) Flammable Solids

(h) Corrosive Liquids

(i) Poison B

(j) Corrosive Solids

(k) Irritating Materials

(l) Combustible Liquids (110 gallons or more)

(m) ORM-B

(n) ORM-A

(o) Combustible Liquids (110 gallons or less)

(p) ORM-E

(3) If adequate information is not provided by the NSN, LSN, or FSC, the substance will be considered an unknown. Before accountability can be accepted by the PDO, these unknown substances must be identified by the turn-in activity.

b. Placement of Material in Proper Storage Area

(1) Each DPDO will maintain a current inventory list in its receiving area or at the receiving area and each basic storage area. These current inventory lists may be made of cardboard, plywood, or some comparable material covered with a transparent plastic sheet which can be written on with grease pencil or water soluble felt tip marker.

(2) As HM/HW is received, it will be screened against the items that are presently in that particular area, by refering to the basic groups in enclosure 3, to ascertain if any incompatibilities will exist if the item is placed in storage there. Exceptions to the use of the basic groups in enclosure 3 are noted in enclosure 2.

(3) If there are no incompatibilities, the HM/HW will be added to the current inventory list and the item will be placed in its proper storage area.

(4) As items are added to the storage area, their names will be added to each current inventory list along with the date on which they were placed there; and as items are taken from the storage area, their names will be taken off of the lists. An example of a current inventory list is illustrated in enclosure 1 along with an example of the HM/HW being added.

CURRENT INVENTORY LIST

A. This appendix contains examples of the Current Inventory Lists which are required to be kept in the receiving area or in both the receiving area and in each basic group storage area.

B. There will be a Current Inventory List for each basic group storage area. These lists will be made of a rigid material covered by a transparent plastic sheet that can be written on with grease pencil or water soluble felt marker.

C. Each Current Inventory List shall contain enough spaces to accommodate all of the items in a particular storage area at any time.

D. As a hazardous item is received in the DPDO system, its name and date received will be added to the Current Inventory List. As hazardous items leave the DPDO because of disposal actions, their names will be deleted from the list.

E. This system will allow the PDO to maintain a current inventory of all HM/HW within the DPDO.

CURRENT INVENTORY LIST-FORMAT

HM/HW ITEMS CURRENTLY STORED	DATE STORED

CURRENT INVENTORY LIST-FORMAT
FLAMMABLE STORAGE

HM/HW ITEMS CURRENTLY STORED	DATE STORED
TOLUENE	2/10/83
METHYL VINYL KETONE	2/25/83
NAPHTHA	2/27/83
PENTANE	4/10/83

If the above named hazardous materials are already in the Flammable Storage bin and the following items are received, the compatibility would be checked in the following manner.

a. Potassium peroxide is received by the DPDO. In checking enclosure 3, page E3-29, it is found that this substance is a strong oxizider (O) and must not be stored in this area.

b. Pentaborane is received by the DPDO. In checking enclosure 3, page E3-26. its Basic Group is found to be F** which indicates that it is flammable but it is also a strong reducing agent and should be checked further. A further check will indicate that it is incompatible with naptha and can not be stored with it.

CONVERSION OF HMIS STORAGE CODES TO BASIC STORAGE GROUPS

A. The storage guidance list being provided as enclosure 3 consists of three columns. The first column provides an alphabetized list of hazardous materials/hazardous wastes (HM/HW) which may be received by the DPDO.

B. The second column provides a partial listing of synonyms of the items appearing in the first column.

C. The third column provides the basic storage groups (BG) into which the individual HM/HW may be segregated for storage. These BGs include:

a. Flammables and combustibles (F). Where possible (room permitting) all flammables and combustibles will be stored in the flammable storage area. If indoor flammable storage space is inadequate to store all of the flammables and combustibles, priority for storage will be given to the flammables listed in the following sequence: F1; F2; F3; F4; F5; and F6.

b. Bases (B), including all organic and inorganic basic substances.

c. Acids (A), organic and inorganic acids should be kept separated in storage. If the acid being turned in is not known as far as being organic or inorganic, look it up in your chemical dictionary or call your regional environmentalists.

d. Oxidizers (O), this includes the oxidizing acids as well as any other oxidizers.

e. Reactives (R), includes all of the water reactive substances.

f. Toxics (T), includes all toxic substances which cannot be stored in general warehousing; and

g. General Warehousing (G), those HM/HW items which can, with proper packaging, be placed in general warehousing (example-friable asbestos).

D. There are also HM/HW items that are listed as explosives (E), but these are not to be accepted by the DPDO.

E. If the hazardous property (HP) being turned in cannot be found in enclosure 3 but can be found in the Hazardous Materials Information System (HMIS) under a different storage coding system the following system will be used to determine into which Basic Group it will be placed. If questions exist for those groups which are followed by an asterisk, call your Regional Environmental Specialist.

Basic Group	Comparable HMIS Code
F	F1, F2, F3, F4, F5, F6
B	B1, B2
T	P1, P2, T3, T4
A	C1, C2*
O	R1
R	R3
PCB	T2**
G	L1, N1, J1***

F. There are items in some HMIS categories which the DPDO does not normally accept (see DoD 4160.21-M Chapter VI and DPDS-H 4160.3 Volume I, Chapter III). These categories are as follows:

A	Radioactives
E1, E2, E3	Explosives Classes A, B, & C
T5	Etiological Agents
R4	Pyrophorics

* When storing acids (C1 & C2) make sure that they are kept separated when placing them in the same storage area.

** The PCBs are listed in HMIS as having storage code T2 and must be stored in a manner which is in compliance with the Toxics Substance Control Act (TSCA). Other bioaccumulatives (such as lead and other heavy metals) may be stored in the most appropriate way.

*** Those items which are in HMIS storage codes L1, N1, and J1 can normally be stored in general warehousing.

HMIS storage codes for gases are G1, G2, G3, G4, G5, G6, and G7. These gases will be stored in accordance to the guidance in DoD 4145.19-R-1.

The HMIS storage for carcinogens is T1. These will be stored in accordance with DLAM 1000.1.

On all items which carry an HMIS storage code of S1 (Special hazard/multiple hazard) call your regional environmentalist for storage guidance.

LIST OF CHEMICAL SUBSTANCES

A. This lists chemical substances that may be found in hazardous waste streams.

B. The list consists of three (3) columns. The first column lists the chemical or trade names of the materials in alphabetical order. The trade names are denoted by asterisks (*). The second column lists the synonyms or common names of the chemical substance when available. The third column lists the basic group to which the material is assigned. These include flammable (F), toxic (T), base (B), acid (A), oxidizer (O), reactive (R), and general warehousing (G). There are some chemicals which are listed as explosive (E) which the DPDO will normally not accept(see DoD 4160.21-M and DPDS-M 4160.3 Volume I). The double asterisk (**) after the BG denotes a strong reducing agent while a triple asterisk (***) behind the BG denotes a substance which will polymerize vigorously under certain conditions. When either (**) or (***) is encountered special storage, conditions may be necessary. Call your Regional Environmental Specialist for guidance on categories not identified.

NAMES	SYNONYMS	BG
Abate*		G
Acenaphthene		G
Acetamide		G
Acetaldehyde		F
Acetic Acid		A
Acetic anhydride		R
Acetone	Dimethyl ketone	F
Acetone cyanohydrin	Hydroxyisobutyronitrile	T
Acetonitrile	Methyl cyanide	F
Acetophenone		G
Acetoxybutane	Butyl acetate	F
Acetoxypentane	Amyl acetate	F
Acetyl acetone	2,4-Pentanedione	G
Acetyl azide		E
Acetyl benzoyl peroxide		O
Acetyl bromide		R
Acetyl chloride		R
Acetylene		F
Acetyl nitrate		E
Acetyl peroxide		O
Acrolein	Aqualin	F***
Acrylic acid		A***
Acrylonitrile		F***
Adhesive		F
Adhesive, liquid cement		F
Adhesive, plastic		G
Adhesive, rubber cemment		F
Adhesive, resin epoxy		G

NAMES	SYNONYMS	BG
Adhesive, silicone		G
Adhesive, synthetic resin		F
Adipic acid		A
Adiponitrile		F
Agallel	Methoxyethylmercuric chloride	T
Agoloaretan	Methoxymehtylmercuric chloride	T
Alcohol, denatured		F
Aldicarb	Temik*	T
Aldrin		T
Alkyl aluminum chloride		R
Alkyl resins		G
Allene		F
Allyl alcohol	2-Propen-1-o1	F
Allyl bromide	Bromopropene	F
Allyl chloride	Chloropropene	F
Allyl chlorocarbonate	Allyl chloroformate	F
Allyl chloroformate	Allyl chlorocarbonate	F
Allyl trichlorosilane		F
Aluminum		G
Aluminum aminoborhydride		E
Aluminum borohydride		R
Aluminum bromide		R
Aluminum carbide		F
Aluminum chloride		O
Aluminum diethyl monochloride	Diethylaluminum chloride	E
Aluminum fluoride		G
Aluminum hydride		R
Aluminum hypophosphide		R
Aluminum phosphide		R
Aluminum tetraazidoborate		R
Aminobenzene	Aniline	T
Aminobutane	Butylamine	F
Aminochlorotoluene	Chlorotoluidine	G
Aminodiphenyl		T
Aminoethane	Ethylamine	F
Aminoethanol		F
Aminoethanolamine		G
Aminohexane	Hexylamine	F
Aminomethane	Methylamine	F
Aminopenthane	Amylamine	F
Aminophenol		G
Aminopropane	Isopropyl amine	F
Amino propionitrile		G
Aminothiazole		G
Aminotoluene	Toluidine	T

NAMES	SYNONYMS	BG
Ammonia		B
Ammonium arsenate		T
Ammonium azide		E
Ammonium bifluoride		A
Ammonium chlorate		E
Ammonium dichromate		O
Ammonium fluoride		T
Ammonium hexanitrocobaltate		O
Ammonium hydroxide		B
Ammonium hypophosphide		G
Ammonium molybdate		G
Ammonium nitrate		E
Ammonium nitridoosmate		O
Ammonium nitrite		E
Ammonium perchlorate		E
Ammonium periodate		E
Ammonium permaganate		E
Ammonium persulfate		O
Ammonium picrate		E
Ammonium sulfide		F
Ammonium tetrachromate		O
Ammonium tetraperoxychomate		E
Ammonium trichromate		O
Amyl acetate	Acetoxy pentane	F
Amyl alcohol		F
Amyl chloride	Chloropentane	F
Amyl cyanide		T
Amylamide	Aminopentane	F
Amylene	Pentene	F
Amyl mercaptan	Pentanethiol	F
Aniline		T
Anisole		G
Anisole chloride		R
Anthracene		T
Antimony		T
Antimony chloride	Antimony trichloride	R
Antimony fluoride	Antimony trifluoride	R
Antimony nitride		T
Antimony oxychloride		T
Antimony oxide	Antimony trioxide	T
Antimony pentachloride		T
Antimony pentafluoride		T
Antimony pentasulfide		F**
Antimony perchlorate		O
Antimony potassium tartrate		T
Antimony sulfate	Antimony trisulfate	T
Antimony sulfide	Antimony trisulfide	F**

NAMES	SYNONYMS	BG
Antimony tribromide		R
Antimony trichloride	Antimony chloride	R
Antimony trifluoride	Antimony fluoride	R
Antimony triiodide		R
Antimony trioxide	Antimony oxide-	T
Antimony trisulfate	Antimony sulfate	T
Antimony trisulfide	Antimony sulfide	T
Antimony trivinyl		R
Aqualin	Acrolein	F
Aqueous solutions & mixtures		G
Aretan*	Methoxyethylmercuric chloride	T
Aroclor*	Polychlorinated biphenyl	PCB
Arsenic		T
Arsenic bromide	Arsenic tribromide	R
Arsenic chloride	Arsenic trichloride	R
Arsenic disulfide	Arsenic sulfide	T
Arsenic iodide	Arsenic triiodide	R
Arsenic oxide	Arsenic pentoxide	T
Arsenic pentaselenide		T
Arsenic pentasulfide		T
Arsenic pentoxide	Arsenic oxide	T
Arsenic sulfide	Arsenic disulfide	T**
Arsenic tribromide	Arsenic bromide	R
Arsenic trichloride	Arsenic chloride	R
Arsenic trifluoride		T
Arsenic triiodide	Arsenic iodide	R
Arsenic trisulfide		T**
Arsine		T**
Askarel	Polychlorinated biphenyl	PCB
Asphalt		G
Azidocarbonyl guanidine		E
Azido-s-trizaole		T
Azinphos ethyl		T
Aziridine	Ethyleneimine	T
a,a'-Azidiisobutyronitrile		T
Azodrin*	Monocrotophos	T
Bakelite*		G
Banol	Carbonolate	T
Barium		F
Barium azide		E
Barium bromate		O
Barium carbide		T
Barium chlorate		O
Barium chloride		T
Barium chromate		T
Barium fluoride		T

375 ABG (MAC)
Scott AFB IL 62225
1 APRIL 88

ANNEX K TO 375 ABG OPLAN 932-88 (OPR: 375 ABG/DE)

MUTUAL SUPPORT AGREEMENTS

1. Currently, there is a mutual aid agreement between Scott Air Force Base and the following Fire Departments and Districts:

a. Belleville Fire Department

b. Shiloh Valley Fire Department

c. Lebanon Volunteer Fire Department

d. Clinton/St Clair County Fire Department

e. Mascoutah Volunteer Fire Department

f. Emerald Mound Fire Department

g. O'Fallon Volunteer Fire Department

h. East Side Volunteer Fire Department

i. New Baden Volunteer Fire Department

j. Mascoutah District Fire Department

2. The agreement stipulates that upon an official request by one of the above, the Civil Engineering Fire Department will dispatch a limited amount of fire fighting equipment and personnel to the required area.

3. The agreement also provides the base with similar aid from the above Fire Departments. This is in accordance with AFR 92-1.

AGREEMENT FOR MUTUAL AID IN FIRE PROTECTION

This agreement, between the Secretary of the Air Force, acting pursuant to the authority of 42 U.S.C. (1856 (A)), and the Belleville Fire Department is for the purpose of securing to each the benefits of mutual aid in fire prevention, in the protection of life and property from fire, and in firefighting. It is agreed that:

(1) On request to a representative of the Scott Air Force Base Fire Department by a representative of the Belleville Fire Department, firefighting equipment and personnel of the Scott Air Force Base Fire Department will be dispatched to any point within the area for which the Belleville Fire Department normally provides fire protection as designated by the representative of the Belleville Fire Department.

(2) On request to a representative of the Belleville Fire Department by a representative of the Scott Air Force Base Fire Department, firefighting equipment and personnel of the Belleville Fire Department will be dispatched to any point within the firefighting jurisdiction of the Scott Air Force Base Fire Department as designated by the representative of the Scott Air Force Base Fire Department.

(3) Any dispatch of equipment and personnel pursuant to this agreement is subject to the following conditions:

(a) Any request for aid hereunder shall include a statement of the amount and type of equipment and personnel requested, and shall specify the location to which the equipment and personnel are to be dispatched, but the amount and type of equipment and number of personnel to be furnished shall be determined by a representative of the responding organization.

(b) The responding organization shall report to the officer in charge of the requesting organization at the location to which the equipment is dispatched and shall be subject to the orders of that official.

(c) A responding organization shall be released by the requesting organization when the services of the responding organization are no longer required or when the responding organization is needed within the area for which it normally provides fire protection.

(d) In the event of a crash of aircraft owned or operated by the United States or military aircraft of any foreign nation within the area for which the Belleville Fire Department normally provides fire protection, the Chief of the Scott Air Force Base Fire Department or his representative may assume full command on arrival at the scene of the crash.

(4) Belleville Fire Department may claim reimbursement for the direct expenses and losses which are additional firefighting costs above the normal operating costs incurred while fighting a fire under this agreement as provided in 44 C.F.R., Part 151.

(5) Each party waives all claims against every other party for compensation for any loss, damage, personal injury, or death occurring as a consequence of the performance of this agreement.

(6) All equipment used by the Belleville Fire Department in carrying out this agreement will, at the time of action hereunder, be owned by it; and all personnel acting for the Belleville Fire Department under this agreement will, at the time of such action, be an employee or volunteer member of the Belleville Fire Department.

For the City of Belleville	For the Secretary of the Air Force
Richard A Kramer	Thomas E Diamond
(Signature)	(COMMANDER)
Mayor	SCOTT AIR FORCE BASE
(Title)	
19th Jan., 1988	13 Jan 88
(Date)	(Date)

AGREEMENT FOR MUTUAL AID IN FIRE PROTECTION

This agreement, between the Secretary of the Air Force, acting pursuant to the authority of 42 U.S.C. (1856 (A)), and the O'Fallon Fire Department (Shiloh Valley) is for the purpose of securing to each the benefits of mutual aid in fire prevention, in the protection of life and property from fire, and in firefighting. It is agreed that:

(1) On request to a representative of the Scott Air Force Base Fire Department by a representative of the O'Fallon Fire Department (Shiloh Valley), firefighting equipment and personnel of the Scott Air Force Base Fire Department will be dispatched to any point within the area for which the O'Fallon Fire Department (Shiloh Valley) normally provides fire protection as designated by the representative of the O'Fallon Fire Department (Shiloh Valley).

(2) On request to a representative of the O'Fallon Fire Department (Shiloh Valley) by a representative of the Scott Air Force Base Fire Department, firefighting equipment and personnel of the O'Fallon Fire Department (Shiloh Valley) will be dispatched to any point within the firefighting jurisdiction of the Scott Air Force Base Fire Department as designated by the representative of the Scott Air Force Base Fire Department.

(3) Any dispatch of equipment and personnel pursuant to this agreement is subject to the following conditions:

(a) Any request for aid hereunder shall include a statement of the amount and type of equipment and personnel requested, and shall specify the location to which the equipment and personnel are to be dispatched, but the amount and type of equipment and number of personnel to be furnished shall be determined by a representative of the responding organization.

(b) The responding organization shall report to the officer in charge of the requesting organization at the location to which the equipment is dispatched and shall be subject to the orders of that official.

(c) A responding organization shall be released by the requesting organization when the services of the responding organization are no longer required or when the responding organization is needed within the area for which it normally provides fire protection.

(d) In the event of a crash of aircraft owned or operated by the United States or military aircraft of any foreign nation within the area for which the O'Fallon Fire Department (Shiloh Valley) normally provides fire protection, the Chief of the Scott Air Force Base Fire Department or his representative may assume full command on arrival at the scene of the crash.

(4) O'Fallon Fire Department (Shiloh Valley) may claim reimbursement for the direct expenses and losses which are additional firefighting costs above the normal operating costs incurred while fighting a fire under this agreement as provided in 44 C.F.R., Part 151.

(5) Each party waives all claims against every other party for compensation for any loss, damage, personal injury, or death occurring as a consequence of the performance of this agreement.

(6) All equipment used by the O'Fallon Fire Department (Shiloh Valley) in carrying out this agreement will, at the time of action hereunder, be owned by it; and all personnel acting for the O'Fallon Fire Department (Shiloh Valley) under this agreement will, at the time of such action, be an employee or volunteer member of the O'Fallon Fire Department (Shiloh Valley).

For Shiloh Valley	For the Secretary of the Air Force
[illegible]	Thomas E Drainard
(Signature)	(COMMANDER)
President O.S.V.C. Fire Dist.	SCOTT AIR FORCE BASE
(Title)	
June 19, 1985	13 Jan 88
(Date)	(Date)

AGREEMENT FOR MUTUAL AID IN FIRE PROTECTION

This agreement, between the Secretary of the Air Force, acting pursuant to the authority of 42 U.S.C. (1856 (A)), and the Lebanon Fire Department (Emerald Mound) is for the purpose of securing to each the benefits of mutual aid in fire prevention, in the protection of life and property from fire, and in firefighting. It is agreed that:

(1) On request to a representative of the Scott Air Force Base Fire Department by a representative of the Lebanon Fire Department (Emerald Mound), firefighting equipment and personnel of the Scott Air Force Base Fire Department will be dispatched to any point within the area for which the Lebanon Fire Department (Emerald Mound) normally provides fire protection as designated by the representative of the Lebanon Fire Department (Emerald Mound).

(2) On request to a representative of the Lebanon Fire Department (Emerald Mound) by a representative of the Scott Air Force Base Fire Department, firefighting equipment and personnel of the Lebanon Fire Department (Emerald Mound) will be dispatched to any point within the firefighting jurisdiction of the Scott Air Force Base Fire Department as designated by the representative of the Scott Air Force Base Fire Department.

(3) Any dispatch of equipment and personnel pursuant to this agreement is subject to the following conditions:

(a) Any request for aid hereunder shall include a statement of the amount and type of equipment and personnel requested, and shall specify the location to which the equipment and personnel are to be dispatched, but the amount and type of equipment and number of personnel to be furnished shall be determined by a representative of the responding organization.

(b) The responding organization shall report to the officer in charge of the requesting organization at the location to which the equipment is dispatched and shall be subject to the orders of that official.

(c) A responding organization shall be released by the requesting organization when the services of the responding organization are no longer required or when the responding organization is needed within the area for which it normally provides fire protection.

(d) In the event of a crash of aircraft owned or operated by the United States or military aircraft of any foreign nation within the area for which the Lebanon Fire Department (Emerald Mound) normally provides fire protection, the Chief of the Scott Air Force Base Fire Department or his representative may assume full command on arrival at the scene of the crash.

(4) Lebanon Fire Department (Emerald Mound) may claim reimbursement for the direct expenses and losses which are additional firefighting costs above the normal operating costs incurred while fighting a fire under this agreement as provided in 44 C.F.R., Part 151.

(5) Each party waives all claims against every other party for compensation for any loss, damage, personal injury, or death occurring as a consequence of the performance of this agreement.

(6) All equipment used by the Lebanon Fire Department (Emerald Mound) in carrying out this agreement will, at the time of action hereunder, be owned by it; and all personnel acting for the Lebanon Fire Department (Emerald Mound) under this agreement will, at the time of such action, be an employee or volunteer member of the Lebanon Fire Department (Emerald Mound).

For Lebanon Fire Department (Emerald Mound)	For the Secretary of the Air Force
Sylvester Korte	Thomas E Drummond
(Signature)	(COMMANDER)
Emerald Mound Fire District	SCOTT AIR FORCE BASE
(Title)	
17 Jan 88	13 Jan 88
(Date)	(Date)

AGREEMENT FOR MUTUAL AID IN FIRE PROTECTION

This agreement, between the Secretary of the Air Force, acting pursuant to the authority of 42 U.S.C. (1856 (A)), and the (Clin-Clair) Fire Department is for the purpose of securing to each the benefits of mutual aid in fire prevention, in the protection of life and property from fire, and in firefighting. It is agreed that:

(1) On request to a representative of the Scott Air Force Base Fire Department by a representative of the Clin-Clair) Fire Department, firefighting equipment and personnel of the Scott Air Force Base Fire Department will be dispatched to any point within the area for which the (Clin-Clair) Fire Department normally provides fire protection as designated by the representative of the (Clin-Clair) Fire Department.

(2) On request to a representative of the (Clin-Clair) Fire Department by a representative of the Scott Air Force Base Fire Department, firefighting equipment and personnel of the (Clin-Clair) Fire Department will be dispatched to any point within the firefighting jurisdiction of the Scott Air Force Base Fire Department as designated by the representative of the Scott Air Force Base Fire Department.

(3) Any dispatch of equipment and personnel pursuant to this agreement is subject to the following conditions:

(a) Any request for aid hereunder shall include a statement of the amount and type of equipment and personnel requested, and shall specify the location to which the equipment and personnel are to be dispatched, but the amount and type of equipment and number of personnel to be furnished shall be determined by a representative of the responding organization.

(b) The responding organization shall report to the officer in charge of the requesting organization at the location to which the equipment is dispatched and shall be subject to the orders of that official.

(c) A responding organization shall be released by the requesting organization when the services of the responding organization are no longer required or when the responding organization is needed within the area for which it normally provides fire protection.

(d) In the event of a crash of aircraft owned or operated by the United States or military aircraft of any foreign nation within the area for which the (Clin-Clair) Fire Department normally provides fire protection, the Chief of the Scott Air Force Base Fire Department or his representative may assume full command on arrival at the scene of the crash.

(4) (Clin-Clair) Fire Department may claim reimbursement for the direct expenses and losses which are additional firefighting costs above the normal operating costs incurred while fighting a fire under this agreement as provided in 44 C.F.R., Part 151.

(5) Each party waives all claims against every other party for compensation for any loss, damage, personal injury, or death occurring as a consequence of the performance of this agreement.

(6) All equipment used by the (Clin-Clair) Fire Department in carrying out this agreement will, at the time of action hereunder, be owned by it; and all personnel acting for the (Clin-Clair) Fire Department under this agreement will, at the time of such action, be an employee or volunteer member of the (Clin-Clair) Fire Department.

For (Clin-Clair)	For the Secretary of the Air Force
James F Norrenbeens (Signature)	Thomas E Diamond (COMMANDER)
District President (Title)	SCOTT AIR FORCE BASE
8 February 1988 (Date)	13 Jan 88 (Date)

AGREEMENT FOR MUTUAL AID IN FIRE PROTECTION

This agreement, between the Secretary of the Air Force, acting pursuant to the authority of 42 U.S.C. (1856 (A)), and the Mascoutah Fire Department is for the purpose of securing to each the benefits of mutual aid in fire prevention, in the protection of life and property from fire, and in firefighting. It is agreed that:

(1) On request to a representative of the Scott Air Force Base Fire Department by a representative of the Mascoutah Fire Department, firefighting equipment and personnel of the Scott Air Force Base Fire Department will be dispatched to any point within the area for which the Mascoutah Fire Department normally provides fire protection as designated by the representative of the Mascoutah Fire Department.

(2) On request to a representative of the Mascoutah Fire Department by a representative of the Scott Air Force Base Fire Department, firefighting equipment and personnel of the Mascoutah Fire Department will be dispatched to any point within the firefighting jurisdiction of the Scott Air Force Base Fire Department as designated by the representative of the Scott Air Force Base Fire Department.

(3) Any dispatch of equipment and personnel pursuant to this agreement is subject to the following conditions:

(a) Any request for aid hereunder shall include a statement of the amount and type of equipment and personnel requested, and shall specify the location to which the equipment and personnel are to be dispatched, but the amount and type of equipment and number of personnel to be furnished shall be determined by a representative of the responding organization.

(b) The responding organization shall report to the officer in charge of the requesting organization at the location to which the equipment is dispatched and shall be subject to the orders of that official.

(c) A responding organization shall be released by the requesting organization when the services of the responding organization are no longer required or when the responding organization is needed within the area for which it normally provides fire protection.

(d) In the event of a crash of aircraft owned or operated by the United States or military aircraft of any foreign nation within the area for which the Mascoutah Fire Department normally provides fire protection, the Chief of the Scott Air Force Base Fire Department or his representative may assume full command on arrival at the scene of the crash.

(4) Mascoutah Fire Department may claim reimbursement for the direct expenses and losses which are additional firefighting costs above the normal operating costs incurred while fighting a fire under this agreement as provided in 44 C.F.R., Part 151.

(5) Each party waives all claims against every other party for compensation for any loss, damage, personal injury, or death occurring as a consequence of the performance of this agreement.

(6) All equipment used by the Mascoutah Fire Department in carrying out this agreement will, at the time of action hereunder, be owned by it; and all personnel acting for the Mascoutah Fire Department under this agreement will, at the time of such action, be an employee or volunteer member of the Mascoutah Fire Department.

For the City of Mascoutah	For the Secretary of the Air Force
(Signature)	(COMMANDER)
Mayor (Title)	SCOTT AIR FORCE BASE
8th Feb. 1988 (Date)	13 Jan 88 (Date)

AGREEMENT FOR MUTUAL AID IN FIRE PROTECTION

This agreement, between the Secretary of the Air Force, acting pursuant to the authority of 42 U.S.C. (1856 (A)), and the O'Fallon Fire Department is for the purpose of securing to each the benefits of mutual aid in fire prevention, in the protection of life and property from fire, and in firefighting. It is agreed that:

(1) On request to a representative of the Scott Air Force Base Fire Department by a representative of the O'Fallon Fire Department, firefighting equipment and personnel of the Scott Air Force Base Fire Department will be dispatched to any point within the area for which the O'Fallon Fire Department normally provides fire protection as designated by the representative of the O'Fallon Fire Department.

(2) On request to a representative of the O'Fallon Fire Department by a representative of the Scott Air Force Base Fire Department, firefighting equipment and personnel of the O'Fallon Fire Department will be dispatched to any point within the firefighting jurisdiction of the Scott Air Force Base Fire Department as designated by the representative of the Scott Air Force Base Fire Department.

(3) Any dispatch of equipment and personnel pursuant to this agreement is subject to the following conditions:

(a) Any request for aid hereunder shall include a statement of the amount and type of equipment and personnel requested, and shall specify the location to which the equipment and personnel are to be dispatched, but the amount and type of equipment and number of personnel to be furnished shall be determined by a representative of the responding organization.

(b) The responding organization shall report to the officer in charge of the requesting organization at the location to which the equipment is dispatched and shall be subject to the orders of that official.

(c) A responding organization shall be released by the requesting organization when the services of the responding organization are no longer required or when the responding organization is needed within the area for which it normally provides fire protection.

(d) In the event of a crash of aircraft owned or operated by the United States or military aircraft of any foreign nation within the area for which the O'Fallon Fire Department normally provides fire protection, the Chief of the Scott Air Force Base Fire Department or his representative may assume full command on arrival at the scene of the crash.

(4) O'Fallon Fire Department may claim reimbursement for the direct expenses and losses which are additional firefighting costs above the normal operating costs incurred while fighting a fire under this agreement as provided in 44 C.F.R., Part 151.

(5) Each party waives all claims against every other party for compensation for any loss, damage, personal injury, or death occurring as a consequence of the performance of this agreement.

(6) All equipment used by the O'Fallon Fire Department in carrying out this agreement will, at the time of action hereunder, be owned by it; and all personnel acting for the O'Fallon Fire Department under this agreement will, at the time of such action, be an employee or volunteer member of the O'Fallon Fire Department.

For the City of O'Fallon	For the Secretary of the Air Force
Kristi Vetri (Signature)	Thomas E Diamond (COMMANDER)
Mayor (Title)	SCOTT AIR FORCE BASE
Jan. 29, 1988 (Date)	13 Jan 88 (Date)

AGREEMENT FOR MUTUAL AID IN FIRE PROTECTION

This agreement, between the Secretary of the Air Force, acting pursuant to the authority of 42 U.S.C. (1856 (A)), and the East Side Volunteer Fire Department is for the purpose of securing to each the benefits of mutual aid in fire prevention, in the protection of life and property from fire, and in firefighting. It is agreed that:

(1) On request to a representative of the Scott Air Force Base Fire Department by a representative of the East Side Volunteer Fire Department, firefighting equipment and personnel of the Scott Air Force Base Fire Department will be dispatched to any point within the area for which the East Side Volunteer Fire Department normally provides fire protection as designated by the representative of the East Side Volunteer Fire Department.

(2) On request to a representative of the East Side Volunteer Fire Department by a representative of the Scott Air Force Base Fire Department, firefighting equipment and personnel of the East Side Volunteer Fire Department will be dispatched to any point within the firefighting jurisdiction of the Scott Air Force Base Fire Department as designated by the representative of the Scott Air Force Base Fire Department.

(3) Any dispatch of equipment and personnel pursuant to this agreement is subject to the following conditions:

(a) Any request for aid hereunder shall include a statement of the amount and type of equipment and personnel requested, and shall specify the location to which the equipment and personnel are to be dispatched, but the amount and type of equipment and number of personnel to be furnished shall be determined by a representative of the responding organization.

(b) The responding organization shall report to the officer in charge of the requesting organization at the location to which the equipment is dispatched and shall be subject to the orders of that official.

(c) A responding organization shall be released by the requesting organization when the services of the responding organization are no longer required or when the responding organization is needed within the area for which it normally provides fire protection.

(d) In the event of a crash of aircraft owned or operated by the United States or military aircraft of any foreign nation within the area for which the East Side Voluntter Fire Department normally provides fire protection, the Chief of the Scott Air Force Base Fire Department or his representative may assume full command on arrival at the scene of the crash.

(4) East Side Volunteer Fire Department may claim reimbursement for the direct expenses and losses which are additional firefighting costs above the normal operating costs incurred while fighting a fire under this agreement as provided in 44 C.F.R., Part 151.

(5) Each party waives all claims against every other party for compensation for any loss, damage, personal injury, or death occurring as a consequence of the performance of this agreement.

(6) All equipment used by the East Side Volunteer Fire Department in carrying out this agreement will, at the time of action hereunder, be owned by it; and all personnel acting for the East Side Volunteer Fire Department under this agreement will, at the time of such action, be an employee or volunteer member of the East Side Volunteer Fire Department.

For East Side Volunteer Fire Dept.	For the Secretary of the Air Force
Norman Wright (Signature)	Thomas E Diamond (COMMANDER)
Pres. of Trustees (Title)	SCOTT AIR FORCE BASE
15 Jan 88 (Date)	13 Jan 88 (Date)

AGREEMENT FOR MUTUAL AID IN FIRE PROTECTION

This agreement, between the Secretary of the Air Force, acting pursuant to the authority of 42 U.S.C. (1856 (A)), and the Fairview-Caseyville Township Fire Protection District is for the purpose of securing to each the benefits of mutual aid in fire prevention, in the protection of life and property from fire, and in firefighting. It is agreed that:

(1) On request to a representative of the Scott Air Force Base Fire Department by a representative of the Fairview-Caseyville Township Fire Protection District, firefighting equipment and personnel of the Scott Air Force Base Fire Department will be dispatched to any point within the area for which the Fairview-Caseyville Township Fire Protection District normally provides fire protection as designated by the representative of the Fairview-Caseyville Township Fire Protection District.

(2) On request to a representative of the Fairview-Caseyville Township Fire Protection District by a representative of the Scott Air Force Base Fire Department, firefighting equipment and personnel of the Fairview-Caseyville Township Fire Protection District will be dispatched to any point within the firefighting jurisdiction of the Scott Air Force Base Fire Department as designated by the representative of the Scott Air Force Base Fire Department.

(3) Any dispatch of equipment and personnel pursuant to this agreement is subject to the following conditions:

(a) Any request for aid hereunder shall include a statement of the amount and type of equipment and personnel requested, and shall specify the location to which the equipment and personnel are to be dispatched, but the amount and type of equipment and number of personnel to be furnished shall be determined by a representative of the responding organization.

(b) The responding organization shall report to the officer in charge of the requesting organization at the location to which the equipment is dispatched and shall be subject to the orders of that official.

(c) A responding organization shall be released by the requesting organization when the services of the responding organization are no longer required or when the responding organization is needed within the area for which it normally provides fire protection.

(d) In the event of a crash of aircraft owned or operated by the United States or military aircraft of any foreign nation within the area for which the Fairview-Caseyville Township Fire Protection District normally provides fire protection, the Chief of the Scott Air Force Base Fire Department or his representative may assume full command on arrival at the scene of the crash.

(4) Fairview-Caseyville Township Fire Protection District may claim reimbursement for the direct expenses and losses which are additional firefighting costs above the normal operating costs incurred while fighting a fire under this agreement as provided in 44 C.F.R., Part 151.

(5) Each party waives all claims against every other party for compensation for any loss, damage, personal injury, or death occurring as a consequence of the performance of this agreement.

(6) All equipment used by the Fairview-Caseyville Township Fire Protection District in carrying out this agreement will, at the time of action hereunder, be owned by it; and all personnel acting for the Fairview-Caseyville Township Fire Protection District under this agreement will, at the time of such action, be an employee or volunteer member of the Fairview-Caseyville Township Fire Protection District.

For Fairview-Caseyville Township Fire Protection District	For the Secretary of the Air Force
Bernard Lerman (Signature)	Thomas E. Diamond (COMMANDER)
CHIEF (Title)	SCOTT AIR FORCE BASE
18 Jan 88 (Date)	13 Jan 88 (Date)

AGREEMENT FOR MUTUAL AID IN FIRE PROTECTION

This agreement, between the Secretary of the Air Force, acting pursuant to the authority of 42 U.S.C. (1856 (A)), and the Fayetteville Community Volunteer Fire Company is for the purpose of securing to each the benefits of mutual aid in fire prevention, in the protection of life and property from fire, and in firefighting. It is agreed that:

(1) On request to a representative of the Scott Air Force Base Fire Department by a representative of the Fayetteville Community Volunteer Fire Company, firefighting equipment and personnel of the Scott Air Force Base Fire Department will be dispatched to any point within the area for which the Fayetteville Community Volunteer Fire Company normally provides fire protection as designated by the representative of the Fayetteville Community Volunteer Fire Company.

(2) On request to a representative of the Fayetteville Community Volunteer Fire Company by a representative of the Scott Air Force Base Fire Department, firefighting equipment and personnel of the Fayetteville Community Volunteer Fire Company will be dispatched to any point within the firefighting jurisdiction of the Scott Air Force Base Fire Department as designated by the representative of the Scott Air Force Base Fire Department.

(3) Any dispatch of equipment and personnel pursuant to this agreement is subject to the following conditions:

(a) Any request for aid hereunder shall include a statement of the amount and type of equipment and personnel requested, and shall specify the location to which the equipment and personnel are to be dispatched, but the amount and type of equipment and number of personnel to be furnished shall be determined by a representative of the responding organization.

(b) The responding organization shall report to the officer in charge of the requesting organization at the location to which the equipment is dispatched and shall be subject to the orders of that official.

(c) A responding organization shall be released by the requesting organization when the services of the responding organization are no longer required or when the responding organization is needed within the area for which it normally provides fire protection.

(d) In the event of a crash of aircraft owned or operated by the United States or military aircraft of any foreign nation within the area for which the Fayetteville Community Volunteer Fire Company normally provides fire protection, the Chief of the Scott Air Force Base Fire Department or his representative may assume full command on arrival at the scene of the crash.

(4) Fayetteville Community Volunteer Fire Company may claim reimbursement for the direct expenses and losses which are additional firefighting costs above the normal operating costs incurred while fighting a fire under this agreement as provided in 44 C.F.R., Part 151.

(5) Each party waives all claims against every other party for compensation for any loss, damage, personal injury, or death occurring as a consequence of the performance of this agreement.

(6) All equipment used by the Fayetteville Community Volunteer Fire Company in carrying out this agreement will, at the time of action hereunder, be owned by it; and all personnel acting for the Fayetteville Community Volunteer Fire Company under this agreement will, at the time of such action, be an employee or volunteer member of the Fayetteville Community Volunteer Fire Company.

For Fayetteville Community Volunteer Fire Community	For the Secretary of the Air Force
Verlan F. Funk	Thomas E. Diamond
(Signature)	(COMMANDER)
Chief	SCOTT AIR FORCE BASE
(Title)	
15 Jan 88	13 Jan 88
(Date)	(Date)

AGREEMENT FOR MUTUAL AID IN FIRE PROTECTION

This agreement, between the Secretary of the Air Force, acting pursuant to the authority of 42 U.S.C. (1856 (A)), and the Fayetteville Community Volunteer Fire Company is for the purpose of securing to each the benefits of mutual aid in fire prevention, in the protection of life and property from fire, and in firefighting. It is agreed that:

(1) On request to a representative of the Scott Air Force Base Fire Department by a representative of the Fayetteville Community Volunteer Fire Company, firefighting equipment and personnel of the Scott Air Force Base Fire Department will be dispatched to any point within the area for which the Fayetteville Community Volunteer Fire Company normally provides fire protection as designated by the representative of the Fayetteville Community Volunteer Fire Company.

(2) On request to a representative of the Fayetteville Community Volunteer Fire Company by a representative of the Scott Air Force Base Fire Department, firefighting equipment and personnel of the Fayetteville Community Volunteer Fire Company will be dispatched to any point within the firefighting jurisdiction of the Scott Air Force Base Fire Department as designated by the representative of the Scott Air Force Base Fire Department.

(3) Any dispatch of equipment and personnel pursuant to this agreement is subject to the following conditions:

(a) Any request for aid hereunder shall include a statement of the amount and type of equipment and personnel requested, and shall specify the location to which the equipment and personnel are to be dispatched, but the amount and type of equipment and number of personnel to be furnished shall be determined by a representative of the responding organization.

(b) The responding organization shall report to the officer in charge of the requesting organization at the location to which the equipment is dispatched and shall be subject to the orders of that official.

(c) A responding organization shall be released by the requesting organization when the services of the responding organization are no longer required or when the responding organization is needed within the area for which it normally provides fire protection.

(d) In the event of a crash of aircraft owned or operated by the United States or military aircraft of any foreign nation within the area for which the Fayetteville Community Volunteer Fire Company normally provides fire protection, the Chief of the Scott Air Force Base Fire Department or his representative may assume full command on arrival at the scene of the crash.

(4) Fayetteville Community Volunteer Fire Company may claim reimbursement for the direct expenses and losses which are additional firefighting costs above the normal operating costs incurred while fighting a fire under this agreement as provided in 44 C.F.R., Part 151.

(5) Each party waives all claims against every other party for compensation for any loss, damage, personal injury, or death occurring as a consequence of the performance of this agreement.

(6) All equipment used by the Fayetteville Community Volunteer Fire Company in carrying out this agreement will, at the time of action hereunder, be owned by it; and all personnel acting for the Fayetteville Community Volunteer Fire Company under this agreement will, at the time of such action, be an employee or volunteer member of the Fayetteville Community Volunteer Fire Company.

For the City of Lebanon	For the Secretary of the Air Force
N James Lombardo	
Jerry Bohnenstiehl	Thomas E Drainard
(Signature)	(COMMANDER)
Mayor	
Fire Chief	SCOTT AIR FORCE BASE
(Title)	
1-19-88	
1-19-88	13 Jan 88
(Date)	(Date)

AGREEMENT FOR MUTUAL AID IN FIRE PROTECTION

This agreement, between the Secretary of the Air Force, acting pursuant to the authority of 42 U.S.C. (1856 (A)), and the New Baden Fire Department is for the purpose of securing to each the benefits of mutual aid in fire prevention, in the protection of life and property from fire, and in firefighting. It is agreed that:

(1) On request to a representative of the Scott Air Force Base Fire Department by a representative of the New Baden Fire Department, firefighting equipment and personnel of the Scott Air Force Base Fire Department will be dispatched to any point within the area for which the New Baden Fire Department normally provides fire protection as designated by the representative of the New Baden Fire Department.

(2) On request to a representative of the New Baden Fire Department by a representative of the Scott Air Force Base Fire Department, firefighting equipment and personnel of the New Baden Fire Department will be dispatched to any point within the firefighting jurisdiction of the Scott Air Force Base Fire Department as designated by the representative of the Scott Air Force Base Fire Department.

(3) Any dispatch of equipment and personnel pursuant to this agreement is subject to the following conditions:

(a) Any request for aid hereunder shall include a statement of the amount and type of equipment and personnel requested, and shall specify the location to which the equipment and personnel are to be dispatched, but the amount and type of equipment and number of personnel to be furnished shall be determined by a representative of the responding organization.

(b) The responding organization shall report to the officer in charge of the requesting organization at the location to which the equipment is dispatched and shall be subject to the orders of that official.

(c) A responding organization shall be released by the requesting organization when the services of the responding organization are no longer required or when the responding organization is needed within the area for which it normally provides fire protection.

(d) In the event of a crash of aircraft owned or operated by the United States or military aircraft of any foreign nation within the area for which the New Baden Fire Department normally provides fire protection, the Chief of the Scott Air Force Base Fire Department or his representative may assume full command on arrival at the scene of the crash.

(4) New Baden Fire Department may claim reimbursement for the direct expenses and losses which are additional firefighting costs above the normal operating costs incurred while fighting a fire under this agreement as provided in 44 C.F.R., Part 151.

(5) Each party waives all claims against every other party for compensation for any loss, damage, personal injury, or death occurring as a consequence of the performance of this agreement.

(6) All equipment used by the New Baden Fire Department in carrying out this agreement will, at the time of action hereunder, be owned by it; and all personnel acting for the New Baden Fire Department under this agreement will, at the time of such action, be an employee or volunteer member of the New Baden Fire Department.

For the City of New Baden	For the Secretary of the Air Force
Ralph C. Bann	Thomas E. Drawford
(Signature)	(COMMANDER)
	SCOTT AIR FORCE BASE
(Title)	
	13 Jan 88
(Date)	(Date)

AGREEMENT FOR MUTUAL AID IN FIRE PROTECTION

This agreement, between the Secretary of the Air Force, acting pursuant to the authority of 42 U.S.C. (1856 (A)), and the Mascoutah Fire District Fire Department* is for the purpose of securing to each the benefits of mutual aid in fire prevention, in the protection of life and property from fire, and in firefighting. It is agreed that:

(1) On request to a representative of the Scott Air Force Base Fire Department by a representative of the Mascoutah Fire District Fire Department,* firefighting equipment and personnel of the Scott Air Force Base Fire Department will be dispatched to any point within the area for which the Mascoutah Fire District Fire Department* normally provides fire protection as designated by the representative of the Mascoutah Fire District Fire Department.*

(2) On request to a representative of the Mascoutah Fire District Fire Department* by a representative of the Scott Air Force Base Fire Department, firefighting equipment and personnel of the Mascoutah Fire District Fire Department* will be dispatched to any point within the firefighting jurisdiction of the Scott Air Force Base Fire Department as designated by the representative of the Scott Air Force Base Fire Department.

(3) Any dispatch of equipment and personnel pursuant to this agreement is subject to the following conditions:

(a) Any request for aid hereunder shall include a statement of the amount and type of equipment and personnel requested, and shall specify the location to which the equipment and personnel are to be dispatched, but the amount and type of equipment and number of personnel to be furnished shall be determined by a representative of the responding organization.

(b) The responding organization shall report to the officer in charge of the requesting organization at the location to which the equipment is dispatched and shall be subject to the orders of that official.

(c) A responding organization shall be released by the requesting organization when the services of the responding organization are no longer required or when the responding organization is needed within the area for which it normally provides fire protection.

(d) In the event of a crash of aircraft owned or operated by the United States or military aircraft of any foreign nation within the area for which the Mascoutah Fire District Fire Department* normally provides fire protection, the Chief of the Scott Air Force Base Fire Department or his representative may assume full command on arrival at the scene of the crash.

(4) Mascoutah Fire District Fire Department* may claim reimbursement for the direct expenses and losses which are additional firefighting costs above the normal operating costs incurred while fighting a fire under this agreement as provided in 44 C.F.R., Part 151.

(5) Each party waives all claims against every other party for compensation for any loss, damage, personal injury, or death occurring as a consequence of the performance of this agreement.

(6) All equipment used by the Mascoutah Fire District Fire Department* in carrying out this agreement will, at the time of action hereunder, be owned by it; and all personnel acting for the Mascoutah Fire District Fire Department* under this agreement will, at the time of such action, be an employee or volunteer member of the Mascoutah Fire District Fire Department*

For Mascoutah Fire District Fire Dept.*	For the Secretary of the Air Force
Orville E. Rasp (Signature)	Thomas E Drummond (COMMANDER)
President (Title)	SCOTT AIR FORCE BASE
March 8, 1988 (Date)	13 Jan 88 (Date)

*Correct Name: Mascoutah Rural Fire Protection District, St. Clair County, Illinois

375 ABG (MAC)
Scott AFB IL 62225
1 APRIL 88

ANNEX L TO 375 ABG OPLAN 932-88 (OPR: 375 ABG/DE)

MAIN POWER SUPPLY

1. The Illinois Power Company (IP) of Belleville, Illinois has two circuits of 34.5 KV feeding two Air Force owned switch stations, north 9100 and south 9101.

a. The north switch station serves the following substations:

(1) #1 with 3 phase IP owned 5,000/7,000 KVA transformer.

(2) #4 with 3 phase government owned 3,750 KVA transformer.

b. The south switch station serves the following substations:

(1) #2 with 3 single phase 1,000 KVA IP owned transformers.

(2) #3 with 3 single phase 1,667 KVA government owned transformers.

(3) #5 with 3 phase 3,750 KVA government owned transformer.

(4) #6 with 3 phase 7,500/9,600 KVA government owned transformer.

(5) #7 with 3 phase 2,000 KVA government owned transformer and 3 phase 1,000 KVA government owned transformer.

2. The distribution system consists of 20 primary feeder lines as well as the following lines: overhead, primary and secondary lines - 398,000 ft; underground, primary and secondary lines - 272,000 ft; and airfield lighting cables underground - 158,400 ft.

3. Isolation of base areas will normally be performed at the listed substations or the transformer vaults indicated on the prints.

MEMORANDUM OF UNDERSTANDING
BETWEEN
USAF MEDICAL CENTER SCOTT
SCOTT AIR FORCE BASE, ILLINOIS

AND

ST. MARY'S HOSPITAL EAST ST. LOUIS
EAST ST. LOUIS, ILLINOIS

This Memorandum of Understanding by and between the USAF Medical Center Scott (Medical Center) and the St. Mary's Hospital East St. Louis, witnesseth:

WHEREAS: The Medical Center does not presently have an established written agreement between the Medical Center and St. Mary's Hospital East St. Louis for the receipt of some or all patients transferred from Medical Center to St. Mary's Hospital East St. Louis in the event the Medical Center falls victim to facility failure or is overwhelmed by patient workload; and

WHEREAS: The St. Mary's Hospital East St. Louis recognizes the Medical Center's potential need to transfer some or all of their inpatients in the event the Medical Center falls victim to facility failure or is overwhelmed by patient workload. Now therefore, it is mutually agreed between the parties hereto as follows:

The Medical Center Agrees to:

1. Coordinate patient transfer to St. Mary's Hospital East St. Louis prior to any actual movement of inpatients from the Medical Center.

2. Only reimburse for care given to active duty members through Supplemental Care Funds (to be handled through the Medical Center Resource Management Office). All charges for care rendered to active duty dependents, retirees, and retiree dependents will be reimbursed through CHAMPUS, Medicare, private insurance, or self pay.

3. Maintain administrative jurisdiction over all active duty personnel transferred to St. Mary's Hospital East St. Louis.

4. Relinquish management of care of all active duty dependents, retirees, and retiree dependents to St. Mary's Hospital East St. Louis.

5. Reimburse by charge for civilian ambulance transfer when necessary.

6. Accept patient transfers from St. Mary's Hospital East St. Louis (who could not be transferred to other civilian hospitals) with prior coordination with the Medical Center in the event St. Mary's Hospital East St. Louis falls victim to facility failure or is overwhelmed by patient workload.

The St. Mary's Hospital East St. Louis Agrees to:

1. Accept patient transfers from the Medical Center, with prior coordination, in the event the Medical Center falls victim to facility failure and is overwhelmed by patient workload.

2. Recognize the Medical Center as being financially responsible for active duty patient transfers only; and, that treatment for active duty dependents, retirees, and retiree dependents will be reimbursed through CHAMPUS, Medicare, private insurance, or self pay.

3. Inform the Medical Center, for administrative purposes, of all treatments received by active duty patients.

4. Grant physician staff from the Medical Center temporary practicing privileges for follow-up treatment of active duty patient transfers when necessary to ensure continuity of care. This will be coordinated in advance through this hospital and the Hospital Services Office at the Medical Center.

5. Coordinate patient transfer to the Medical Center prior to any actual movement of inpatients from St. Mary's Hospital East St. Louis.

This Memorandum of Understanding shall remain in effect for one year from the effective date stated below and may be reviewed and renewed annually. It may be cancelled by either party upon written notice 30 days prior to the date of cancellation.

EFFECTIVE DATE:

FOR THE MEDICAL CENTER

MICHAEL J. TORMA
Colonel, USAF, MC
Commander

FOR THE ST. MARY'S HOSPITAL EAST ST. LOUIS

Philip J. Karsty, Ph.D.
Executive Director

BED STATUS SHEET

SPECIALTY CATEGORY	NUMBER of STAFFED BEDS
MEDICAL (MIM)	
PSYCHIATRIC (QPG) —	19
GENERAL SURGERY (SGS)	
BURNS (SBN)	
NEUROSURGERY (SNS)	
ORTHOPEDICS (SOR)	
UROLOGY (SUR)	
THORACIC SURGERY (STS)	
ORAL-MAXILLOFACIAL SURGERY (SMF)	
OPHTHALMOLOGY (SOP)	
SPINAL CORD INJURY (SCI)	
PEDIATRICS (PED) —	43
OBSTETRICS-GYNECOLOGY (OBG)	

*Medical/Surgical Beds - 186

MEMORANDUM OF UNDERSTANDING
BETWEEN
USAF MEDICAL CENTER SCOTT
SCOTT AIR FORCE BASE, ILLINOIS

AND

COMMUNITY HOSPITAL EAST ST. LOUIS
EAST ST. LOUIS, ILLINOIS

This Memorandum of Understanding by and between the USAF Medical Center Scott (Medical Center) and the Community Hospital East St. Louis, witnesseth:

WHEREAS: The Medical Center does not presently have an established written agreement between the Medical Center and Community Hospital East St. Louis for the receipt of some or all patients transferred from Medical Center to Community Hospital East St. Louis in the event the Medical Center falls victim to facility failure or is overwhelmed by patient workload; and

WHEREAS: The Community Hospital East St. Louis recognizes the Medical Center's potential need to transfer some or all of their inpatients in the event the Medical Center falls victim to facility failure or is overwhelmed by patient workload. Now therefore, it is mutually agreed between the parties hereto as follows:

The Medical Center Agrees to:

1. Coordinate patient transfer to Community Hospital East St. Louis prior to any actual movement of inpatients from the Medical Center.

2. Only reimburse for care given to active duty members through Supplemental Care Funds (to be handled through the Medical Center Resource Management Office). All charges for care rendered to active duty dependents, retirees, and retiree dependents will be reimbursed through CHAMPUS, Medicare, private insurance, or self pay.

3. Maintain administrative jurisdiction over all active duty personnel transferred to Community Hospital East St. Louis.

4. Relinquish management of care of all active duty dependents, retirees, and retiree dependents to Community Hospital East St. Louis.

5. Reimburse by charge for civilian ambulance transfer when necessary.

6. Accept patient transfers from Community Hospital East St. Louis (who could not be transferred to other civilian hospitals) with prior coordination with the Medical Center in the event Community Hospital East St. Louis falls victim to facility failure or is overwhelmed by patient workload.

The Community Hospital East St. Louis Agrees to:

1. Accept patient transfers from the Medical Center, with prior coordination, in the event the Medical Center falls victim to facility failure and is overwhelmed by patient workload.

2. Recognize the Medical Center as being financially responsible for active duty patient transfers only; and, that treatment for active duty dependents, retirees, and retiree dependents will be reimbursed through CHAMPUS, Medicare, private insurance, or self pay.

3. Inform the Medical Center, for administrative purposes, of all treatments received by active duty patients.

4. Grant physician staff from the Medical Center temporary practicing privileges for follow-up treatment of active duty patient transfers when necessary to ensure continuity of care. This will be coordinated in advance through this hospital and the Hospital Services Office at the Medical Center.

5. Coordinate patient transfer to the Medical Center prior to any actual movement of inpatients from Community Hospital East St. Louis.

This Memorandum of Understanding shall remain in effect for one year from the effective date stated below and may be reviewed and renewed annually. It may be cancelled by either party upon written notice 30 days prior to the date of cancellation.

EFFECTIVE DATE: 2-12-87

Eugene Collier Asst Adm

FOR THE MEDICAL CENTER

FOR THE COMMUNITY HOSPITAL EAST ST. LOUIS

MICHAEL J. TORMA
Colonel, USAF, MC
Commander

Adm.

SGAX 7U 16 Sep 86 SGAA ____ SGA ____ SG ____

BED STATUS SHEET

SPECIALTY CATEGORY	NUMBER of STAFFED BEDS
MEDICAL (MIM)	30
PSYCHIATRIC (QPG)	0
GENERAL SURGERY (SGS)	30
BURNS (SBN)	0
NEUROSURGERY (SNS)	0
ORTHOPEDICS (SOR)	0
UROLOGY (SUR)	0
THORACIC SURGERY (STS)	0
ORAL-MAXILLOFACIAL SURGERY (SMF)	0
OPHTHALMOLOGY (SOP)	0
SPINAL CORD INJURY (SCI)	0
PEDIATRICS (PED)	16
OBSTETRICS-GYNECOLOGY (OBG)	0
Detox / Drug Abuse	10
ICU	8

MEMORANDUM OF UNDERSTANDING
BETWEEN
USAF MEDICAL CENTER SCOTT
SCOTT AIR FORCE BASE, ILLINOIS

AND

CENTREVILLE TOWNSHIP HOSPITAL
CENTREVILLE, ILLINOIS

This Memorandum of Understanding by and between the USAF Medical Center Scott (Medical Center) and the Centreville Township Hospital, witnesseth:

WHEREAS: The Medical Center does not presently have an established written agreement between the Medical Center and Centreville Township Hospital for the receipt of some or all patients transferred from Medical Center to Centreville Township Hospital in the event the Medical Center falls victim to facility failure or is overwhelmed by patient workload; and

WHEREAS: The Centreville Township Hospital recognizes the Medical Center's potential need to transfer some or all of their inpatients in the event the Medical Center falls victim to facility failure or is overwhelmed by patient workload. Now therefore, it is mutually agreed between the parties hereto as follows:

The Medical Center Agrees to:

1. Coordinate patient transfer to Centreville Township Hospital prior to any actual movement of inpatients from the Medical Center.

2. Only reimburse for care given to active duty members through Supplemental Care Funds (to be handled through the Medical Center Resource Management Office). All charges for care rendered to active duty dependents, retirees, and retiree dependents will be reimbursed through CHAMPUS, Medicare, private insurance, or self pay.

3. Maintain administrative jurisdiction over all active duty personnel transferred to Centreville Township Hospital.

4. Relinquish management of care of all active duty dependents, retirees, and retiree dependents to Centreville Township Hospital.

5. Reimburse by charge for civilian ambulance transfer when necessary.

6. Accept patient transfers from Centreville Township Hospital (who could not be transferred to other civilian hospitals) with prior coordination with the Medical Center in the event Centreville Township Hospital falls victim to facility failure or is overwhelmed by patient workload.

The Centreville Township Hospital Agrees to:

1. Accept patient transfers from the Medical Center, with prior coordination, in the event the Medical Center falls victim to facility failure and is overwhelmed by patient workload.

2. Recognize the Medical Center as being financially responsible for active duty patient transfers only; and, that treatment for active duty dependents, retirees, and retiree dependents will be reimbursed through CHAMPUS, Medicare, private insurance, or self pay.

3. Inform the Medical Center, for administrative purposes, of all treatments received by active duty patients.

4. Grant physician staff from the Medical Center temporary practicing privileges for follow-up treatment of active duty patient transfers when necessary to ensure continuity of care. This will be coordinated in advance through this hospital and the Hospital Services Office at the Medical Center.

5. Coordinate patient transfer to the Medical Center prior to any actual movement of inpatients from Centreville Township Hospital.

This Memorandum of Understanding shall remain in effect for one year from the effective date stated below and may be reviewed and renewed annually. It may be cancelled by either party upon written notice 30 days prior to the date of cancellation.

EFFECTIVE DATE: October 15, 1986

FOR THE MEDICAL CENTER

MICHAEL J. TORMA
Colonel, USAF, MC
Commander

FOR THE CENTREVILLE TOWNSHIP HOSPITAL

Carl G. Jaeger

CARL G. JAEGER
Administrator

BED STATUS SHEET

SPECIALTY CATEGORY	NUMBER of STAFFED BEDS
MEDICAL (MIM)	61
PSYCHIATRIC (QPG)	-0-
GENERAL SURGERY (SGS)	59
BURNS (SBN)	
NEUROSURGERY (SNS)	
* ORTHOPEDICS (SOR)	
* UROLOGY (SUR)	
* THORACIC SURGERY (STS)	
* ORAL-MAXILLOFACIAL SURGERY (SMF)	
* OPHTHALMOLOGY (SOP)	
SPINAL CORD INJURY (SCI)	
PEDIATRICS (PED)	37
OBSTETRICS-GYNECOLOGY (OBG)	22
INTENSIVE CARE	10

*Included with the General Surgery bed count.

Atch 2

MEMORANDUM OF UNDERSTANDING
BETWEEN
USAF MEDICAL CENTER SCOTT
SCOTT AIR FORCE BASE, ILLINOIS

AND

MEMORIAL HOSPITAL
BELLEVILLE, ILLINOIS

This Memorandum of Understanding by and between the USAF Medical Center Scott (Medical Center) and the Memorial Hospital, witnesseth:

WHEREAS: The Medical Center does not presently have an established written agreement between the Medical Center and Memorial Hospital for the receipt of some or all patients transferred from Medical Center to Memorial Hospital in the event the Medical Center falls victim to facility failure or is overwhelmed by patient workload; and

WHEREAS: The Memorial Hospital recognizes the Medical Center's potential need to transfer some or all of their inpatients in the event the Medical Center falls victim to facility failure or is overwhelmed by patient workload. Now therefore, it is mutually agreed between the parties hereto as follows:

The Medical Center Agrees to:

1. Coordinate patient transfer to Memorial Hospital prior to any actual movement of inpatients from the Medical Center.

2. Only reimburse for care given to active duty members through Supplemental Care Funds (to be handled through the Medical Center Resource Management Office). All charges for care rendered to active duty dependents, retirees, and retiree dependents will be reimbursed through CHAMPUS, Medicare, private insurance, or self pay.

3. Maintain administrative jurisdiction over all active duty personnel transferred to Memorial Hospital.

4. Relinquish management of care of all active duty dependents, retirees, and retiree dependents to Memorial Hospital.

5. Reimburse by charge for civilian ambulance transfer when necessary.

6. Accept patient transfers from Memorial Hospital (who could not be transferred to other civilian hospitals) with prior coordination with the Medical Center in the event Memorial Hospital falls victim to facility failure or is overwhelmed by patient workload.

The Memorial Hospital Agrees to:

1. Accept patient transfers from the Medical Center, with prior coordination, in the event the Medical Center falls victim to facility failure and is overwhelmed by patient workload.

2. Recognize the Medical Center as being financially responsible for active duty patient transfers only; and, that treatment for active duty dependents, retirees, and retiree dependents will be reimbursed through CHAMPUS, Medicare, private insurance, or self pay.

3. Inform the Medical Center, for administrative purposes, of all treatments received by active duty patients.

4. Grant physician staff from the Medical Center temporary practicing privileges for follow-up treatment of active duty patient transfers when necessary to ensure continuity of care. This will be coordinated in advance through this hospital and the Hospital Services Office at the Medical Center.

5. Coordinate patient transfer to the Medical Center prior to any actual movement of inpatients from Memorial Hospital.

This Memorandum of Understanding shall remain in effect for one year from the effective date stated below and may be reviewed and renewed annually. It may be cancelled by either party upon written notice 30 days prior to the date of cancellation.

EFFECTIVE DATE:

FOR THE MEDICAL CENTER

MICHAEL J. TORMA
Colonel, USAF, MC
Commander

FOR THE MEMORIAL HOSPITAL

Larry R Mauer

SGAX [illegible] SGAA ____ SGA [illegible] SG ____

16 Sep 86

BED STATUS SHEET

SPECIALTY CATEGORY	NUMBER of STAFFED BEDS
MEDICAL (MIM)	134
PSYCHIATRIC (QPG)	40
* GENERAL SURGERY (SGS)	76
BURNS (SBN)	
NEUROSURGERY (SNS)	
ORTHOPEDICS (SOR)	
UROLOGY (SUR)	
THORACIC SURGERY (STS)	
ORAL-MAXILLOFACIAL SURGERY (SMF)	
OPHTHALMOLOGY (SOP)	
SPINAL CORD INJURY (SCI)	
PEDIATRICS (PED)	28
OBSTETRICS-GYNECOLOGY (OBG)	32

*The hospital provides for all of the above categories except burns. Specific beds are not allocated for these categories.

file 17-A-1

52

MEMORANDUM OF UNDERSTANDING
BETWEEN
USAF MEDICAL CENTER SCOTT
SCOTT AIR FORCE BASE, ILLINOIS

AND

ST. ELIZABETH'S HOSPITAL
BELLEVILLE, ILLINOIS

This Memorandum of Understanding by and between the USAF Medical Center Scott (Medical Center) and the St. Elizabeth's Hospital, witnesseth:

WHEREAS: The Medical Center does not presently have an established written agreement between the Medical Center and St. Elizabeth's Hospital for the receipt of some or all patients transferred from Medical Center to St. Elizabeth's Hospital in the event the Medical Center falls victim to facility failure or is overwhelmed by patient workload; and

WHEREAS: The St. Elizabeth's Hospital recognizes the Medical Center's potential need to transfer some or all of their inpatients in the event the Medical Center falls victim to facility failure or is overwhelmed by patient workload. Now therefore, it is mutually agreed between the parties hereto as follows:

The Medical Center Agrees to:

1. Coordinate patient transfer to St. Elizabeth's Hospital prior to any actual movement of inpatients from the Medical Center.

2. Only reimburse for care given to active duty members through Supplemental Care Funds (to be handled through the Medical Center Resource Management Office). All charges for care rendered to active duty dependents, retirees, and retiree dependents will be reimbursed through CHAMPUS, Medicare, private insurance, or self pay.

3. Maintain administrative jurisdiction over all active duty personnel transferred to St. Elizabeth's Hospital.

4. Relinquish management of care of all active duty dependents, retirees, and retiree dependents to St. Elizabeth's Hospital.

5. Reimburse by charge for civilian ambulance transfer when necessary.

6. Accept patient transfers from St. Elizabeth's Hospital (who could not be transferred to other civilian hospitals) with prior coordination with the Medical Center in the event St. Elizabeth's Hospital falls victim to facility failure or is overwhelmed by patient workload.

The St. Elizabeth's Hospital Agrees to:

1. Accept patient transfers from the Medical Center, with prior coordination, in the event the Medical Center falls victim to facility failure and is overwhelmed by patient workload.

2. Recognize the Medical Center as being financially responsible for active duty patient transfers only; and, that treatment for active duty dependents, retirees, and retiree dependents will be reimbursed through CHAMPUS, Medicare, private insurance, or self pay.

3. Inform the Medical Center, for administrative purposes, of all treatments received by active duty patients.

4. Grant physician staff from the Medical Center temporary practicing privileges for follow-up treatment of active duty patient transfers when necessary to ensure continuity of care. This will be coordinated in advance through this hospital and the Hospital Services Office at the Medical Center.

5. Coordinate patient transfer to the Medical Center prior to any actual movement of inpatients from St. Elizabeth's Hospital.

This Memorandum of Understanding shall remain in effect for one year from the effective date stated below and may be reviewed and renewed annually. It may be cancelled by either party upon written notice 30 days prior to the date of cancellation.

EFFECTIVE DATE:

FOR THE MEDICAL CENTER

MICHAEL J. TORMA
Colonel, USAF, MC
Commander

FOR THE ST. ELIZABETH'S HOSPITAL

Gerald M. Harman
Executive Vice President

BED STATUS SHEET

SPECIALTY CATEGORY	NUMBER of STAFFED BEDS
MEDICAL (MIM)/General Surgery	211
PSYCHIATRIC (QPG)	47
GENERAL SURGERY (SGS) (See Above)	
BURNS (SBN)	
NEUROSURGERY (SNS)	
ORTHOPEDICS (SOR)	
UROLOGY (SUR)	
THORACIC SURGERY (STS)	
ORAL-MAXILLOFACIAL SURGERY (SMF)	
OPHTHALMOLOGY (SOP)	
SPINAL CORD INJURY (SCI)	
PEDIATRICS (PED)	16
OBSTETRICS-GYNECOLOGY (OBG)	71
Chemical Dependency	26
Rehabilitation	17
Critical Care	24
Telemetry	35
	447

SCOTT AIR FORCE BASE

OIL AND HAZARDOUS SUBSTANCE

SPILL PREVENTION AND RESPONSE PLAN

NOVEMBER 1989

SECURITY INSTRUCTIONS/RECORD OF REVIEW AND AMENDMENTS

SECURITY INSTRUCTIONS

1. The long title of this document is Oil and Hazardous Substance Spill Prevention and Response Plan (SPR). The title is unclassified.

2. This document is unclassified.

3. As this plan is unclassified, it does not come within the scope of directives governing the protection of information affecting national security as specified in Air Force Directives in the 205 series.

4. This plan will be distributed to those organizations shown on the distribution list, Annex X. The plan will be controlled in accordance with established USAF procedures for unclassified documents.

5. Tasked organizations are authorized to extract and reproduce those portions of this document essential in the accomplishment of necessary planning and in the preparation of supporting documents and reports.

REVIEW AND AMENDMENT INSTRUCTIONS

1. The review of the SPR Plan, and any resulting amendments or changes to the plan must be logged on the attached record sheet. See Plan Review and Update, Section VI, for additional details.

2. When amendments or changes significantly affect the Annex I, or the Spill Prevention, Control and Countermeasure (SPCC) section; the plan must be recertified by a professional engineer.

RECORD OF CHANGES:

Change Number	Date of Entry	Signature and Organization of Individual Posting Entry

RECORD OF REVIEW:

Reviewed By	Organization	Date Reviewed	Remarks

SCOTT AIR FORCE BASE
OIL AND HAZARDOUS SUBSTANCE SPILL PREVENTION AND RESPONSE PLAN
Scott AFB, Illinois 62225
November 1989

TABLE OF CONTENTS

CONTENTS	PAGE
LETTER OF PROMULGATION	i
SECURITY INSTRUCTIONS/REVIEW AND AMENDMENT	ii
RECORD OF CHANGES/RECORD OF REVIEW	iii
TABLE OF CONTENTS	iv
SECTION ONE - OVERALL MISSION	1
SECTION TWO - RESPONSIBILITIES	2
Environmental Protection Subcommittee for Spills	2
Environmental Protection Committee	2
Tasked Commanders and Staff Agency Chiefs	2
Office of Primary Responsibility	2
On-Scene Coordinator (OSC)	2
Spill Response Team (SRT)	3
Individuals Assigned or Attached to Scott AFB	3
SECTION THREE - SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC)	3
Mission	3
Secondary Containment	3
Visual Inspections	4
Preventive Maintenance	4
Housekeeping	4
Material Compatibility	4
Security	4
Monitoring	4
SECTION FOUR - OIL AND HAZARDOUS SUBSTANCE CONTINGENCY PLAN	4
Mission	4
Response Organization	4
Plan Execution	11
SECTION FIVE - TRAINING	17
Personnel Training Requirements	17
Contractors Handling Oils and Hazardous Materials	18
Spill Response Team (SRT) Training	19
SECTION SIX - PLAN REVIEW AND UPDATE	20

CONTENTS

		PAGE
ANNEX I	- OIL AND HAZARDOUS SUBSTANCE SITE SPILL PREVENTION MECHANISMS AND CONTINGENCY ACTIONS	1-1 thru 1-31
	Oil and Hazardous Substance Site Spill Prevention Control and Countermeasures Summary	1-1 thru I-15
	Oil and Hazardous Substance Site Spill Prevention Control and Countermeasures Explanatory TAB s	I-16 thru I-31
	Certification and Approval Signatures	
ANNEX II	- SITE-SPECIFIC CONTINGENCY PLANS, INDEX	II-1 thru II-22
ANNEX III	- MATERIAL SAFETY DATA SHEETS, INDEX	III-1
ANNEX IV	- LISTING OF OIL/WATER SEPARATORS LOCATED AT SCOTT AFB	IV-1
ANNEX V	- SPILL RESPONSE EQUIPMENT INVENTORY	V-1 thru V-2
ANNEX VI	- SUMMARY OF SCOTT AFB SPILL RESPONSE TEAM @SRT) ORGANIZATIONS AND @URGENT TELEPHONE CONTACT NUMBERS	VI-1 thru VI-2
ANNEX VII	- SUMMARY LISTING OF OFF-BASE SPILL NOTIFICATION PROCEDURES AND RESPONSE ORGANIZATIONS	VII-1 thru VII-4
ANNEX VIII	- OIL AND HAZARDOUS SUBSTANCE SITE LOCATION MAP AND INSTALLATION SPILL CONTAINMENT AREA MAP	VIII-1
ANNEX IX	- PLAN REVIEW AND UPDATE REPORTS/SPILL INCIDENT POLLUTION REPORTS (Under Separate Cover)	IX-1
ANNEX X	- DISTRIBUTION LIST	X-1

SCOTT AIR FORCE BASE
OIL AND HAZARDOUS SUBSTANCE SPILL PREVENTION AND RESPONSE PLAN
Scott AFB, Illinois 62225
November 1989

SPILL PREVENTION AND RESPONSE PLAN (SPR)

SECTION ONE

OVERALL MISSION

The plan will have a long title of "Oil and Hazardous Substance Spill Prevention and Response Plan" and a short title of "Spill Prevention and Response Plan." This plan is intended to fulfill the requirements of a Spill Prevention Control and Countermeasure (SPCC) Plan, an Oil and Hazardous Substance Pollution Contingency (OHSPC) Plan, and the hazardous waste spill prevention and response requirements. The SPCC portion of the document primarily pertains to spill prevention and includes a discussion of the major types of spill prevention procedures, methods and equipment incorporated into the base facilities. The Contingency Plan portion of the document specifies procedures to be followed when responding to releases, accidents and spills involving oils or hazardous substances. These include spill detection, reporting, containment, cleanup and disposal procedures. The plan should be implemented in conjunction with the Scott AFB Disaster Preparedness OPLAN 355-XX, or Scott AFB Base Recovery OPLAN 932-XX in the event that the circumstances warrant implementation of the OPLAN. Also included within this document are general procedures for plan reviews and updates. The SPR Plan is supported by several vital annexes which provide the specific information associated with the facilities found on Scott Air Force Base.

IN THE EVENT OF A SPILL OF OIL OR A HAZARDOUS SUBSTANCE, CONCERNED PARTIES SHOULD REFER DIRECTLY TO THE SECTION ENTITLED "PLAN EXECUTION" FOR GENERAL RESPONSE PROCEDURES AND TO ANNEXES I, II AND III FOR SITE SPECIFIC INFORMATION.

These annexes provide relevant site descriptions including location, maximum spill quantity, probable spill route and secondary containment (Annex I); Site Specific Contingency Plans for major potential spill sites (Annex II); and Safety Data Sheets for the oils and hazardous substances normally stored on Base (Annex III).

SECTION TWO - RESPONSIBILITIES

Environmental Protection Subcommittee for Spills

The development, review and update of the SPR plan is the responsibility of the appointed "Spill Committee." The committee is a subcommittee of the Environmental Protection Committee (EPC) and is composed of the following;

Base Civil Engineer, who serves as the chairperson
Base Bio-Environmental Engineer
Chief of Operations/Maintenance (DEM)
Base Fire Chief
Base Environmental Coordinator

Base Fuels Management Officer.
Spill Response Team Chief
Base Hazardous Waste Manager

Various members of the EPC are used as consultants in the development, review and update of this plan.

Environmental Protection Committee (EPC)

The Base Environmental Protection Committee is responsible for reviewing the SPR plan prior to its Promulgation by the Base Commander and prior to finalization of any modifications occurring during the annual review and update of the plan. The committee will develop pollution abatement policy guidance, monitor implementation of this plan and other pollution abatement directives, and insure that supporting procedures by responsible commanders are published.

Tasked Commanders and Staff Agency Chiefs

It is the responsibility of the tasked commanders and staff agency chiefs to publish such procedures that are necessary for implementing this plan, insuring adequate training is conducted, and for insuring that environmental protection/pollution abatement procedures are implemented in their areas of responsibility. They will designate additional project officers and monitors as required to insure an effective program and continually inspect the work areas under their control to insure that effective pollution abatement procedures are followed. They will also insure that Site-Specific Contingency Plans developed for their particular areas are posted in prominent locations at the potential spill sites.

Office of Primary Responsibility (OPR)

The OPR is the individual assigned the responsibility for directing and coordinating all spill response actions for Air Force spills (see Executive Order 12316). The OPR will have the authority to utilize the expertise and resources of the Spill Response Team (SRT) in determining and performing response actions. It is also the responsibility of the OPR to oversee that training programs regarding spill response activities are routinely conducted at the base.

The primary office of ~~primary~~ responsibility (OPR) for spills of oil or hazardous substances at Scott AFB will be the Commander 375 Air Base Group. The first alternate OPR will be the Base Civil Engineer and the second alternate OPR will be the Base Environmental Coordinator. The alternate OPR will assume full responsibility in the absence of the primary OPR.

On-Scene Coordinator (OSC)

The OSC is the individual coordinating actual spill containment, decontamination, and clean-up operations. The primary OSC for spills of oil or hazardous substances at Scott AFB will be the Base Fire Chief unless relieved by the Commander, 375 Air Base Group or the Base Civil Engineer if the commander is not available. If the Fire Chief is relieved or unavailable, the Commander, 375 Air Base Group will assume the responsibilities of the OSC with the BCE as the alternate.

Spill Response Team (SRT)

The SRT members, as designated in this document, are tasked to respond to all spills when requested by the OSC and to perform spill containment, recovery, clean-up, disposal and restoration activities as directed by the OSC.

Individuals Assigned, Attached to. or Working at Scott AFB

Each individual assigned, attached to, or working at Scott AFB is tasked to report any spill of oil or hazardous substance to the Base Fire Department (ext 117) and to take every reasonable precaution to prevent the spillage of oil or hazardous substances. In addition, all contractors performing services on base will be notified prior to the initiation of the contract of their responsibilities to take every reasonable precaution to prevent the spillage of oil or hazardous substances and to report any spills of this nature to the Base Fire Department.

SECTION THREE - SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC)

Mission

Spill prevention control and countermeasure procedures, methods and equipment have been developed and implemented for all the Scott AFB oil and hazardous substance storage and transfer areas. The general mechanisms of spill prevention that are practiced at Scott AFB are briefly discussed below. The specific spill prevention mechanisms associated with each facility having a potential for a "Reportable Spill" are summarized in the Annex I table and tabs.

Secondary Containment

Secondary Containment is the physical containment or capture of a spill thus preventing or limiting its release to the environment. Examples include: dikes, curbs, oil/water separators, drip pans and collection systems. Additional examples may include remote secondary containment such as floating booms and flow diversions utilizing basins, sumps, ponds, etc. (Refer to Annex I, Tab F.)

Visual Inspections

Visual Inspections consist of touring or patrolling the potential spill site to detect spills, evidence of spills, or other conditions that could result in a spill (Refer to Annex I, Tab 1). These include routine inspections performed by the operating and supervisory personnel and detailed inspections performed by members of the Environmental Protection Subcommittee for Spills.

Preventive Maintenance

Preventive Maintenance, as a part of the SPCC program, involves the periodic lubrication, adjustment and replacement of worn parts in all equipment where equipment failure could result in a spill of oils or hazardous substances, or impede response efforts. This includes the implementation of all Standard Operating Procedures (SOP) and Recurring Maintenance Programs (RMP) for the specific areas. (Refer to Annex I, Tab J.)

Housekeeping

Good housekeeping is the practice of maintaining a clean orderly work environment; thereby reducing the possibility of accidental spills caused by mishandling of equipment and materials, and facilitating the detection of spills and leaks. (Refer to Annex I, Tab K.)

Material Compatibility

Material Compatibility refers to the compatibility of oil and hazardous substances with the materials of construction that store or transport them, compatibility of storage or transfer devices with their environment, and compatibility of different substances upon mixing. (Refer to Annex I, Tab L.)

Security

Security involves the deterrence of unauthorized, unknowing, or accidental entry of personnel, animals or vehicles into potential spill areas when such entry could result in the damage or misuse of equipment containing or conveying oils or hazardous substances. (Refer to Annex I, Tab M.)

Monitoring

Monitoring entails the prevention of oil and hazardous substance spills by observing operational conditions that could indicate or result in a spill, and early detection of existing spills by monitoring environmental conditions. (Refer to Annex I, Tab N.) Secondary or backup monitoring should be used where acute health hazards are involved.

SECTION FOUR - OIL AND HAZARDOUS SUBSTANCE CONTINGENCY PLAN Mission

The Oil and Hazardous Substance Contingency Plan for Scott AFB designates the procedures to be followed in the event of releases, accidents and spills involving oils or hazardous substances and the organizations, personnel and equipment responsible for carrying out the response functions.

Response Organizations

The Office of Primary Responsibility (OPR) is the individual assigned the responsibility for directing and coordinating all spill response actions. The OPR will have the authority to utilize the expertise and resources of the Spill Response Team (SRT) in determining and performing response actions. Deployment of the Spill Response Team (SRT) will be activated only if called by the On-Scene Coordinator (OSC) or his designate. The deployment of the SRT is effected to provide a coordinated response to contain, control, recover and restore the environment from all spills. Annex VI summarizes all Base telephone numbers used for contacting these organizations. Off-duty telephone numbers are maintained by the Civil Engineering Service Call Desk. Annex VII summarizes all off-base response organizations along with the telephone numbers used for contacting these organizations. Following all assigned responsibilities:

a. Commander 375 ABG will:

(1) Act as Office of Primary Responsibility (OPR) for directing and coordinating all spill response actions.

(2) Assume the responsibilities of the On-Scene Coordinator (OSC) at his discretion or in the absence of the Base Fire Chief.

(3) Insure base personnel are trained in spill prevention, control and response.

b. Base Civil Engineer (BCE) will:

(1) Act as first alternate OPR in the event the Commander 375 ABG is unavailable or delegates his responsibility to the BCE.

(2) Act as the alternate OSC to the Commander 375 ABG.

(3) Appoint an Environmental Coordinator to furnish technical expertise relative to pollution control techniques.

(4) Chief of Operations and Maintenance will:

(a) Within his capability, provide personnel, transportation and equipment for containment, clean-up, and restoration of landscape due to spills of oils and hazardous substances that exceed the capability of the base agency responsible for the spill.

(b) Notify the Commander 375 ABG, BCE of personnel and equipment requirements that exceed base capability.

(c) Maintain interception devices which prevent potential sources of pollution from emptying directly into off-base tributary streams.

(d) Provide suitable inventory and storage for chemical agents, absorbent materials, and equipment not otherwise specified to be furnished by other units which are employed in combating pollution.

(e) Provide a Liquid Fuels Maintenance technician to supply explosion-hazard, technical assistance to the OSC.

(f) Assign members to the Hazardous Materials Response Team (HAZMAT) and the Spill Response Team (SRT). Prior to assignment, assure medical examinations are to be made available and provide the following information to the examining physician:

(~~1~~ 1) A description of the employees duties as it relates to exposure to hazardous substances or health hazards;

(~~2~~ 2) The employees exposure levels or anticipated exposure levels;

(~~3~~ 3) A description of the personal protection equipment used or expected to be used.

(g) Insure HAZMAT/SRT members receive medical examinations on a yearly basis and upon termination of hazardous waste operations work, if it has been more than six months since their last examination.

(5) Base Fire Chief will:

(a) Act as the on-scene coordinator unless relieved by the 375 ABG Commander or the BCE.

(b) Direct Fire Department to record all spill reports received from the Emergency Call Line (117) on a designated telephone log.

(c) Immediately respond to spills as necessary to protect life and property with due regard for the environment.

(d) Activate Disaster Preparedness OPLAN 355-XX as necessary.

(e) Direct emergency dispatch operator to notify the Scott AFB Medical Center if injuries are reported ~~and the~~ Base Civil Engineer or Environmental Coordinator of spill occurrence.

(f) Provide technical assistance to the OSC concerning response to, and handling of, combustible or flammable substances.

(g) Maintain protective clothing and equipment for response personnel within the Fire Department.

(6) The Environmental Coordinator will:

(a) Report to scene of spill immediately upon notification.

(b) Evaluate the severity of spill and determine the response necessary for containment and recovery.

(c) Advise the Commander 375 ABG (OSC) and BCE as to the necessity for activation of the SRT.

(d) On the authorization of the OSC, notify specifically requested members of the SRT or instruct the CE-Service Desk to notify these members to assemble at a designated area within 15 minutes of notification.

(e) Furnish the OSC technical expertise relative to pollution control techniques.

(f) Assume duties as OSC once the emergency is contained or as directed by the activating OSC.

c. Bio-Environmental Engineer will:

(1) Take periodic samples of all on-base waterways for background information.

(2) Upon notification of a spill, and at the direction of the OSC, sample and test the affected waterways to monitor the extent and degree of pollution caused by the spill, if any.

(3) Provide technical assistance and advice to the OSC and the Scott AFB Medical Center with respect to the health hazards associated with oils and hazardous substances.

(4) Take ground and water samples after clean-up to determine if site is completely clean.

(5) Maintain a file of all applicable Material Safety Data Sheets (MSDS).

d. Disaster Preparedness Officer will:

(1) Insure that the Scott AFB Base Disaster Preparedness OPLAN 355-XX is coordinated with the SPR Plan in the event of a hazardous substance spill requiring the implementation of the OPLAN.

(2) Act as point of contact (POC) for the Local Emergency Planning Committees (LEPC) and will contact them in the event of a reportable spill.

e. Chief of Security Police will:

(1) Instruct his organization to immediately respond to an actual or potential oil or hazardous substance spill, to isolate the spill area and control traffic when and where necessary as directed by the OSC.

(2) Insure that during non-duty hours, including holidays, routine checks of the fuel storage areas, pumps and transfer equipment are conducted to assure that they are not being tampered with, subjected to unauthorized use, or display evidence of leaks or spillage.

(3) Insure that while individuals in the security force are on normal patrols, they are continuously aware of oil and hazardous substance spills and report all areas that appear to be suspect.

f. Staff Judge Advocate will:

(1) Respond to all oil and hazardous substance pollution spills at the request of the OSC to ensure that information, records, and samples adequate for legal purposes are obtained and safeguarded for future use.

(2) Advise the OSC on the legal aspects of spill response when parties other than the Air Force are responsible for the spill.

g. Public Affairs Officer will:

(1) Respond to all oil or hazardous substance spills when requested by the OSC.

(2) Keep abreast of all base actions during a spill so as to be able to provide prompt and accurate news releases on the nature of the discharge and the steps being taken to correct the problem. This policy must be followed to obtain understanding from the public, insure cooperation from all interested parties, and to check the spread of misinformation.

(3) Coordinate all news media releases involving base actions with the Wing Commander.

(4) If the Regional Response Teams' News Office is activated, coordinate all news releases with them. If a Regional Response Team News Office is not activated, the EPA's Public Information Office can be contacted, if deemed appropriate (217-752-3397).

h. Safety Officer will:

(1) Provide technical assistance to the OSC with respect to the safety of personnel.

i. Commander Scott AFB Medical Center will:

(1) Insure that medical personnel and ambulance(s) are dispatched to the site of the spill as directed.

(2) Insure that emergency treatment is rendered and injured personnel are removed to the clinic for treatment.

(3) Insure that current and follow-up information on injured personnel is provided to the OSC as soon as possible.

(4) Insure that the Medical Center staff is familiar with health effects of hazardous substances present on the base.

(5) Institute a medical surveillance program for members of the HAZMAT/SRT. Medical examinations are to be made available to members of the HAZMAT/SRT on a yearly basis. Medical examinations are to be made available before assignment to hazardous waste operations, and also upon termination of hazardous waste operations work, if it has been more than six months since their last examination. The content of these medical examinations are to include medical and work history, with special emphasis on systems related to hazardous substances, and the fitness of the employee to wear personal protection equipment under extreme conditions.

(6) The examining physician is to write a written opinion on each member of the HAZMAT/SRT. The written opinion is to document the results of the medical examination and test, provides the physician's opinion as to any conditions that would place the member at increased risk, recommended limitations upon the member assigned work, and a statement that the member has been informed of the results of the examination and any medical conditions that require further examination or testing.

(7) Maintain a copy of the medical surveillance record for the periods required in 29 CFR 1910.20. This record is to include the members name, SSAN, the physician's written opinions, any member medical complaints related to exposure to hazardous substances, and a copy of the information provided to the examining physician.

j. Transportation Officer will:

(1) Provide OSC with transportation as required for spill response personnel and equipment.

k. Weather Squadron Officer will:

(1) Insure that the OSC is provided with up-to-date weather information as requested.

l. Chief of Operations and Training will: PUT IN OSC RESPONSIBILITY

(1) Insure that a photographer will document with photographs the extent of the spill and the containment, countermeasures, and restoration procedures utilized, as directed by the OSC.

m. Tenant and Base Organizational Commanders will:

(1) Assign in writing an organizational Hazardous Waste Monitor upon initial assignment. Forward the letter to 375 ABG/DEEV.

(2) Insure organizational personnel who are involved in the handling of hazardous waste are trained according to the standards of this Plan.

(3) Provide an emergency spill kit for the immediate containment and clean-up of small spills. (All spills will be reported)

n. Contractoring Officier will;

(1) Provide contractors with a summary of base spill response and reporting procedures.

(2) Include responsibility for training of contractor's personnel in spill response in contract if applicable.

o. In addition to the base organizations and personnel assigned to the response effort, provisions have been made for including off-base organizations in the response organization when on-base spill response resources and expertise are insufficient, and when off-base water, land, or air are adversely affected. Some of the significant off-base spill response resources that can be incorporated into the SRT, as needed, are discussed in the paragraphs below. A current listing of telephone numbers to contact these organizations is presented in Annex VII.

(1) Regional Response Team: Scott AFB falls under the jurisdiction of the U.S. EPA, Region V. The Regional Response Center will be able to provide additional equipment, personnel, expertise and data bases to aid in the response to major spills.

(2) State of Illinois Response Team: The State of Illinois Department of Natural Resources has developed an Emergency Response Team to respond to spills occurring within the State boundaries. The State on-scene coordinator will be briefed fully by the Base OSC on the spill response.

(3) Mutual Support Agreements

(a) Currently, there is a mutual aid agreement between Scott Air Force Base and the following Fire Departments and Districts:

- Belleville Fire Department
- Shiloh Valley Fire Department
- Lebanon Volunteer Fire Department
- Clinton/St Clair County Fire Department
- Mascoutah Volunteer Fire Department
- Emerald Mound Fire DePartment
- O'Fallon Volunteer Fire DePartment
- East Side Volunteer Fire DePartment
- New Baden Volunteer Fire Department
- Mascoutah District Fire Department

(b) The agreement stipulates that upon an official request by one of the above, the Civil Engineering Fire Department will dispatch a limited amount of fire fighting equipment and personnel to the required area. The agreement also provides the base with similar aid from the above Fire Departments. This is in accordance with AFR 92-1.

(c) Although no formal written agreements exist for mutual police support, the St. Clair Police Department will be contacted to provide assistance in securing any off-base areas in proximity to the spill site, dissemination of information to the local populace, and assist in evacuations if necessary.

(d) These agencies may be activated through procedures established in either Scott OPLAN 355-XX (Disaster Preparedness) or Scott OPLAN 932-XX (Base Recovery).

(4) Private Contractors: Private contractors are included in the response organization primarily to conduct clean-up and restoration work when Base resources are insufficient to conduct these activities. Names of reputable contractors have been obtained from the "Hazardous Waste Service Directory" maintained by the Environmental Coordinator. No advanced contract arrangements have been made by the Base with any outside contractors.

(5) CHEMTREC: CHEMTREC, the Chemical Transportation Emergency Center, is a 24-hour hot line that provides warnings and limited guidance to the OSC when a spill product can be identified by either chemical or trade name. CHEMTREC will also assist the OSC in contracting the manufacturer or shipper for additional information. This service should be used whenever adequate spill response information is not available. The telephone number for CHEMTREC is 1-800-424-9300.

(6) CHRIS Manual - Chemical Hazards Response Information System: The CHRIS manual is an official publication of the U.S. Coast Guard that currently provides technical information and appropriate response procedures for over 1,000 different substances. The manual contains four volumes which are periodically updated. CHRIS data forms for many of the chemicals stored at the base have been included in Annex III of this document.

(7) ETIS - Environmental Technical Information System: ETIS is a computerized information system which contains Federal and state environmental regulations, directories of Federal and state environmental contacts and

computer modeling capabilities. The ETIS overall system manager is the U.S. Army Construction Engineering Research Laboratory located at Champaign, Illinois. The Environmental Planning Directorate at AFESC manages Air Force use of the system. Additional information on the system and how to access it can be obtained by calling AUTOVON 297-6240.

(8) USAF Occupational and Environmental Health Laboratory (OEHL): The OEHL is assigned responsibility for providing consulting services on spill sampling contaminant treatment methods, as well as analytical support during response and recovery operations. For complex spill problems, on-site support may be provided, call AUTOVON 240-3626.

Plan Execution

Due to the diversity of materials stored on base and the variable severity of the hazards presented in the event of a spill, the response actions will vary. General procedures are outlined in the following sub-sections. These procedures should be reviewed and, if necessary, updated prior to adopting courses of action in a particular situation. The table in Annex I and maps in Annex IX should be consulted with regard to the reportable actions. If a Site Specific Contingency Plan exists for the spill area in question, it will be noted in the Contingency Action column of the Annex I table and should be referred to in Annex II.

The execution of the SPR Plan is divided into two phases; Phase I - Spill Discovery and Initial Notification; Phase II - Response Actions. Phase I designates the initial spill response or potential spill of oil or hazardous substances. It also designates the procedures to be followed by the Fire Department, Base Environmental Coordinator, Base Civil Engineer and CE Service Call Desk in providing rapid notification of the spill to the proper on-base personnel and organizations. Phase II then designates the general response actions to be taken by the OSC in containing, cleanup and restoring the spill site.

Phase I - Spill Discovery and Initial Notification

a. The following actions will be implemented as necessary upon discovery of a spill by person(s) discovering spill who is responsible for providing initial defensive actions without undue risk of personal injury. The order of the actions will depend on existing conditions.

(1) Initiate evacuation, if necessary.

(2) Notify Base Fire Department On-Base (ext 117 or 744-1117) of the following information:

(a) Name of individual reporting spill.

(b) Location of spill.

(c) Number of injured personnel and nature of injuries.

(d) Substance spilled.

(e) Amount spilled (estimated).

(f) Rate material currently spilling (estimated).

(g) Time spill occurred (estimated).

(h) Extent which spill has traveled.

(i) Any additional pertinent Information (i.e., other potential hazards).

(3) Stop source of spill when possible without undue risk of personal injury; to include use of on-site spill containment equipment and materials.

(4) Make spill scene OFF LIMITS to unauthorized personnel.

(5) Restrict all sources of ignition when flammable substances are involved.

(6) Report to on-scene coordinator upon arrival.

b. Civil Engineer will:

(1) Immediately dispatch a squadron representative to the spill site who will:

(a) Evaluate the severity of the spill and determine the response necessary for containment and recovery.

(b) Advise the OSC as to the necessity for activation of the Spill Response Team (SRT).

(c) On the authorization of the OSC, notify specifically requested members of the SRT or instruct the CE Service Desk to notify these members to assemble at the area designated by the OSC or the Environmental Coordinator within 15 minutes of notification.

(2) The Environmental Coordinator will:

(a) Contact MAC/DEEV, ext 65764, even if base personnel are uncertain of the spill classification. The purpose of the telecon is to verify the spill classification or aid in the classification when uncertainty exists and to gather available information on reportable spills to support the initial command telecon report to USAF/LEEV. For spills occurring after normal duty hours or on weekends, the MAC/DE alert duty officer should be contacted through the MAC Command Post, ext 63325. As much of the following information as can be reasonably determined should be initially reported.

- Name of installation.
- Location of incident and geography.
- OSC name and telephone number.
- Time of spill.
- Type and estimated quantity of spill substance.
- Magnitude and severity of the threat to public health, welfare and natural resources.
- Weather conditions at spill site.

- Cause of incident.
- Anticipated containment and cleanup action and effectiveness.
- Need for assistance by national, regional, or state response teams.
- Any other pertinent information.

(b) Determine if a Reportable Spill has occurred. Annex I includes Reportable Spill criteria for the substances identified on base as potential Reportable Spill substances. If the spill is deemed a "Reportable Spill" by the OSC, a confirming message containing the available information identified in paragraph (1)q of this section must be released and transmitted to MAC SCOTT AFB IL/DEEV/SGPAE with information copies to HQ USAF WASH DC/LEEV/SGES, HQ AFESC TYNDALL AFB FL/DEVP/PA/DEMM, HQ AFMSC BROOKS AFB TX/SGP, USAF OEHL BROOKS AFB TX/ECW, HQ USAF WASH DC/LEYF (when POL is involved) and HQ USAF WASH DC/RDCM (when industrial facilities are involved). This message should be transmitted within four hours of the telecon notification to MAC/DEEV. If the telecon notification is made after 1500 hours local, the message will be transmitted no later than 1000 hours the following day.

(c) Telephone and message notification of other Federal and state agencies must be made promptly following telecon notification of reportable spill to MAC/DEEV. These agencies are:

National Response Center	(800) 424-8802
U.S. EPA, Region V Response Center	(312) 353-2318
Illinois Emergency Services & Disaster Agency	(800) 782-7860
Illinois EPA Emergency Response Unit	(217) 782-3637
St. Clair Emergency Services & Disaster Agency	(618) 277-3012

(3) The Fire Department will:

(a) Record spill reports on a Spill Incident Checklist Log designed to record the information listed in the above paragraph (1)b along with the time of the report.

(b) Immediately respond as necessary to protect life and property with due regard for the environment.

(c) Notify the Fire Chief and the CE Service Call desk.

(d) Notify the Scott AFB Medical Center if injuries are reported.

(4) The CE Service Call Desk will:

(a) Notify the Base Civil Engineer and the Environmental Coordinator of the spill.

(b) Maintain a current list of all members of the Spill Response Team (SRT) along with their duty telephone numbers (Annex VI) as well as non-duty telephone numbers.

(c) Contact the SRT members designated by the OSC or the Environmental Coordinator and inform them to assemble within 15 minutes at a specified location.

Phase II - Spill Response Actions

a. In the event of a spill of oil or hazardous substances, the OSC will be responsible for directing and coordinating all spill response actions. The OSC or his designee will maintain an Incident Log detailing all actions taken during the course of the pollution spill response. The log will include (but not limited to): description of pollutant(s); the actions taken to recover the pollutant(s) and restore the environment; and any additional significant information. Spill response actions under the responsibility of the OSC are:

(1) Activate or authorize action of appropriate members of the Spill Response Team (SRT) based on information relayed during initial notification or information provided by the Environmental Coordinator, and immediately investigate the reported spill.

(2) Determine source, type and approximate quantity of spill substance.

(3) Evaluate magnitude and severity of the threat to public health, welfare and natural resources. The Material Safety Data Sheets contained in Annex III should be utilized as required to determine potential health, fire and pollution affects associated with the spill material.

(4) Take appropriate safety precautions to protect response personnel and any additional personnel located in close proximity to the probable spill route. Base Security Police will be utilized for implementing evacuation or traffic control measures.

(5) Determine the party responsible for spill, if other than the Air Force. The responsible party should be informed of the spill and their response action as evaluated by the Base OSC. If their response actions are inadequate in the judgment of the OSC, they should first be informed of their financial liability, and then if their spill response actions remain inadequate, the Base OSC should assume control of the spill response. The Base Judge Advocate should be informed in all response actions involving parties other than the Air Force. If a contractor is involved with a spill, the contracting office should be notified, ext 63036.

(6) Determine cause of spill and institute appropriate action to stop the source of spill, if spill is still occurring.

(7) Institute spill containment procedures. The primary concern is to confine spills as close to their source as practical and, if at all possible, prevent spills from exiting base property. In accomplishing this task, the OSC should refer to the following sources of information contained in this document:

(a) Annex I for maximum potential spill quantities, available secondary containment, probable spill routes and general contingency actions.

(b) Annex II for Site-Specific Contingency Plan when the existence of such a plan is stated under "Contingency Action" in Annex I.

(c) Annex III for the health hazards, fire hazards, pollution potential and physical and chemical properties of the spill materials.

(d) Annex IV for a listing of the containment facilities located on Base which may potentially be used for containment of spills.

(e) Annex V for spill response equipment inventory and location of equipment.

(f) Annex VIII for maps to assist in the determination of probable spill routes, access to the spill sites, location of remote secondary containment and spill containment areas.

(8) Determine if the vulnerable areas listed in Annex VIII (i.e. wastewater treatment plant or recreational waters) might be adversely affected and notify the appropriate personnel or organizations listed in the Annex.

(9) Direct Base Bio-Environmental Engineer to take samples to determine the chemical nature, pollutant concentration and extent of the spill as required for response actions and documentation.

(10) Advise Base Public Affairs of the size and nature of the spill and response actions.

(11) Initiate cleanup actions. Pollutants will be collected to the maximum extent possible.

(a) Petroleum pollutants will be collected and stored in the waste oil storage facility.

(b) Absorbent and similar material will be placed in 55-gallon drums, labeled, and turned over to the responsibile party for the spill. Normal procedures will be followed for disposal of the waste.

(c) Hazardous pollutants will be collected in polyethylene-lined drums (see 49 CFR 178.133) or other approved drums under 49 CFR 172.101 or 102, labeled, and turned over to the responsibile party for the spill. Normal procedures will be followed for disposal of the waste.

(12) Officially classify oil spills using the following definitions:

(a) Minor discharge. Minor discharge means a discharge to the inland waters of less than 1,000 gallons of oil; or a discharge to the coastal waters of less than 10,000 gallons of oil.

(b) Medium discharge. Medium discharge means a discharge of 1,000 to 10,000 gallons of oil to the inland waters; or a discharge of 10,000 gallons to 100,000 gallons of oil to the coastal waters.

(c) Major discharge. Major discharge means a discharge of more than 10,000 gallons of oil to the inland waters; or more than 100,000 gallons of oil to the coastal waters.

(13) Following the initial confirmation message, the base will release and transmit subsequent messages every weekday as of 0800 hours due-out by 1200 hours the same day. The report may be made by exception. Following the initial message, subsequent messages need not be transmitted on weekends or holidays unless specifically requested by MAC/DEEV. Addresses for the subsequent message reports are the same as those listed in paragraph (1)j of this section.

Part 7 b.(4)(b)

(14) On completion of cleanup operations, a "close-up" report will be submitted to MAC/DEEV, with information copies to Region V, Environmental Protection Agency. In addition, the report must be submitted within 60 days of a "major" oil spill to the National Response Team and the Regional Response Team; within 60 days of a 1,000 gallon oil spill or 2 reportable oil spills in 12 months to the Regional Administrator of EPA; within 60 days of a reportable spill of Clean Water Act Section 311 substances to the Regional EPA Enforcement Division Director; and within 15 days of a spill of hazardous waste requiring the implementation of the SPR Plan to the Regional Administrator of EPA. Both regulatory agency reports and internal Air Force reports should contain all of the information listed below. However, the regulatory agency reports must be narrative format, and the internal Air Force reports must be in the message format specified in AFR 19-8.

(a) Name and address of installation and/or owner;

(b) Name and telephone number of OSC;

(c) Incident report (initial, second, third, final);

(d) Date and time of incident;

(e) Time of official spill notification to the National Response Center and other regional and state officials;

(f) Location of incident and the nature of the terrain at the location, to include surface and subsurface drainage characteristics and relationships to water bodies (estimate extent of area affected such as miles of stream or acres of lake);

(g) Weather conditions and how they affected response action;

(h) Cause of incident;

(i) Type and estimated amount (barrels, gallons, pounds) of pollutant and the official size classification (minor, medium, major);

(j) Actual damage and/or potential threat to human life, to property (private, state, or federal), and to plant or animal life;

(k) Corrective action taken to eliminate pollution source;

(l) Corrective action taken to remove pollutant;

(m) Assistance required;

(n) Estimated completion date of remedial actions and anticipated effectiveness;

(o) Estimated quantity and disposition as spill material and contaminated soil;

(p) Confirmation that emergency response equipment is back in operation before resuming operating activities;

(q) Description of any problems encountered during implementation of the SPR plan and an explanation of how the Spill Prevention and Response Plan was, or will be modified to prevent the recurrence of the spill event;

(r) Anticipated or actual reaction by the news media and public to the incident (specify potential for liability in the internal Air Force reports only);

(s) A copy of this SPR Plan if requested.

SECTION FIVE - TRAINING

Personnel Training Requirements

All personnel involved with the management and handling of oil and hazardous substances must take part in periodic spill prevention and response training programs. A different standard is given for current or new employees. Both employees require an eight-hour refresher annually. New employees require twenty-four hours of initial training. Current employees do not need the initial 24 hours of training, provided the commander can show that the employee's previous work experience and/or training is satisfactory to meet the initial training requirements. The training needs will be designed so that it will enable employees involved in hazardous waste operations to perform their assigned duties and functions in a safe manner. The training will be conducted by an individual familiar with the SPR and hazardous waste management (i.e., the Base Environmental Coordinator and supervisory personnel from respective oil and hazardous substance storage areas). Others assisting with the training will include the Bio-Environmental Engineer, Fire Department and Disaster Preparedness Office. Training programs will be divided into two functions.

a. The first function will be given either by the Environmental Coordinator or the Base Hazardous Waste Manager, and will include the following:

(1) Introduction to RCRA;

(2) Identification of Typical MAC RCRA Compounds;

(3) Accumulation Point Management;

(4) Container Management;

(5) Container Marking and Labeling;

(6) Recordkeeping;

(7) Treatment, Storage, and Disposal Facility (TSDF) Management;

(8) Turn-in Procedures;

(9) Organization/Activity Responsibility;

(10) Closure of Accumulation Points/TSDFs;

(11) Contingency Plans/Emergency Responses;

(12) Manifest and Transportation;

(13) Commercial Disposal Facilities;

(14) Hazardous Substance Characterization and Compatibility;

(15) Fire Considerations; and

(16) Safety, health, and other hazards present at the site.

b. The second training function will be given by the organizational Hazardous Waste Monitor, and will include all of the above which pertains to his organization and all of the following:

(1) Names of personnel and alternates responsible for safety and health.

(2) Use of personal protection equipment.

(3) Safe work practices.

(4) Safe use of engineering controls and equipment at the site.

(5) Medical surveillance requirements, including the symptoms and signs of over-exposure.

(6) Site control measures.

(7) Decontamination procedures.

(8) Standard oPerating Procedures at the site.

(9) Personal protection equipment and other equipment used at the site.

(10) Confined space entry procedures.

c. Training programs will be conducted either annually or semi-annually (IAW the Hazardous Waste Training Program) for all personnel working at oil and hazardous substances sites; within six months (two weeks recommended) for all personnel starting a supervised position; prior to starting work for personnel entering an unsupervised position; after any significant revisions to the training program or the SPR Plan, and after a spill response in which training deficiencies were noted. Records of the type, extent and frequency of each employee's training will be maintained until closure of the

applicable area or until three years after the date the employee last worked. Training will be documented in each individual's training record. Newcomers to the base should be immediately informed of the general spill response and reporting procedures by including a procedural outline in each newcomer sponsor package.

Contractor Handling Oils and Hazardous Materials

Contractors working in areas associated with oils or hazardous substances are responsible for training their personnel in spill response and reporting procedures. The contract administrator for the Air Force is responsible for providing these contractors with a summary of spill response and reporting procedures.

Spill Response Team (SRT) Training

All base personnel designated in this document as part of the SRT must take part in periodic spill response training programs. The training will involve both general training and detailed training. The general training will consist of the applicable laws; base responsibilities; DOD and USAF policies; potential hazards to personnel, property and the environment from spill events; and the use of the SPR Plan including the function of the OSC, the designated responsibilities of member organizations and the general response procedures. The detailed training will be specifically structured for each response organization and address the following:

a. The responsibilities of the individual organization being trained;

b. The detailed response procedures to be followed in the event of a spill;

c. The location and use of spill response equipment;

d. The potential health and fire hazards associated with spill response activities.

The training will consist of formal classroom training and spill exercises. The Chief of Operations and Maintenance is responsible for the training program, and the Base Environmental Coordinator will assist with the program. The frequency of the training program, at a minimum, will correspond to the requirements designated for base personnel. Spill response exercises will be conducted at least once annually. Response to an actual spill will satisfy the annual requirement for spill response exercises. New SRT members should be given a copy of the SPR Plan and briefed when they are assigned to the team.

SECTION SIX - PLAN REVIEW AND UPDATE

The SPR Plan will be reviewed, at a minimum, annually and amended as required. Other circumstances which will warrant a plan review and update are listed as follows:

a. When RCRA permit is modified;

b. When facility changes occur which increase the potential for spills or change the spill prevention and response procedure methods and equipment;

c. When the SPR Plan fails or proves to be ineffective in the prevention of or response to a spill event;

d. At the request of the U.S. Environmental Protection Agency;

e. When changes occur in the OSC, SRT or spill response equipment list;

f. After enactment of, or amendment to, pertinent federal or state legislation, or changes in DOD or USAF policy. Particular attention should be given to changes in reportable spill quantities;

g. After pertinent modifications of federal, regional and state contingency plans;

h. After any changes in adjacent land and water use that would affect spill prevention and response considerations;

i. At the request of the Scott AFB Environmental Protection Committee or its Subcommittee on spills.

The Environmental Protection Subcommittee on spills will conduct these reviews utilizing the same procedures used in the initial plan development of the document (refer to USAF Guidance Manual for Preparation of SPR Plans). The review will include detailed inspection of oil and hazardous substance sites and verification of all data generated during the initial plan development. When possible, a professional engineer will take part in these inspections. The Environmental Protection Subcommittee on spills will submit a report to the Environmental Protection Committee describing any deficiencies and recommended corrective actions.

The Environmental Protection Committee will be responsible for reviewing the report, monitoring any corrective actions and amending the SPR Plan when necessary. The review of the SPR Plan, and any resulting amendments or changes to the plan will be logged on the record sheet at the front of this document. If amendments or changes significantly affect the SPCC portion of the plan, Annex I; the plan must be recertified by a professional engineer.

Chemical	Hazard	Basis for Hazard Designation
Methyl ethyl ketone	Toxic	Listed Waste U159
Naptha	Ignitable	Characteristic Waste D001
Battery acid	Corrosive	Characteristic Waste D002
Dry cleaning solvent (PD-680)	Ignitable	Characteristic Waste D001
Perchloroethylene	Toxic	Listed Waste U210
Methyl methacrylate	Ignitable, Toxic	Listed Waste U162
Methyl ethyl ketone peroxide	Toxic, Reactive	Listed Waste U160
Toluene	Toxic	Listed Waste U220
1,1,1-trichloroethane	Toxic	Listed Waste U226
Trichloroethene	Toxic	Listed Waste U228
Xylene	Ignitable	Listed Waste U239
Denatured alcohol	Ignitable	Characteristic Waste D001
Ammonium hydroxide	Corrosive	Characteristic Waste D002
Dichloromethane	Toxic	Listed Waste U080
Methanol	Ignitable	Listed Waste U154
Primer	Ignitable	Characteristic Waste D001
Paint	Ignitable, Toxic	Characteristic Waste D001
Acetone	Ignitable	Listed Waste U002
Adhesive	Ignitable	Characteristic Waste D001
Carbon removing compound	Ignitable	Characteristic Waste D001
Cleaning compound	Ignitable, Corrosive	Characteristic Waste D001, D002
Enamel	Ignitable	Characteristic Waste D001
Epoxy remover	Ignitable, Toxic	Characteristic Waste D001

Chemical	Hazard	Basis for Hazard Designation
Hydrochloric acid	Corrosive	Characteristic Waste D002
Mercury	Ep Toxic	Characteristic Waste D009
Methylene chloride	Toxic	Listed Waste U080
Paint remover	Ignitable	Characteristic Waste D001
Potassium nitrate	Ignitable	Characteristic Waste D001
Sealing compound	Ignitable	Characteristic Waste D001
Tetrachloroethylene	Toxic	Listed Waste U210
Paint thinner	Ignitable, Toxic	Characteristic Waste D001

Chemical	Hazard	Basis for Hazard Designation
Spent methyl ethyl ketone mixed with paint	Toxic, Ignitable Ep Toxic	Characteristic Waste D001, D007, D008
Used degreasing solvent	Toxic, Ignitable	Listed Waste F001, F002, F003, F004
Waste battery acid	Corrosive	Characteristic Waste D002
Used dry cleaning solvent	Toxic, Ignitable	Characteristic Waste D001
Waste paint, thinner, and related materials	Toxic, Ignitable Ep Toxic	Characteristic Waste D001, D007, D008
Methyl methacrylate mixed with waste materials	Ignitable, Toxic	Characteristic Waste D001
Methylene chloride and waste paint materials	Toxic	Listed Waste F001, F002
Waste corrosive paint materials	Corrosive, Toxic, Ep Toxic, Ignitable	Characteristic Waste, D001 D002, D007, D008
Spent sulfuric acid	Toxic, Corrosive	Characteristic Waste D002
Used naphtha degreasing materials	Ignitable,	Characteristic Waste D001
Spent 1,1,1-trichloroethane	Toxic	Listed Waste F001, F002
Solvent still bottoms	Toxic, Ep Toxic	Characteristic Waste D007, D008, Listed Waste F001, F002, F003, F004, F005
Waste combustible materials	Ignitable, Toxic	Characteristic Waste D001

CLASS OUTLINE

HAZARDOUS WASTE MANAGEMENT FOR HAZARDOUS WASTE MANAGERS AND ACCUMULATION POINT MANAGERS

I. INTRODUCTION: This is the class outline for hazardous waste management for hazardous waste managers and accumulation point managers. This outline is intended for your use as a guideline for managing hazardous waste storage and disposal at your organization. If you have any questions concerning the Hazardous Waste Management Program, contact the Base Environmental Coordinator, Lt Richard Sloop, at 62092 or 64165.

II. MATERIAL TO BE COVERED:

A. Introduction to the Resource Conservation and Recovery Act (RCRA)

B. Identification of Typical MAC RCRA Compounds

C. Containers and Container Management

D. Container Marking and Labeling

E. Turn-In Procedures

F. Contingency Plans/Emergency Response

G. Hazardous Substance Characterization and Compatibility

H. Safety Considerations

I. Closure of Accumulation Points and Transportation, Storage and Disposal Facilities (TSDF)

J. Accumulation Point Management

K. Recordkeeping

III. INTRODUCTION TO RCRA:

A. The Resource Conservation and Recovery Act (RCRA) provides the regulatory framework for the management of hazardous waste (HW) from its point of generation (cradle) to its ultimate disposal (grave). This is known as the policy of "cradle to grave" control and is the responsibility of the generating activity, in this case Scott Air Force Base. Remember, ultimate disposal does not mean burying it in the ground. Disposal is when a hazardous waste is no longer considered hazardous.

B. A hazardous waste is defined as:

1. A waste that is listed in the Code of Federal Regulations (CFR), Title 40, Part 261 or 35 Illinois Administrative Code (IAC), Subtitle G, Part 721.

Atch 1

2. A waste that exhibits one or more of the following properties:

a. Ignitability - Flash point less than 140 degrees Fahrenheit.

b. Corrosivity - Has a pH less than 2.0 or greater than 12.0.

c. Reactivity - Reacts with other products or itself to create dangerous liquids or vapors or causes fire and/or explosion.

d. EP Toxicity - The extract of the material contains unnacceptable levels of hazardous materials listed in 40 CFR.

C. RCRA regulates the following:

1. Generators - Organizations or industry which produces a hazardous waste.

2. Transporters - Organizations which transport hazardous waste intra- or interstate by air, rail, water, or public highway.

a. Scott AFB does NOT transport hazardous waste outside base property.

b. The Defense Reutilization and Marketing Office (DRMO) governs off-base transport of hazardous waste.

3. Storers - Organizations which store hazardous waste on their premises for any amount of time.

a. If an organization stores waste on its premises for more than 90 days, 40 CFR requires an operating permit.

b. The permitted storage facility on Scott is the Aqua Yard (Bldg 59) and is managed by 375 CES/DEMWW (64226).

4. Treaters - Organizations which render a hazardous waste non-hazardous by physical, chemical, or biological means.

5. Disposers - Organizations which dispose of hazardous waste through landfills or injection wells.

D. Some functions are not regulated by RCRA, these are:

1. Household waste

2. Wastewater Treatment Plant (Regulated by the Clean Water Act)

E. Some of the violations under RCRA are:

1. Transporting HW to an unpermitted facility.

2. Transporting without a manifest.

3. Disposing of HW in an unpermitted facility.

4. Omitting information or falsifying documents or records.

5. Placing human life in danger.

F. Some of the penalties are:

1. Criminal Penalties - $250,000 per day of noncompliance
- $1.0 Million per day of noncompliance for organizations
- 15 years imprisonment
- Or both

2. Civil Penalties - $25,000 per day personal liability

IV. IDENTIFICATION OF TYPICAL MAC RCRA COMPOUNDS:

A. Hazardous material becomes a hazardous waste when it becomes no longer useful. This can happen in one of three ways:

1. Contaminated raw material

2. Outdated inventory

3. Material out of specification

B. A HM or HW can threaten human health and the environment. Examples are:

1. The reactiveness of ammunition.

2. The ignitability of acetone.

3. Waste batteries can create lead poisoning, not to mention the acids that are used.

4. Trichloroethylene (TCE) exposure can create paralysis or liver damage. TCE is contained in common degreasing solvents.

C. Examples of base HW generators are:

1. Hospital

2. Laboratories

3. Workshops

4. Supply

D. The base Spill Response Plan (SPR) and the HW Management Plan requires work area supervisors to have information concerning all HM or HW used in their organization.

E. Sources of information on HM and HW are:

1. Material Safety Data Sheets (MSDS) (See Atch 1). These sheets are available through the manufacturer or the base bioenvironmental engineer (BEE) and contain the following information:

a. Chemical and noun name.

b. Hazard Classification

c. Listing of Hazardous components

d. Physical Data (Boiling point, Flash point, etc.)

e. Fire and explosion data

f. Health hazards

g. Reactivity Data

h. Spill and Leak procedures

i. Protective equipment required

2. Chemical Hazard Response Information Sheet (CHRIS) (See Atch 2). Prepared by the US Coast Guard and is a guide for spill response. CHRIS contains the following information:

a. Provides other names

b. Personal protective equipment

c. Treatment for exposure

d. Labeling required

e. Chemical Formula

f. Chemical appearance

g. Symptoms of personnel exposed to the HM or HW

h. Effects on building materials

i. Effects on aquatic life

j. Transportation information

k. Hazard Code

l. Chemical and Physical properties

3. Technical Orders provide health and hazard warnings.

4. Hazardous Material Information System (HMIS). Contains MSDS on microfiche and is located in the BEE's office.

5. The BEE may have additional chemical hazard references:

a. Toxic and Hazardous Industrial Chemicals Safety Manual

b. The Merck Index

c. Dangerous Properties of Industrial Materials

d. Clinical Toxicology of Commercial Products

e. Patty's Industrial Hygiene and Toxicology

V. CONTAINERS AND CONTAINER MANAGEMENT:

A. The Environmental Protection Agency (EPA) has adopted the Department of Transportation (DOT) regulations concerning containers and enforces them as if they were their own.

B. Since DRMO manages all HW transport, they will accept only DOT specified containers for the turn of HW. These specifications can be found in 49 CFR, parts 170-189.

C. SATELLITE ACCUMULATION POINTS (SAP) - The area at or near the point where up to 55 gallons of waste is initially accumulated which is under the control of the shop supervisor of the process generating the waste.

1. Container management requirements at SAP's:

a. Containers must be in good condition

b. Containers must be compatible with the waste

c. Containers must be kept closed

d. Handle or store containers in a manner to avoid ruptures or releases

e. Mark the container to identify the contents or with the words "HAZARDOUS WASTE"

D. ACCUMULATION POINTS (AP) - The area near the generating activity where hazardous wastes are accumulated in tanks or containers for a period of up to 90 days from the time the first drop of waste is placed in the tank or container.

1. Container management requirements at AP's:

a. Mark the container "HAZARDOUS WASTE"

b. Containers must be kept in good condition

c. Containers must be compatible with the materials being accumulated

d. Containers must be kept closed

e. Containers must be handled or stored in a manner to avoid ruptures or releases

f. Containers must be inspected weekly for leaks and deterioration

g. Containers holding ignitables must be 50 feet from the base boundary

h. Segregate wastes to the maximum extent possible

i. Mark the date waste was first placed in the container

E. When accumulating waste at an AP or SAP, the following items shall be placed on the drum either stenciled or using a hazardous waste label (Atch 3):

1. Proper shipping name (if unsure, contact DRMO (63105) or DEEV (62092))

2. Date accumulation started

3. National Stock Number of the material if pure. If not, contact DRMO for the Stock Number.

4. UN or NA number. This number can be obtained from DRMO or DEEV.

5. Approximation of the contents. Example - 50 percent paint
- 40 percent thinner
- 10 percent water

6. Contact name and phone number

F. Both AP and SAP have the following requirements:

1. Emergency response/cleanup equipment available

2. Communications

3. Copy of the Base SPR

4. Documented training of personnel (both initial and recurring)

G. Used 55 gallon drums can be used for accumulation, storage and transport of HW. The specification of the used drum must be compared to the approved container listing in 40 CFR (available at DRMO). All containers are marked on the bottom of the drum or the footing. A typical container may have the following markings:

MSB
20/18 55 84 7
DOT 17E
STC

MSB - Manufacturer's symbol
20/18 - Gauge of body/gauge of top and bottom
55 - Capacity in gallons
84 - Year of Manufacture
DOT 17E - DOT specification
STC - "Single Trip Container"

H. The two types of containers are:

1. STC - Single Trip Container

2. NRC - Non-Reusable Container

I. Both STC and NRC containers can be reused for hazardous waste subject to the four following conditions:

1. The container meets the approved specifications for the material.

2. Transport is by highway only (not air or water).

3. The drum must be closed and allowed to stand for 24 hours and inspected for leaks.

4. The container can be used to transport hazardous waste only once.

J. All containers must be in good condition, which means:

1. No visible pitting due to rust, chemical attack, or corrosion is permitted.

2. No sharp edged creases or dents are permitted.

3. No material defects in the metal body or heads of the container.

4. No bulging heads caused by overpressuring or overfilling the container.

5. No dents or creases to the top or bottom chime or to the rolling hoops.

K. If any of the previous conditions are not met:

1. If empty, <u>DO NOT</u> use the container and turn in to DRMO.

2. If in use, contact CE to get the drum overpacked as soon as possible.

VI. CONTAINER MARKING AND LABELING:

A. EPA and DOT have enforcement authority over interstate and intrastate shipments of HW.

1. The regulations can be found in 40 CFR but are identical to 49 CFR.

2. Because DRMO accepts only approved containers, it may be necessary for an organization to repackage if the proper container was not used. This process increases the chance for an incident.

B. "Marking" means:

1. Descriptive name (use proper shipping name)

2. Instructions

3. Cautions

4. Weight

5. Material specifications

C. The marking requirements for HW shipments are:

1. Hazardous Waste Warning -

HAZARDOUS WASTE
FEDERAL LAW PROHIBITS IMPROPER DISPOSAL
IF FOUND, CONTACT THE NEAREST POLICE, OR
PUBLIC SAFETY AUTHORITY, OR THE
U.S. ENVIRONMENTAL PROTECTION AGENCY

2. Proper shipping name -

a. If it is a pure substance, it must be as it appears in the hazardous waste table in 40 CFR or 35 IAC. If it is a waste pure material, the word "WASTE" must proceed the shipping name. For example:

WASTE ETHYL ALCOHOL
UN 1170

b. If the waste is NOT a pure substance, the proper shipping name would be a "Not Otherwise Specified", (N.O.S.). For example, a flammable mixture of thinners and toluene would be:

FLAMMABLE LIQUID, N.O.S.
UN 1993

If you have a mixture of wastes, contact DRMO for the proper shipping name.

3. The UN (United Nations) or NA (National) identification number. These can be obtained from DRMO or DEEV.

4. The letters "RQ" if the waste has a reportable spill quantity. DRMO or DEEV can tell you whether a particular waste or material has a reportable quantity.

5. The generator's USEPA I.D. number: IL7570024177

D. All this information can be applied to one form (atch 3) or it may be stenciled directly on the drum. Both methods are acceptable and it is desirable to have both. Both methods must be readable.

E. Although Scott AFB does not transport HW, it is important for us to know what requirements the transporter must meet:

1. All transporters of HW must have an EPA identification number.

2. All hazardous waste shipments must be accompanied by a manifest.

3. Drums must be labeled in accordance with 49 CFR.

a. A label is defined as any diamond, square or rectangular shaped attachment that identifies the hazardous nature of a material. (See Attch 4)

b. Labels must be:

- Durable and weather resistant
- Minimum size of 4" inches on a side
- Label colors must be in accordance with 49 CFR

VII. TURN IN PROCEDURES:

A. DRMO will accept accountability and responsibility for managing the disposal of wastes that are regulated under RCRA, State, or local regulation. This DOES NOT mean that DRMO accepts liability for any HW. The liability remains with the generator.

B. When turning in a hazardous waste, the form to use is a DTID 1348-1. This form shall have a certification to be signed by the generator that states:

THIS IS TO CERTIFY THAT THE ABOVE NAMED MATERIALS ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED, AND LABELED AND ARE IN PROPER CONDITION FOR TRANSPORTATION ACCORDING TO THE APPLICABLE REGULATIONS OF DOT AND EPA

C. DRMO requires the following information be on the DTID 1348-1:

1. NSN of the identified property

2. Noun name as catalogued in the supply system

3. Chemical name of hazardous contaminants

4. Noun name of non-hazardous contaminants

5. Amount of hazardous and non-hazardous contaminants

D. Turn in procedures are as follows:

1. Contact DEMWW (TSgt Weber, 64226) to set up a pre-inspection of the drums and paperwork. If anything is incorrect or unnacceptable, it will have to be fixed.

2. If all paperwork is in order and all drums are marked properly and are in good condition, the generator will arrange transportation to the permitted storage area.

E. Instructions for filling out the DTID 1348-1 form are as follows:

1. Blocks 1-3, always enter "A5J"

2. Blocks 8-22, Enter stock number. If you have a mixture and are unsure of the stock number, contact DRMO.

3. Blocks 23-24, Enter unit of issue. DR for drum, GL for gallon, QT for quart, LB for pound. **NOTE** - Use Gallons instead of number of drums.

4. Blocks 25-29, Enter quantity, using 5 digits. Example: 25 gallons would be 00025.

5. Blocks 30-43, leave blank. The storage area will fill out these blocks.

6. Block 64, enter "N"

7. Block 65, enter "A"

8. Block 71, enter "H" for an unserviceable NSN or part number or "A" for a serviceable NSN or part number.

9. Blocks 74-80, enter estimated unit price. $1.00 is all that is necessary for hazardous waste.

10. Block A, enter organization title, address, base and EPA I.D. number

11. Block B, enter "DRMO, Scott AFB"

12. Block C, enter "HW" for hazardous waste or "HM" for hazardous material

13. Block U, Enter "Hazardous Waste" or "Hazardous Material" and the EPA hazardous waste number. The hazardous waste number can be obtained from DRMO or DEEV.

14. Block V, enter the name of the satellite accumulation point or accumulation point manager.

15. Block X, enter the proper shipping name with UN or NA number.

16. Block Y, enter the duty phone of the accumulation point or satellite accumulation point manager.

17. Block AA, enter the type and estimated amount of contaminants.

18. Blocks DD, EE, FF, and GG to enter the certification statement and signature of AP or SAP manager.

F. The DTID 1348-1 MUST be typed, or it will not be accepted.

VIII. CONTINGENCY PLANS/EMERGENCY RESPONSE:

A. The main plan for contingency and emergency response is the 375 AAW OPLAN 19-XX, the Base Spill Prevention and Response Plan (SPR).

B. All responses to hazardous waste spills will be in accordance with the base spill prevention and response plan.

1. This plan will give the following information:

a. Facility number

b. Substance stored

c. Site description

d. Map grid coordinates

e. Maximum possible spill quantity

f. Reportable spill quantity

g. Spill response actions

C. When a spill is discovered, the following actions should be taken:

1. Initiate evacuation, if necessary

2. Notify base fire department

3. Stop source of spill if it can be done without danger to human health.

4. Make spill site off limits to unauthorized personnel

5. Restrict all sources of ignition when flammable substances are involved

6. Report to the On Scene Coordinator (OSC) upon arrival. The OSC will usually be the base fire chief.

D. When contacting the fire department, provide the following information:

1. Amount spilled (est.)

2. Rate material currently spilling (est.)

3. Time spill occurred (est.)

4. Extent which spill has traveled

5. Any additional, pertinent information such as your name and phone number.

E. The Base Commander (OPR) is responsible for directing and coordinating all spill response actions. These actions include:

1. Establish responsibility, if other than Air Force

2. Determine cause of spill and take action to prevent recurrence.

3. Institute spill containment procedures

4. Notify HQ MAC/DEEV

5. Determine if vulnerable areas might be adversely affected

6. Determine if a "reportable spill" has occurred. Report as required.

7. Notify State and Federal agencies

8. Collect samples as required

9. Advise base public affairs of spill and response actions

10. Initiate cleanup actions

11. Package, label, and turn in hazardous waste residues

12. Classify oil spill (if applicable)

F. It is the work area supervisor's responsibility to maintain a copy of the SPR and to make sure that his or her personnel read and understand what actions are to be taken in the event of a spill.

IX. HAZARDOUS SUBSTANCE CHARACTERIZATION AND COMPATIBILITY:

A. RCRA requires that "Before an owner or operator treats, stores, or disposes of any hazardous waste, HE MUST OBTAIN A DETAILED CHEMICAL AND PHYSICAL ANALYSIS OF A REPRESENTATIVE SAMPLE OF THE WASTE." This analysis must contain all information necessary to treat, store, or dispose of the waste under RCRA and must be accurate from point of generation to final disposal.

B. The best way to maintain a high level of analysis is to segregate the wastes as much as possible. In other words, place wastes only in those containers labeled for that waste.

C. Generators must be certain that:

1. Waste containers are accurately identified

2. Wastes generated remain consistent over time

3. Wastes are located away from ignition/reaction sources and incompatible materials

4. Accurate dates are reflected on containers

D. Some of the consequences of not knowing waste characteristics are:

1. Potential for incidents is high during storage, transportation, treatment, and disposal

2. Transporters and TSDF can hold the Air Force liable for incidents resulting from improperly identified wastes

3. Waste management processes may not be effective for unidentified wastes or unanticipated components.

4. Emergency response may not be appropriate

5. Personal health can be threatened

6. State and Federal agencies can impose civil or criminal penalties

E. Incompatible waste shall not be:

1. Placed in a container, tank, or facility if the waste can corrode or decay the structure

2. Mixed with another waste or material under uncontrolled conditions

F. The three types of incompatibility that must be considered are:

1. Waste to waste

2. Waste to raw material

3. Waste to management structure

G. It is the generating organization's responsibility to maintain the maximum possible segregation of HW. To do this, AP and SAP managers must:

1. Maintain tight controls on what goes into each drum

2. Provide security to prevent "midnight deposits"

3. Maintain accurate records of what goes into each drum

H. Questions about compatibility should be directed to the base Bioenvironmental engineer (67307).

X. SAFETY CONSIDERATIONS:

A. The base has several resources concerning safety:

1. AFOSH standards

2. Base safety office (SE)

3. Environmental planning (DEEV)

4. Bioenvironmental engineering (SGPB)

5. Base fire department (DEF)

B. Some sources of safety data and information are:

1. Technical Orders

2. Product Labels

3. MSDS

4. Bioenvironmental engineering

C. The work area supervisor is responsible for making sure that their personnel are aware of:

1. Areas that have a high probability of exposure to hazardous materials/waste.

2. The location of all emergency equipment such as spill containment, eyewash station, etc.

3. Clearance is maintained so that emergency equipment can access the site

D. Container with hazardous waste should not be moved by hand, mechanical means should be used.

E. All questionable containers should not be used and if are in use should be overpacked.

F. Drums are not to be overfilled. Containers should only be filled to 90 percent of their capacity. For example a 55-gallon drum should only contain 50 gallons.

G. Flammable liquids are defined as a liquid with a flashpoint below 100 degrees fahrenheit, with a vapor pressure not exceeding 40 pounds per square inch at 100 degrees fahrenheit. These materials are to be marked as flammable and shall be protected from possible ignition sources.

H. When working with Hazardous materials, the proper personal protective clothing (i.e. gloves, respirator, etc) shall be used.

I. When placing waste materials in a drum, a funnel should be used. After use, it shall be removed or be securable.

J. All drums shall be grounded to a static point.

K. Acids and Bases shall be kept separate.

XI. CLOSURE OF ACCUMULATION POINTS/TREATMENT, STORAGE, DISPOSAL:

A. RCRA requires a closure plan for each permitted facility:

1. Storage facilities

2. Treatment facilities

3. Disposal facilities.

B. The closure plan must have provisions for closing and decontaminating all accumulation points, both AP and SAP.

C. The procedure for closure of SAP and AP is:

1. Coordinate with DEEV

2. List possible site contaminants

3. Turn in or dispose of accumulated waste(s)

4. Decontaminate the site

5. Sample and analyze as advised by the Bioenvironmental engineer

6. Turn in waste generated by the decontamination procedure

7. Submit closure report to DEEV

Hach!

XII. ACCUMULATION POINT MANAGEMENT:

A. The regulatory requirements for accumulation points are:

1. Containers must be kept closed

2. Containers must be handled in a manner to avoid ruptures or releases

3. Containers must be marked "HAZARDOUS WASTE"

4. The AP must be inspected weekly and the inspections documented.

5. Ignitable or reactives must be 50 ft from the base boundary

6. Separate incompatible wastes or incompatable waste and materials

7. Date the container

8. Have proper emergency equipment on hand

9. Have a copy of the SPR Plan

10. Train personnel occupantionally exposed to or who handle hazardous waste and document training.

11. All spills of hazardous waste require immediate remedial response.

B. The documentation requirements for accumulation points are:

1. Documentation of training

2. Weekely Inspection log. The inspection log should have at minimum, the following information:

a. Date

b. Inspector's name

c. Number of containers and each waste stored during inspection

d. Waste accumulation start date for each drum

e. Condition of drums

f. Any corrective action taken (if needed)

C. The responsibilities of the accumulation point manager are:

1. Coordinate location of accumulation point facility.

2. Ensure wastes are placed in approved and marked containers.

3. Ensure containers are kept closed.

4. Carry out inspections and repairs.

5. Prepare documentation for waste turn in.

6. Turn in waste within the 90 day accumulation time limit.

7. Notify DEEV of any operations changes.

8. Contact the Bioenvironmental engineer for review of changes.

XIII. RECORDKEEPING:

A. One of the most important aspects of hazardous waste management is accurate recordkeeping.

B. The recordkeeping requirements for satellite accumulation points are:

1. Turn in document 1348-1. Copies should be retained for 3 years.

2. Submit annual report to 375 ABG/DEEV by 15 January each year. This report shall include:

a. SAP Manager's name

b. Training received

c. Copies of 1348-1 turned in for the year

d. Copies of inspection logs

C. The recordkeeping requirements for accumulation points who transfer waste to on-base storage facilities are:

1. Copies of 1348-1 to be kept at least 3 years

2. Maintain training records for at least 3 years. These records are to include:

a. Job title and position

b. Copy of shop training records

c. Log of completed training (initial or recurring)

3. Record of weekly inspections

4. Annual report to 375 ABG/DEEV, to include:

a. AP Manager's name

Attach'

b. Training records

c. Copies of 1348-1 turned in for the year

d. Copies of inspection logs

Certificate Of Achievement

HWMC

This certificate has been awarded to

Jerry Conner
at

Rochester, New York

For successfully completing the Lion Technology Inc. Annual Certification Workshop on the applicable regulations of the United States Environmental Protection Agency and the United States Department of Transportation regarding the management of wastes designated as hazardous.

This training completed as of

17 October 1989

W P Taggart
INSTRUCTOR

LION TECHNOLOGY INC.

Headquarters 375 Aeromedical Airlift Wing (MAC)
Scott Air Force Base, Illinois 62225-5000
January 1986

APPENDIX 2 TO ANNEX D TO 375 AAW OPLAN 198-85 (OPR: 375 ABG/DE)
LISTING AND LOCATION CODES FOR HAZARDOUS WASTE GENERATORS AND ACCUMULATION POINTS

LOCATION CODE	SITE	SHOP	GENERATOR	ACCUMULATION POINT
1/2.	Bldg 548	375 TRANSS Vehicle Maintenance Shop	Yes	Yes
3.	Bldg 382	375 SUPS Fuels Lab	Yes	No
4.	Bldg 433	Hanger No. 1	Yes	Yes
5.	Bldg 441	375 CAMS	Yes	Yes
6.	Bldg 443	375 CAMS	Yes	No
7.	Bldg 456	375 CAMS-AGE	Yes	No
8.	Bldg 506	Hanger No. 3	Yes	Yes
9.	Bldg 514	375 CES - Ext Elec., Entomology	Yes	Yes
10.	Bldg 515	375 CES - Grounds	Yes	Yes
11.	Bldg 532	375 CES - Paint	Yes	Yes
12.	Bldg 540	PCB Transformer Storage	No	Yes
13.	Bldg 700	375 ABG Printing	Yes	Yes
14.	Bldg 1530	USAF Medical Center	Yes	Yes
15.	Bldg 3184	375 TRANSS Refueling Maintenance	Yes	No
16.	Bldg 3290	375 CES Sewage Treatment Plant	No	No
17.	Bldg 3680	102 Army Air Reserve	Yes	Yes

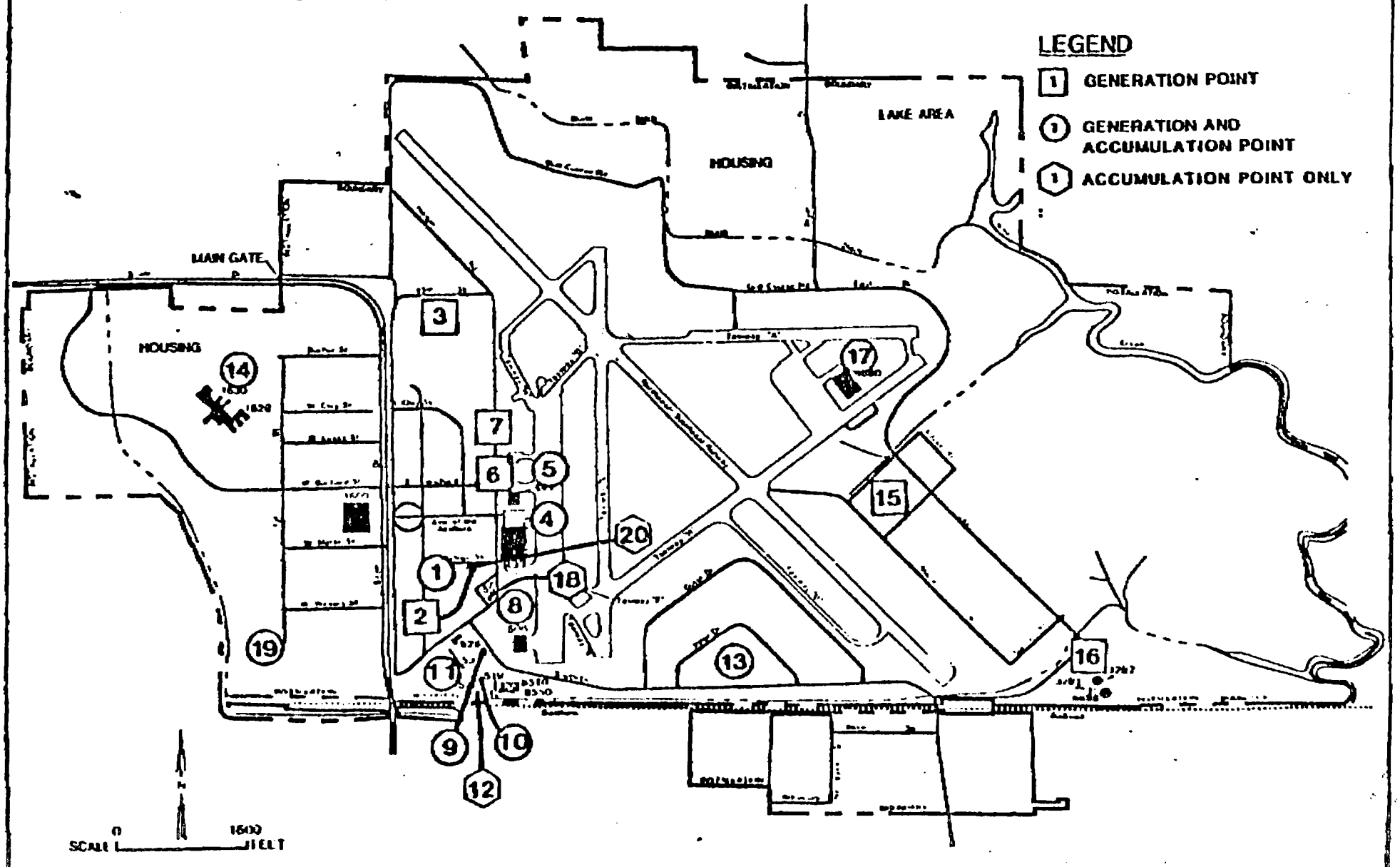
LOCATION CODE	SITE	SHOP	GENERATOR	ACCUMULATION POINT
18.	Aqua Yard	Waste Storage Tanks	No	Yes
18.	Bldg 59	Waste Storage Area	No	Yes
19.	Bldg 1989	Auto Hobby Shop	Yes	Yes
20.	Bldg 45	Waste Fuel Oil	No	Yes

APPENDIX 1 TO ANNEX B TO 375 AAW OPLAN 198-85 (OPR: 375 ABG/DE)

HAZARDOUS MATERIALS MAP

SCOTT AFB

FUELS AND HAZARDOUS MATERIALS



SOURCE: INSTALLATION DOCUMENTS

Headquarters 375 Aeromedical Airlift Wing (MAC)
Scott Air Force Base, Illinois 62225-5000
January 1986

APPENDIX 2 TO ANNEX D TO 375 AAW OPLAN 198-85 (OPR: 375 ABG/DE)
LISTING AND LOCATION CODES FOR HAZARDOUS WASTE GENERATORS AND ACCUMULATION POINTS

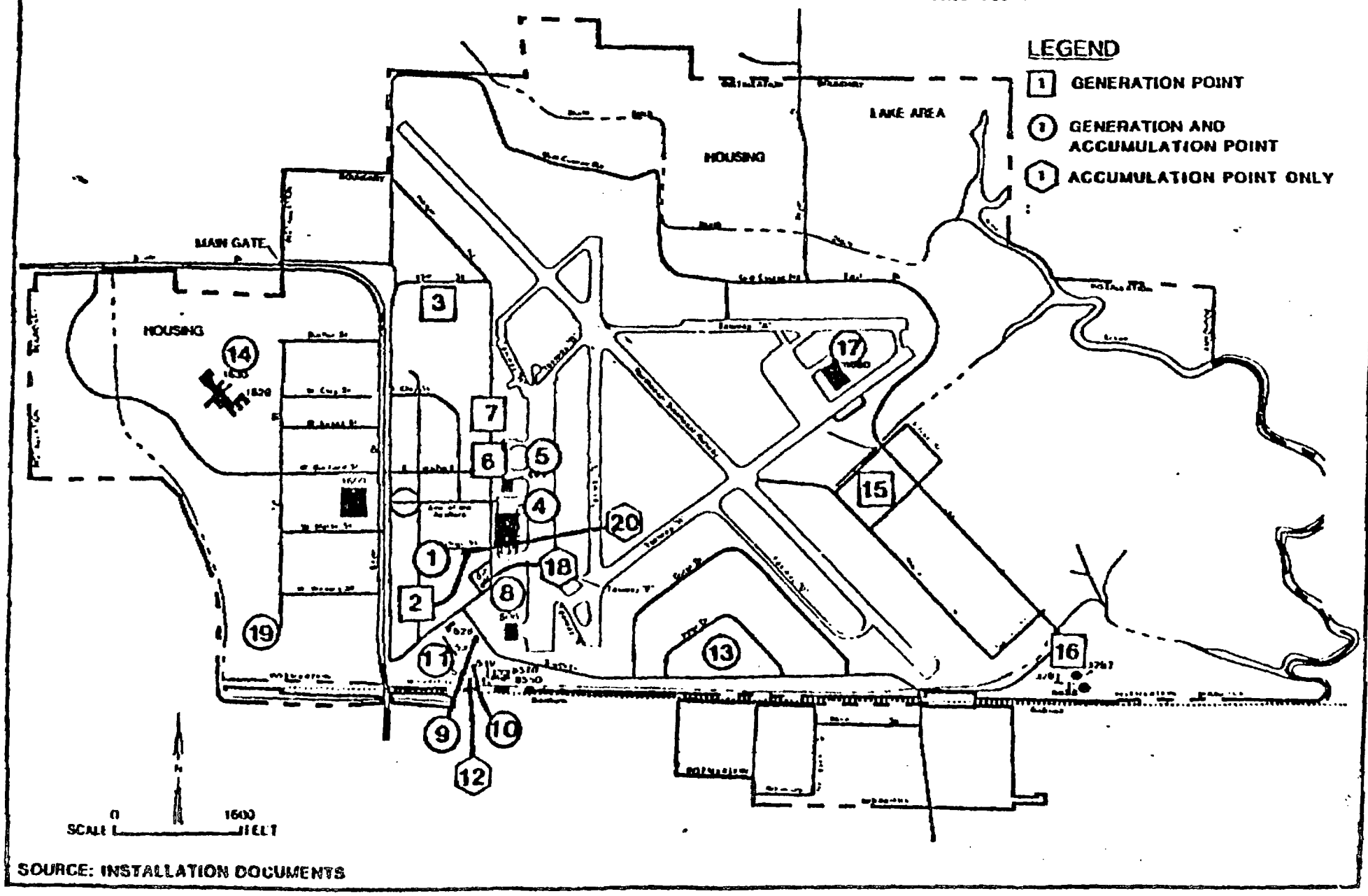
LOCATION CODE	SITE	SHOP	GENERATOR	ACCUMULATION POINT
1/2.	Bldg 548	375 TRANSS Vehicle Maintenance Shop	Yes	Yes
3.	Bldg 382	375 SUPS Fuels Lab	Yes	No
4.	Bldg 433	Hanger No. 1	Yes	Yes
5.	Bldg 441	375 CAMS	Yes	Yes
6.	Bldg 443	375 CAMS	Yes	No
7.	Bldg 456	375 CAMS-AGE	Yes	No
8.	Bldg 506	Hanger No. 3	Yes	Yes
9.	Bldg 514	375 CES - Ext Elec., Entomology	Yes	Yes
10.	Bldg 515	375 CES - Grounds	Yes	Yes
11.	Bldg 532	375 CES - Paint	Yes	Yes
12.	Bldg 540	PCB Transformer Storage	No	Yes
13.	Bldg 700	375 ABG Printing	Yes	Yes
14.	Bldg 1530	USAF Medical Center	Yes	Yes
15.	Bldg 3184	375 TRANSS Refueling Maintenance	Yes	No
16.	Bldg 3290	375 CES Sewage Treatment Plant	No	No
17.	Bldg 3680	102 Army Air Reserve	Yes	Yes

LOCATION CODE	SITE	SHOP	GENERATOR	ACCUMULATION POINT
18.	Aqua Yard	Waste Storage Tanks	No	Yes
18.	Bldg 59	Waste Storage Area	No	Yes
19.	Bldg 1989	Auto Hobby Shop	Yes	Yes
20.	Bldg 45	Waste Fuel Oil	No	Yes

APPENDIX 1 TO ANNEX B TO 375 AAW OPLAN 198-85 (OPR: 375 ABG/DE)
HAZARDOUS MATERIALS MAP

SCOTT AFB

FUELS AND HAZARDOUS MATERIALS



Chemical	Hazard	Basis for Hazard Designation
Methyl ethyl ketone	Toxic	Listed Waste U159
Naptha	Ignitable	Characteristic Waste D001
Battery acid	Corrosive	Characteristic Waste D002
Dry cleaning solvent (PD-680)	Ignitable	Characteristic Waste D001
Perchloroethylene	Toxic	Listed Waste U210
Methyl methacrylate	Ignitable, Toxic	Listed Waste U162
Methyl ethyl ketone peroxide	Toxic, Reactive	Listed Waste U160
Toluene	Toxic	Listed Waste U220
1,1,1-trichloroethane	Toxic	Listed Waste U226
Trichloroethene	Toxic	Listed Waste U228
Xylene	Ignitable	Listed Waste U239
Denatured alcohol	Ignitable	Characteristic Waste D001
Ammonium hydroxide	Corrosive	Characteristic Waste D002
Dichloromethane	Toxic	Listed Waste U080
Methanol	Ignitable	Listed Waste U154
Primer	Ignitable	Characteristic Waste D001
Paint	Ignitable, Toxic	Characteristic Waste D001
Acetone	Ignitable	Listed Waste U002
Adhesive	Ignitable	Characteristic Waste D001
Carbon removing compound	Ignitable	Characteristic Waste D001
Cleaning compound	Ignitable, Corrosive	Characteristic Waste D001, D002
Enamel	Ignitable	Characteristic Waste D001
Epoxy remover	Ignitable, Toxic	Characteristic Waste D001

Chemical	Hazard	Basis for Hazard Designation
Hydrochloric acid	Corrosive	Characteristic Waste D002
Mercury	Ep Toxic	Characteristic Waste D009
Methylene chloride	Toxic	Listed Waste U080
Paint remover	Ignitable	Characteristic Waste D001
Potassium nitrate	Ignitable	Characteristic Waste D001
Sealing compound	Ignitable	Characteristic Waste D001
Tetrachloroethylene	Toxic	Listed Waste U210
Paint thinner	Ignitable, Toxic	Characteristic Waste D001

by wastage to ground, storm or sanitary sewers or contract disposal. Sludge generated by large bulk fuel storage facilities (No. 8550 and 8570) and possibly by others was placed in a bermed area adjacent to tanks 8552 and 8554 for drying from about 1975 to 1980. Existing policy now calls for drumming of all this waste for off-site disposal. Two tanks have been involved in major fuel spills and leaks; these are Facility 8550 and Facility 1965. These episodes are discussed in the subsequent section under Spills and Leaks.

Spills and Leaks

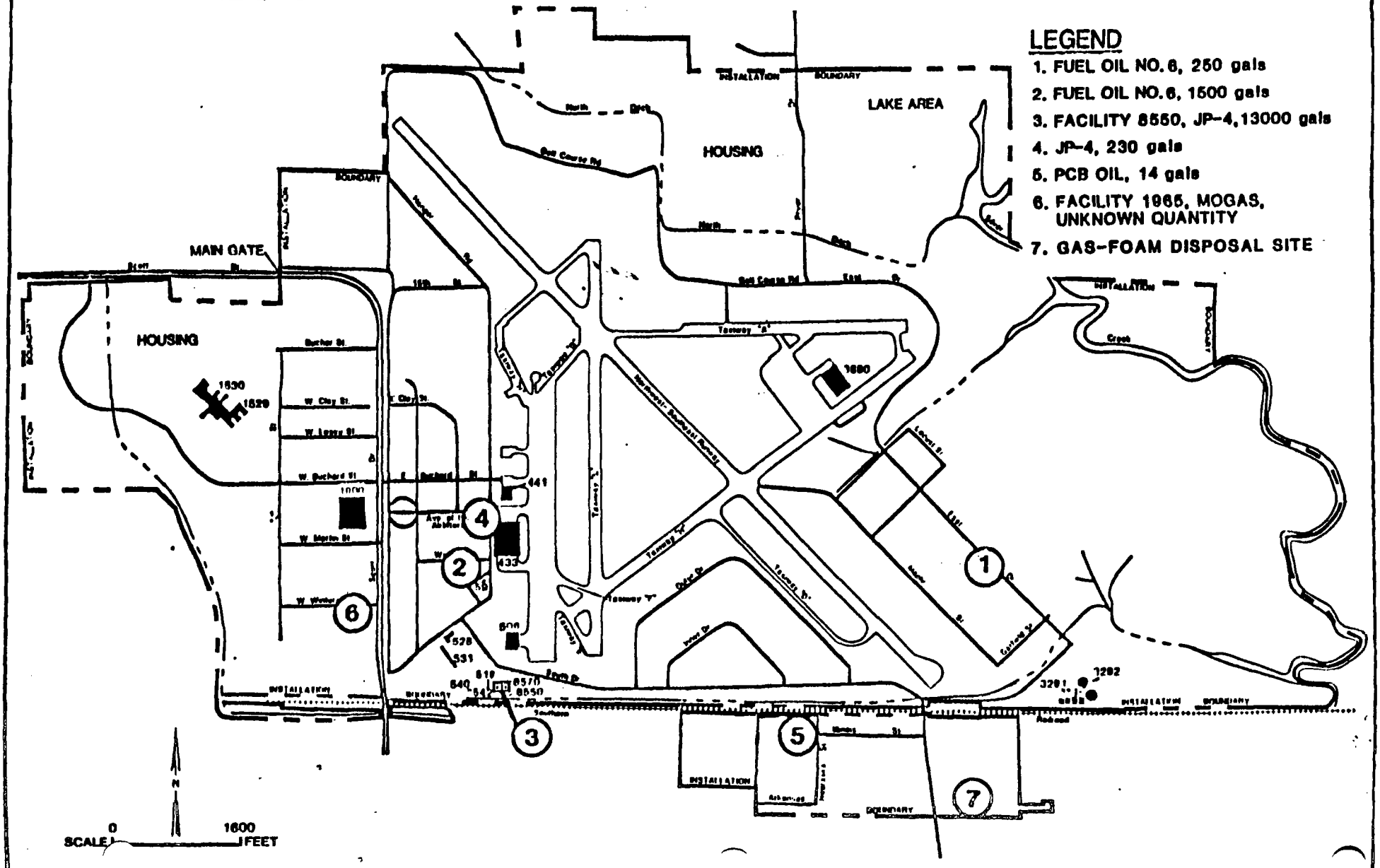
Base records and interviews with present and past personnel indicate several significant fuel leaks have occurred since 1950. Base records kept since 1974 also indicate that many minor spills and leaks have occurred. These minor spills were either allowed to evaporate, were picked up by Liquid Fuels Maintenance or the fire department, or were washed down sanitary or storm sewers with eventual discharge to Silver Creek.

The locations of seven significant leaks and spills are indicated on Figure 4.2. Two spills were noted in the SPCC plan of 1982 involving Fuel Oil No. 6 in February, 1978. The first spill resulted in about 250 gallons of Fuel Oil No. 6 entering a drainage ditch adjacent to the fueling point at Bldg. 3191. The drainage ditch discharges to Silver Creek and some oil was reported to have reached the creek. The second February, 1978 spill resulted in about 1,500 gallons of Fuel Oil No. 6 spilling into Silver Creek due to a rupture in a steam heating coil serving the 420,000 gallon tank at Bldg. No. 45.

Two other spills were reported involving JP-4. In 1977 approximately 13,000 gallons of JP-4 fuel were estimated lost in an incident involving Tank 8550. Base records are not clear on this matter. The incident alledgedly involved a 20,000 gallon spill, but only 6,000 or 7,000 gallons of fuel were recovered out of the diked area surrounding the tank, and an undetermined amount of fuel was discharged to Silver Creek. Seven recovery wells were dug to attempt to retrieve fuels that may have infiltrated into subsurface areas. The wells were dug about 18 inches in diameter and about 9 feet deep. The wells did not, however, yield any fuel. A recent incident (October, 1983) also involving JP-4 resulted in spillage of about 230 gallons into a drainage ditch near the

SCOTT AFB

LOCATION OF MAJOR SPILLS AND LEAKS



SOURCE: INSTALLATION DOCUMENTS

FIGURE 4.

intersection of Avenue of the Airlifters and Hanger Road. The drainage ditch discharged to the South Ditch/Silver Creek waterways. The incident originated when a fuel truck was involved in an accident with another vehicle.

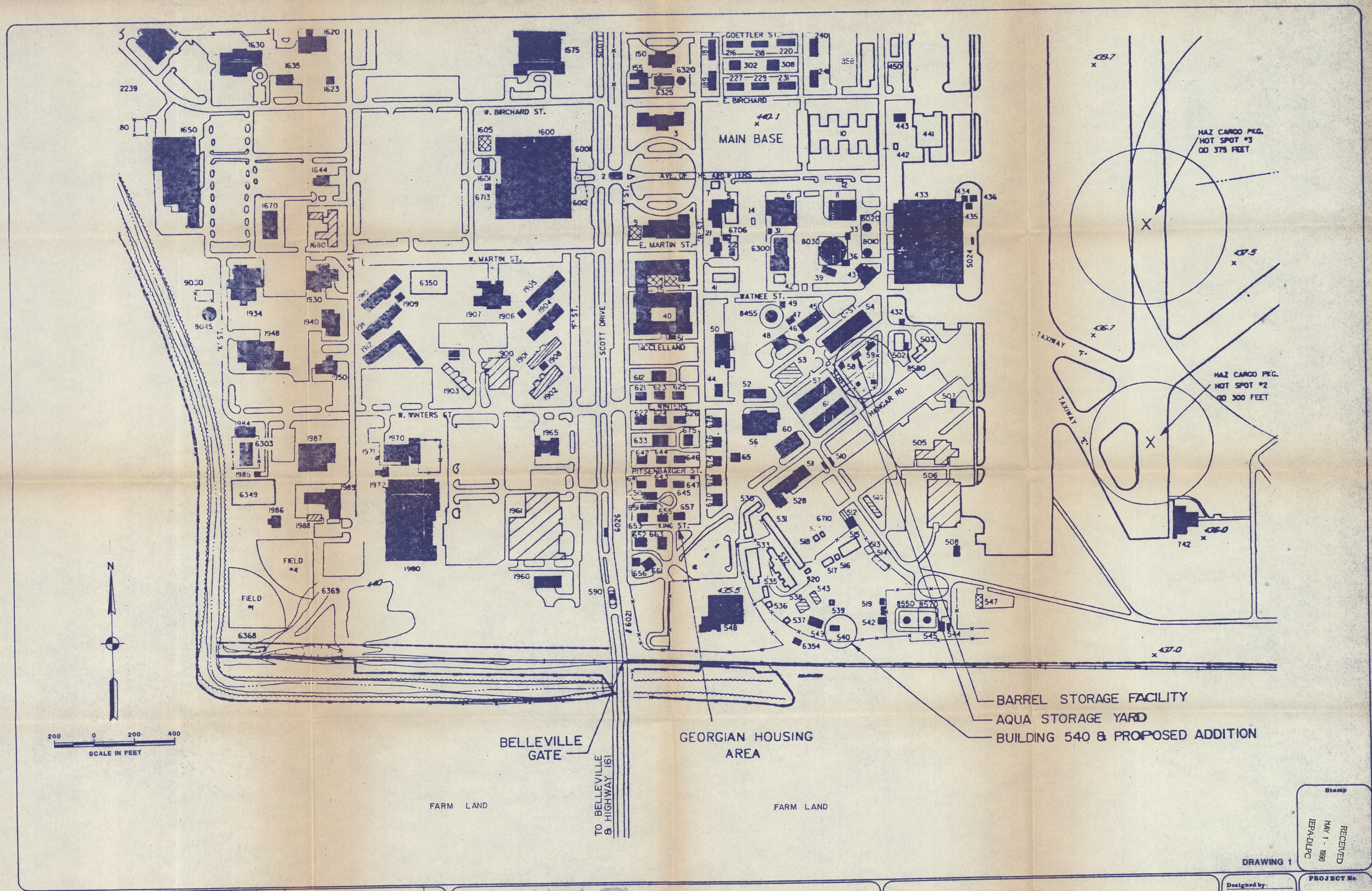
A spill of 14 gallons of PCB-containing transformer fluid (25-27 ppm) occurred in 1984 onto the gravelled area of the DPDO storage yard. Records indicate that all PCB residue was removed during cleanup operations at that time.

Another incident involving fuels occurred when an underground tank adjacent to the Facility 1965 BX service station was discovered to be leaking in the mid-1970's. The leak was attributed to a faulty valve on the tank. Since the leak was discovered indirectly from odors in the adjacent sanitary sewer lines, it is not known how long the tank may have leaked. A major effort was undertaken to recover lost fuel and the tank was dug up, repaired and put back in place. Although several barrels of fuel were recovered from the pit dug to retrieve the tank, the extent of any remaining contamination (if any) was not documented.

One spill of potentially hazardous material during the 1950's was noted. On one occasion during the 1950's a spill of aviation gasoline from an aircraft was mixed with fire extinguishing foam and removed from the concrete area where the spill occurred. This gasoline-foam mixture, estimated to include about 100 gallons of gasoline, was placed in a pit approximately 20 feet square and one to two feet deep south of the south end of the main runway. This site remains visible at present as a wet-weather pond in a black locust grove.

Pesticide Utilization

Pesticides have been used at Scott AFB for controlling weeds, insects, rodents and fungus. Pesticides used at the base are listed in Appendix D. Entomology mixes most of the chemicals used on base inside and/or adjacent to Building 1050. The golf course and grounds crew also mixes pesticides at a building located adjacent to the golf course (Bldg. 1197). In practice, the container rinsewater has been put back into sprayers for dilution water. Empty containers are punctured and disposed at the landfills used by the base before 1976 and since that time they have been disposed off base. Residual pesticide in the spray equipment is used at various areas where the material is being applied.



Stamp
RECEIVED
MAY 1 - 1990
IEPA-DLPC

DRAWING 1

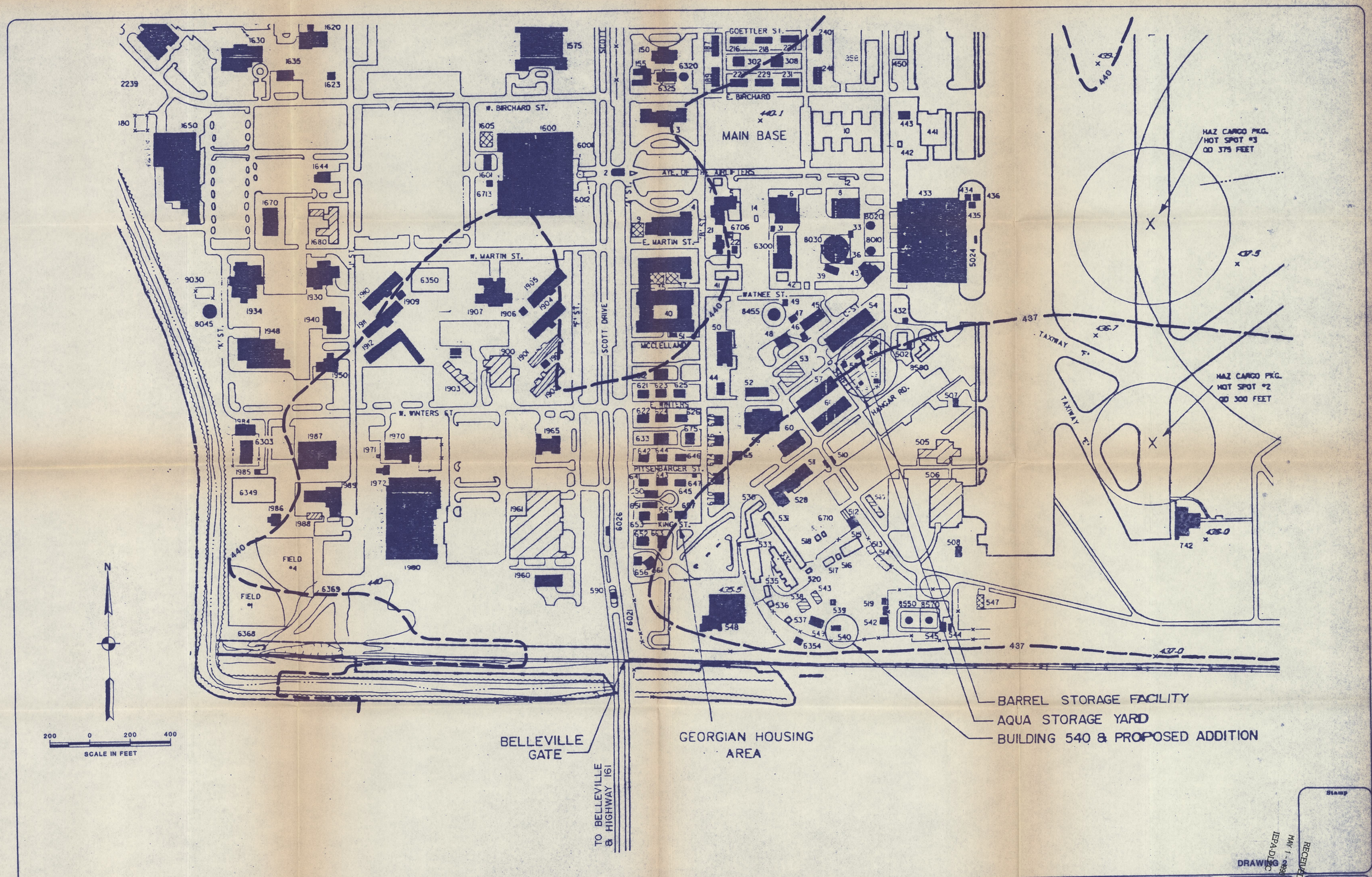
NO.	DATE	REVISION	BY	NO.	DATE	REVISION	BY

ENVIRONMENTAL TECHNICAL CONSULTANTS, INC.
■ Consulting Engineers and Scientists ■
1610 SOUTH BROADWAY ▪ LITTLE ROCK, AR 72202

BASE LAYOUT

Designed by:
Drawn by:
Checked by:
Date:

PROJECT No.
SHEET No.
OF



Stamp

RECEIVED
MAY 1 - 1989
IEPA-DLPC

DRAWING

NO.	DATE	REVISION	BY	NO.	DATE	REVISION	BY

ENVIRONMENTAL TECHNICAL CONSULTANTS, INC.

■ Consulting Engineers and Scientists ■

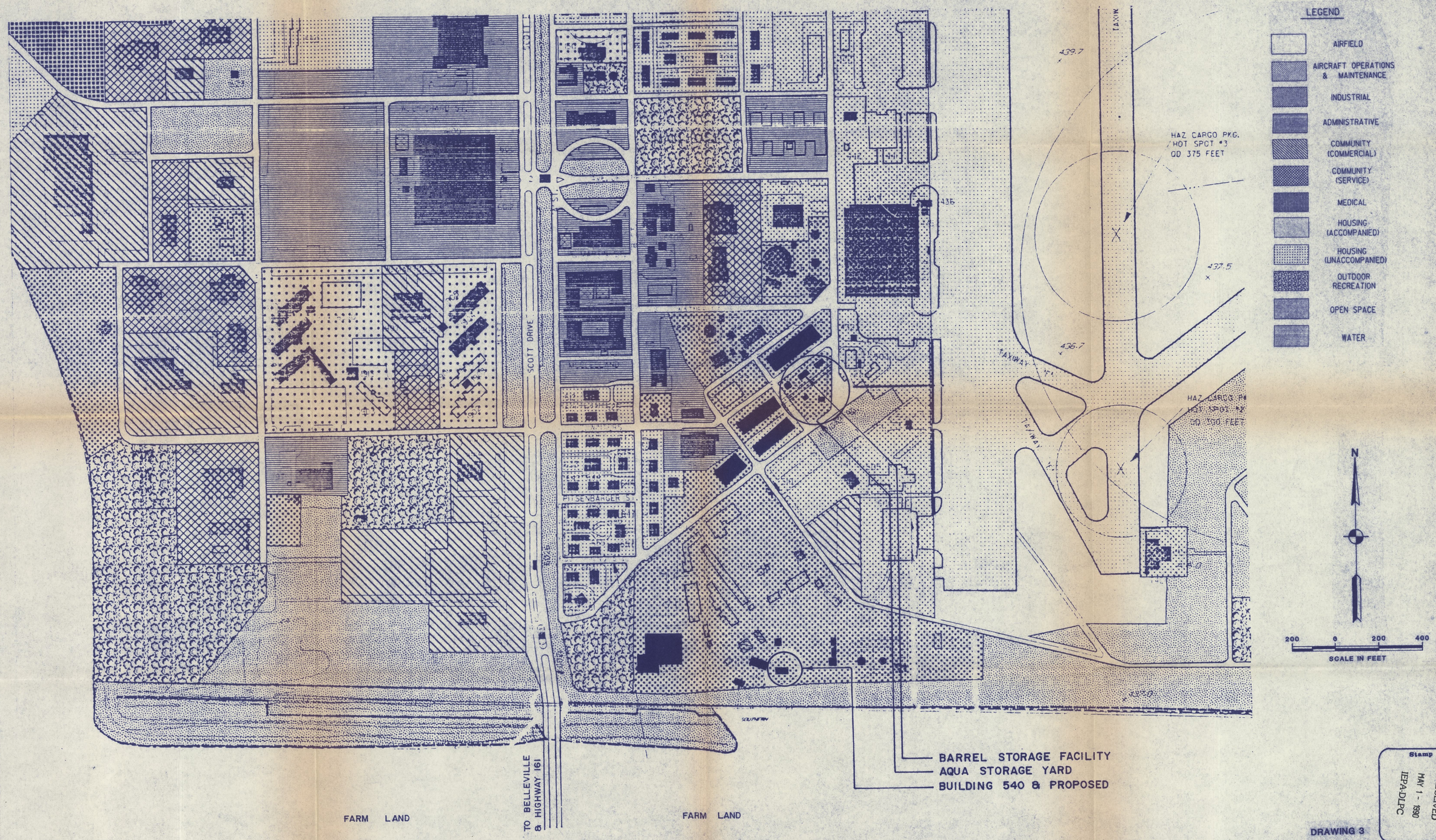
1510 SOUTH BROADWAY • LITTLE ROCK, AR 72202

TOPOGRAPHIC MAP

Designed by:
Drawn by:
Checked by:
Date:

PROJECT No.

SHEET No. ____ OF ____



Stamp
RECEIVED
MAY 1 - 1990
IEPA-DLPC

DRAWING 3

NO.	DATE	REVISION	BY	NO.	DATE	REVISION	BY

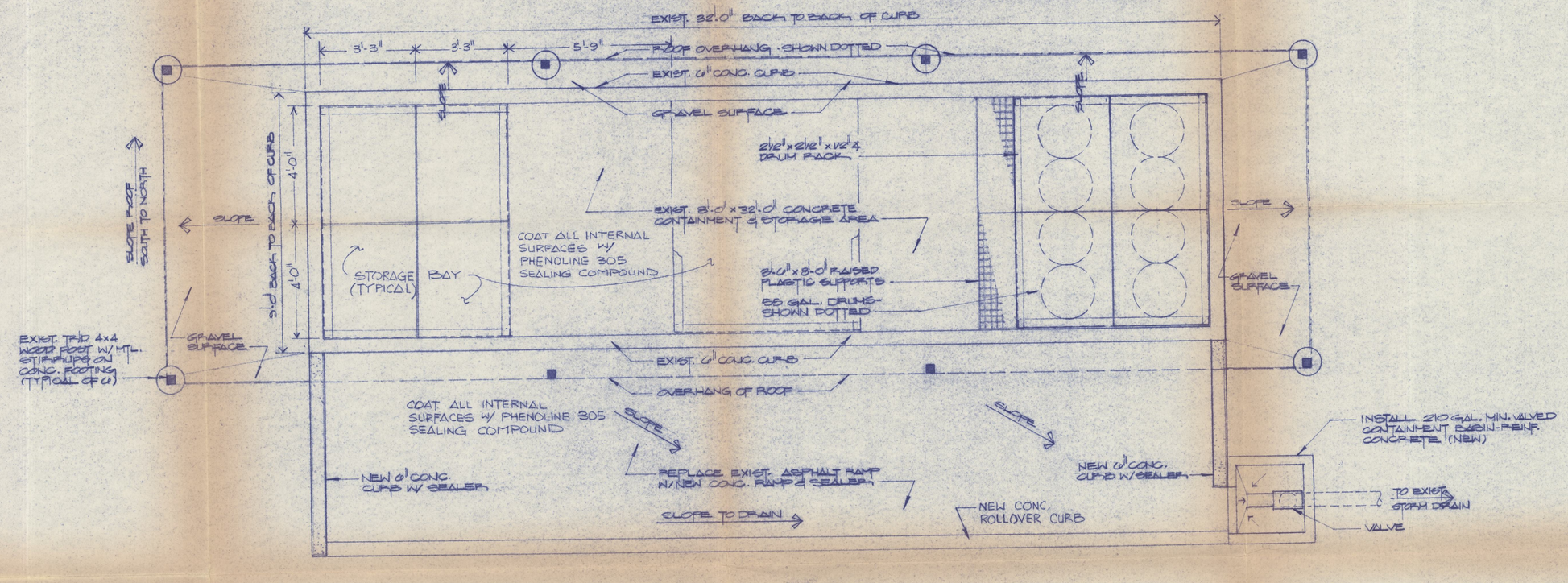
ENVIRONMENTAL TECHNICAL CONSULTANTS, INC.

■ Consulting Engineers and Scientists ■
1510 SOUTH BROADWAY • LITTLE ROCK, AR 72202

EXISTING LAND USE PLAN

Designed by:
Drawn by:
Checked by:
Date:

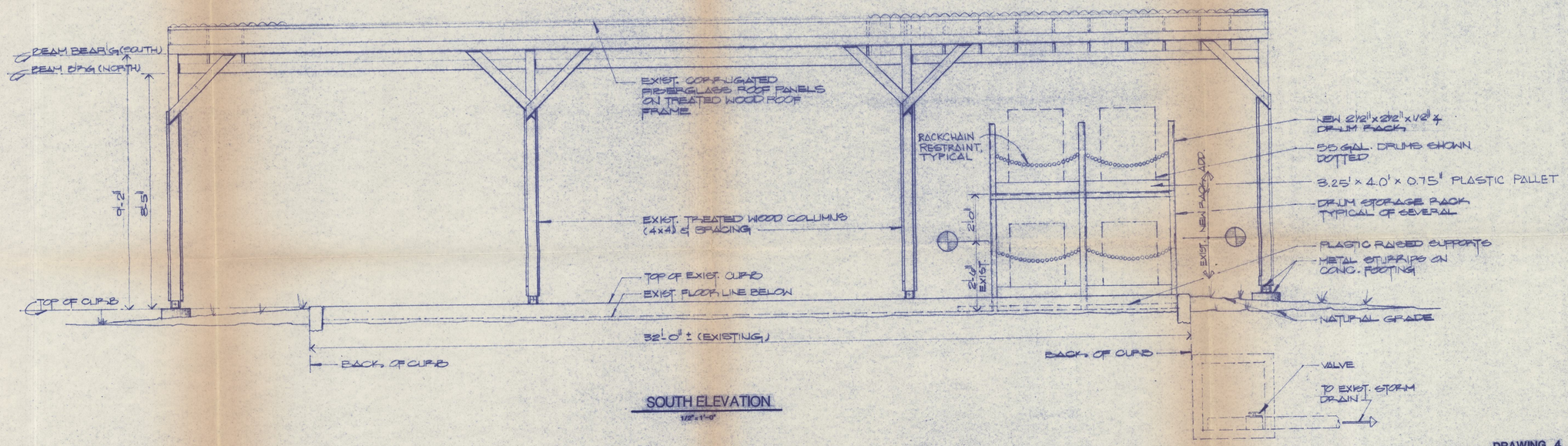
PROJECT No.
SHEET No.
OF



FLOOR PLAN

1/2" = 1'-0"

NORTH



SOUTH ELEVATION

1/2" = 1'-0"

DRAWING 4

Stamp

RECEIVED
MAY 1 - 1990
IEPA-DLPC

NO.	DATE	REVISION	BY	NO.	DATE	REVISION	BY

ENVIRONMENTAL TECHNICAL CONSULTANTS, INC.

Consulting Engineers and Scientists

1510 SOUTH BROADWAY • LITTLE ROCK, AR 72202

AQUA STORAGE YARD

PLAN & ELEVATION

Designed by:

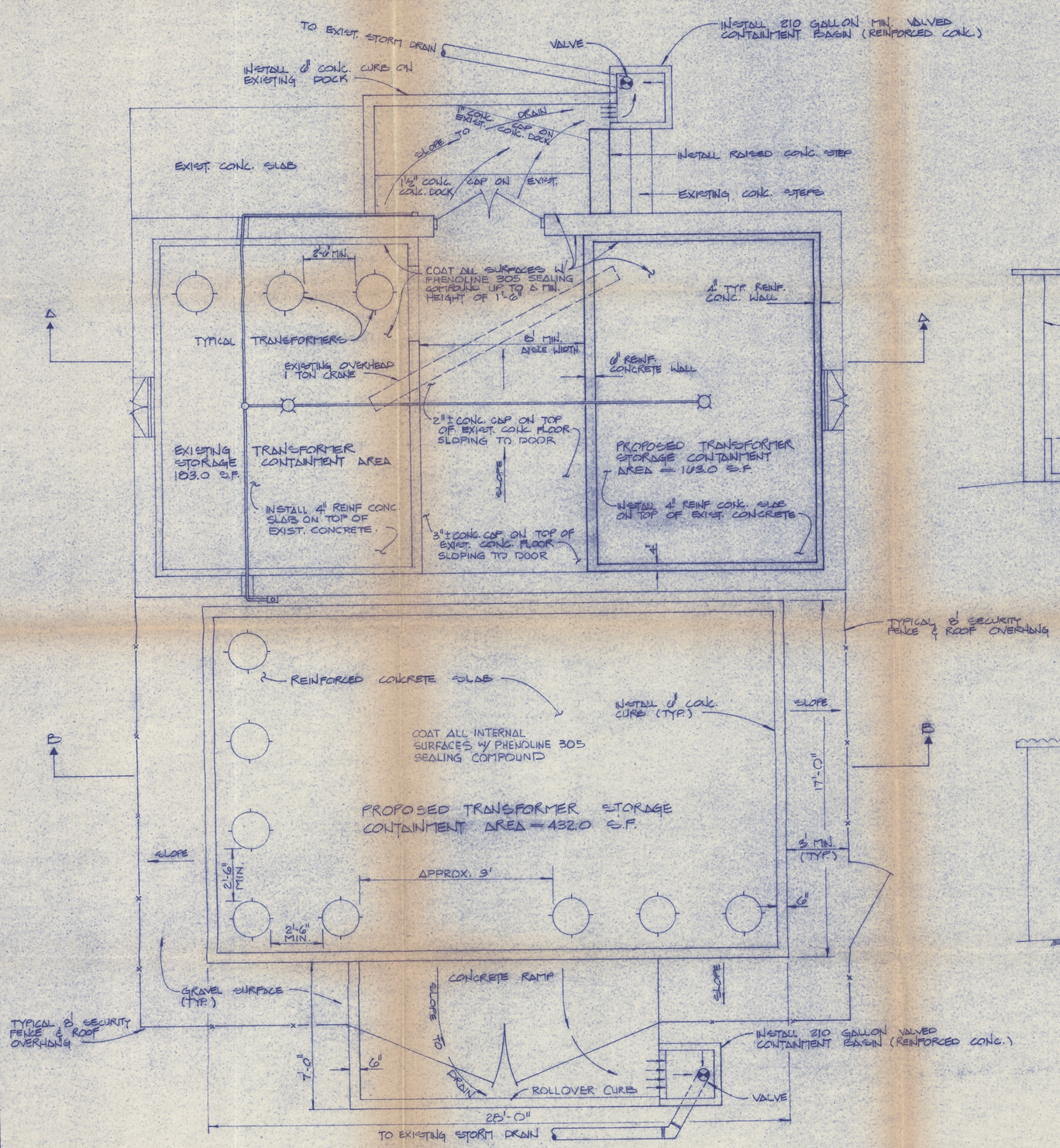
Drawn by:

Checked by:

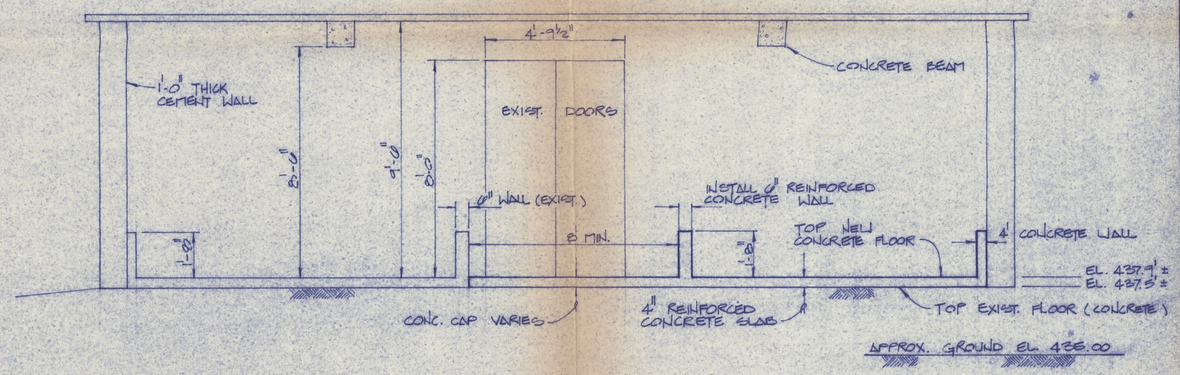
Date:

PROJECT No.

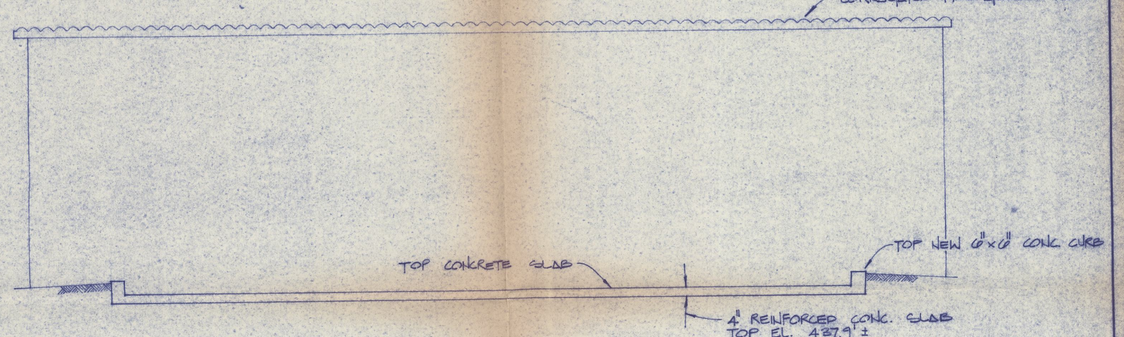
SHEET No. ____ OF ____



BUILDING 540 — PLAN VIEW
SCALE: 3/8" = 1'-0"



SECTION A-A
SCALE: 3/8" = 1'-0"



SECTION B-B
SCALE: 3/8" = 1'-0"

Stamp
RECEIVED
MAY 1 - 1990
IEPA-DLPC

DRAWING 5

NO.	DATE	REVISION	BY	NO.	DATE	REVISION	BY

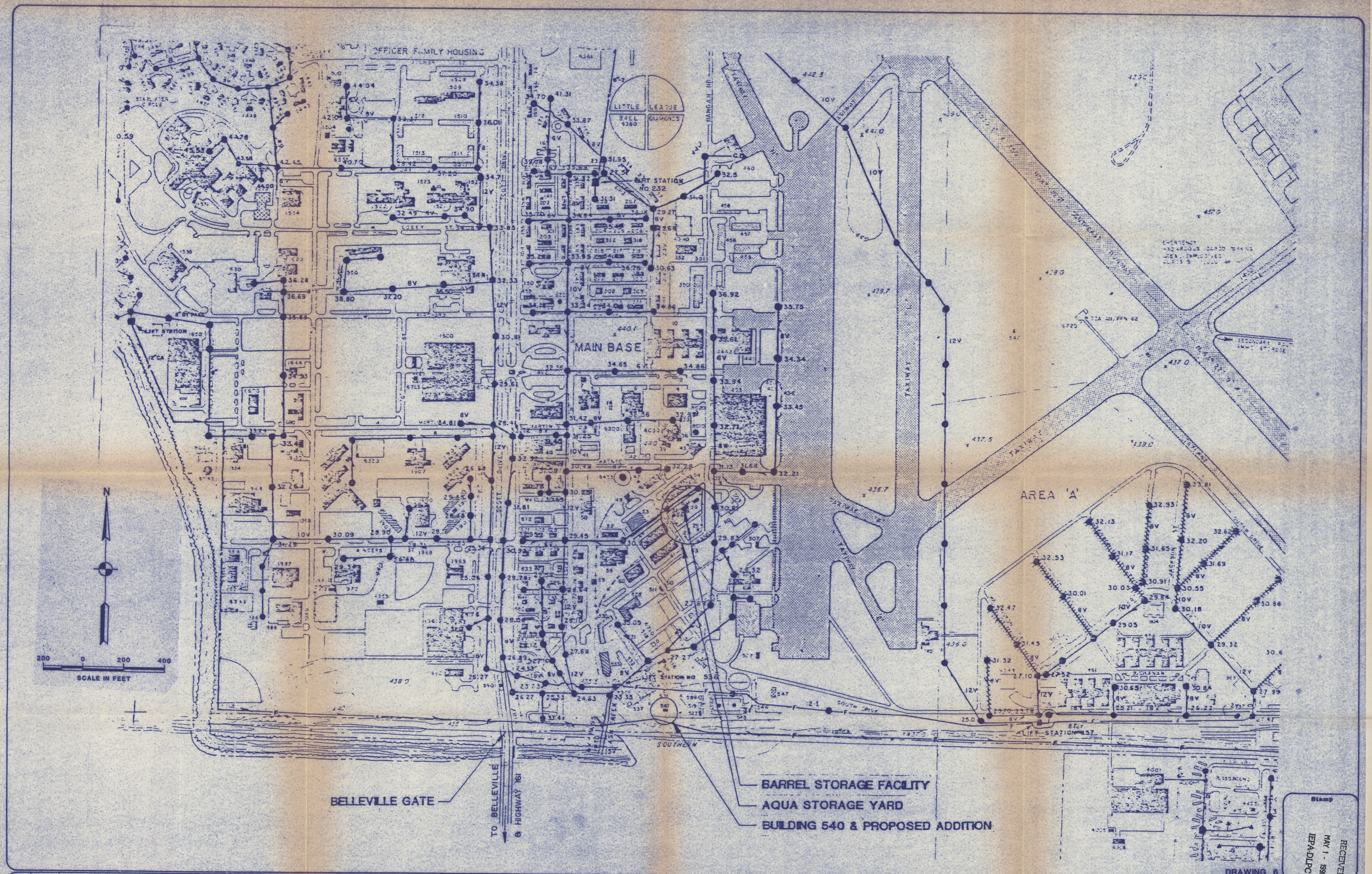
ENVIRONMENTAL TECHNICAL CONSULTANTS, INC.
■ Consulting Engineers and Scientists ■
1510 SOUTH BROADWAY • LITTLE ROCK, AR 72202

BUILDING 540

FLOORPLAN & SECTIONS

Designed by:
Drawn by:
Checked by:
Date:

PROJECT No.
SHEET No.
OF



Stamp
RECEIVED
MAY 1 - 1990
IEPA-DLPC

DRAWING 6

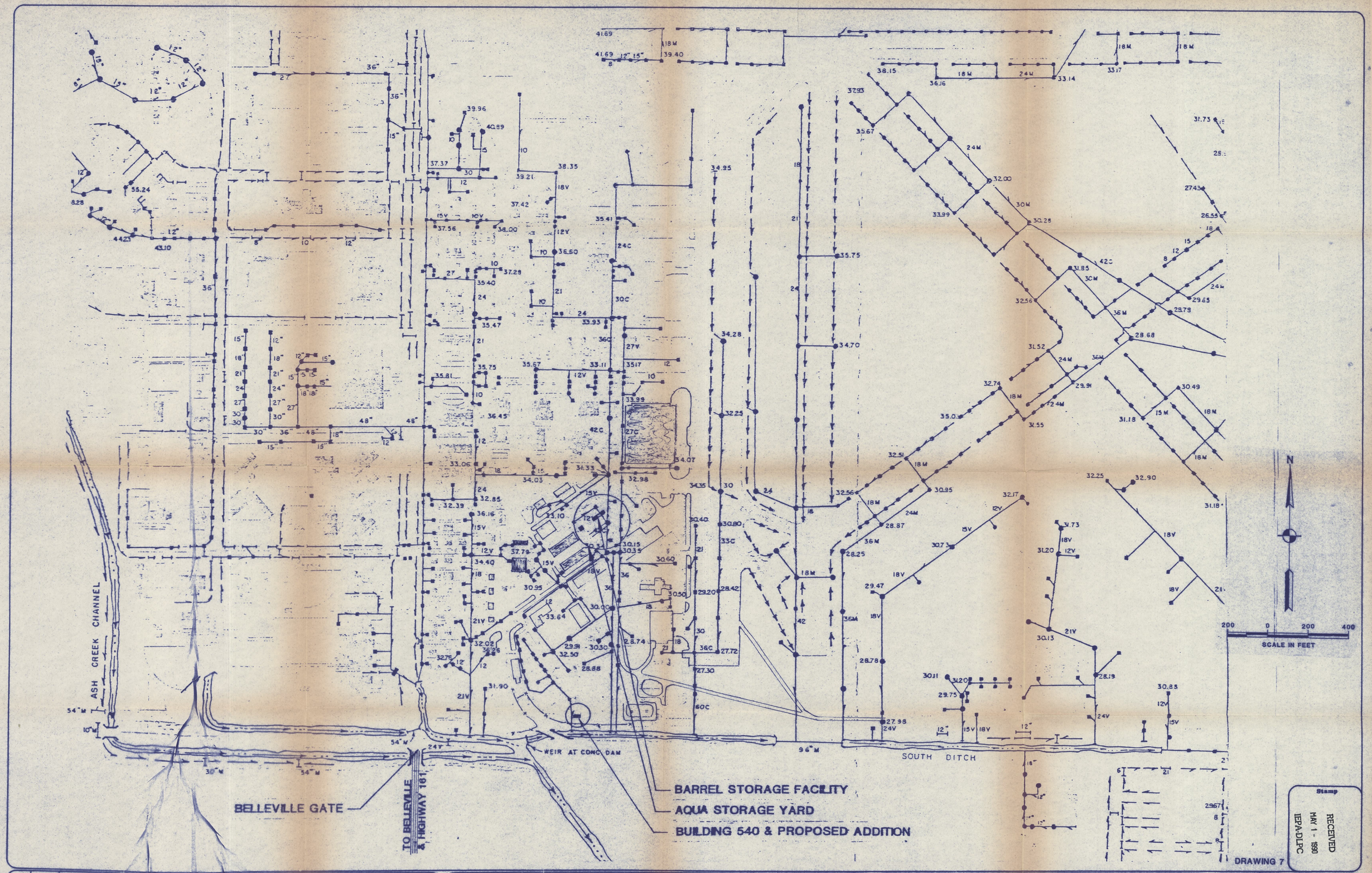
NO.	DATE	REVISION	BY	NO.	DATE	REVISION	BY

ENVIRONMENTAL TECHNICAL CONSULTANTS, INC.
■ Consulting Engineers and Scientists ■
1510 SOUTH BROADWAY • LITTLE ROCK, AR 72202

SANITARY SEWER SYSTEM

Designed by:
Drawn by:
Checked by:
Date:

PROJECT No.
SHEET No.
OF



NO.	DATE	REVISION	BY	NO.	DATE	REVISION	BY

ENVIRONMENTAL TECHNICAL CONSULTANTS, INC.

■ Consulting Engineers and Scientists ■

1510 SOUTH BROADWAY • LITTLE ROCK, AR 72202

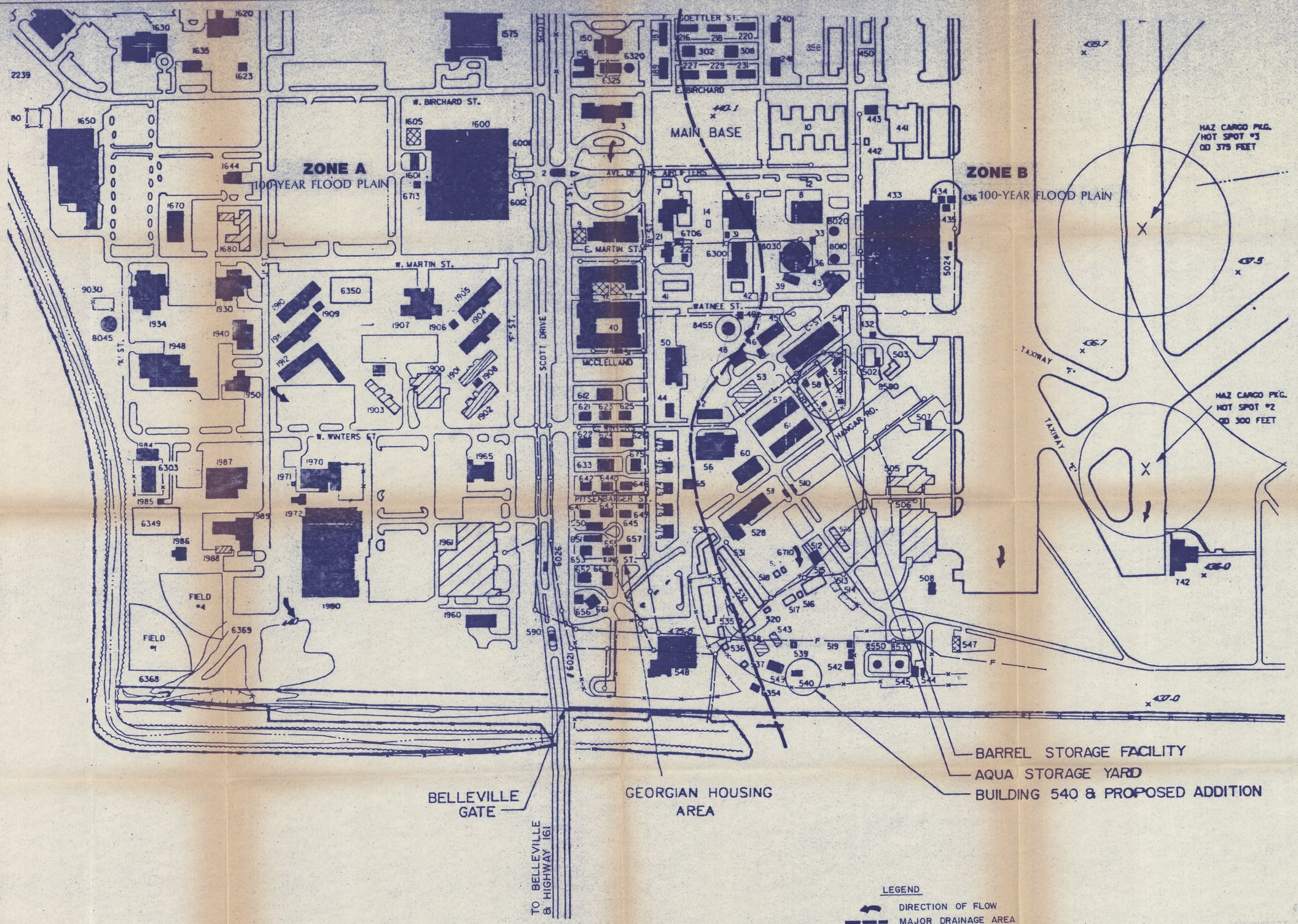
STORM DRAINAGE SYSTEM

Designed by:
Drawn by:
Checked by:
Date:

PROJECT No.

SHEET No.

OF



DRAWING 8

Stamp
RECEIVED
MAY 1 - 1990
IEPA-DLPC

NO.	DATE	REVISION	BY	NO.	DATE	REVISION	BY

ENVIRONMENTAL TECHNICAL CONSULTANTS, INC.
■ Consulting Engineers and Scientists ■
1510 SOUTH BROADWAY • LITTLE ROCK, AR 72202

FLOOD PLAIN & DRAINAGE MAP

Designed by:
Drawn by:
Checked by:
Date:

PROJECT No.
SHEET No.
OF