TINKER AIR FORCE BASE

DRAFT
RCRA OPERATIONS PERMIT

For Renewal of:
Permit No. 571724391

Prepared by:

Oklahoma Department of Environmental Quality

Submitted By:

Environmental Management Directorate
OC-ALC/EM
Tinker AFB, Oklahoma

FACT SHEET

Tinker Air Force Base
Oklahoma City Air Logistics Center
Oklahoma City, Oklahoma

FACT SHEET

Permit Conditions for a
Hazardous Waste Facility
Operations Permit

Type of Action:	Oklahoma Department of Environmental Quality RCRA Permit for a Hazardous Waste Storage Facility and corrective action at Solid Waste Management Units under the Hazardous and Solid Waste Amendments of 1984 (HSWA)
Type of Facility:	U. S. Military Installation - Hazardous Waste Storage Facility
EPA ID Number:	OK1571724391
Location:	Building 810 Tinker Air Force Base Oklahoma City, Oklahoma 73145
Legal Description:	Located within the NE/4 of the NW/4 of the NW/4 of Section 27, Township 11 North, Range 2 West, I. M., the north side of which is 270 feet south of the north boundary line of Section 27 (center line of SE 59th Street), and the west side of which is 920 feet east of the west boundary line of Section 27 (center line of Air Depot Boulevard), all in Oklahoma County, Oklahoma.
Geographic Location:	Latitude: 35° 24' 12" North Longitude: 97° 38' 57" West
Landowner:	United States Air Force
Facility Operator:	Defense Reutilization and Marketing Service (DRMS) Defense Reutilization and Marketing Office (DRMO) Tinker Air Force Base, OK 73145 (405) 734-7033
Term of Permit:	August___, 2002 through August___, 2012

Basis of the Permit

Tinker Air Force Base submitted to the Oklahoma Department of Environmental Quality Land Protection Division an application for the renewal of its Resource

Conservation and Recovery Act permit. The basis of the permit renewal is for operation of the hazardous waste storage facility and the corrective measures programs for the solid waste management units (SWMUs) on the base.

During 1999 - 2000 Tinker AFB applied for no further [corrective] action on fourteen SWMUs and three other waste management sites listed below:

SWMU 7 (former Fire Training Area 1)
SWMU 14 (Sludge Drying Beds)
SWMU 16 (Bldg. 201, West Alcove)
SWMU 17 (Bldg. 201, North Side)
SWMU 18 (Bldg. 201 Southwest Alcove)
SWMU 19 (Radioactive Waste Disposal Site (RWDS) 1030W)
SWMU 20 (RWDS 201S)
SWMU 21 (RWDS 62598)
SWMU 22 (RWDS 1022E)
SWMU 24.2 (Industrial Wastewater Treatment Plant (IWTP) - Tanks D-1 and D-2)
SWMU 24.9 (IWTP - Wet Lift Station)
SWMU 24.10 (IWTP - Softener Basin)
SWMU 24.13 (IWTP - Industrial Sludge Drying Beds), and
SWMU 24.14. (IWTP - Abandoned Waste Tanks)
AOC 2 (Old Pesticide Storage Area)
Waste Fuel Dump Site (no number)
Fuel Truck Maintenance Area (no number)

The Oklahoma DEQ concurred that no further investigation or remedial activities were necessary for these sites, and approved "no further action" for the site contingent upon fulfillment of public notice requirements. Therefore, by the implementation of this renewal RCRA Permit, these sites will be removed from the Hazardous Waste and Solid Waste Amendments of 1984 (HSWA) section (Section IV) of the RCRA permit. This permit reflects Oklahoma DEQ findings, affirming that twenty-nine SWMUs listed in Section IV of the permit remain in Tinker AFB's corrective action program. RFI requirements listed in the corrective section of the permit shall apply to any SWMUs discovered after the effective date of this permit modification.

The basic requirements of the Oklahoma Hazardous Waste Management Act (OHWMA); the State Rules and Regulations for Hazardous Waste Management (Rules) as amended; and the federal RCRA and HSWA have been met. The Oklahoma DEQ has prepared permit conditions for the management and storage of hazardous wastes, and corrective action activities.

Information Resources:

Copies of the permit conditions and the Part A and B applications are available for review during normal business hours at the location listed below:

Land Protection Division
707 North Robinson, 5th Floor
Oklahoma City, Oklahoma 73102
(405) 702-5100

Telephone inquires may be directed to:

Oklahoma DEQ: Dr. Saba Tahmassebi (405) 702-5100

Tinker AFB: Mr. Leaman Harris (405) 734-3277

Comment Period and Procedures:

Comments on the draft permit conditions may be submitted in writing to Oklahoma DEQ at the address below. All comments must be received at the Oklahoma DEQ no later than the close of business 45 days from the date of the public notice. Also, persons residing or doing business in Oklahoma may request in writing a formal public meeting to make oral and written comments on the draft permit. A request for a public meeting should state the nature of the issues proposed to be raised in the meeting.

Land Protection Division
Attn: Dr. Saba Tahmassebi, Chief Engineer
Oklahoma Department of Environmental Quality
Post Office Box 1677
Oklahoma City, OK 73101-1677

Oklahoma DEQ's comment and public hearing procedures may be found in 40 CFR 124.10 and 124.12.

SIGNATURE PAGE

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
HAZARDOUS WASTE STORAGE FACILITY PERMIT

EPA ID No.: OK1571724391

Permittee: Tinker Air Force Base

Operator: Defense Reutilization and Marketing Service
Defense Reutilization and Marketing Office

Permit Number: 1571724391

Effective Date: March __, 2002
Expiration Date: March __, 2012

Pursuant to the Oklahoma Hazardous Waste Management Act (OHWMA) (27A O.S. Supp. 2000, §2-7-101 et seq.) and regulations promulgated thereunder, Oklahoma Administrative Code (OAC) 252:205, and authorization by the United State Environmental Protection Agency pursuant to the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 USC 6901 et seq., commonly known as RCRA), including the Hazardous and Solid Waste Amendments of 1984 (HSWA), and regulations promulgated thereunder by the U.S. Environmental Protection Agency (EPA) (codified in Title 40 of the Code of Federal Regulations), a Permit to operate a hazardous waste storage facility (HWSF) and to conduct corrective action activities is issued by the Oklahoma Department of Environmental Quality (DEQ) to Tinker Air Force Base (hereafter called the Permittee). The HWSF is located at Tinker Air Force Base, Oklahoma, at Latitude: 35° 24′ 18″ North, Longitude: 97° 24′ 10″ West. The HWSF has a capacity of 158,796 gallons.

Corrective action provisions for various solid waste management units (SWMUs) under the HSWA requirements for the site are incorporated into Section IV of this permit.

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein (including those in any attachments), and the applicable laws and regulations contained in the OHWMA, OAC252:205 and 40 CFR Parts 124, 260 through 264, 266, 268, and 270, as specified in the permit. Applicable regulations are those which are in effect on the date of issuance of the permit, in accordance with 40 CFR 270.32(c).

This permit is also based on the assumption that all the information submitted in the Permittee's Part B permit application attached to the Permittee's letter dated May 16, 2001 and subsequent submissions, are accurate and that the facility will conduct hazardous waste management operations as specified in the application.

Any inaccuracies found in the submitted information may be grounds for revocation and reissuance, modification, or termination of this permit in accordance with 40 CFR 270.41, 270.42, and 270.43 and for enforcement action.

This permit became effective March , 2002, and shall remain in effect until March , 2012, unless revoked and reissued under 40 CFR 270.41, terminated under 40 CFR 270.43, or continued in accordance with 40 CFR 270.51(a), OAC 252:205 and the Oklahoma Administrative Procedures Act.

Issued this _____ day of March, 2002

_____

Mark S. Coleman Date
Executive Director
Oklahoma Department of Environmental Quality

_____

Scott Thompson Date
Director
Land Protection Division
Oklahoma Department of Environmental Quality

_____

Saba Tahmassebi, Ph.D., P.E. Date
Chief Engineer
Land Protection Division
Oklahoma Department of Environmental Quality

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SECTION ONE

SECTION I - GENERAL PERMIT CONDITIONS

A. GENERAL

The Permittee shall operate the permitted facility in compliance with the provisions of the Oklahoma Hazardous Waste Management Act (OHWMA), 27A O.S. Supp. 2000 §§ 2-7-101 et seq., as amended, the Department of Environmental Quality (ODEQ or Department) Regulations for Hazardous Waste Management, Oklahoma Administrative Code (OAC) 252:205 (Rules), the Federal Resource Conservation and Recovery Act (RCRA), the Hazardous and Solid Waste Amendments of 1984 (HSWA), and the approved permit application as further modified through permit conditions set herein.

B. BASIS OF PERMIT

This permit is granted based on the information submitted and the design criteria presented in the January 15, 2001, application and all subsequent revisions. Any inaccuracies found in this information could provide cause for the termination or modification of this permit, and for enforcement action. The Permittee is to inform the Land Protection Division of the Oklahoma DEQ of any deviation from, or changes in, the design or operation of the facility which could affect the Permittee's ability to comply with the applicable regulations or permit conditions.

C. INCORPORATION BY REFERENCE

All the referenced Code of Federal Regulations (40 CFR) Parts 124, 144, 146, 260 through 266, 268, and 270 as specified in the permit are, unless otherwise stated, incorporated in their entirety by OAC 252:205-3-2 et seq. of the Rules, as amended.

D. DEFINITIONS

For purposes of this permit, terms used herein shall have the same meaning as those in 40 CFR Parts 124, 260, 261, 264, 266, 268, and 270; and OAC 252:205-1-2 and 252:205-3-4 of the Rules, unless this permit specifically provides otherwise. Where terms are not defined in the regulations or the permit, the meaning associated with such terms shall be defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term. "Executive Director" means the Executive Director of the Oklahoma DEQ, or his/her designee or authorized representative. "Director" means the Director of the Land Protection Division of the Oklahoma DEQ, or his/her designee or authorized representative. "Administrative Authority" means the Executive Director or the Director.

E. EFFECT OF PERMIT

The Permittee is authorized and required to operate the following facility for the effective term of this permit specified in permit Section I, F.4. subject to the limitations contained herein.

> Hazardous Waste Storage Facility (also known as HWSF), capacity 158,796 gallons; for storage of solid and hazardous wastes prior to off-site disposition or disposal.

Any hazardous waste activities not authorized in this permit are prohibited, unless exempted from permit requirements. Subject to 40 CFR 270.4, compliance with this permit generally constitutes compliance, for purposes of enforcement, with Subtitle C of RCRA. Issuance of this permit does not convey any property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of state or local laws or regulations. Compliance with the terms of this permit does not constitute a defense to any order issued or any action brought under the OHWMA; Sections 3008(a), 3008(h), 3013, or 7003 of RCRA; Sections 104, 106(a) or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. § 9601 et seq., commonly known as CERCLA), or any other law providing for protection of public health or the environment from an imminent or substantial endangerment. [40 CFR 270.4 and 270.30(g)]

F. PERMIT ACTIONS

1. Permit Modification, Revocation and Reissuance, and Termination

This permit may be modified, revoked and reissued, or terminated for cause, as specified in 40 CFR 270.41, 270.42, and 270.43. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee, does not stay the applicability or enforceability of any permit condition. [40 CFR 270.4(a), and 270.30(f)]

2. Permit Renewal

This permit may be renewed as specified in 40 CFR 270.30(b) and 270.51 and permit Section I, H.2. Review of any application for a permit renewal shall consider improvements in the state of control and measurement technology, as well as changes in applicable regulations. [40 CFR

270.30(b), HSWA Sec.212, and OHWMA 27A O.S. Supp. 2000 Sec. 2-7-127(B)]

3. Permit Modifications

Any proposal for a major modification (Class III) shall require amendment of the permit and the opportunity for public meeting. A proposal for a Class III modification requires two opportunities for a public meeting, one to be conducted by the facility upon submission of the proposed modification to Oklahoma DEQ and one to be conducted by Oklahoma DEQ upon issuance of a draft permit. A proposal for a Class II modification requires only that the facility conduct a public meeting upon submission of the proposed modification to Oklahoma DEQ. The Administrative Authority may modify a permit to make corrections or allowances for minor modifications (Class I) to a permit as outlined in 40 CFR 270.42. An opportunity for a public meeting is not required under the conditions relating to minor modifications.

4. Permit Expiration

Pursuant to 40 CFR 270.50, this permit shall be effective for a fixed term not to exceed 10 years. This permit and all conditions herein will remain in effect beyond the permit's expiration date, if the Permittee has submitted a timely, complete application (see 40 CFR 270.10, 270.13 through 270.29) and, through no fault of the Permittee, the Administrative Authority has not issued a new permit, as set forth in 40 CFR 270.51. Permits continued under this section remain fully effective and enforceable. When the Permittee is not in compliance with the conditions of the expiring or expired permit, the Administrative Authority may choose to do any one or more of the following:

a. Initiate enforcement action based upon the permit which has been continued;
b. Issue an intent to deny the new permit under 40 CFR Section 124.6. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;
c. Issue a new permit under Part 124 with appropriate conditions; or
d. Take other actions authorized by the regulations.

5. Transfer of Permits

This permit is not transferable to any person, except after notice to the Administrative Authority. The Administrative Authority may require

modification or revocation and reissuance of the permit pursuant to 40 CFR 270.40. Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner or operator in writing of the requirements of 40 CFR Parts 264 and 270 and this permit. [40 CFR 270.30(l)(3) and 264.12(c)]

G. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby. [40 CFR 124.16(a)]

H. DUTIES AND REQUIREMENTS

1. Duty to Comply

The Permittee shall comply with all conditions of this permit, except to the extent and for the duration that noncompliance is authorized by an emergency permit. Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of OHWMA and RCRA and is grounds for enforcement action, for the permit termination or revocation and reissuance, or modification, or denial of a permit renewal application. [40 CFR 270.30(a)]

2. Duty to Reapply

If the Permittee wishes to continue an activity allowed by this permit after the expiration of this permit, the Permittee shall submit a complete application for a new permit at least 180 days prior to permit expiration. [40 CFR 270.10(h) and 270.30(b)]

3. Monthly Reports

The Permittee shall submit monthly reports in accordance with OAC 252:205-9-2.

4. Biennial Report

The Permittee shall comply with the biennial reporting requirements of 40 CFR 264.75.

5. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [40 CFR 270.30(c)]

6. Duty to Mitigate

In the event of noncompliance with this permit, the Permittee shall take all reasonable steps to minimize releases to the environment and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment. [40 CFR 270.30(d)]

7. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance/quality control procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this permit. [40 CFR 270.30(e)]

8. Duty to Provide Information

The Permittee shall furnish to the Administrative Authority, within a reasonable time, any relevant information which the Administrative Authority may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Administrative Authority, upon request, copies of records required to be kept by this permit. [40 CFR 270.30(h)]

9. Inspection and Entry

Pursuant to 40 CFR 270.30(i), the Permittee shall allow the Administrative Authority, or an authorized representative, upon clearance with the Air Force Security Police via the Directorate of Environmental Management, and the presentation of credentials and other documents, as may be required by law, to:

a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by RCRA or OHWMA, any substances or parameters at any location.

10. Reporting Planned Changes

The Permittee shall give notice to the Administrative Authority, as soon as possible, of any planned physical alterations or additions to the permitted facility. [40 CFR 270.30(l)(1)]

11. Reporting Anticipated Noncompliance

The Permittee shall give advance notice to the Administrative Authority of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. [40 CFR 270.30(l)(2)]

12. Twenty-four Hour Reporting [40 CFR 270.30(l)(6) and OAC 252:205-13-1]

a. The Permittee shall report to the Administrative Authority any noncompliance which may endanger health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the circumstances. The report shall include the following:

i. Information concerning release of any hazardous waste that may cause an endangerment to public drinking water supplies.
ii. Any information of a release or discharge of hazardous waste, or of a fire or explosion from the hazardous waste management facility which could threaten the environment or human health outside the facility.

b. The description of the occurrence and its cause shall include:

i. Name, address, and telephone number of the owner or operator;
ii. Name, address, and telephone number of the facility;
iii. Date, time, and type of incident;
iv. Name and quantity of materials involved;
v. The extent of injuries, if any;
vi. An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and
vii. Estimated quantity and disposition of recovered material that resulted from the incident.

c. A written submission shall also be provided within five days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period(s) of noncompliance (including exact dates and times); whether the noncompliance has been corrected; and, if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Administrative Authority may waive the five-day written notice requirement in favor of a written report within fifteen (15) days.

13. Other Noncompliance

The Permittee shall report all other instances of noncompliance not otherwise required to be reported above at the time of the Compliance Evaluation Inspection. The reports shall contain the information listed in Permit Section I, H.9. [40 CFR 270.30(l)(10)]

14. Other Information

Whenever the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Administrative Authority, the Permittee shall promptly submit such facts or information. [40 CFR 270.30(l)(11)]

I. SIGNATORY REQUIREMENT

All applications, reports, or information submitted to or requested by the Administrative Authority, his designee, or authorized representative, shall be signed and certified in accordance with 40 CFR 270.11 and 270.30(k).

J. REPORTS, NOTIFICATIONS, AND SUBMISSIONS TO THE ADMINISTRATIVE AUTHORITY

All reports, notifications, or other submissions which are required by this permit to be sent or given to the Administrative Authority should be sent by certified mail or given to:

Department of Environmental Quality
Land Protection Division
707 North Robinson Avenue
Oklahoma City, Oklahoma 73101-1677

Telephone Number (405) 702-5100

K. CONFIDENTIAL INFORMATION

In accordance with 40 CFR 270.12, the Permittee may claim confidential any information required to be submitted by this permit. Any such claim must be asserted at the time of submission in the manner prescribed on the application form or instructions, or in the case of other submissions, by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of the submission, EPA and Oklahoma DEQ may make the information available to the public without further notice. If a claim is asserted, the information will be treated in accordance with the procedures in 40 CFR Part 2 (Public Information) and the Oklahoma open Records Act. Claims of confidentiality for the name and address of any permit applicant or permittee will be denied.

SECTION TWO

SECTION II - GENERAL FACILITY CONDITIONS

A. DESIGN AND OPERATION OF FACILITY

The Permittee shall construct, maintain and operate the permitted facility to minimize the possibility of a fire, explosion, or any unplanned, sudden or non-sudden release of hazardous waste constituents to air, soil, ground water, or surface water which could threaten human health or the environment, as required by 40 CFR 264.31. (Also see Permit Attachment 5.)

B. REQUIRED NOTICES

1. Hazardous Waste from Off-Site Sources

The permitted unit is not authorized to receive any hazardous waste from off-site sources other than from sources under the auspice of the defense Reutilization and Marketing Service and/or the Department of Defense or as provided by 10 U.S.C. 2692. The Permittee is not authorized to receive any hazardous waste from any non-Department of Defense foreign source. [40 CFR 264.12]

C. SECURITY

The Permittee shall comply with the security provisions of 40 CFR 264.14(b) and (c) and the approved Security Plan found in Permit Attachment 10.

D. GENERAL INSPECTION REQUIREMENTS

The Permittee shall follow the inspection schedule set out in Permit Attachment 6. The Permittee shall remedy any deterioration or malfunction discovered by an inspection, as required by 40 CFR 264.15(c). Records of inspections shall be kept, as required by 40 CFR 264.15(d).

E. PERSONNEL TRAINING

The Permittee shall conduct personnel training as required by 40 CFR 264.16. The Permittee shall maintain training documents and records, as required by 40 CFR 264.16(d) and (e). (Permit Attachment 7)

F. PREPAREDNESS AND PREVENTION

The Permittee shall equip, test and maintain safety, communication, alarm, and emergency equipment in accordance with the requirements of 40 CFR 264.32 and 264.33 as described in Permit Attachment 11, and latest approved contingency plan, Permit Attachment 8.

G. CONTINGENCY PLAN

The Permittee shall immediately carry out the provisions of the latest approved contingency plan whenever there is a fire, explosion, or release of hazardous waste or constituents which could threaten human health or the environment. (Also see Permit Attachment 8.)

1. Copies of the Plan

   The Permittee shall comply with the requirements of 49 CFR 264.53.

2. Amendment of Plan

   The Permittee shall review and immediately amend, if necessary, the Contingency Plan, as required by 40 CFR 264.54.

3. Emergency Coordinator

   A trained emergency coordinator shall be available at all times in case of emergency, as required by 40 CFR 264.55.

H. ARRANGEMENTS WITH LOCAL AUTHORITIES

The Permittee shall maintain arrangements with state and local authorities, as required by 40 CFR 264.37. If state or local officials refuse to enter into preparedness and prevention arrangements with the Permittee, the Permittee must document this refusal in the operating record.

I. MANIFEST SYSTEM

The Permittee shall comply with the manifest requirements of 40 CFR 264 Subpart E.

J. INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS

The Permittee is exempt from this permit provision in accordance with 40 CFR 140(c).

K. GENERAL CLOSURE REQUIREMENTS

1. Performance Standard

The Permittee shall close the facility, as required by 40 CFR 264.111 and in accordance with Permit Provision III.J.

2. Notification of Closure

The Permittee shall notify the Administrative Authority in writing at least 45 days prior to the date on which he expects to begin closure of the facility, as required by 40 CFR 264.112(d).

3. Certification of Closure

The Permittee shall certify that the facility has been closed in accordance with the specifications in the Closure Plan, as required by 40 CFR 264.115.

L. COST ESTIMATE FOR CLOSURE AND POST-CLOSURE

The Permittee is exempt from this permit provision in accordance with 40 CFR 264.140(c).

M. FINANCIAL ASSURANCE FOR CLOSURE AND POST-CLOSURE

The Permittee, as a branch of the United States military, is exempted from demonstrating continuous compliance with 40 CFR 264.143 and 264.145, and from providing documentation of financial assurance, as required by 40 CFR 264.151 or 264.149.

N. LIABILITY REQUIREMENTS

The Permittee is exempt from this permit provision in accordance with 40 CFR 264.140(c).

SECTION THREE

SECTION III - STORAGE FACILITY

A. PERMITTED UNIT DESCRIPTION

1. Hazardous Waste Storage Facility

The Hazardous Waste Storage Facility (HWSF), Building 810, is located within a Defense Reutilization and Marketing Office (DRMO) storage area near 59th Street in the southwest portion of Tinker AFB. The HWSF location is presented in Permit Attachment 5, Figures 5-1, 5-2, and 5-3. Other storage sites at Tinker AFB include the Hazardous Waste Management Facility (HWMF), Building 809, east of the HWSF and other less-than-90-day temporary storage areas. This facility replaces a previously permitted two-building facility near Douglas Boulevard at the east edge of the base. The facility will be operated by the DRMO.

The HWSF is a concrete masonry unit with a metal roof to prevent accumulation of precipitation within the storage facility. Some storage modules/closets are equipped with roll-up (overhead) doors. A staging area (Staging Area 101) is located within the HWSF and is also equipped with overhead doors. Staging Area 101 is used for direct loading and unloading operations. From the staging area, containers with hazardous waste may be stored before loading onto vehicles or transferring to other designated modules or closets within the HWSF. If left in the staging area beyond normal operating hours, hazardous waste containers with free liquids are provided with secondary containment trays. Each secondary containment tray has sufficient capacity to contain 10% of the volume of the containers in each tray or the volume of the largest container in each tray, which ever is greater. The building has four double-wide, fully enclosed modules to allow storage of drums and other large quantities of materials, five standard sized modules, one smaller sized module, and ten closets for storing smaller quantities of materials separately from other materials. A site plan of the building is included in Permit Attachment 5, Figure 5-4. A six-inch-high concrete curb surrounds the concrete floor of the storage modules. The modules are used for storage of ignitables, corrosive acid, poisons, polychlorinated biphenyls (PCBs), precious metals, oxidizers/reactives, and corrosive bases.

Because the building is sized for both hazardous materials and hazardous waste, hazardous materials destined for reutilization, transfer, donation, or sale (RTDS) may also be stored in Building 810. When hazardous waste is placed in specified storage modules or the same modules as hazardous materials, it shall be separated from the hazardous materials. A compatibility chart and knowledge of process shall be used to ensure safe storage of hazardous waste and or materials.

Concrete ramps are provided for entering and exiting each storage module. A ramp is located within each module, along the center corridor that runs the length of the building. A description of the secondary containment system design, and containment capacity is presented in Permit Attachment 13.

Either electric power or a chain hoist may operate the HWSF's receiving door. All overhead doors for the large closets, used for the storage of Hazardous Class 1A flammable waste, shall conform to NFPA 80. Electrical lighting shall comply with NFPA 70, Article 500 for hazardous locations.

Section 5.2 of Permit Attachment 5 outlines the functional use of the storage modules, and summarizes the maximum storage volumes for the various waste types. Two emergency eyewash/shower stations are available to comply with 29 CFR. Essential spill equipment is also maintained in Building 810 to comply with pertinent sections of 29 CFR.

Storage shall be accomplished by placing a maximum of four 55-gallon drums on pallets, then placing the pallets in a row in the storage module. Pallets shall be placed on metal racks. If necessary, pallets may be stacked in the staging area. Pallets shall not be stacked more than two high. Individual drums of liquid flammable wastes shall not be stacked; however, stacking one liquid waste pallet above another on a metal rack shall not be considered direct stacking.

Flammable wastes constitute the largest of the waste groups and require the most space, especially since pallets holding drums of flammable liquids cannot be stacked. The volume of toxic and flammable waste varies considerably. Therefore, it is frequently necessary to convert the use of a bay from storage of one compatible group to storage of another. An entire bay is normally converted. If it becomes necessary to place more than one compatibility group in the same bay, only one group will be subject to that bay's secondary containment. The other group will be placed in secondary containment devices which are compatible with, and which can hold one-hundred percent of, the waste being contained.

The staging area will be used for assembling loads of waste to be transported by truck to a TSD facility. In the event additional storage

space is required, the staging area may be used for storage. Secondary containment shall be provided in accordance with the protocol described in Section III, A.1.of this Permit.

2. Permitted Waste Identification

The Permittee may store on-site, at any one time at the DRMO HWSF, a total volume of 158,796 gallons of wastes described by the following EPA waste codes subject to the terms of this permit:

F001	D001	D012	D023	D034
F002	D002	D013	D024	D035
F003	D003	D014	D025	D036
F004	D004	D015	D026	D037
F005	D005	D016	D027	D038
F006	D006	D017	D028	D039
F007	D007	D018	D029	D040
F008	D008	D019	D030	D041
F009	D009	D020	D031	D042
F019	D010	D021	D032	D043
F039	D011	D022	D033	
P001	P030	P097	P105	P121
P012	P042	P098	P106	
P021	P066	P099	P108	
P029	P077	P104	P119	
U002	U052	U112	U144	U211
U003	U056	U117	U151	U213
U012	U057	U121	U154	U219
U020	U058	U122	U159	U220
U032	U070	U123	U160	U226
U036	U075	U129	U161	U239
U038	U076	U132	U162	U240
U041	U080	U133	U188	U248
U044	U088	U134	U196	
U051	U103	U135	U210	
K045				

The individual containers are generally 55-gallon Department of Transportation (DOT) containers. (Overpack drums are allowed for deteriorating or leaking containers.) Various containers of other sizes are allowed.

The Permittee is prohibited from storing hazardous wastes that are not identified in this table or Permit Attachment 2 or its updates. These updates must be included as part of the facility operating record.

Results of additional waste analyses performed after the submission of the effective date of this permit modification must be incorporated in the facility operating record. No permit modification shall be required if the analyses results are for a waste with an EPA waste code included in Permit Section III. However, if the EPA waste code is not listed in Permit Section III, the Permittee shall apply for a permit modification in accordance with 40 CFR 270.42.

B. CONDITION OF CONTAINERS [40 CFR 264.171]

If a container holding hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects, etc.) or if it begins to leak, the Permittee shall transfer the hazardous waste from the container to a container that is in good condition, or otherwise manage the waste in compliance with the conditions of this permit.

C. COMPATIBILITY OF WASTE WITH CONTAINERS [40 CFR 264.172]

The Permittee shall use containers made of or lined with materials which will not react with, and are otherwise compatible with, the hazardous waste being stored, so that the ability of the container to contain the waste is not impaired.

D. MANAGEMENT OF CONTAINERS [40 CFR 264.173]

1. The Permittee shall keep the containers closed during storage, except when it is necessary to add or remove waste.

2. The Permittee shall not open, handle, or store containers in a manner which may rupture the container or cause it to leak.

E. INSPECTION SCHEDULES AND PROCEDURES [40 CFR 264.174]

The Permittee shall inspect the container area weekly, in accordance with the Inspection Schedule presented in Permit Attachment 6, or its equivalent, to detect leaking containers and deterioration of containers and the containment system caused by corrosion and other factors.

F. CONTAINMENT SYSTEM [40 CFR 264.175]

The Permittee shall maintain the containment system in accordance with the attached plans and specifications contained in Permit Attachment 13.

G. RECORD KEEPING and REPORTING [40 CFR 264.73 through 264.77]

The Permittee shall keep a written operating record at the HWSF in accordance with the regulations specified at 40 CFR 264.73 and 264.74, as well as provide reports in accordance with 40 CFR 264.75, 264.76, and 264.77, as applicable.

H. SPECIAL PROVISIONS FOR IGNITABLE OR REACTIVE WASTE [40 CFR 264.176]

Containers holding ignitable or reactive waste must be located at least 15 meters (50 feet) from the facility's property line.

I. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES [40 CFR 264.177]

1. The Permittee shall not place incompatible wastes, or incompatible wastes and materials, in the same container, unless the procedures specified in Permit Attachment 15 and 40 CFR 264.17(b) are followed.

2. Hazardous waste must not be placed in an unwashed container that previously held incompatible waste or material.

2. The Permittee shall separate containers of incompatible waste in accordance with 40 CFR 264.177(c).

J. CLOSURE REQUIREMENTS

Closure of the HWSF container area shall begin on the permitted unit within ninety (90) days after receiving the final volume of hazardous waste. Closure shall be completed within 180 days after receiving the final volume of hazardous waste. At closure, the Permittee shall remove all hazardous waste containers and all hazardous waste residues from the containment system, in accordance with the procedures in the approved Closure Plan presented in Permit Attachment 9.

K. SPECIAL CONDITIONS

1. The Waste Analysis Plan (Permit Attachment 3) shall be modified according to updated sampling results conducted by the Permittee.

2. The previously permitted two-building hazardous waste storage facility (old facility) shall continue to operate under the previous permit conditions until the new facility is constructed and fully operational. The total hazardous waste storage capacity for the old and new facilities during an interim period of ninety (90) days, when the waste from the old facility is shipped off-site or transferred to the HWSF, shall not exceed 158,796 gallons.

L. PERMITTED AND PROHIBITED WASTE IDENTIFICATION

1. The Permittee is authorized to manage the waste listed in the application and identified in Permit Section III, and Permit Attachment 2, subject to the limitations provided herein.

2. The Permittee is prohibited from managing hazardous waste in the permitted facility that is not identified in the application or in Section III or Permit Attachment 2.

HSWA SECTION

SECTION IV - SPECIAL CONDITIONS PURSUANT TO THE 1984 HAZARDOUS AND SOLID WASTE AMENDMENTS (HSWA)

CURRENT SOLID WASTE MANAGEMENT UNITS

Background

Fifty-three (53) SWMUs and two (2) AOCs were entered into the RCRA Permit issued jointly by the Oklahoma Department of Health and the U. S. Environmental Protection Agency on July 1, 1991. The RCRA Permit required Tinker AFB to investigate these 53 SWMUs and 2 AOCs, and to perform corrective measures at those which posed a threat to human health and the environment.

Tinker AFB prepared work plans, performed field investigations, and issued a Draft Phase I RFI Report dated April 8, 1994 covering the SWMUs and AOCs identified in the RCRA Permit. The EPA approved the Final Phase I RFI Report on September 6, 1994. The Final Phase I RFI Report concluded that no further actions were required at SWMU-26 (Ordnance Disposal Area), SWMU-40 (Holding Pond), and the Spill Pond (Drainage Spillways behind Building 1030) which was an AOC. Tinker AFB also prepared work plans, performed field investigations, and submitted on March 3, 1997, a Draft RFI Report for SWMUs 1, 2, 8, 12, 13, 54, and the Fuel Truck Maintenance Facility (AOC). The report recommended that no further actions were required for SWMU-54 (Stained Drainage Ditch/Building 17). The Oklahoma DEQ concurred with the recommendation of no further action for SWMU-54 in a letter dated April 23, 1997. Implementation of a Class 3 RCRA Permit Modification on March 11, 1999, removed these four sites from the RCRA Permit. The modified permit reflected the EPA and Oklahoma DEQ findings, affirming that there remained 49 SWMUs and one AOC in Tinker AFB's corrective action program.

In numerous submissions to the Oklahoma DEQ during 2000 and 2001, Tinker AFB applied for no further action on the following seventeen sites:

SWMU 7 (former Fire Training Area 1)
SWMU 14 (Sludge Drying Beds)
SWMU 16 (Bldg. 201, West Alcove)
SWMU 17 (Bldg. 201, North Side)
SWMU 18 (Bldg. 201 Southwest Alcove)
SWMU 19 (Radioactive Waste Disposal Site (RWDS) 1030W)
SWMU 20 (RWDS 201S)
SWMU 21 (RWDS 62598)
SWMU 22 (RWDS 1022E)
SWMU 24.2 (Industrial Wastewater Treatment Plant (IWTP) - Tanks D-1 and D-2)
SWMU 24.9 (IWTP - Wet Lift Station)
SWMU 24.10 (IWTP - Softener Basin)
SWMU 24.13 (IWTP - Industrial Sludge Drying Beds), and
SWMU 24.14.(IWTP - Abandoned Waste Tanks)
AOC 2 (Old Pesticide Storage Area)

Waste Fuel Dump Site (no number)
Fuel Truck Maintenance Area (no number)

The Oklahoma DEQ concurred that completed corrective actions at these SWMUs had been adequate in minimizing or precluding any further threat of contaminant migration from these units. Subsequently, the Oklahoma DEQ granted the requests for no further action and subsequent petitions for removal of these SWMUs from the RCRA permit pending finalization of public notification requirements. The publication of the draft renewal permit will accomplish public notice requirements for the approval of the no further action requests and removal of these sites from the RCRA permit.

Current

Therefore, the RFI requirements listed in this corrective action section of the permit shall apply only to those SWMUs on the SWMU List and to any SWMUs discovered hereafter.

Tinker AFB shall follow the EPA/Oklahoma DEQ-approved Ground Water Monitoring and Ground Water Sampling and Analysis Plans for the corrective action section of this Permit.

Off-site Groundwater Contamination

In 2001, tricloroethene (TCE) groundwater contamination was discovered to have migrated off-site from the southwest quadrant of the Base. Therefore, inclusive with the requirements of this section, the Permittee shall address the off-site contamination specifically. The Permittee shall continue with any further investigations reasonably necessary to determine the nature and extent of the contamination for the implementation of remedial actions for groundwater contamination in this area in compliance with the approved recommendations in the RCRA Facility Investigation report for Contaminated Groundwater Area 38.

Environmental Indicators

The Permittee shall strive to complete the following corrective action programs within the respective schedule to achieve the Environmental Indicators:

- Complete Groundwater RCRA Facility Investigation by December 2002.
- Implement all groundwater corrective actions for non-NPL sites by December 2005.

The above deadlines may be extended as necessary upon written permission from the Land Protection Division of the Oklahoma DEQ.

A. STANDARD CONDITIONS

1. Waste Minimization

Annually, by December 1, for the previous year ending September 30, the Permittee shall enter into the operating record as required by 40 CFR 264.73(b)(9), a statement certified according to 40 CFR 270.11(d) specifying that the Permittee has a program in place to reduce the volume and toxicity of hazardous wastes generated by the facility's operation to the degree determined by the Permittee to be economically practicable; and the proposed method of treatment, storage, or disposal is that practicable method, currently available to the Permittee, which minimizes the present and future threat to human health and the environment. A current description of the program shall be maintained in the operating record and a copy of the annual certified statement shall be submitted to the Administrative Authority. The following are suggested criteria for the program:

a. Any written policy or statement that outlines goals, objectives, and/or methods for source reduction and recycling of hazardous waste at the facility;

b. Any employee training or incentive programs designed to identify and implement source reduction and recycling opportunities;

c. Any source reduction and/or recycling measures implemented in the last five years or planned for the near future;

d. An itemized list of the dollar amounts of capital expenditures (plant and equipment) and operating costs devoted to source reduction and recycling of hazardous waste;

e. Factors that have prevented implementation of source reduction and/or recycling;

f. Sources of information on source reduction and/or recycling received at the facility (e.g., local government, trade associations, suppliers, etc.);

g. An investigation of additional waste minimization efforts which could be implemented at the facility. This investigation would analyze the potential for reducing the quantity and toxicity of each waste stream through production reformulation, recycling, and all other appropriate

means. The analysis would include an assessment of the technical feasibility, cost, and potential waste reduction for each option;

h. A flow chart or matrix detailing all hazardous wastes it produces by quantity, type, and building/area;

i. A demonstration of the need to use those processes which produce a particular hazardous waste due to a lack of alternative processes or available technology that would produce less hazardous waste.

j. A description of the waste minimization methodology employed for each related process at the facility. The description should show whether source reduction or recycling is being employed.

k. A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years.

2. Dust Suppression

a. Pursuant to 40 CFR 266.23(b), and the Toxic Substances Control Act, the Permittee shall not use waste or used oil or any other material which is contaminated with dioxin, polychlorinated biphenyls (PCBs), or any other hazardous waste (other than a waste identified solely on the basis of ignitability), for dust suppression or road treatment.

3. Permit Modification

a. Agency Initiated Modifications

If at any time for any of the reasons specified in 40 CFR 270.41, the Administrative Authority determines that modification of this Permit is necessary, the Agency may initiate permit modification proceedings in accordance with the regulations set forth at 40 CFR 270.41.

b. Permittee Initiated Modifications

The Permittee may, when appropriate, initiate permit modifications in accordance with the regulations set forth at 40 CFR 270.42. All applicable requirements and procedures as specified in 40 CFR 270.42 shall be followed by Permittee in initiating such proceedings.

c. Modification of Corrective Action Schedules of Compliance (CASC)

1) The Permittee shall adhere to CASCs contained in the permit. If at any time the Permittee determines that such schedules cannot be met, the Permittee shall, within fifteen (15) days of such determination, notify the Administrative Authority and submit a request for a permit modification under 40 CFR 270.42, with a justification as to why the current CASC cannot be met.

2) If the Administrative Authority determines that a modification of the CASC is required, the procedure specified in Permit Condition A.3.c)3) of this Section will apply. CASC Modifications made under this procedure are not subject to administrative appeal.

3) The Administrative Authority will notify the Permittee in writing of the proposed modification. Such notice will:

a) Describe the exact changes to be made to the permit conditions;

b) Provide an explanation of why the modification is needed;

c) Provide notification of the date by which comments on the proposed modification must be received. Such date will not be less than twenty days from the date the notice of proposed modification is received by the Permittee, or after the public notice is published;

d) Provide notification that supporting documentation or data may be available for inspection at the State or EPA Regional office; and

e) Include the name and address of a representative of the Administrative Authority to whom comments may be sent.

4) The Administrative Authority will:

a) Publish a notice of the proposed modification in a newspaper distributed in the locality of the facility, which

includes notice of items in Permit Section IV, Condition A.3.c.3)a);

b) Mail a notice of the proposed modification to all persons on the facility mailing list maintained according to 40 CFR 124.10(c)(1). Such notice will include items under Section IV, Permit Condition A.3.c.3)a), and shall be mailed concurrently with notice to the Permittee;

c) For facilities which have established an information repository pursuant to Permit Section IV, Condition E., the Administrative Authority shall place a notification of the proposed modification, including items under Permit Section IV, Condition A.3.c.3), in the information repository concurrently with actions taken under those items.

5) Administrative Authority's Decision Regarding Modification

a) If the Administrative Authority receives no written comment on the proposed modification, the modification shall become effective five (5) calendar days after the close of the comment period. The Administrative Authority will:

i Notify the Permittee in writing of the final decision.

ii Notify individuals on the facility mailing list in writing that the modification has become effective and will place a copy of the modified permit in the information repository, if a repository is required for the facility.

b) If the Administrative Authority receives written comment on the proposed modification, the Administrative Authority will make a final determination concerning the modification after the end of the comment period. The Administrative Authority will:

i Notify the Permittee in writing of the final decision.

ii Provide notice of the final modification decision in a locally distributed newspaper and place a copy of the modified permit in the information repository, if a repository is required for the facility.

4. Permit Review

This Permit may be reviewed by the Administrative Authority five years after the date of permit issuance and may be modified as necessary as provided for in Permit Section IV, Condition A.3. Nothing in this section shall preclude the Administrative Authority from reviewing and modifying the Permit at any time during its term.

5. Compliance with Permit

Compliance with a RCRA permit during its term constitutes compliance, for purposes of enforcement, with subtitle C of RCRA except for those requirements not included in the permit which:

a. Become effective by statute;

b. Are promulgated under 40 CFR 268 restricting the placement of hazardous wastes in or on the land; or

c. Are promulgated under 40 CFR 264 regarding leak detection systems for new and replacement surface impoundment, waste pile, and landfill units, and lateral expansions of surface impoundment, waste pile, and landfill units. The leak detection system requirements include double liners, CQA programs, monitoring action leakage rates, and response action plans, and will be implemented through the procedures of 40 CFR 270.42 Class 1 permit modifications.

6. Specific Waste Ban

a. The Permittee shall not place in any land disposal unit the wastes specified in 40 CFR 268 after the effective date of the prohibition unless the Administrator has established disposal or treatment standards for the hazardous waste and the Permittee meets such standards and other applicable conditions of this Permit.

b. The Permittee may store wastes restricted by 40 CFR 268 solely for the purpose of accumulating quantities necessary to facilitate proper recovery, treatment, or disposal provided that it meets the requirements of 40 CFR 268.50(a)(2) including, but not limited to, clearly marking each tank or container.

c. The Permittee is required to comply with all requirements of 40 CFR 268.7 as amended. Changes to the waste analysis plan will be considered permit modifications at the request of the Permittee, pursuant to 40 CFR 270.42.

d. The Permittee shall perform a waste analysis at least annually or when a process changes, to determine whether the waste meets applicable treatment standards. Results shall be maintained in the operating record.

e. The Permittee must comply with requirements restricting placement of hazardous wastes in or on land which become effective by statute or amending 40 CFR Part 268, regardless of requirements in the Permit. Failure to comply with the regulations may subject the Permittee to enforcement action under Section 3008 of RCRA, the OHWMA and OAC 252:205.

7. Information Submittal

Failure to comply with any condition of the Permit, including information submittal, constitutes a violation of the Permit and is grounds for enforcement action, permit amendment, termination, revocation, suspension, or denial of permit renewal application. Falsification of any submitted information is grounds for termination of this Permit (40 CFR 270.43) and civil and criminal penalties.

The Permittee shall ensure that all plans, reports, notifications, and other submissions to the Administrative Authority required in this Permit are signed and certified in accordance with 40 CFR 270.11. A summary of the planned reporting requirements pursuant to this Permit is found in Table 1. Two (2) copies and either one compact disk (CD) copy or one 3.5" IBM compatible disk copy each of these plans, reports, notifications or other submissions shall be submitted to the Administrative Authority by Certified Mail or hand delivered to:

Oklahoma Department of Environmental Quality

Approval of units for managing wastes and conditions for operating the units, if approved, shall be granted through the permitting process.

B. SPECIFIC CONDITION - CLOSURE

This section is not applicable to this permit.

C. SPECIFIC CONDITION - SURFACE IMPOUNDMENTS AND LANDFILLS

The Permittee operates no active landfills or surface impoundments. Therefore this section does not apply to this permit.

D. SPECIFIC CONDITION - INCINERATORS

The Permittee operates no incinerators. Therefore this permit section is not applicable.

E. SPECIFIC CONDITION - INFORMATION REPOSITORY

1. Within thirty (30) days of the effective date of this Permit, the Permittee shall establish an information repository to provide the public an opportunity to review and comment on the corrective action activities specified in this Permit. This repository shall be established at a local public library or similar facility which is easily accessible to the public.

2. Within thirty (30) days of the effective date of this Permit, the Permittee shall mail a notice to all individuals on the facility-specific mailing list maintained by the Administrative Authority, including all individuals that submitted oral or written comments on the Permittee's draft permit during the public comment period. The Permittee shall amend this mailing list as necessary to include those individuals that submit a written request to the Administrative Authority and the Permittee for inclusion in this list.

3. This notice shall state the location, purpose, and content of the repository. A copy of this notice shall be provided to the Administrative Authority, for approval, prior to mailing to the public.

4. Once established, the Permittee shall place into the repository, on or before the date due to the Administrative Authority, all documents (e.g., all correspondence, work plans and final reports) as specified in this Permit, and

those documents deemed appropriate by the Administrative Authority. The Permittee shall specify within the text or cover letter of each document the date each submittal was placed in the repository.

F. SPECIFIC CONDITION - INVESTIGATION OF AREA(s) OF CONCERN

The Permittee shall investigate any newly identified areas of concern in accordance with applicable parts of Permit Section IV.

G. SPECIAL CONDITIONS [RESERVED]

H. BIF RULE [RESERVED]

I. AA,BB, and CC AIR REGULATIONS

The Permittee must comply with the requirements of 40 CFR 264 Subparts AA and BB and CC, as applicable. Within 90 days of the effective date of this Permit modification, the Permittee shall submit to the Administrative Authority a report covering those units subject to Subparts AA and BB which must contain, at minimum, the following information:

1. An equipment list which includes all the information required by 264.1064(b)(1) for equipment that contains or contacts hazardous wastes with organic concentrations of at least 10 percent by weight, and a list of all process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations managing hazardous waste with organic concentrations of at least 10 percent by weight.

2. For the process vents listed above, the amount of vent emissions in lb/hr or kg/hr, and in lb/yr or kg/yr.

3. If the emissions in paragraph 2 of this section exceed the emission limits cited in 264.1032(a)(1), the report must detail the manner in which compliance will be obtained, i.e., by the reduction of total organic emissions to the limits in 264.1032(a)(1), or reduction by means of a control device per 264.1032(a)(2).

4. If a closed-vent system and control device is installed to comply with the requirements in 264.1032(a)(2), provide the following information:

a. An implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation per 40 CFR 264.1033(a)(2).

b. The type of control device under 264.1033 to be installed (e.g. vapor recovery, flare, etc.).

4. If the Permittee feels any of the requirements of this Permit Section IV, Condition I., or of 40 CFR 264 Subparts AA, BB and CC, are not applicable to this facility, the Permittee must provide justification for this decision as part of the report.

J. SUBPART DD - CONTAINMENT BUILDINGS

The Permittee must comply with the applicable requirements for containment buildings specified in 40 CFR 264.1100 through 1102.

K. SUBPART EE - HAZARDOUS WASTE MUNITIONS AND EXPLOSIVES STORAGE

The Permittee does not store hazardous waste munitions or explosive hazardous wastes at the facility. Therefore, this Subpart is not applicable.

L. CORRECTIVE ACTION

1. Corrective Action for Releases: Section 3004(u) of RCRA, as amended by HSWA, and 40 CFR 264.101, require that permits issued after November 8, 1984, address corrective action for releases of hazardous waste or hazardous constituents from any SWMU at the facility, regardless of when the waste was placed in the unit.

2. Action Levels

a. Applicability - The concept of action levels, described in the RFI guidance document referenced in Permit Section IV, Condition Q.1.c.1) shall be used by the Permittee to determine the need for further corrective actions under this Permit. As specified in Permit Section IV, Condition U., the Permittee shall conduct a CMS whenever concentrations of hazardous constituents in ground water, surface water, soils, or air exceed action levels for any environmental medium; or when the Administrative

Authority determines that concentrations of contaminants, even if below action levels, present a threat to human health or the environment. The concept of action levels is not the same as cleanup levels, although in some cases a final cleanup level may be set to equal the action level.

b. Calculation - The Permittee shall adhere to RFI guidance in the calculation of action levels for all the environmental media. These action levels shall be updated as new toxicity data and promulgated standards (e.g., maximum contaminant levels) are derived. The most recent reference doses, reference concentrations, and cancer slope factors (e.g., data found in EPA's Integrated Risk Information System) shall be utilized in the calculation of action levels. The toxicity data available at the time that a determination for further action is made (i.e., requirement to conduct a CMS), including interim measures, shall be utilized in the calculations. If used as final cleanup levels, action levels shall be calculated using the most recent toxicity data and promulgated standards existing at the time of implementation of corrective measures.

3. Risk Assessment

a. The Permittee shall conduct human health and ecological risk assessments as necessary for the protection of human health and the environment. These risk assessments shall be used to establish baseline risk at a site and/or to derive final or interim cleanup levels at the site. These risk assessments, if necessary, shall be performed concurrently with the corrective action activities specified in this Permit, including any activities undertaken during implementation of the activities proposed in the RFI Work Plan. These risk assessments may also be performed concurrently with the RFI Final Report and Summary and the CMS Phase of this permit, as specified in Permit Section IV, Condition L.3 and Z. respectively, but only after the Permittee has determined the full vertical and horizontal extent of contamination at each respective SWMU.

b. The Permittee shall utilize, but not be limited to, the following EPA documents and publications: "Compendium of ORD and OSWER Documents Relevant to RCRA Corrective Action" (EPA530-B-92-003, April 1992); "Ecological Assessments of Hazardous Waste Sites, A Field and Laboratory Reference Document" (EPA/600/3-89/013, March 1989); "ECO

Update, Ecological Assessment of Superfund Sites: An Overview" (Publication 9345.0-05I, Vol. 1, No. 2, December 1991); and "ECO Update, Developing A Work Scope for Ecological Assessments" (Publication 9345.0-05I, Vol. 1, No. 4, May 1992); including any subsequent revisions.

1) Baseline Risk Assessments - Baseline risk assessments, if required, shall be used to evaluate the risks posed by contaminants at a site prior to the beginning of any corrective actions. This type of risk assessment shall be used in certain circumstances (specified in Permit Section IV, Condition L.3.b.2) instead of action levels (described in Permit Section IV, Condition L.2) to determine the need for remedial action.

2) Although the action level concept shall serve as a trigger for a CMS (as specified in Permit Section IV, Condition U.) certain exceptions will apply, but not be limited to the following circumstances. In cases where the applicable action levels are not protective enough of sensitive environmental systems; such as wetlands, estuaries, and habitats of endangered or threatened species, the Permittee shall conduct a baseline environmental risk assessment. In cases where there are confirmed releases to ground water, surface water, air, or sediments, a baseline risk assessment shall be required to determine the need for stabilization/interim measures, especially where health advisories have been issued by local/state governments. In addition, action levels may be inappropriate at a site where there are multiple contaminants or where leaching from contaminated soils into ground water poses greater risk than ingestion of the soils.

3) If an action level has been exceeded, for any of the environmental media of concern, at any time during the corrective action activities required by this Permit, the Permittee may be required to conduct a risk assessment to determine risks to human health and the environment and the necessity to perform interim measures, as specified in Permit Section IV, Condition P. Risk assessments to determine final cleanup levels or to be used in justifying no further action determinations shall be conducted only after the Permittee has determined the full vertical and

horizontal extent of contamination from each SWMU or groups of SWMUs specified in this permit.

c. Risk Assessments for Deriving Cleanup Levels - Risk assessments, if required, may also be used as a starting point for cleanup goals, in addition to the final cleanup level. Risk assessments may be required as specified in Permit Section IV, Condition L.3.b.2). In addition, where cleanup levels fail to incorporate significant routes of exposure at a particular site, or where remedies cannot meet the 10^{-4} to 10^{-6} risk range for carcinogens or meet action levels if chosen as final cleanup levels, a risk assessment may also be required.

Only after the Permittee has determined the full vertical and horizontal extent of contamination from each SWMU or groups of SWMUs specified in the List of SWMUs in this permit, the Administrative Authority will review risk assessments as part of the CMS Phase of the corrective action activities specified in this Permit in deriving final cleanup goals.

d. Use of Risk Assessments in Justifying No Further Action - The Permittee may submit a risk assessment(s) justifying no further action at a SWMU(s) concurrently with submittal of the RFI Final Report and Summary specified in Permit Section IV, Condition S., only if the Permittee has determined the full vertical and horizontal extent of contamination from each SWMU or group of SWMUs specified in this Permit.

e. Corrective Action for Releases Beyond Facility Boundary: Section 3004(v) of RCRA as amended by HSWA, and Federal regulations promulgated as 40 CFR 264.101(c), require corrective actions beyond the facility property boundary, where necessary to protect human health and the environment, unless the Permittee demonstrates that, despite the Permittee's best efforts, the Permittee was unable to obtain the necessary permission to undertake such actions. The Permittee is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where offsite access is denied.

f. Financial Responsibility: As a branch of the United States military, the Permittee is exempt from having to provide assurances of financial responsibility for corrective action. (Title 40 CFR 264.140(c))

4. Dispute Resolution

a. The parties shall use their best efforts to informally and in good faith resolve all disputes or differences of opinion. If, however, disputes arise concerning the corrective action which the parties are unable to resolve informally, the following procedures shall apply. If Permittee's dispute concerns its inability to meet a specified deadline, then Permittee is obligated to advise the Administrative Authority of the issue at least 30 days in advance of the deadline.

b. The Administrative Authority shall provide Permittee written notice of its disapproval or modification of any interim submission under HSWA, including, but not limited to, implementation of work plans, approval of documents, scheduling of any work, or selection, performance, or completion of any correction action. The written notice of disapproval or modification shall set forth the reasons for the disapproval or modification. If the Permittee disagrees, in whole or in part, with any such written notice, the Permittee shall notify the Oklahoma DEQ Land Protection Division RCRA Facility Manager , in writing, within 10 days of receipt of the written notice. The Permittee and the Land Protection Division shall use their best efforts to informally and in good faith resolve the dispute. The Permittee is entitled to meet with the Land Protection Division in person at the Administrative Authority's office or by teleconference, if it so desires, in order to resolve the dispute.

c. If the Permittee and the Oklahoma DEQ are unable to resolve the dispute, the Permittee may request a final decision by the Administrative Authority's official having been delegated final permit approval authority. Within 30 days of receipt of the Administrative Authority's written notice, the Permittee shall submit to the permit approval authority, a written statement of its arguments and explanations of its position. The written statement should include, at a minimum, the specific points of dispute, the position the Permittee maintains should be adopted as consistent with the Permit requirements and the basis therefore, any matters which it considers necessary for proper determination of the dispute, and whether the Permittee requests an informal conference in front of the permit approval authority. The Permittee's failure to follow the procedures set forth in this paragraph will constitute a waiver of its right to further consideration of the dispute.

d. The Administrative Authority's duly appointed official having final permit approval authority, at his/her discretion, will determine whether an informal conference, if requested by the Permittee, will be held.

e. The Administrative Authority shall consider the written position of the Permittee and the oral arguments, if an informal conference is convened, and shall provide a written statement of its decision based on the record. This statement shall be considered to be incorporated as an enforceable provision of the permit, and shall constitute a final permit decision for the purposes of the Uniform Environmental Permitting Act. The written statement shall respond to the Permittee's arguments and shall set forth the reasons for the Administrative Authority's final decision. Such a decision shall be the final resolution of the dispute and shall be implemented immediately by the Permittee according to the schedule contained therein, subject only to the Permittee's appeal rights under the Environmental Quality Code, 27A O.S. § 2-1-101 et seq., and the Administrative Procedures Act, 75 O.S. § 250.1 et seq.

f. Notwithstanding the invocation of this dispute resolution procedure, the Permittee shall proceed to take any action required by those portions of the submission and of the permit the Administrative Authority determines are not substantially affected by the dispute.

g. The Permittee shall invoke the Dispute Resolution provisions of this Permit in good faith and not for purposes of delay.

M. REPORTING REQUIREMENTS

1. The Permittee shall submit, in accordance with Permit Section IV, Condition A.7, signed quarterly progress reports of all activities (i.e., RFI, CMS) conducted pursuant to the provisions of this Permit beginning no later than ninety (90) calendar days from the effective date of this Permit. These reports shall contain:

   a. A description of the work completed and an estimate of the percentage of work completed;

   b. Summaries of all findings, including summaries of laboratory data;

   c. Summaries of all problems or potential problems encountered during the reporting period and actions taken to rectify problems;

   d. Projected work for the next reporting period;

   e. Summaries of contacts pertaining to corrective action or environmental matters with representatives of the local community, public interest groups or State government during the reporting period;

   f. Changes in key project personnel during the reporting period; and

   g. Summaries of all changes made in implementation during the reporting period.

2. Copies of other reports relating to or having bearing upon the corrective action work, (e.g., inspection reports), drilling logs and laboratory data shall be made available to the Administrative Authority upon request.

3. In addition to the written reports as required in Permit Section IV, Condition M.1 and 2 above, at the request of the Administrative Authority, the Permittee shall provide status review through semi-annual briefings with the Administrative Authority.

N. NOTIFICATION REQUIREMENTS FOR AND ASSESSMENT OF NEWLY-IDENTIFIED SWMUs AND POTENTIAL AOCs

1. The Permittee shall notify the Administrative Authority, in writing, of any newly-identified SWMU(s) and potential AOCs (i.e., a unit or area not specifically identified during the RFA), discovered in the course of ground water monitoring, field investigations, environmental audits, or other means, no later than thirty (30) calendar days after discovery. The Permittee shall also notify the Administrative Authority of any newly-constructed land-based SWMUs (including but not limited to, surface impoundments, waste piles, landfills, land treatment units) and newly-constructed SWMUs where any release of hazardous constituents may be difficult to identify (e.g., underground storage tanks) no later than thirty (30) days after construction. The notification shall include the following items, to the extent available:

   a. The location of the newly identified SWMU or potential AOC on the topographic map required under 40 CFR Section 270.14(b)(19). Indicate all existing units (in relation to other SWMUs);

   b. The type and function of the unit;

   c. The general dimensions, capacities, and structural description of the unit (supply any available drawings);

   d. The period during which the unit was operated;

   e. The specifics, to the extent available, on all wastes that have been or are being managed at the SWMU or potential AOC; and

   f. Results of any sampling and analysis required for the purpose of determining whether releases of hazardous waste including hazardous constituents have occurred, are occurring, or are likely to occur from the SWMU or whether the AOC should be considered a SWMU.

2. Based on the results of this Notification the Administrative Authority will designate the newly identified AOC(s). Based on the results of this notification or investigation conducted according to Permit Section IV, Condition F., the Administrative Authority will determine the need for further investigations or corrective measures at any newly-identified SWMU(s) or AOC(s). If the Administrative Authority determines that such investigations are needed, the

Administrative Authority may require the Permittee to prepare a plan for such investigations. The plan for investigation of SWMU(s) or AOC(s) will be reviewed for approval as part of the RFI Work Plan or a new RFI Work Plan under Permit Section IV, Condition Q.3. The Permit will be modified according to Permit Section IV, Condition A.3 to incorporate the investigation requirements for the newly-identified AOC(s) identified pursuant to Permit Section IV, Condition N.1 or SWMU(s) identified pursuant to Permit Section IV, Condition F. if an investigation is required.

O. NOTIFICATION REQUIREMENTS FOR NEWLY-DISCOVERED RELEASES AT SWMU(s) AND AOC(s)

The Permittee shall notify the Administrative Authority in writing, no later than fifteen (15) calendar days after discovery, of any release(s) from a SWMU or AOC of hazardous waste or hazardous constituents discovered during the course of ground water monitoring, field investigation, environmental auditing, or other means. Such newly-discovered releases may be from newly-identified SWMUs or AOCs, newly-constructed SWMUs, or from SWMUs or AOCs for which, based on the findings of the RFA, completed RFI, or investigation of an AOC(s), the Administrative Authority had previously determined no further investigation was necessary. The notification shall include information concerning actual and/or potential impacts beyond the facility boundary and on human health and the environment, if available at the time of the notification. The Administrative Authority may require further investigation and/or interim measures for the newly identified release(s), and may require the Permittee to prepare a plan for the investigation and/or interim measure. The plan will be reviewed for approval as part of the RFI Work Plan or a new RFI Work Plan under Permit Section IV, Condition Q.3. The Permit will be modified according to Permit Section IV, Condition A.3 to incorporate the investigation, if required.

P. INTERIM MEASURES

1. If during the course of any activity initiated under this Permit, the Administrative Authority determines that a release or potential release of hazardous constituents from a SWMU poses a threat to human health or the environment, the Administrative Authority may require interim measures. The Administrative Authority shall determine the specific measure(s) or require the Permittee to propose a measure(s). The interim measure(s) may include a permit modification, a schedule for implementation, and a written plan. The Administrative Authority shall notify the Permittee in writing of the requirement to perform interim measures. The Administrative Authority may modify this

Permit according to Permit Section IV, Condition A.3 to incorporate interim measures into the Permit.

2. The Permittee may propose interim measures at any time. The proposal shall include a written plan and a schedule for implementation. Depending upon the nature of the interim measure, a permit modification may not be required.

3. The following factors may be considered by the Administrative Authority in determining the need for interim measures and the need for permit modification:

   a. Time required to develop and implement a final remedy;

   b. Actual and potential exposure to human and environmental receptors;

   c. Actual and potential contamination of drinking water supplies and sensitive ecosystems;

   d. The potential for further degradation of the medium in the absence of interim measures;

   e. Presence of hazardous wastes in containers that may pose a threat of release;

   f. Presence and concentration of hazardous waste including hazardous constituents in soil that have the potential to migrate to ground water or surface water;

   g. Weather conditions that may affect the current levels of contamination;

   h. Risks of fire, explosion, or accident; and

   i. Other situations that may pose threats to human health and the environment.

Q. RFI WORK PLAN

1. The RFI Work Plan as specified in Permit Section IV, Condition Y.3 shall be submitted to the Administrative Authority within 180 days of the effective date

of this Permit. The RFI Work Plan must address releases of hazardous waste or hazardous constituents to all media for those SWMUs listed in the Permit.

a. The Work Plan shall describe the objectives of the investigation and the overall technical and analytical approach to completing all actions necessary to characterize the direction, rate, movement, and concentration of releases of hazardous waste or hazardous constituents from specific units or groups of units, and their actual or potential receptors. The RFI Work Plan shall detail all proposed activities and procedures to be conducted at the facility, the schedule for implementing and completing such investigations, the qualifications of personnel performing or directing the investigations, including contractor personnel, and the overall management of the RFI. The Scope of Work for a RCRA Facility Investigation (RFI) is in Permit Section IV, Condition Y.

b. The RFI Work Plan shall describe sampling, data collection quality assurance, and data management procedures, including formats for documenting and tracking data and other results of investigations, and health and safety procedures.

c. Development of the RFI Work Plan and reporting of data shall be consistent with the following EPA guidance documents or the equivalent thereof:

1) RCRA Facility Investigation Guidance Document (EPA 530/SW-89-031, May 1989);

2) RCRA Ground-Water Monitoring: Draft Technical Guidance (EPA/530-R-93-001, November 1992;

3) RCRA Groundwater Monitoring Technical Enforcement Guidance Document (OSWER 9950.1) September 1986; and

4) Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd Edition, with updates and revisions through December 1996.

2. After the Permittee submits the work plan, the Administrative Authority will approve, disapprove, or modify the work plan in writing.

   If the Administrative Authority approves the work plan, the Permittee shall begin implementation of the plan within two weeks (14 days) of receipt of approval, and implement it according to the schedule contained in the plan. All approved work plans become incorporated into this Permit as per Permit Section IV, Condition A.8.

   In the event of disapproval (in whole or in part) of the work plan, the Administrative Authority shall specify deficiencies in writing. The Permittee shall modify the plan to correct these within the time frame specified in the notification of disapproval by the Administrative Authority. The modified work plan shall be submitted in writing to the Administrative Authority for review. Should the Permittee take exception to all or part of the disapproval, the Permittee shall submit a written statement of the grounds for the exception within 15 days of receipt of the disapproval per Permit Section IV, Condition L.4.

3. The Administrative Authority shall review for approval as part of the RFI Work Plan or as a new work plan any plans developed pursuant to Permit Section IV, Condition L. addressing further investigations of newly-identified SWMUs or AOCs, or Permit Section IV, Condition O. addressing new releases from previously-identified SWMUs or AOCs.

R. RFI IMPLEMENTATION

Upon receipt of written approval from the Administrative Authority for the RFI Work Plan, the Permittee shall implement the RFI according to the schedules and in accordance with the approved RFI Work Plan and the following:

1. The Permittee shall notify EPA and ODEQ at least 10 days prior to any field sampling, field testing, or field monitoring activity required by this Permit to give Agency personnel the opportunity to observe investigation procedures and/or split samples.

2. Deviations from the approved RFI Work Plan which are necessary during implementation of the investigations must be approved by the Administrative Authority and fully documented and described in the progress reports and in the RFI Final Report.

S. RFI FINAL REPORT AND SUMMARY

1. Within sixty (60) calendar days after the completion of the RFI, the Permittee shall submit an RFI Final Report and Summary. The RFI Final Report shall describe the procedures, methods, and results of all investigations specified in Permit Section IV, Condition Y.5. This includes SWMUs and their releases, the type and extent of contamination at the facility, sources and migration pathways, action levels, and actual or potential receptors. The RFI Final Report shall present all information gathered under the approved RFI Work Plan. The RFI Final Report must contain adequate information to support further corrective action decisions at the facility. The Summary shall summarize the RFI Final Report.

2. After the Permittee submits the RFI Final Report and Summary, the Administrative Authority shall either approve or disapprove them in writing.

   If the Administrative Authority determines the RFI Final Report and Summary do not fully meet the objectives stated in Permit Section IV, Condition Y., the Administrative Authority may disapprove the RFI Final Report and Summary. If the Administrative Authority disapproves the Report, the Administrative Authority shall notify the Permittee in writing of the Report's deficiencies and specify a due date for submittal of a revised Final Report and Summary or the Administrative Authority may modify the report before approval. Once approved, the Summary shall be mailed to all individuals on the facility mailing list as specified above, unless the Permittee takes exception to the conditions of the approved Report. If the Permittee takes exception to any portion of the Report approved by the Administrative Authority, written notification of the exception(s) will be sent to the Administrative Authority in accordance with dispute resolution provisions of Permit Section IV, Condition L.4.

3. Action levels, as discussed in Permit Section IV, Condition L.2, shall be used by the Permittee to determine the need for further corrective action under this Permit. Action levels are one criterion which can be used to determine if a CMS is required. The concept of action levels is not the same as cleanup levels,

although in some cases a final cleanup level may be set to equal the action level.

T. DETERMINATION OF NO FURTHER ACTION

1. Based on the results of the RFI and/or other relevant information, the Permittee may submit an application to the Administrative Authority for a Class III permit modification under 40 CFR 270.42(c) to terminate the RFI/CMS process for a specific unit. This permit modification application must contain information demonstrating that there are no releases of hazardous waste including hazardous constituents from a particular SWMU at the facility that pose threats to human health and/or the environment, as well as additional information required in 40 CFR 270.42(c).

   If, based upon review of the Permittee's request for a permit modification, the results of the RFI, and other information, including comments received during the sixty (60) day public comment period required for Class III permit modifications, the Administrative Authority determines that releases or suspected releases which were investigated either are non-existent or do not pose a threat to human health and/or the environment, the Administrative Authority may grant the requested modification.

2. If necessary to protect human health or the environment, a determination of no further action shall not preclude the Administrative Authority from requiring continued or periodic monitoring of air, soil, ground water, or surface water, when site-specific circumstances indicate that releases of hazardous waste or hazardous constituents are likely to occur.

3. A determination of no further action shall not preclude the Administrative Authority from requiring further investigations, studies, or remediation at a later date, if new information or subsequent analysis indicates a release or likelihood of a release from a SWMU at the facility that is likely to pose a threat to human health or the environment. In such a case, the Administrative Authority shall initiate a modification to the Permit according to Permit Section IV, Condition A.3.

U. CORRECTIVE MEASURES STUDY (CMS) PLAN

1. If the Administrative Authority has reason to believe that a SWMU has released hazardous constituents, or if the Administrative Authority determines that

contaminants present a threat to human health or the environment given action levels or site-specific exposure conditions, the Administrative Authority may require a CMS and shall notify the Permittee in writing. The notification may also specify remedial alternatives to be evaluated by the Permittee during the CMS.

2. The Permittee shall submit a CMS Plan to the Administrative Authority within ninety (90) calendar days from notification of the requirement to conduct a CMS.

   The CMS Plan shall provide the following information:

   a. A description of the general approach to the investigation, and potential remedies;

   b. A definition of the overall objectives of the study;

   c. Specific plans for evaluating remedies to ensure compliance with remedy standards;

   d. Schedules for conducting the study; and

   e. The proposed format for the presentation of information.

3. After the Permittee submits the CMS Plan, the Administrative Authority will approve, disapprove, or modify the plan in writing.

   If the Administrative Authority approves the CMS Plan, the Permittee shall implement the plan per Permit Section IV, Condition V.

   In the event of disapproval (in whole or in part) of the CMS Plan, the Administrative Authority shall specify deficiencies in writing. The Permittee shall modify the plan to correct these within the time frame specified in the notice of deficiency. The modified CMS Plan shall be submitted in writing to the Administrative Authority for review. Should the Permittee take exception to the disapproval, decision, or directive, the Permittee shall submit a written statement of the grounds for the exception in accordance with dispute resolution provisions of Permit Section IV, Condition L.4.

V. CMS IMPLEMENTATION

No later than fifteen (15) calendar days after the Permittee has received written approval from the Administrative Authority for the CMS Plan, the Permittee shall begin implementation of the Corrective Measures Study and complete the plan according to the schedules specified therein. All approved plans become incorporated into this Permit as per Permit Section IV, Condition A.8.

W. CMS FINAL REPORT AND SUMMARY

1. Within sixty (60) calendar days after the completion of the CMS, the Permittee shall submit a CMS Final Report and Summary. The Summary shall summarize the Final Report. The CMS Final Report shall discuss the results of investigations of each remedy studied and of any bench-scale or pilot tests conducted. It must include an evaluation of each remedial alternative. The CMS Final Report shall present all information gathered during the CMS, and must contain adequate information to support the remedy selection process. In the CMS Final Report, the Permittee shall propose a corrective action program that shall:

   a. attain compliance with corrective action objectives for hazardous constituents in each medium, as established in Permit Section IV, Condition Z;

   b. control sources of releases;

   c. meet acceptable waste management requirements; and

   d. protect human health and the environment.

2. After the Permittee submits the CMS Final Report and Summary, the Administrative Authority will either approve or disapprove them in writing. Should the Permittee take exception to the disapproval, decision, or directive, the Permittee shall notify the Administrative Authority according to Permit Section IV, Condition L.4.

   If the Administrative Authority approves the CMS Final Report and Summary, the Permittee shall mail the approved Summary to all individuals on the facility mailing list established pursuant to 40 CFR 124.10(c)(1)(ix), within fifteen (15) calendar days of receipt of approval.

If the Administrative Authority determines the CMS Final Report and Summary do not fully meet the objectives stated in Permit Section IV, Condition Z., the Administrative Authority may disapprove the CMS Final Report and Summary. If the Administrative Authority disapproves the Report, the Administrative Authority shall notify the Permittee in writing of the Report's deficiencies and specify a due date for submittal of a revised Final Report and Summary. Once approved, the Summary shall be mailed to all individuals on the facility mailing list as specified in the paragraph immediately above.

3. Based on preliminary results and the CMS Final Report, the Administrative Authority may require the Permittee to evaluate additional remedies or particular elements of one or more proposed remedies.

X. CORRECTIVE MEASURE (REMEDY) SELECTION AND IMPLEMENTATION

Within thirty (30) calendar days after approval of CMS Final Report and Summary, the Administrative Authority shall initiate modification of the Permit according to Permit Section IV, Condition A.3., for corrective measure (remedy) selection, based on the approved CMS Final Report. The resultant modified permit will include schedules for remedy implementation.

Y. RCRA FACILITY INVESTIGATION

1. Purpose

The purpose of the RFI is to determine the nature and extent of releases of hazardous wastes or hazardous constituents from solid waste management units. The required information shall include each item specified under Permit Section IV, Conditions Y.3, Y.4, and Y.5. The Permittee shall furnish all personnel, materials, and services necessary for, or incidental to, performing the RFI.

If the Permittee believes that certain requirements of the Scope of Work are not applicable, the specific requirements shall be identified and a detailed rationale for inapplicability shall be provided.

2. Scope

The RFI consists of three tasks:

Task I: RFI Work Plan

a. Introduction
b. Environmental Setting
c. Source Characterization
d. Contamination Characterization
e. Potential Receptor Identification
f. Data Collection Quality Assurance Plan
g. Data Management Plan
h. Health and Safety Plan
i. Community Relations Plan
j. Project Management Plan

Task II: Execution of RCRA Facility Investigation

Task III: RFI Final Report and Summary

3. Task I: RFI Work Plan

The Permittee shall prepare a RFI Work Plan as specified in Permit Section IV, Condition Q. and the following. The RFI Work Plan shall provide for and address the following information needs:

a. Introduction

1) Facility Description

The introduction shall summarize the regional location, pertinent boundary features, general facility physiography, hydrogeology, and historical use of the facility for the treatment, storage, or disposal of solid and hazardous waste. Information from existing reports and studies is acceptable, as long as the source of this information is documented, pertinent, and reflective of current conditions. This section shall include:

a) Map(s) depicting the information specified below. All maps shall be consistent with requirements set forth in 40 CFR 270.14 and shall be of sufficient detail and accuracy to locate all current and future work performed at the site and shall include, but not be limited to the following:

i general geographic location;

ii property lines, with the owners of all adjacent property clearly indicated, and all land previously owned and/or used by the Permittee around the facility;

iii topography, waterways, wetlands, floodplains, water features, and drainage patterns;

iv all tanks, buildings, utilities, paved areas, rights-of-way, and other features;

v all solid waste management units;

vi all known past solid or hazardous waste treatment, storage and disposal areas or units regardless of whether they were active on November 19, 1980;

vii surrounding land uses (residential, commercial, agricultural, recreational); and

viii the location of all production and ground water monitoring wells. These wells shall be clearly labeled and ground and top of casing elevations included (these elevations may be included as an attachment).

b) A history and description of ownership and operation, solid and hazardous waste generation, treatment, storage and disposal activities at the facility.

c) A summary of approximate dates or periods of past waste releases, identification of the materials released, the

amount released, the location released, and a description of the response actions conducted (local, state, or Federal response units, or private parties), including any inspection reports or technical reports generated as a result of the release.

d) A reference to all environmental, geologic, and hydrogeologic studies performed by all parties, at or near the facility, with a short summary of the purpose, scope, and significant findings thereof.

e) A reference to all environmental permits, applied for and received or denied, the purpose thereof, and a short summary of requirements.

2) Nature and Extent of Contamination

a) The Introduction shall summarize all possible source areas of contamination. This, at a minimum, should include all SWMUs listed in the attached list of SWMUs. For each area, the Permittee shall identify the following:

i location of unit/area on a facility map;

ii quantities of solid, hazardous, and radiochemical wastes;

iii quantities of radiochemical and hazardous constituents, to the extent known; and

iv identification of areas where additional information is necessary.

b) The Permittee shall prepare an assessment and description of the existing degree and extent of contamination. This will include:

i available monitoring data and qualitative information on locations and levels of contamination at the facility;

ii all potential migration pathways including information on geology, pedology, hydrogeology, physiography, hydrology, water quality, meteorology, and air quality; and

iii the potential impact(s) on human health or the environment, including demography, ground water and surface water use, and land use.

3) Implementation of Interim Measures

The Permittee shall document and report on all interim measures which have been or are being undertaken at the facility, including under state or Federal compliance orders, other than those specified in the Permit. The report shall include, as applicable:

a) Objectives of the interim measures: how the measure is mitigating a potential threat to human health or the environment and/or is consistent with and integrated into requirements for a long term solution;

b) Schedules for design, construction and monitoring;

c) Schedule for progress reports;

d) Stabilization that has occurred at the site;

e) Proposed further investigation and/or action; and

f) Justification for limiting the scope of the RFI.

b. Environmental Setting

The Work Plan shall provide for collection of information to supplement and verify existing information on the environmental setting at the facility. The Work Plan shall provide for characterization of the following:

1) Hydrogeology

The Work Plan shall describe in detail a program to evaluate hydrogeologic conditions at the facility. This program shall provide for at least the following information needs:

a) A description of the regional, local, facility-wide, and SWMU-specific geologic and hydrogeologic characteristics affecting ground water flow beneath the facility.

b) An analysis of any topographic features including surface water bodies that might influence the ground water flow system.

c) A representative and accurate classification and description of the hydrogeologic units which may be part of migration pathways at the facility (i.e., the aquifers and any intervening saturated and unsaturated units) based on field data, tests (e.g., gamma and neutron logging of existing and new wells, piezometers and borings), and cores.

d) The extent (depth, thickness, lateral extent) of hydrogeologic units which may be part of migration pathways based on field studies and cores, structural geology, and hydrogeologic cross sections, including:

   i unconsolidated sand and gravel deposits;

   ii zones of fracturing or channeling in consolidated or unconsolidated deposits; and

   iii zones of high permeability or low permeability that might direct and restrict the flow of contaminants.

e) A description of representative water level or fluid pressure based on data obtained from ground water monitoring wells and piezometers installed upgradient and downgradient of the potential contaminant source. Information needs include: potentiometric surface maps; hydrologic cross sections showing vertical gradients; vertical and horizontal components of flow; temporal changes in hydraulic gradients; and flow nets.

f) A description of man-made influences that may affect site hydrogeology such as active and inactive local water supply and production wells, pipelines, French drains, and ditches.

2) Soils

The Permittee shall describe in detail a program designed to characterize soil and rock units above the water table. Such characterization shall include, but is not limited to, the following information: surface soil distribution; soil profile, including ASTM and USCS classifications of soils; transects of soil stratigraphy; saturated hydraulic conductivity; porosity; cation exchange capacity (CEC); soil pH; particle size distribution; depth to water table; moisture content; effect of stratification on unsaturated flow; infiltration; evapotranspiration; residual concentration of contaminants in soil; total natural organic carbon content; and mineral and metal content.

c. Source Characterization

The Permittee shall describe in detail a program designed to completely characterize the wastes and the areas where wastes have been placed, including: type, quantity, physical form, composition, disposition (containment and nature of wastes), and the facility characteristics affecting releases (e.g., facility security, engineered barriers). This shall include quantification of the following specific characteristics, at each source area:

1) Unit/disposal area characteristics, including but not limited to: location of unit/disposal area; type of unit/disposal area; design features; operating practices (past and present); period of operation; age of unit/disposal area; general physical conditions; and method used to close the unit/disposal area.

2) Waste characteristics, including but not limited to: type of waste placed in unit (hazardous classification, quantity, chemical composition); physical and chemical characteristics (physical form, physical description, temperature, pH, general chemical class, molecular weight, density, boiling point, viscosity, solubility in water, solubility in solvents, cohesiveness, vapor pressure); and migration and dispersal characteristics of the waste (sorption

coefficients, biodegradability, photodegradation rates, hydrolysis rates, chemical transformations).

d. Contamination Characteristics

The Permittee shall describe in detail a program to collect analytical data on ground water, soils, surface water, sediment, and subsurface gas contamination when necessary to characterize contamination from a SWMU. The data shall be sufficient to define the extent, origin, direction, and rate of movement of contaminant plumes. Data required shall include time and location of sampling, media sampled, concentrations found, conditions during sampling, and the identity of the individual(s) performing the sampling and analysis. All media (ground water, surface water and sediments, soil, air, and gas) must be investigated. If the Permittee believes certain media could not be affected by a release from a specific unit, a detailed justification for not investigating those media must be provided. The Permittee shall address the following types of contamination at the facility as appropriate:

1) Ground Water Contamination

The Work Plan shall describe in detail a program of ground water investigation to characterize any ground water plumes of contamination at the facility that are not subject to corrective action requirements of 40 CFR Section 264.100. The program shall at a minimum provide for the following information needs:

a) a description of the horizontal and vertical extent of any immiscible or dissolved plume(s) originating from the facility;

b) the horizontal and vertical direction of contamination movement;

c) the velocity of contaminant movement;

d) the horizontal and vertical concentrations of any 40 CFR 264 Appendix IX constituents;

e) an evaluation of factors influencing the plume movement; and

density, ion exchange capacity, and total natural organic carbon content;

c) maps which meet requirements in 40 CFR 270.14 and which are sufficiently detailed and accurate to depict all the information required for all areas included in surface water and sediment investigations;

d) a description of the horizontal and vertical extent of any immiscible or dissolved plumes originating from the facility, and the extent of contamination in the underlying sediments;

e) the horizontal and vertical direction and velocity of contaminant movement;

f) an evaluation of the physical, biological, chemical, and radiochemical factors influencing contaminant movement;

g) an extrapolation to future contaminant movement; and

h) a description of the chemistry of the contaminated surface waters and sediments. This includes pH, temperature, total dissolved solids, total suspended solids, biochemical oxygen demand, alkalinity, conductivity, dissolved oxygen profiles, nutrients, chemical oxygen demand, total organic carbon, and specific contaminant concentrations.

4) Air Contamination

The Permittee shall describe in detail a program to characterize particulate and gaseous contaminants released into the atmosphere. This investigation shall provide the following information: a description of the horizontal and vertical direction and velocity of contaminant movement; the rate and amount of the release; and the chemical, radiochemical, and physical composition of the contaminants released, including horizontal and vertical concentration profiles.

5) Subsurface Gas

The Permittee shall describe in detail a program to characterize the nature, rate and extent of releases of reactive gases from the units. Such a program shall include, but is not limited to: provisions for monitoring subsurface gases released from the unit, and an assessment of the potential for threat to human health and/or the environment.

e. Potential Receptors

The Permittee shall describe in detail a program to collect data to describe human populations and environmental systems that are susceptible to contaminant exposure from the facility. Chemical and radiochemical analysis of biological samples may be needed. Data on observable effects in ecosystems may also be required. The following characteristics shall be identified:

1) Local uses and possible future uses of ground water, including:

a) type of use (i.e., potable, domestic, agricultural, residential, industrial, municipal)

b) location of all ground water wells, names of owners or tenants at those locations, USGS/DODT well designations, and current use of those wells within a 1-mile radius of facility.

2) Local uses and possible future uses of surface waters within a 1.5 mile radius of the facility, including domestic and municipal, recreational, agricultural, industrial, and environmental.

3) Human use of or access to the facility and adjacent lands, including but not limited to recreation, hunting, residential, commercial, and industrial.

4) A demographic profile of people who use or have access to the facility and adjacent land, including, but not limited to age, gender, and sensitive subgroups.

5) A description of the local ecology, including, but not limited too, biota in surface water bodies on, adjacent to, or affected by the facility, and a description of any endangered or threatened species near the facility.

f. Data Collection Quality Assurance Plan

The Permittee shall prepare a plan to document all monitoring procedures: sampling, field measurements, and sample analysis performed at the facility during the investigation to characterize the environmental setting, source, and contamination, so as to ensure that all information, data, and resulting decisions are technically sound, statistically valid, and properly documented.

1) The strategy section of the Data Collection Quality Assurance Plan shall include but not be limited to the following:

a) a description of the intended uses for the data, and the necessary level of precision and accuracy for those intended uses;

b) a description of methods and procedures to be used to assess the precision, accuracy and completeness of the measurement data; and

c) a schedule and information to be provided in quality assurance reports, including at least:

i periodic assessment of measurement data accuracy, precision, and completeness;

ii results of performance audits;

iii results of systems audits; and

iv significant quality assurance problems and resolutions.

2) The Sampling and Field Measurements Section of the Data Collection Quality Assurance Plan shall at least discuss:

a) selection of appropriate sampling and field measurements locations, depths, etc.;

b) provision of a statistically sufficient number of sampling and field measurement sites;

c) determination of conditions under which sampling or field measurements shall be conducted;

d) determination of which parameters are to be measured and where;

e) selection of the frequency of sampling and length of sampling period;

f) selection of the types of sample (e.g., composites vs. grabs) and number of samples to be collected;

g) delineation of procedures designed to prevent contamination of sampling or field measurements equipment and cross contamination between sampling points;

h) documentation of field sampling operations and procedures;

i) selection of appropriate sample containers;

j) preservation of samples;

k) chain-of-custody controls; and

l) disposal of all contaminated materials generated by activities in a manner compliant with all state and Federal regulations.

3) The Sample Analysis shall include:

a) chain-of-custody procedures;

b) sample storage procedures and holding times;

c) sample preparation methods;

d) analytical procedures;

e) calibration procedures and frequency;

f) data reduction, validation and reporting; and

g) frequency of internal quality control checks and laboratory performance audits.

g. Data Management Plan

The Permittee shall develop and initiate a Data Management Plan to document and track investigation data and results. This plan shall identify and set up data documentation materials and procedures (data record), project file requirements, and project-related progress reporting procedures and documents.

1) The data record shall include at least the following for all sample and field measurements: unique measurement code; measurement location; measurement type; laboratory ID number; property or component analyzed; and results of analysis.

2) The Data Management Plan shall provide the format to be used to present the data and conclusions of the investigation, etc.

a) The following shall be presented in tables: raw data; data sorted by significant features such as location, media, constituent; data reduction for statistical analysis; and summary data.

b) The following shall be presented in graphical formats (e.g., bar graphs, line graphs, plan maps, isopleth plots, cross-sections, three-dimensional displays, etc.): sampling location and grid; levels of contamination at each sampling location; geographical extent of contamination; and

changes in concentration relative to source, time, depth, and other parameters.

h. Health and Safety Plan

1) The Permittee shall prepare a facility Health and Safety Plan, which shall include:

a) a description of the facility including availability of resources such as roads, water supply, electricity and telephone service;

b) a description of the known hazards and evaluation of the risks associated with each activity conducted, including but not limited to on and off-site exposure to contaminants during implementation of interim measures;

c) a list of key personnel and alternatives responsible for site safety, response operations, and for protection of public health;

d) a delineation of the work area;

e) a description of levels of protection to be worn by personnel in the work area;

f) procedures established to control site access;

g) decontamination procedures for personnel and equipment;

h) site emergency procedures;

i) emergency medical care procedures for injuries and toxicological problems;

j) requirements for an environmental field monitoring program;

k) routine and special training requirements for responders; and

l) procedures for protecting workers from weather-related problems.

2) The Facility Health and Safety Plan shall be consistent with:

a) NIOSH Occupation Safety and Health Guidance Manual for Hazardous Waste Site Activities (1985);

b) EPA Order 1440.1 - Respiratory Protection;

c) EPA Order 1440.3 - Health and Safety Requirements for Employees engaged in Field Activities;

d) approved Facility Contingency Plan;

e) EPA Operating Safety Guide (1984);

f) OSHA regulations, particularly 29 CFR 1910 and 1926;

g) State and local regulations; and

h) other EPA guidance as provided.

i. Community Relations Plan

The Permittee shall prepare a plan for dissemination of information to the public regarding investigation activities and results.

j. Project Management Plan

The Permittee shall prepare a Project Management Plan which will include a discussion of the technical approach, schedules, budget, and key project personnel. The project management plan will also include a description of qualifications of key project personnel performing or directing the RFI, including contractor personnel. This plan shall also document the overall management approach to the RFI.

4. Task II: RCRA Facility Investigation

The facility investigation activities shall follow the RFI Work Plan. All sampling and analyses shall be conducted in accordance with the Data Collection Quality Assurance Plan. All sampling locations shall be documented in a log and identified on a detailed site map. During the RFI, it may be necessary to revise the RFI Work Plan to increase or decrease the detail of information collected to accommodate the facility specific situation.

The Permittee shall conduct investigations of SWMUs previously identified with known or suspected releases of contamination to characterize the facility (Environmental Setting), define the source (Source Characterization), define the degree and extent of contamination (Contamination Characterization), and identify actual or potential receptors.

The investigations should result in data of adequate technical quality to develop and evaluate corrective measures alternatives during the Corrective Measures Study, when necessary.

5. Task III: RFI Final Report

The Permittee shall analyze all facility investigation data collected during the RFI process and prepare a detailed report on the type and extent of contamination at the facility including sources and migration pathways. All information generated during the investigation shall be presented and analyzed. All evidence and procedures used for making any determinations (e.g., velocity of groundwater, extent of contamination) shall be fully documented. The report shall describe the extent of contamination (qualitative/quantitative) in relation to background levels indicative for the area. The report shall contain the results of all tests, calculations, inspections, record searches, and observations. It shall contain soil and ground water contamination profiles, statistical comparisons, and the results of all sampling events conducted as part of the investigation. It shall display results in tables, graphs, maps, and cross sections as discussed in the Data Management Plan and Permit Section IV, Condition Y.3.g.2).

The Permittee shall identify and comply with all relevant and applicable standards for the protection of human health or the environment (e.g., National Ambient Air Quality Standards, federally approved State water quality standards, ground water protection standards, etc.)

Data shall be evaluated to ensure it is sufficient in quality (e.g., quality assurance procedures have been followed) and quantity to describe the nature and extent of contamination, to evaluate the potential threat to human health or the environment, and to support a CMS, if required. The report shall present all data in an Appendix.

6. General RFI Reporting Requirements

a. Two hard copies and one IBM compatible disk copy of all reports and data shall be submitted by the Permittee to the Administrative Authority as specified in Permit Section IV, Condition A.7.

b. The RFI Work Plan shall be submitted by the Permittee to the Administrative Authority as described in Permit Section IV, Condition Q.

c. The RFI Final Report and Summary shall be submitted by the Permittee to the Administrative Authority as described in Permit Section IV, Condition S.

d. Within 90 days of the effective date of this Permit, the Permittee shall provide the Administrative Authority with signed, quarterly progress reports as specified in Permit Section IV, Condition M.1.

Z. CMS SCOPE OF WORK

1. Purpose

The purpose of the CMS is to develop and evaluate corrective measures alternatives and to recommend the corrective measure or measures to be taken. The required information shall include each item specified under CMS Tasks IV-VI (Permit Section IV, Conditions Z.3 through Z.5.) The Permittee will furnish the personnel, materials, and services necessary to prepare the CMS, except as otherwise specified.

2. Scope

The Corrective Measure Study consists of three tasks:

Task IV: CMS Plan

a. Description of Current Situation
b. Establishment of Corrective Action Objectives
c. Description of Approach to CMS
d. Schedule for CMS

Task V: Corrective Measures Study

a. Identification of Corrective Measures Alternatives(s)
b. Screening of Corrective Measures Alternatives(s)
c. Development of Corrective Measures Alternative(s)
d. Evaluation of Corrective Measures Alternative(s)
e. Selection of Corrective Measures Alternative(s)

Task VI: CMS Final Report and Summary

3. Task IV: CMS Plan

a. Description of Current Conditions

The Permittee shall briefly describe current conditions at the facility to update information provided in the RFI Final Report and Summary. This shall include previous and/or ongoing remedial activity or interim measures.

b. Establishment of Corrective Action Objectives

The Permittee shall propose to the Administrative Authority for review and approval, facility specific objectives for the corrective action. These objectives shall be based on public health and environmental criteria, information gathered during the RFI, EPA guidance, and the requirements of any applicable Federal statutes and regulations.

c. Description of Approach to CMS

The Permittee shall describe the general approach to the corrective measures study. The approach shall include identification, development, screening, and evaluation of the corrective measure alternatives, as discussed in detail in Permit Section IV, Condition Q.4. The Permittee shall describe specific plans for laboratory and bench-scale studies, or field studies, if needed. Specific plans for evaluating remedy effectiveness shall also be developed. The

approach shall specify formats to be used for data presentation, including raw data, maps, charts, graphs, engineering schematics, construction design, etc.

d. Schedule

The Permittee shall develop a schedule for implementing the corrective measures study, and a schedule for submitting quarterly progress reports on the study implementation.

4. Task V: Corrective Measures Study

The CMS consists of five parts: identification, screening, development, evaluation, and selection of the corrective measures alternative(s).

a. Identification of Preliminary Corrective Measures Alternative(s)

Based on the results of the RFI and the CMS Plan objectives, the Permittee shall identify all possible alternatives for removal, containment, treatment and/or other remediation of the contamination.

b. Screening of Preliminary Corrective Measures Alternatives

The Permittee shall screen the identified preliminary corrective measures alternatives to eliminate those that may not prove feasible to implement, that rely on technologies unlikely to perform satisfactorily or reliably, or that do not achieve the corrective action objective within a reasonable time period. This screening process focuses on eliminating those technologies which have severe limitations for a given set of waste and site-specific conditions. The screening step may also eliminate technologies based on inherent technological limitations.

Site, waste, and technological characteristics which are used to screen inapplicable technologies are described in more detail below:

1) Site Characteristics. Site data should be reviewed to identify conditions which may limit or promote the use of certain technologies. Technologies whose use is clearly precluded by site characteristics should be eliminated from further consideration;

2) Waste Characteristics. Identification of waste characteristics that limit the effectiveness or feasibility of technologies is an important part of the screening process. Technologies clearly limited by waste characteristics should be eliminated from consideration.

3) Technological Limitations. The level of technology development, performance record, and operation and maintenance problems shall be identified for each technology considered. Technologies that are unreliable, perform poorly, or are not fully demonstrated may be eliminated in the screening process.

c. Development of Corrective Measures Alternatives

The Permittee shall develop corrective measures alternatives based on corrective measures objectives, and identification and screening of preliminary alternatives. The Permittee shall rely on engineering practice to determine which of the previously identified and screened technologies appear most suitable for the site. Technologies can be combined to form the overall corrective measures alternatives. The alternatives developed should represent a workable number of options that each appears to adequately address all site problems and corrective action objectives. Each alternative may consist of an individual technology or a combination of technologies. The Permittee shall document the reasons for excluding technologies.

When a new technology is proposed or similar waste streams have not routinely been treated or disposed of using the technology, the Permittee shall conduct laboratory and/or bench-scale studies to determine the applicability to facility conditions. The Permittee shall analyze the technologies, based on literature review, vendor contracts, and past experience to determine the testing requirements.

1) The Permittee shall develop a testing plan identifying the type(s) and goal(s) of the study(ies), the level of effort needed, and the procedures to be used for data management and interpretation.

2) Upon completion of testing, the Permittee shall evaluate the testing results to assess the technology or technologies with respect to the site-specific questions identified in the test plan.

3) The Permittee shall prepare a report summarizing the testing program and its results, both positive and negative.

d. Evaluation of Corrective Measures Alternative(s)

The Permittee shall evaluate each corrective measure alternative developed in Permit Section IV, Condition Z.4.c. The evaluation shall be based on technical, environmental, human health and institutional concerns. The Permittee shall also develop cost estimates for each corrective measure.

1) Technical, Environmental, Human Health, and Institutional Concerns

The Permittee shall provide a description of each corrective measures alternative which includes but is not limited to the following: preliminary process flow sheets; preliminary sizing and type of construction for buildings and structures; and rough quantities of utilities required. The Permittee shall evaluate each alternative in the four following areas:

a) Technical

The Permittee shall evaluate each corrective measure alternative based on performance, reliability, efficacy of implementation, and safety.

i The Permittee shall evaluate performance based on the effectiveness and useful life of the corrective measure:

(a) Effectiveness shall be evaluated in terms of the ability to perform intended functions such as containment, diversion, removal, destruction, or treatment. The effectiveness of each corrective measure shall be determined either through design specifications or by performance evaluation. Any specific waste or site characteristics which could potentially impede effectiveness shall be considered. The evaluation should

also consider the effectiveness of combinations of technologies.

(b) Useful life is defined as the length of time the level of effectiveness can be maintained. Each corrective measure shall be evaluated in terms of the projected service lives of its component technologies. Resource availability in the future life of the technology, as well as appropriateness of the technologies, must be considered in estimating the useful life of the project.

ii The Permittee shall provide information on the reliability of each corrective measure including operation and maintenance requirements and demonstrated reliability:

(a) Operation and maintenance requirements include the frequency and complexity of operation and maintenance. Technologies requiring frequent or complex operation and maintenance activities should be regarded as less reliable than technologies requiring little or straightforward operation and maintenance. The availability of labor and materials to meet these requirements shall also be considered.

(b) Demonstrated and expected reliability is a way of measuring risk and effect of failure. The Permittee should evaluate whether technologies have been used effectively under analogous conditions; whether the combination of technologies have been used together effectively; whether failure of any one technology has an immediate impact on receptors; and whether the corrective measure has the flexibility to deal with uncontrollable changes at the site.

iii The Permittee shall describe the efficacy of implementation of each corrective measure including relative ease of installation (construction) and total time required to achieve a given level of response:

(a) Ease of construction is determined by conditions both internal and external to facility conditions and includes such items as location of underground utilities, depth to water table, heterogeneity of subsurface materials, and location of facility (i.e., remote location vs. congested urban area). The Permittee shall evaluate what measures can be taken to facilitate construction under site specific conditions. External factors which affect implementation include the need for special permits or agreements, equipment availability, and the location of suitable off-site treatment or disposal facilities.

(b) Time has two components to be addressed: the time it takes to implement a corrective measure and the time it takes to see beneficial results. Beneficial results are defined as the reduction of contaminants to acceptable levels as established in the corrective measures objectives.

iv The Permittee shall evaluate each corrective measure alternative with regard to safety. This evaluation shall include threats to the safety of nearby communities and environments as well as those to workers during implementation. Factors to consider include fire, explosion, and exposure to hazardous substances.

The Permittee shall develop an estimate of the cost of each corrective measure alternative and for each phase or segment of the alternative. The cost estimate shall include capital, and operation and maintenance costs.

a) Capital costs consist of direct and indirect costs.

i Direct capital costs include:

(a) Construction costs: Cost of materials, labor (including fringe benefits and worker's compensation), and equipment required to install the corrective measures alternative;

(b) Equipment costs: Costs of treatment, containment, disposal and/or servicing of equipment used to implement the action;

(c) Land and site development costs: Expenses associated with purchase of land and development of existing property; and

(d) Building and services costs: Costs of process and non-process buildings, utility connections, purchased services, and disposal costs.

ii Indirect capital costs include:

(a) Engineering expenses: Costs of administration, design, construction, supervision, drafting, and testing of corrective measures alternatives;

(b) Legal fees and license or permit costs: Administrative and technical costs necessary to obtain licenses and permits for installation and operation;

(c) Start-up and shakedown costs: Costs incurred during corrective measure start-up; and

(d) Contingency allowances: Funds to cover costs resulting from unforeseen circumstances such as adverse weather conditions, strikes, and inadequate facility characterization.

b) Operation and maintenance costs are post-construction costs necessary to ensure continued effectiveness of a corrective measure. The Permittee shall consider the following operation and maintenance cost components:

i Operating labor costs: Wages, salaries, training, overhead, and fringe benefits associated with the labor needed for post-construction operation;

ii Maintenance materials and labor costs: Costs for labor, parts, and other resources required for routine maintenance of facilities and equipment;

iii Auxiliary materials and energy: Costs of such items as chemicals and electricity for treatment plant operations, water and sewer service, and fuel;

iv Purchased services: Sampling costs, laboratory fees, and professional fees which can be predicted;

v Disposal and treatment: Costs of transporting, treating, and disposing of waste materials, such as treatment plant residues, generated during operation;

vi Administrative costs: Costs associated with administration of corrective measures operation and maintenance not included under other categories;

vii Insurance, taxes, and licensing costs: Costs of such items as liability and accident insurance; real estate taxes on purchased land or rights-of-way; licensing fees for certain technologies; and permit renewal and reporting costs;

viii Maintenance reserve and contingency funds: Annual payments into escrow funds to cover costs of anticipated replacement or rebuilding of equipment, and any large unanticipated operation and maintenance costs; and

ix Other costs: Items that do not fit any of the above categories.

e. Selection of Corrective Measures Alternative(s)

The Permittee shall select a corrective measure alternative using technical, human health, and environmental criteria. At a minimum, the following criteria shall be used to select the final corrective measure or measures.

1) Technical

a) Performance. Corrective measure or measures which are most effective at performing their intended functions and maintaining performance over extended periods of time will be given preference;

b) Reliability. Corrective measure or measures which do not require frequent or complex operation and maintenance activities and have proven effective under conditions similar to those anticipated will be given preference;

c) Efficacy of Implementation. Corrective measure or measures which can be constructed and operated to reduce levels of contamination to attain or exceed applicable standards in the shortest period of time will be preferred; and

d) Safety. Corrective measure or measures which pose the least threat to the safety of nearby residents and environments as well as workers during implementation will be preferred.

2) Human Health

The corrective measure or measures must comply with existing EPA criteria, standards, or regulations for the protection of human health. Corrective measures which provide the minimum level of exposure to contaminants and the maximum reduction in exposure with time are preferred.

3) Environmental

The corrective measure or measures imposing the least adverse impact and greatest improvement on the environment over the shortest period of time will be preferred.

5. Task VI: CMS Final Report and Summary

The Permittee shall prepare a CMS Final Report and Summary presenting the results of the CMS and recommending a corrective action program. The Report shall at a minimum include:

a. A summary of all the corrective measure alternatives originally identified, and the screening rationale employed. The results of development of each alternative shall be described, and the evaluation of those developed shall be presented in detail. The report will describe the rationale for selection of a corrective measures alternative, including performance expectations, preliminary design criteria and rationale, general operation and maintenance requirements, and long-term monitoring requirements. The report shall include summary tables, which allow the alternative or alternatives to be easily understood. Trade-offs among health risks, environmental effects, and other pertinent factors shall be highlighted.

b. A proposed corrective action program that will attain compliance with concentration level objectives, control sources of releases, meet

acceptable waste management requirements, and protect human health and the environment.

c. Design and implementation precautions, including special technical problems, additional engineering data required, permits and regulatory requirements, access, easements, and right-of-way, health and safety requirements, and community relations activities.

d. Cost estimates and schedules including capital cost estimate, operation and maintenance cost estimate, and project schedule (design, construction, operation).

e. A schedule for corrective measure implementation.

6. General CMS Reporting Requirements

a. Two hard copies and one IBM compatible disk copy of all reports shall be submitted by the Permittee to the Administrative Authority as specified in Permit Section IV, Condition A.7.

b. The Permittee shall submit the CMS Plan to the Administrative Authority as described in Permit Section IV, Condition U.

c. The Permittee shall submit the CMS Final Report and Summary to the Administrative Authority as described in Permit Section IV, Condition W.

d. Within 90 days of the date the Permittee is notified to begin a CMS, the Permittee shall provide the Administrative Authority with signed, quarterly progress reports as specified in Permit Section IV, Condition M.1.

Table 1: RFI/CMS SUBMISSION SUMMARY

Below is a summary of the planned reporting requirements pursuant to this Permit:

Actions	Due Date (examples)
Progress reports on all activities	quarterly; no later than ninety (90) calendar days after effective date of Permit

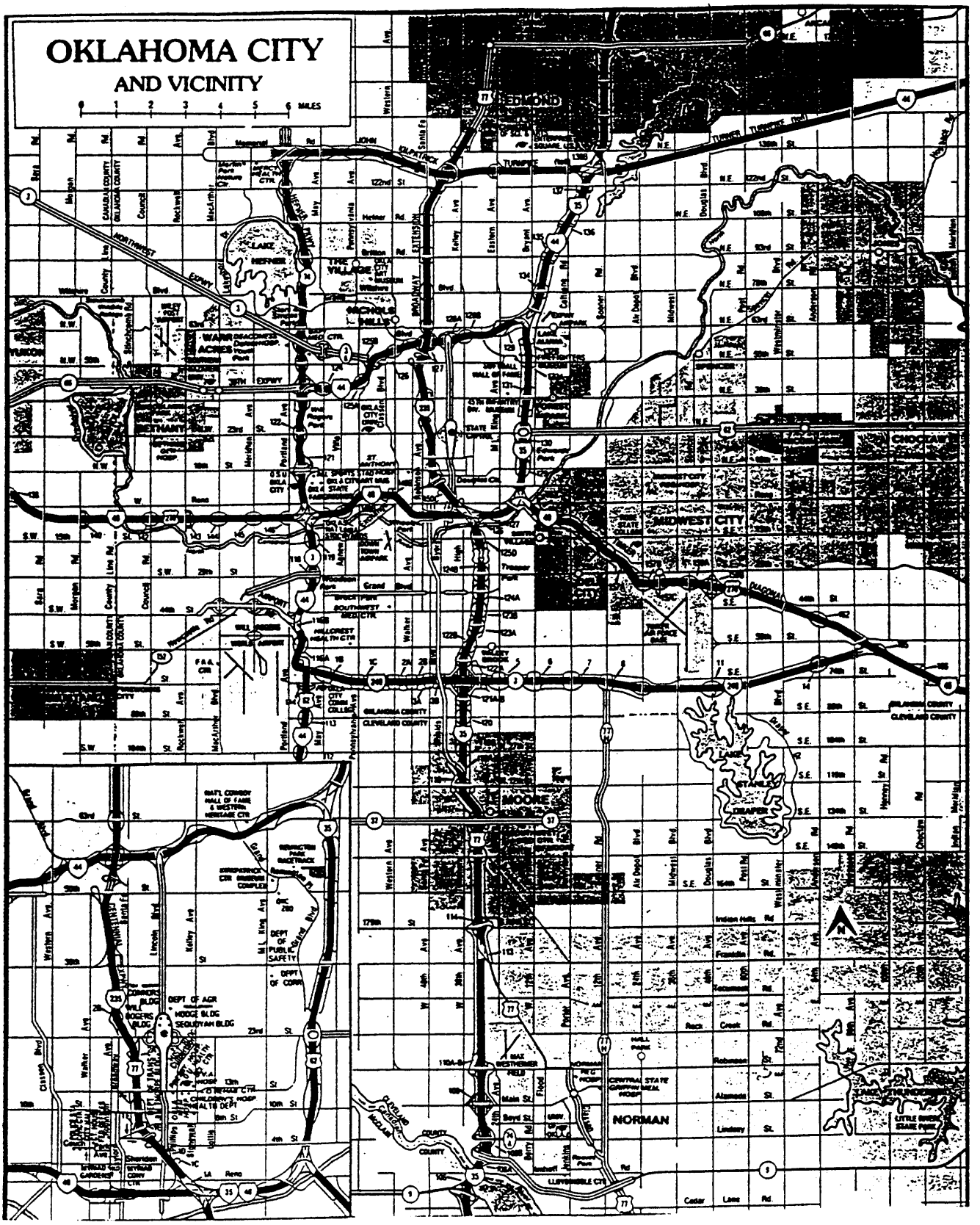
Actions	Due Date (examples)
RFI Work Plan	Permittee completed the RFI Work Plan which was approved by EPA in 1993.
Revised RFI Work Plan	as determined by Administrative Authority, not less than thirty (30) calendar days of receipt of NOD
RFI Report and Summary	RFI Phase I Report was approved by EPA on September 6, 1994.
Revised RFI Report and Summary	as determined by Administrative Authority, not less than thirty (30) calendar days of receipt of NOD
Notification of newly identified SWMUs	thirty (30) calendar days after discovery
Notification of newly discovered releases	fifteen (15) calendar days after discovery
Interim Measures Plan	as determined by Administrative Authority
Revised Interim Measure Plan	as determined by Administrative Authority
CMS Plan	ninety (90) calendar days after notification of requirement to perform CMS
Revised CMS Plan	as determined by Administrative Authority, not less than thirty (30) calendar days of receipt of NOD
CMS Final Report and Summary	sixty (60) calendar days after completion of CMS
Revised CMS Final Report	as determined by the Administrative Authority, not less than (30) calendar days after receipt of NOD

LIST OF SWMUs

TINKER AFB LIST OF SWMUs AND AOCs

Site	SWMU No.
LANDFILL 6	1
LANDFILL 5	2
LANDFILL 1	3
LANDFILL 2	4
LANDFILL 3	5
LANDFILL 4	6
FIRE TRAINING AREA No. 2	8
SUPERNATANT POND	11
INDUSTRIAL WASTE PIT No. 1	12
INDUSTRIAL WASTE PIT No. 2	13
BUILDING 201 SOUTH ALCOVE SITE (UST)	15
IWTP - INDUSTRIAL WASTE TREATMENT PLANT	24
LIFT STATION No. 2	24.1
OIL SEPARATOR	24.3
VALVE VAULT	24.4
EQUALIZATION BASINS (2)	24.5
MAIN FLOW VALVE	24.6
MIXING BASINS (3)	24.7
SOLIDS CONTACT CLARIFIER	24.8
ACTIVATED SLUDGE UNIT (2)	24.11
SECONDARY CLARIFIERS	24.12
SWTP - SANITARY WASTE TREATMENT PLANT	32
PARSHALL FLUME	32.1
FLOCCULATION CHAMBER	32.2
PRIMARY CLARIFIERS	32.3
TRICKLING FILTERS	32.4
FINAL CLARIFIERS	32.5
FORMER CHLORINE CONTACT CHAMBER	32.6
DRYING BEDS	32.7

ATTACHMENT 1



ATTACHMENT 1

Map of Oklahoma City and Vicinity

ATTACHMENT 2

ATTACHMENT 2

PERMITTED WASTE IDENTIFICATION

(Permittee is prohibited from managing hazardous wastes not listed below.)

F001	D001	D012	D023	D034
F002	D002	D013	D024	D035
F003	D003	D014	D025	D036
F004	D004	D015	D026	D037
F005	D005	D016	D027	D038
F006	D006	D017	D028	D039
F007	D007	D018	D029	D040
F008	D008	D019	D030	D041
F009	D009	D020	D031	D042
F019	D010	D021	D032	D043
F039	D011	D022	D033	
P001	P030	P097	P105	P121
P012	P042	P098	P106	
P021	P066	P099	P108	
P029	P077	P104	P119	
U002	U052	U112	U144	U211
U003	U056	U117	U151	U213
U012	U057	U121	U154	U219
U020	U058	U122	U159	U220
U032	U070	U123	U160	U226
U036	U075	U129	U161	U239
U038	U076	U132	U162	U240
U041	U080	U133	U188	U248
U044	U088	U134	U196	
U051	U103	U135	U210	
K045				

ATTACHMENT 3

ATTACHMENT 3

OVERVIEW OF WASTE ANALYSIS PLAN

3.1 PURPOSE

The purpose of the Waste Analysis Plan is to establish procedures for the analysis of hazardous wastes required before treatment, storage, or disposal according to 40 CFR 264.13, and 268.7, and Oklahoma Administrative Code 252:205-9-6. As a HWSF, the Tinker Waste Analysis Plan provides procedures for identifying waste characteristics necessary for safe storage of waste before shipment off-site for further management. Although not all encompassing, the procedures cover the majority of the waste streams that TAFB generates. The remaining waste streams are generated or are expected to be generated on a one-time or infrequent basis either on-site or off-site. Therefore, additional analytical procedures will need to be added or adapted from existing procedures on a case-by-case basis. This section presents:

- An Overview of the Waste Analysis Plan (Section 3.2) with specific reference to regulatory requirements

- The Waste Analysis Plan, including specific discussion of analytical protocols, is presented as Attachment 1 of Tinker's Hazardous Waste Management Instruction OC-ALC TAFBI 32-7004 (Permit Attachment 15).

3.2 OVERVIEW

3.2.1 Responsibilities

The Directorate of Environmental Management (EM) is responsible for ensuring that proper analysis of waste streams to determine hazardous waste characteristics is accomplished, and it will ensure laboratories that TAFB uses follow acceptable quality control/quality assurance procedures. Wastes submitted to the HWSF for storage, irrespective of whether they are from on-site or off-site

sources, will meet the waste characterization requirements of TAFB's Waste Analysis Plan. Waste received from other DoD facilities may require a confirmation fingerprint analysis. Waste analysis is performed if process knowledge is absent or to supplement process knowledge.

3.2.2 Procedures

3.2.2.1 Laboratories

Most of the analyses will be conducted by a laboratory owned, operated, and maintained by the Operations Branch of the Compliance Division of EM. This laboratory is located in Building 3001 at TAFB and has been recently upgraded with additional personnel and modern analytical equipment. If a project requires a large number of analyses or if special procedures are not available in the EM laboratory, the analytical service will be provided by a contract analytical laboratory. The Directorate of EM will maintain a contract with a reputable laboratory to provide the analytical service.

3.2.2.2 Parameters and Rationale

The hazardous waste analyses performed for TAFB will require the waste information recorded on the Oklahoma DEQ Form 858. Copies of Form 858 and appended waste analyses reports have been submitted to Oklahoma DEQ and will be kept on file at EM. In addition, the analyses will require a complete Material Profile Sheet per waste stream sample.

The rationale for selecting parameters for analysis is based on the need to know the chemical characteristics of the wastes, so that wastes can be safely stored at the HWSF. The parameters that may be analyzed are: primary chemical and physical form, characteristics, chemical element, composition, percent solids, specific weight, pH, flash point, organic components, heavy metals and other inorganic components. Tinker's Waste Analysis Plan discusses typical types of wastes and the analyses needed for each. The rationale for selecting the

analytical procedures are based on generator's knowledge of the chemicals used, processes performed and contaminants generated during these processes.

3.2.2.3. Oklahoma Disposal Plan

3.2.2.3.1. Submitted and approved Oklahoma DEQ Forms 858 constitute the Oklahoma Disposal Plan for Tinker AFB, which is assigned Number: 55066.

3.2.2.3.2. Changes to the Disposal Plan shall be submitted to the Oklahoma DEQ at least five days before transporting affected hazardous waste off-site.

3.2.2.3.3. Hazardous waste shall not be transported until the Oklahoma DEQ approves change to Disposal Plan.

3.2.2.3.4. Change requests shall include supporting documentation such as laboratory analyses, and process information.

3.2.2.3.5. If emergency clean-ups, spills, or other unusual hazardous waste is generated, not covered by the Disposal Plan, a one-time Disposal Plan may be requested from the Oklahoma DEQ.

3.2.2.4 Test Methods

Section A1.4. of the Waste Analysis Plan (Attachment 1 of Permit Attachment 15) identifies the test methods to be used to analyze for selected parameters. These methods are those provided in "Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods" (SW-846) (EPA 1988) and its updates.

The SW-846 procedures are designed primarily for trace determinations, and may not always be best suited for a given sample. If a method other than the EPA method is used to analyze a sample, the analytical report will be annotated to indicate the particular method used. Sources of these non-EPA methods will be documented and kept on file by the laboratory.

When necessary, to determine a particular waste's suitability for land disposal, the Toxicity Characteristic Leaching Procedure (TCLP) method discussed in Tinker's Waste Analysis Plan will be used.

3.2.2.5 Sampling Methods

Representative samples of the waste stream will be collected from each container using the sampling procedures recommended by SW-846. Typical methods for common waste types are shown in Table 3-1.

3.2.2.6 Waste Management

This plan mandates that the individual waste streams be isolated, containerized, and not commingled unless process knowledge or waste analysis indicate that these streams are compatible. The problems created by commingling are: (1) risk of mixing incompatible materials, (2) increased difficulty in obtaining a representative sample, (3) increased time and costs of analysis, (4) reduction of resale value of potentially recyclable wastes, and (5) additional difficulty and increases in the costs of waste disposal.

3.2.2.7 Frequency of Analyses

After initial sampling of a discrete waste stream, hazardous wastes generated at TAFB will be analyzed each time waste streams or processes change to ensure analysis is accurate and up-to-date. The current set of hazardous wastes analyses will be reviewed annually by the Directorate of EM. Additional analyses will be accomplished, when necessary, to determine whether a waste is restricted from land disposal according to 40 CFR Part 268.

Table 3-1. SAMPLING METHODS FOR WASTE STREAMS

Physical Form of Waste	Guide Reference for Sampling
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, as revised, or "Samplers and Sampling Procedures for Hazardous Streams." (EPA 600/2-80-018, January, 1980)

ENCLOSURE 3-1

WASTE ANALYSIS PLAN

(Including Analytical Protocols)

Note: A revised Waste Analysis Plan, including analytical protocols for the Plan, is presented in this permit. The Waste Analysis Plan is found in Attachment A1 of Tinker's Hazardous Waste Management Instruction (OC-ALC-TAFBI 32-7004). In this permit, the Tinker AFB Hazardous Waste Management Instruction (OC-ALC-TAFBI 32-7004) is Attachment 15.

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ATTACHMENT 4

ATTACHMENT 4

WASTE STREAM ANALYSIS RESULTS

Typically, containerized waste is sampled for analysis in the Hazardous Waste Management Facility (HWMF), the 90-day barrel yard, prior to the waste being transported to the HWSF. An adequate number of samples are collected so as to provide a representative profile of the waste for proper disposal and regulatory reporting.

Process knowledge alone may also be used to characterize a hazardous waste stream generated at TAFB. For example, if hazardous materials that are off-specification, have passed the desirable shelf-life, or otherwise cannot be used are turned in with their original labeling, the Material Safety Data Sheets (MSDS) will be used to characterize the waste. The generators of the waste are required to provide process information to the Defense Reutilization and Marketing Office (DRMO) at Tinker who operates the HWSF.

TAFB contracted Versar, Inc. in 1989 to conduct a characterization study of the hazardous waste generated within TAFB boundaries. The Final Report (Tinker Air Force Base Hazardous Waste Characterization -- Volume 1, 2, and 3 -- April 1990), hereinafter referred to as the "Versar Report," provides additional background information on waste managed at TAFB. TAFB is planning to perform a second hazardous waste characterization study to update its knowledge of waste streams stored at the HWSF. The purpose of the waste stream characterization studies is to profile the waste streams for proper disposal and regulatory reporting, and to gather information useful to Tinker's waste minimization efforts.

In the Versar Report a total of 148 waste streams were outlined and numbered for easy reference from 1 to 150 (Numbers 17 and 107 were not used). The Versar Report Executive Summary provides a short description of each waste stream, its generation point, and assigned EPA Hazardous Waste Codes. This information makes it possible to rapidly correlate waste streams generated at Tinker with the waste streams outlined in the Versar Report.

Some of the waste streams listed in the revised Part A are not in the Versar Report because they are not routinely generated at TAFB. For example, the pesticides listed as EPA Waste Codes D012 through D017 only rarely appear as wastes at Tinker. They were listed, however, to cover unforeseen events such as spills. The U- and P-wastes listed in the revised Part A could be the result of spills, hazardous waste generated at other DoD facilities and transported to TAFB, or are new materials that are off-specification, past shelf-life, or

otherwise cannot be used. In the case of spills, such events will require one-time disposal actions and analyses will be completed on an as-needed basis. Hazardous waste generated at other DoD facilities and transported to TAFB will be characterized prior to shipment by the facilities. Typically, hazardous materials are turned-in with the original labels. In such cases, the MSDS or the container's label with a listing of its contents will be used to characterize the waste.

Since the Versar Report was completed several reorganizations have taken place at TAFB making the generator symbols obsolete. The following chart illustrates where the symbols in the report belong in the current organization.

Current Office Symbol Designations	Previous Office Symbol Designations
Aircraft Directorate (LAP)	MAB, DYNA
Propulsion Directorate (LPP)	MAE
Commodities Directorate (LIP)	MAT
Technology and Industrial Support Directorate (TIP)	MAD, DSF
552nd Air Control Wing (552 ACW)	AWACS
3rd Combat Communications Squadron (3CCG)	COM 3
Operations Branch, Compliance Div	MAQ (Barrel Yard)
72nd Air Base Group (72 ABG)	654 ABG or 2854 ABG

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ATTACHMENT 5

ATTACHMENT 5

GENERAL INFORMATION

5.1 AREA DESCRIPTION

5.1.1 Location

Construction of the Hazardous Waste Storage Facility (HWSF) is nearing completion after obtaining a Class 3 modification to Tinker's Part B RCRA Permit in March 1999. The HWSF is designated Building 810 and is located within a Defense Reutilization and Marketing Office (DRMO) storage compound. The facility will be operated by the DRMO, which is an organization of the Defense Logistics Agency, a component of the Department of Defense, and tenant of TAFB, which is an U.S. Air Force installation. This compound lies in the southwest corner of TAFB about 150 feet south of SE 59th Street. Figure 5-1 illustrates the location of this facility relative to TAFB. Figure 5-2 is a topographic map of the DRMO area with a contour interval of 2 feet. The municipalities of Oklahoma City, Del City, and Midwest City adjoin TAFB (Figure 5-3). These municipalities are 0.12, 1.5, and 2 miles from the HWSF, respectively.

Storage of hazardous wastes will take place only in containers. In addition to hazardous waste storage, the HWSF will also store hazardous materials destined for reutilization, transfer, donation, and sale (RTDS). This HWSF replaces a previously permitted two-building facility that was located near Douglas Blvd.

5.1.2 Access

a. Routes:

The primary route for the transportation of hazardous waste generated at TAFB into the DRMO compound is be through a gate located along the east side of the compound which is connected with the Hazardous Waste Management Facility (HWMF). Hazardous waste transported from other DoD facilities will enter TAFB through Gate 34 and travel east on Patrol Road to the HWSF. Hazardous waste transported from

TAFB for RTDS or disposal may exit the HWSF compound and travel west on Patrol Road, and depart TAFB through Gate 34. Vehicles transporting hazardous waste to and from TAFB will utilize TAFB's Gate 34 and access the southern interstate highway system by traveling on Air Depot Blvd. past S.E. 74th Street, at the railroad overpass, to I-240, or the northern interstate highway system by traveling on SE 59th Street to Sooner Road and Sooner Road to I-40. These routes can be seen in more detail on Figures 5-2 and 5-3.

b. Traffic Control:

Traffic controls along the access routes consist of traffic signal lights at the intersections of SE 59th Street and Air Depot Blvd., SE 59th Street and Sooner Road, S.E. 74th Street and Air Depot Blvd., on Air Depot Blvd. between SE 59th Street and SE 74th Street by the General Motors (GM) plant, at the Sooner Road gate south of 29th Street, Sooner Road and I-40, and SE 29th Street and Sooner Road. All other major intersections are controlled by stop signs or traffic signals.

c. Road Surfacing/Load Bearing Capacity

All of the off-base streets that will be used for the transportation of hazardous waste have concrete or asphalt surfaces. The quantitative load bearing capacity of the off-base streets is not known, but the streets are approved for 3-axle vehicle and 5-axle vehicle capacities of up to 54,000 pounds and 80,000 pounds, respectively.

5.2 STORAGE FACILITY

5.2.1 Construction Details

Building 810, the HWSF, the associated Administrative Building (Building 811), and landscaping features are located on a site of approximately 3.5 acres in size (Figure 5-4). The HWSF building consists of the following storage areas:

- Four (4) double-wide, fully enclosed storage modules (Modules 103, 107, 120, and 123) to allow for the storage of drums and other large containers of waste and materials up to 20,790 gallons for each module

- Five (5) standard sized storage modules (Modules 102, 108, 113, 119, and 125) to allow for the storage of drums and other containers of waste and materials up to 10,692 gallons for each module

- One (1) smaller standard sized storage module (Module 115) to allow for the storage of drums and other containers of waste and materials up to 4,752 gallons (A door on the west side of this module is used to access Module 116, the mechanical room)

- Six (6) large closets (Modules 109, 110, 111, 112, 118, and 124) for storing smaller quantities of waste and materials up to 1,118 gallons for each closet

- Four (4) small closets (Modules 104, 117, 121, and 122) for storing smaller quantities of waste and materials up to 594 gallons for each closet

- One (1) area (Staging Area 101) will be used for staging incoming and outgoing wastes

The fully enclosed HWSF is constructed of concrete masonry unit walls and a metal roof to prevent accumulation of precipitation within the storage facility. The HWSF storage modules and/or closets are separated by concrete masonry walls. Figure 5-4 is a site plan of the facility and Figures 5-5 through 5-10 contain construction drawings that represent completion designs.

All floors within the HWSF building are constructed of concrete with no floor drains. All floor surfaces are flat except for ramp areas. In accordance with 40 CFR 264.175 (b)(1), the floor surfaces are free of cracks or gaps with the exception of

construction joints and are sufficiently impervious to contain leaks or spills until the released material is detected and removed.

Secondary containment for potential spills is provided by a two-inch concrete block curbing around the entire interior perimeter of the HWSF building. The floors of each storage module and/or closet are depressed four inches from the main corridor with entrance ramps leading down into the module or closet. Joints in the concrete floor are sealed and the floor is coated with a chemical-resistant epoxy sealant. The secondary containment volume requirements for each storage module and closet within the HWSF are presented in Permit Attachment 13. As shown in Figure 5-6, 5-7, and 5-7A, run-on into the HWSF is prevented by modifying the drainage pattern of the site to divert storm water away from the HWSF.

The interior lighting of the HWSF meets appropriate illuminating standards. The HWSF is equipped with two emergency shower/eye wash stations to comply with 29 CFR. (Figure 5-8)

Security for the HWSF building is discussed in Permit Attachment 10.

5.2.2 Design Capacity:

Storage in the HWSF consists of containers placed on pallets which are typically placed on heavy duty metal racks. Sturdy pallets are used as storage platforms, to assist in container handling and to reduce the potential for damage to containers. The pallets help prevent rust or other moisture damage by elevating the containers above the floor and by providing space for the tines of a mechanical fork-lift when movement of the containers is necessary. Flammable waste liquids will not be stacked directly on top of one another; however, according to DRMO waste handling policy, stacking one flammable waste pallet above another on metal racks will not be considered direct stacking. The pallet and metal rack system provides additional storage capacity without stacking pallets directly on top of one another. Small containers may be placed directly on the metal racks without the use of pallets.

A standard pallet is 48 inches by 48 inches. Most of the waste stored at the HWSF is contained in 55-gallon drums. For this purpose, larger pallets measuring 49 inches by 56 inches in size are used. This will provide additional space to hold four 55-gallon drums thereby reducing the chance of a drum falling off the pallet and being damaged.

The maximum storage capacity for each storage module was calculated based on the dimensions of the storage module, the dimensions of the pallet and metal rack systems, the number of 55-gallon drums (at 90% full or 49.5 gallons) that could be stored on the metal racks, and aisle spacing of approximately 12 feet. Based on these factors, the total storage capacity for the HWSF was calculated at 158,796 gallons. Secondary containment capacity for each storage module exceeds 10 percent of the total waste storage capacity. The calculations for storage volumes and secondary containment volumes for each module are presented in Permit Attachment 13.

The layout for waste storage in the HWSF is based on compatibility groups for the various waste. This layout is discussed in Permit Attachment 14.

5.3 WASTE GENERATION

The physical and chemical characteristics of the waste stored at the HWSF are described in this section. It should be noted that hazardous materials destined for RTDS is also stored at the HWSF. Some of the materials may become waste if the RTDS process is not successfully completed. The waste types discussed in this section includes these wastes.

The majority of waste streams stored at the HWSF are those generated at TAFB from aircraft maintenance, modification, and jet engine overhaul activities. However, the HWSF also receives hazardous wastes from other DoD facilities served by DRMO. Because these wastes are part of the DoD system, they are considered on-site wastes. Most of the DoD wastes have similar physical and chemical characteristics as those currently permitted for storage. A list of permitted waste codes is shown in Attachment 2.

The largest waste streams generated at TAFB result from surface preparation of aircraft skin, structural members, and engine parts. This activity includes paint removal and application; grease, dirt, and carbon removal; metal etching and priming; and abrasive blasting. These processes generate spent solvents, corrosive acids and bases, ignitable liquids, and solutions contaminated with toxic metals. Other large waste streams result from alteration of metal surfaces through removal by grinding and cutting operations, or through build-up by electroplating and plasma-spray operations. These processes generate RCRA metals, cyanide solutions, contaminated cutting and coolant fluids, and corrosive liquids.

Maintenance of both aircraft and ground vehicles which includes oil, filters, and antifreeze replacement as well as purging of tanks, fuel systems, and hydraulic lines generate large quantities of used oil, aircraft fuel, gasoline, antifreeze and hydraulic oil. Much of this material is sent to recyclers for energy recovery or reclamation. Occasionally, contamination by heavy metals or solvents requires shipment for disposal.

Sludges resulting from operation of the Industrial Wastewater Treatment Plant (IWTP) make up a large portion of the hazardous waste stream generated at the base. The sludges result from treatment of wastewater from nearly all of the above described processes. The sludge of greatest volume is contaminated with toxic metals and may be corrosive. Another sludge from the bottoms of oil-water separators has a high organic content and also contains toxic metals. Liquid oils and fuel from the tops of these separators are shipped to recyclers for energy recovery. Such bulk wastes are typically pumped into a tank truck and taken directly to an appropriate treatment, storage, or disposal facility.

Other significant waste streams resulting from daily operations include soil, sorbents, and debris contaminated with solvents, oils, fuels, and corrosives from clean-up of spills; photographic developers, fixers; and miscellaneous items such as batteries, fluorescent light end caps/ballast, aerosol cans, mercury instruments, glues, and adhesives.

Another hazardous waste stream generated at Tinker results from RCRA corrective actions and Comprehensive Environmental Release Compensation and Liability Act (CERCLA) remediation of previously contaminated sites. These wastes may contain solvents, hydrocarbons, and metal contaminated soil and debris removed during remediation projects.

Representative waste analyses of the above mentioned wastes are presented in Permit Attachment 4.

5.4. ENVIRONMENTAL SETTING

5.4.1 Area Maps

Figure 5-1 is a U.S. Geological Survey (USGS) topographic map of the TAFB vicinity. Topography, water courses, and cultural development on and around the base are shown. Lake Stanley Draper, a major recreation for the Oklahoma City area, is slightly over 1 mile south of the HWSF. Figures 5-1 and 5-2 detail the direction of surface drainage on TAFB and around the HWSF, respectively. All of the surface drainage is to the north and will not drain into Lake Stanley Draper.

A review of the Oklahoma Water Resources Board's records indicate only one reported water supply well within the SE/4 of Section 21, SW/4 of Section 22, NW/4 of Section 27, and the NE/4 of Section 28 of T11N-R2W. A TAFB water supply well (#29) is located approximately 2000 feet east of the HWSF (see figure 5-11). Tinker's well #29 produces water from the Garber-Wellington Aquifer (screen interval >200 feet below ground surface) (Scott Bowen, Personal Communication 11/13/95). The Hennessey Formation is a confining layer above the Garber-Wellington Aquifer. The Hennessey is characterized by clay-rich, low-permeability shale units that serve as a barriers to greatly reduce the downward infiltration of any fluid (rainfall, liquid wastes, etc.) that falls on or is spilled on the ground surface. The confining nature of the Hennessey causes rainfall to remain near ground surface and to flow laterally, rather than vertically downward, until it discharges to local streams. In the area of TAFB which contains Hennessey shale, the inhibition of downward vertical groundwater flow into the deeper saturated zones contained within the Garber-

Wellington Aquifer helps protect these sources of potable groundwater. As shown by Figure 5-2, TAFB has numerous monitoring wells located north of the HWSF site.

No public schools, education institutions, nursing homes or hospitals are located within 1 mile of the HWSF. A public park, TAFB's South Forty Recreation Area, is located approximately 400 feet north of the HWSF (see Figure 5-11).

5.4.2 Seismic Standard

The HWSF is not subject to the seismic standard because it does not fall under any county, township, or election district listed in 40 CFR 264, Appendix VI. Additionally, no major faults or fracture zones have been mapped near the base.

5.4.3 Flood Plain Standard

Outlines of the 100-year flood plain at TAFB are depicted on figure 5-11. The HWSF is not located in the 100-year flood plain. The information for determining the location of the flood plain was obtained from a TAFB Base Comprehensive Plan Study (1994).

5.4.4 Wind Rose

Figure 5-12 presents the prevailing wind direction at TAFB.

5.5 DELEGATED AUTHORITY FOR REPORTS AND POINTS OF CONTACT

The mailing address of the Directorate of Environmental Management, which has been delegated authority to manage the hazardous waste program, is:

Directorate of Environmental Management
OC-ALC/EM
7701 Arnold Street Suite 204
Tinker AFB OK 73145-9100

The point of contact for hazardous waste management activities at TAFB is:

Leaman D. Harris
Environmental Engineer
OC-ALC/EMPC
(405) 734-3277

5.6 OTHER FEDERAL LAWS

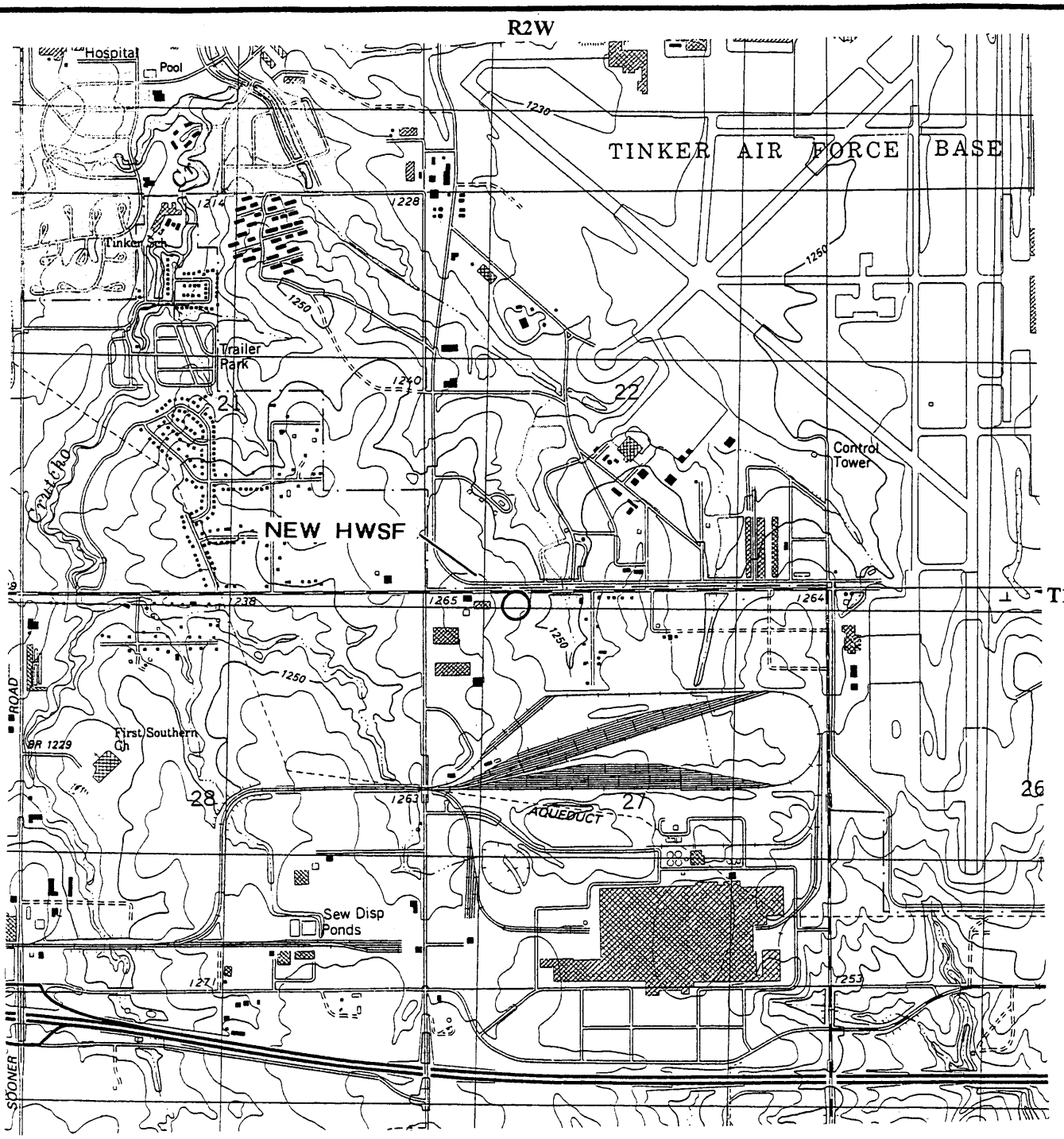
The following discussion is based on the EM Environmental Assessment of the site (TAFB, Final Environmental Assessment of S.E. 59th Street Development at TAFB by Battelle, Oct. 1993); "The site has inhabitants potentially suitable for two Category 2 Candidate (i.e., threatened and endangered [T & E]) species, the Texas horned lizard and the migrant loggerhead shrike. The Oklahoma penstemon, a rare plant identified by the Oklahoma Natural Heritage Inventory, also could survive on the site. The shrike and the lizard are listed on the federal and Oklahoma Natural Heritage Inventory, also could survive on the site. The shrike and the lizard are listed on the federal and Oklahoma Category 2 Candidate T&E species lists and have been found on TAFB. Habitats for these three species could be destroyed due to construction of one or more of the seven projects. However, walkover field surveys conducted during the Environmental Assessment in September 1993 did not reveal any evidence of T&E species, although habitat potentially suitable for the Texas horned lizard, migrant loggerhead shrike, and the Oklahoma penstemon was noted. The Texas horned lizard and the migrant loggerhead shrike are listed by the federal government as "Category 2 Candidate T&E species."

During hazardous waste management activity TAFB will exercise precaution regarding the above assessment report. Discovery of these potential species will be immediately reported to the natural resource specialist at Tinker for further assessment or actions to protect these species.

ATTACHMENT 5

LIST OF FIGURES

FIGURE 5-1	REGIONAL TOPOGRAPHIC MAP OF TAFB
FIGURE 5-2	TOPOGRAPHIC MAP OF HWSF SITE
FIGURE 5-3	GENERAL LOCATION OF TINKER AFB
FIGURE 5-4	SITE PLAN
FIGURE 5-5	UTILITY PLAN
FIGURE 5-6	GRADING AND DRAINAGE PLAN
FIGURE 5-7	STORM DRAINAGE PLAN
FIGURE 5-7A	DRAINAGE EXTENSION AROUND BUILDING 809
FIGURE 5-8	FLOOR PLAN
FIGURE 5-9	TYPICAL MODULES
FIGURE 5-10	FIRE PROTECTION
FIGURE 5-11	COMPOSITE NATURAL RESOURCES MAP
FIGURE 5-12	TAFB WIND ROSE



SCALE 1:24 000

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETRE

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

Designed By:	TINKER AIR FORCE BASE		
Drawn By:	OKLAHOMA CITY, OKLAHOMA		
Checked By:	TITLE: Regional Topographic Map of Tinker AFB		
Submitted By:	PROJECT NUMBER F95513	DATE 10/26/95	FIG. NO. 5-1

Source: USGS, 7.5 Min. Topo,
Midwest City, OK Quad, 1986

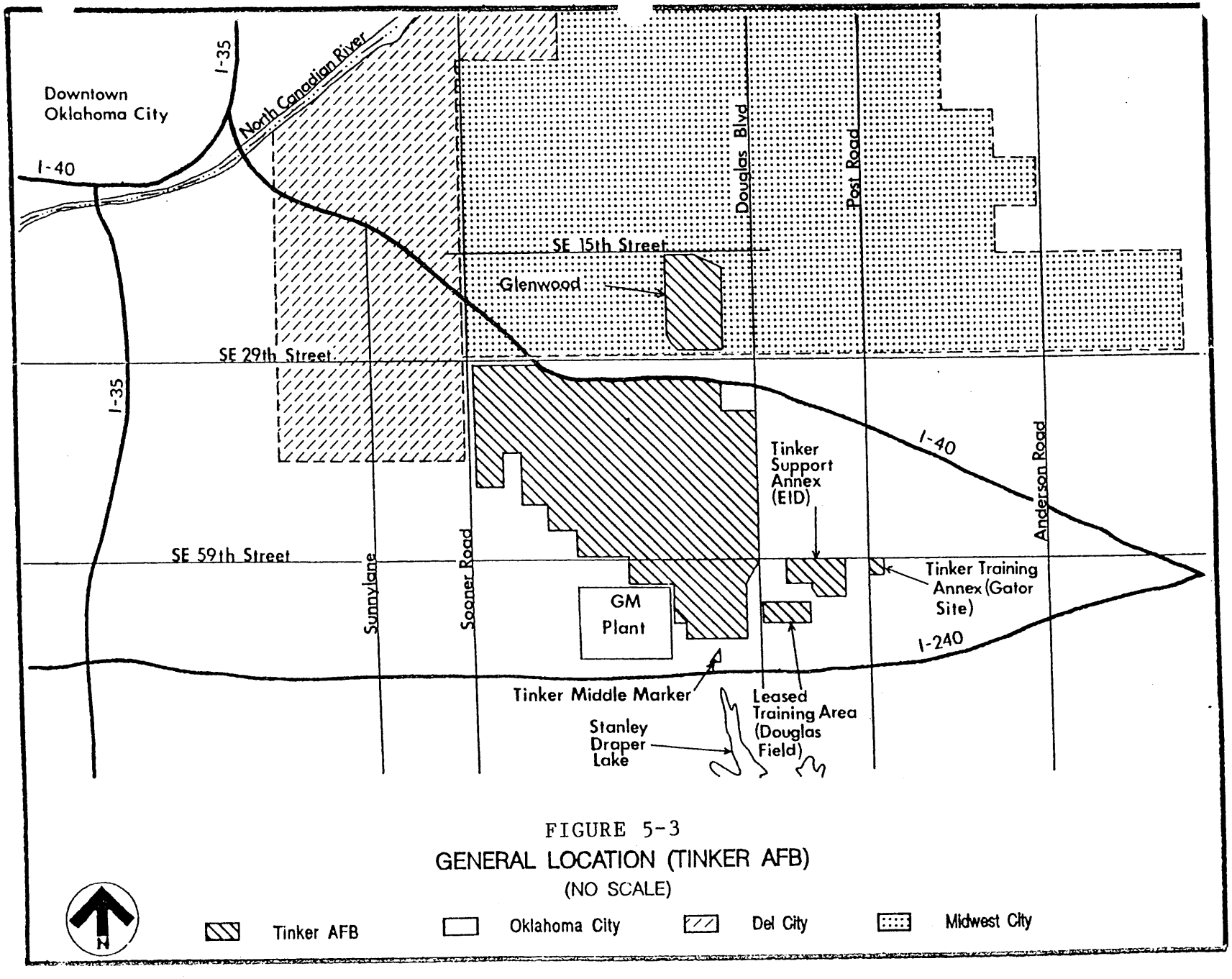


FIGURE 5-3

GENERAL LOCATION (TINKER AFB)

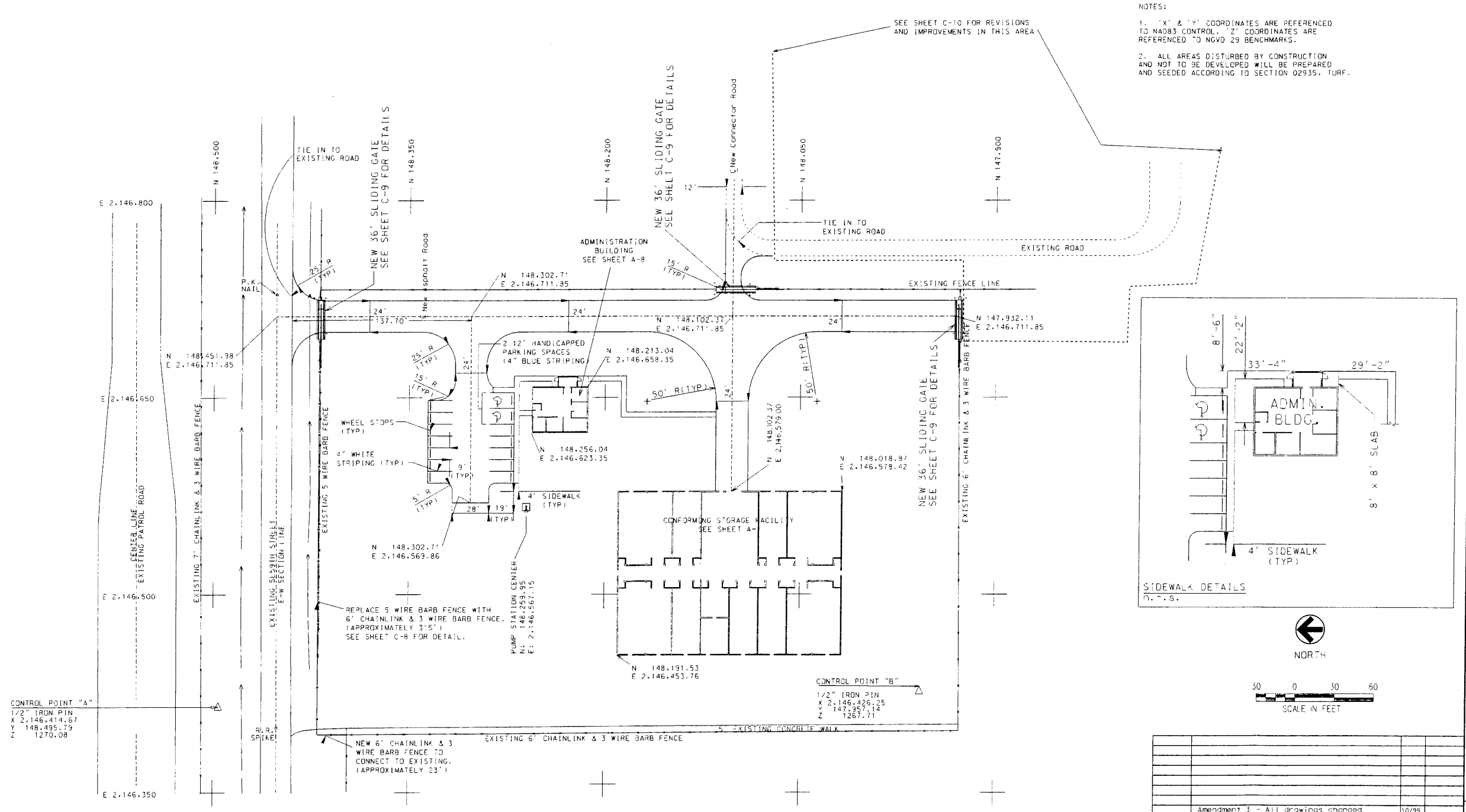
(NO SCALE)

CORPS OF ENGINEERS | 4 | 3 | 2 | 1 | U.S. ARMY

NOTES:

1. 'X' & 'Y' COORDINATES ARE REFERENCED TO NAD83 CONTROL. 'Z' COORDINATES ARE REFERENCED TO NGVD 29 BENCHMARKS.

2. ALL AREAS DISTURBED BY CONSTRUCTION AND NOT TO BE DEVELOPED WILL BE PREPARED AND SEEDED ACCORDING TO SECTION 02935. TURF.



Symbol	Description	Date	Approved
	Amendment 3 - All drawings changed	10/99	

Revisions

DEFENSE REUTILIZATION AND MARKETING SERVICE BATTLE CREEK, MICHIGAN

U.S. ARMY ENGINEERING AND SUPPORT CENTER, HUNTSVILLE CORPS OF ENGINEERS HUNTSVILLE, ALABAMA

SITE ADAPT A/E:

US Army Corps of Engineers

CONFORMING STORAGE FACILITY DRMO OKLAHOMA CITY, OKLAHOMA

SITE PLAN

DWN. BY: T.H | CKD. BY: JRC

REVIEWED BY:

APPROVED BY:

DATE: OCT 99

DRAWING CODE: F 442-85-54

Fig. 5-4

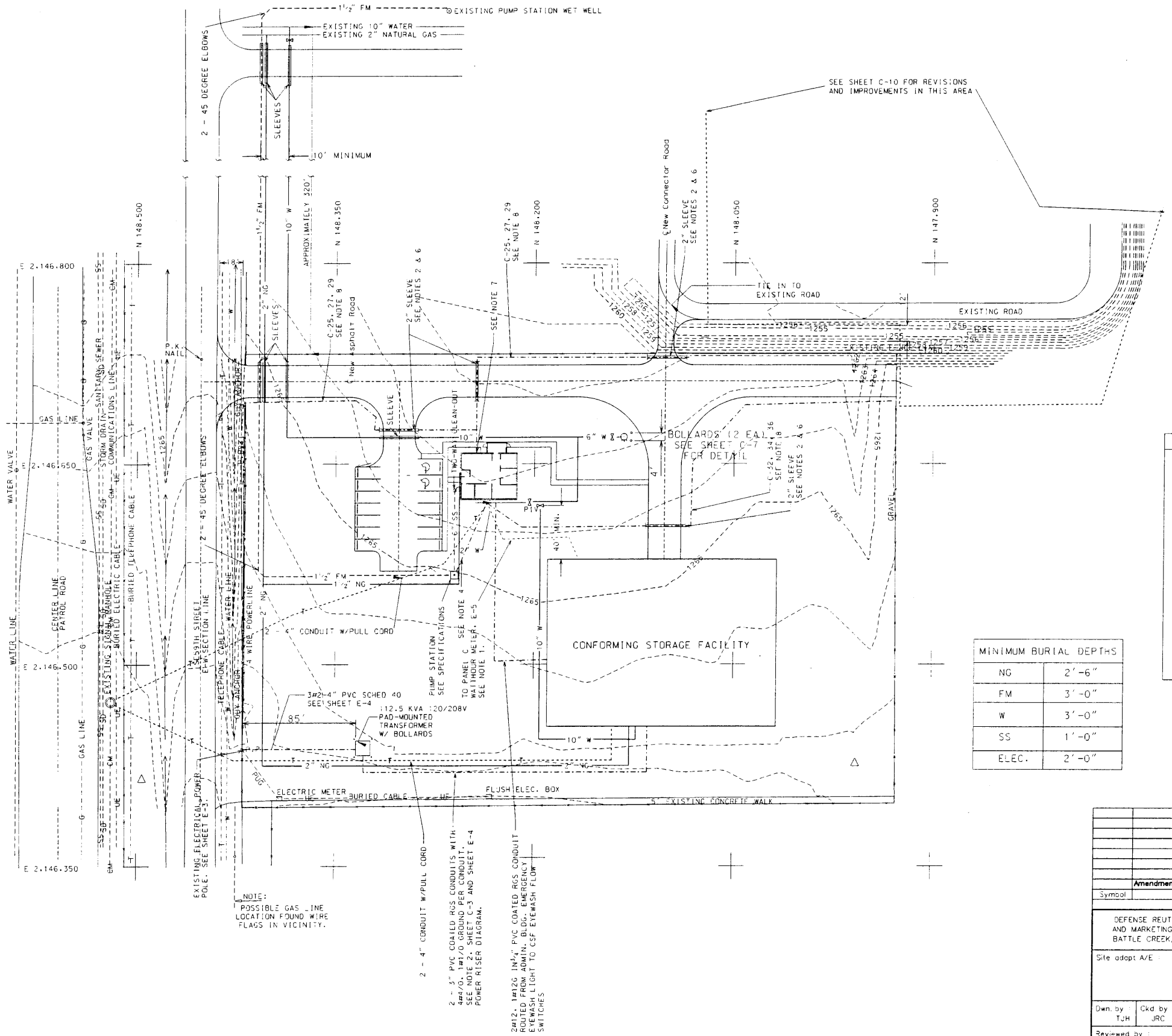
DESIGN FILE NO.: 82984

REV.

SHEET OF

6411C002 DGN

CORPS OF ENGINEERS | 4 | 3 | 2 | 1 | U.S. ARMY



ELECTRICAL NOTES:

1. 4#4/0 - 3" PVC COATED RGS CONDUIT UNDERGROUND SERVICE.
2. BURIED 3'-0" BELOW FINISHED GRADE.
3. SEE SHEETS E-2 THRU E-5 FOR RATINGS AND CONNECTIONS.
4. 4#12, 1#12G IN ¾" PVC COATED RGS CONDUIT ROUTED TO BUILDING AND CONTINUED TO PANEL C.
5. SLIDING GATE DETAILS NOT SHOWN. FOR CLARITY. SEE SHEET C-2 FOR PLAN. AND SHEET C-10 FOR DETAILS.
6. EXTEND STEEL SLEEVES MIN. 3 FEET BEYOND EDGE OF ROAD OR ASPHALT.
7. ¾" PVC CONDUIT WITH CONDUCTOR RUN IN CEILING AND DOWN OUTSIDE WALL.
8. ROUTE ¾" PVC CONDUIT WITH 4#12, 1#12G AWG CONDUCTOR FROM PANEL 'C' TO GATE OPERATOR ENCLOSURE. PROVIDE 120V POWER FROM GATE OPERATOR ENCLOSURE TO ELECTRO-MECHANICAL LOCKING DEVICE.

MINIMUM BURIAL DEPTHS	
NG	2'-6"
FM	3'-0"
W	3'-0"
SS	1'-0"
ELEC.	2'-0"

LEGEND

SS	SANITARY SEWER
FM	FORCE MAIN
W	WATER MAIN
PIV	POST INDICATOR VALVE
	GATE VALVE
	FIRE HYDRANT
	PUMP STATION
NG	NATURAL GAS
PUG	PRIMARY UNDERGROUND
UE	UNDERGROUND ELECTRICAL
	UNDERGROUND TELEPHONE
	2" STEEL SLEEVE W/WIRE

NORTH

30 0 30 60
SCALE IN FEET

Symbol	Description	Date	Approved
	Amendment 3 - All Drawings Changed	10/99	

Revisions

DEFENSE REUTILIZATION AND MARKETING SERVICE
BATTLE CREEK, MICHIGAN

U.S. ARMY ENGINEERING AND SUPPORT CENTER, HUNTSVILLE
HUNTSVILLE, ALABAMA

Site adapt A/E:

US Army Corps of Engineers

CONFORMING STORAGE FACILITY
DRMO
OKLAHOMA CITY, OKLAHOMA

UTILITY PLAN

Dwn. by: TJH | Ckd. by: JRC

Reviewed by:

Date: OCT 99

Approved by:

Drawing code: F 442-85-54

Fig. 5-5

Design file no. 82885

Rev.

Sheet of

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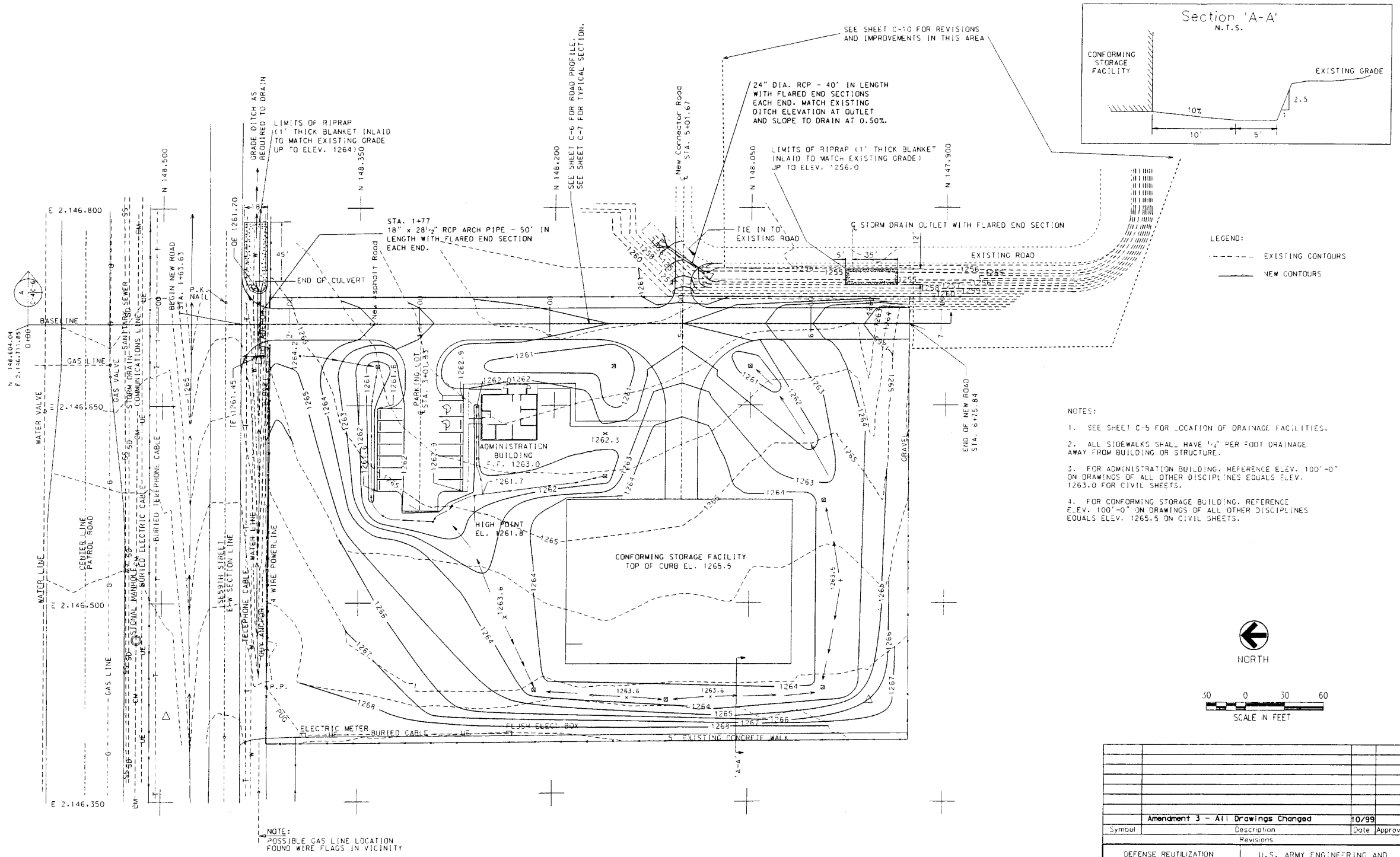
6411C003.DGN

CORPS OF ENGINEERS | 4 | 3 | 2 | 1 | U.S. ARMY



Symbol	Description	Date	Approved
	Amendment 3 - All Drawings Changed	10/99	

Revisions

DEFENSE REUTILIZATION AND MARKETING SERVICE
BATTLE CREEK, MICHIGAN

U.S. ARMY ENGINEERING AND SUPPORT CENTER, HUNTSVILLE
HUNTSVILLE, ALABAMA

Site adopt A/E:

US Army Corps of Engineers

CONFORMING STORAGE FACILITY
DRMO
OKLAHOMA CITY, OKLAHOMA

GRADING & DRAINAGE PLAN

Dwn. by: TJH | Ckd. by: JRC

Reviewed by:

Approved by:

Date: OCT 99

Drawing code: F 442-85-54

Fig. 5-6

Design file no. 82886

Rev.

Sheet of

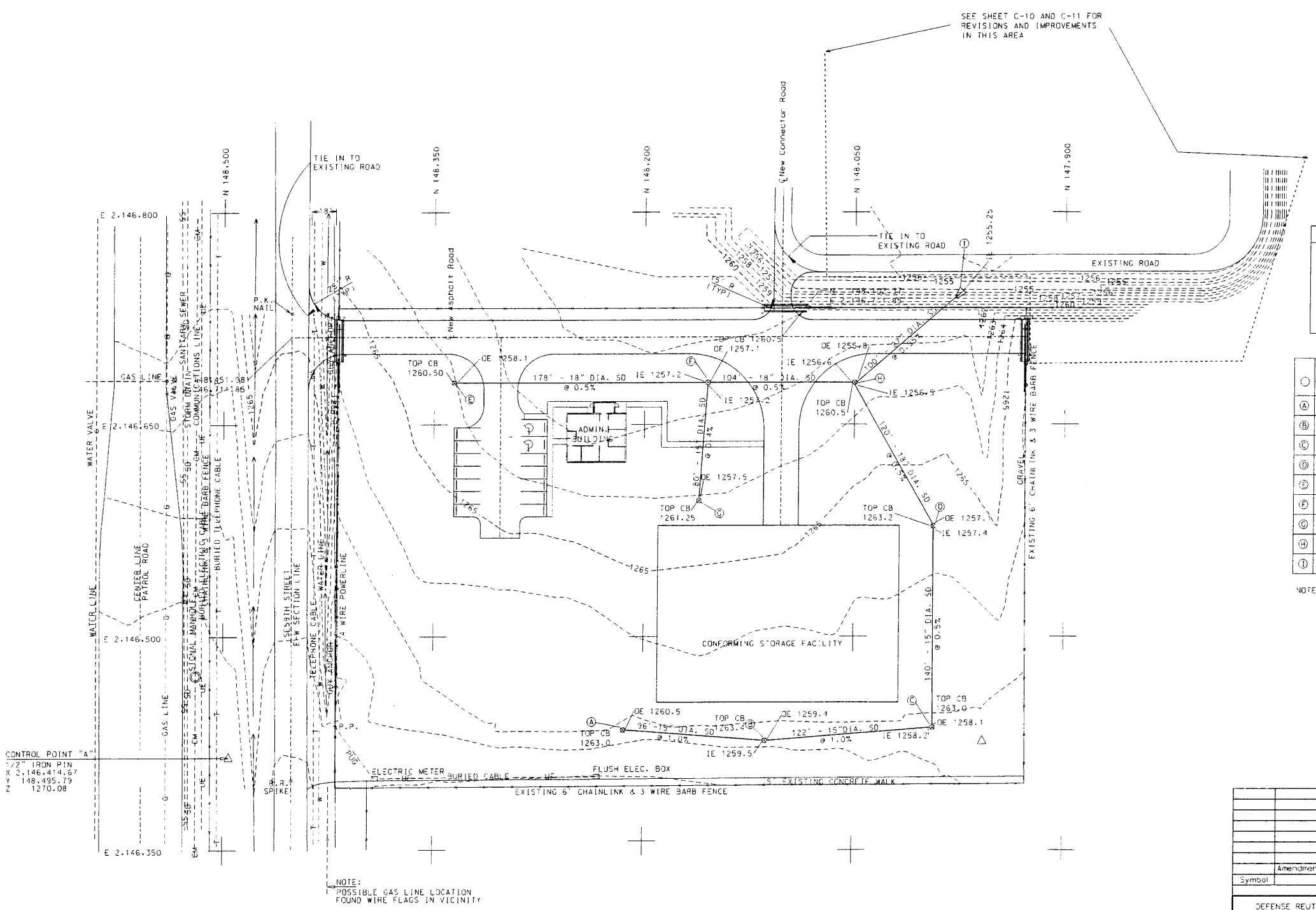
641C004.DGN

5 | 4 | 3 | 2 | 1

CORPS OF ENGINEERS | 4 | 3 | 2 | 1 | U.S. ARMY

NOTES:

1. SEE SHEET C-6 FOR CATCH BASIN DETAILS.
2. SEE SHEET C-7 FOR STORM DRAIN OUTLET DETAILS.



LEGEND		
SD	———	RCP STORM DRAIN
CB	⊠	CATCH BASIN
IE	XXXX.XX	INVERT ELEVATION
OE	XXXX.XX	OUTLET ELEVATION

○	COORDINATES		DESCRIPTION
	NORTHING	EASTING	
Ⓐ	148212	2146432	CATCH BASIN
Ⓑ	148114	2146428	CATCH BASIN
Ⓒ	147991	2146434	CATCH BASIN
Ⓓ	147991	2146576	CATCH BASIN
Ⓔ	148336	2146680	CATCH BASIN
Ⓕ	148156	2146680	CATCH BASIN
Ⓖ	148162	2146598	CATCH BASIN
Ⓗ	148050	2146680	CATCH BASIN
Ⓘ	147973	2146742	OUTLET

NOTE: COORDINATES OF OUTLET Ⓘ MAY HAVE TO BE ADJUSTED IN THE FIELD TO MAINTAIN THE INVERT ELEVATION OF 1255.25; WHICH MUST BE ABOVE THE THE EXISTING DITCH BOTTOM

NORTH

30 0 30 60
SCALE IN FEET

Symbol	Description	Date	Approved
	Amendment 3 - All Drawings Changed	10/99	

Revisions

DEFENSE REUTILIZATION AND MARKETING SERVICE
BATTLE CREEK, MICHIGAN

U.S. ARMY ENGINEERING AND SUPPORT CENTER, HUNTSVILLE
HUNTSVILLE, ALABAMA

Site adopt A/E :

US Army Corps of Engineers

CONFORMING STORAGE FACILITY
DRMO
OKLAHOMA CITY, OKLAHOMA

STORM DRAINAGE PLAN

Dwn. by : TJH | Ckd. by : JRC

Reviewed by :

Date : OCT 99

Approved by :

Drawing code : F 442-85-54

Fig. 5-7

Design file no : 82887

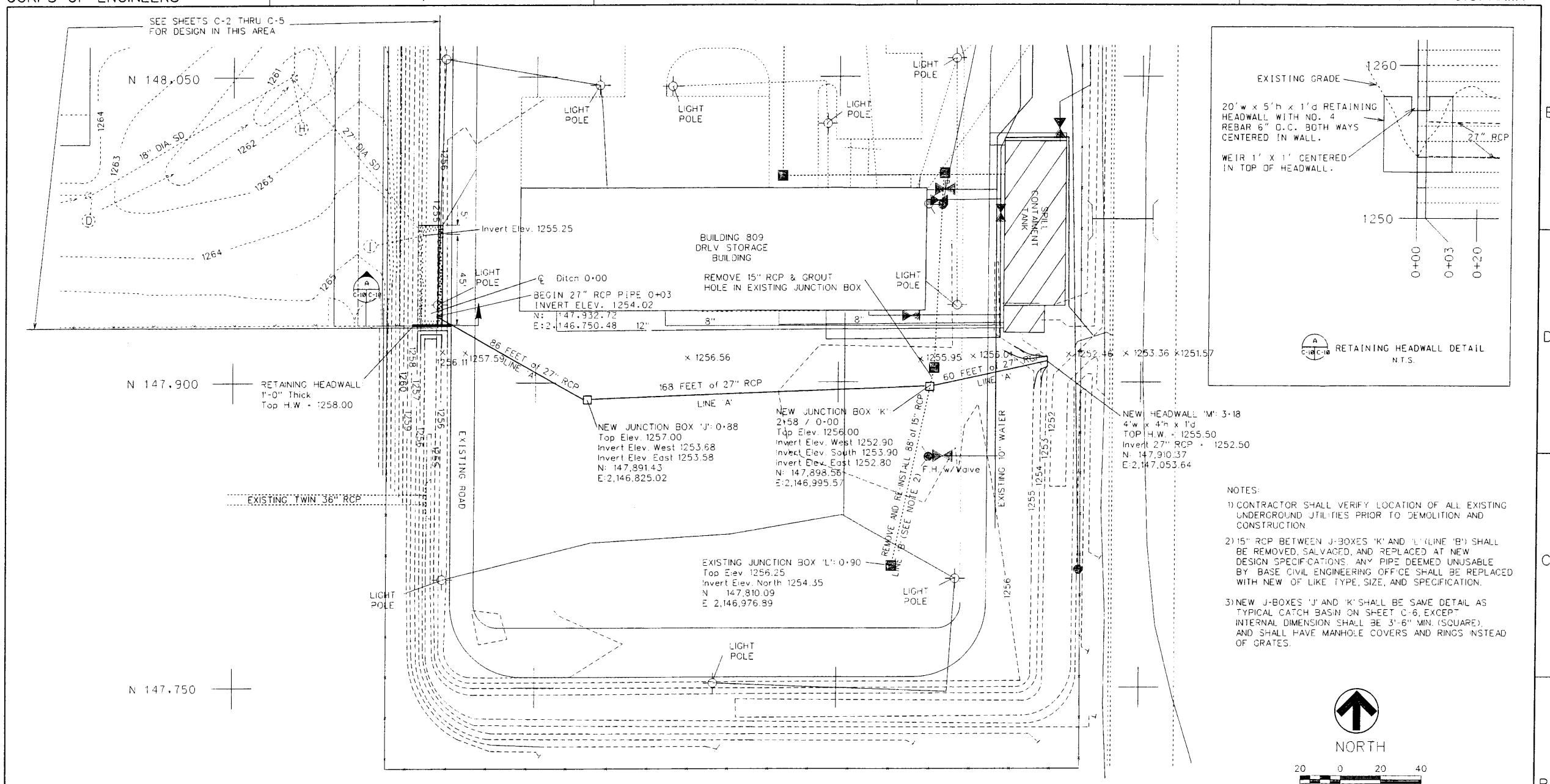
Rev.

Sheet of

5 | 4 | 3 | 2 | 1

6411C005.DGN

CORPS OF ENGINEERS | 4 | 3 | 2 | 1 | U.S. ARMY



NOTES:

1) CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO DEMOLITION AND CONSTRUCTION.

2) 15" RCP BETWEEN J-BOXES 'K' AND 'L' (LINE 'B') SHALL BE REMOVED, SALVAGED, AND REPLACED AT NEW DESIGN SPECIFICATIONS. ANY PIPE DEEMED UNUSABLE BY BASE CIVIL ENGINEERING OFFICE SHALL BE REPLACED WITH NEW OF LIKE TYPE, SIZE, AND SPECIFICATION.

3) NEW J-BOXES 'J' AND 'K' SHALL BE SAME DETAIL AS TYPICAL CATCH BASIN ON SHEET C-6, EXCEPT INTERNAL DIMENSION SHALL BE 3'-6" MIN. (SQUARE), AND SHALL HAVE MANHOLE COVERS AND RINGS INSTEAD OF GRATES.

MODIFICATION TO EXISTING
'DEPOT HAZARDOUS WASTE PROCESSING FACILITY'
SCALE: AS-SHOWN

ONLY CONSTRUCTION REQUIRED ON THIS SHEET IS THE STORM DRAINAGE SYSTEM ADDITION AND MODIFICATIONS SHOWN ON THE SOUTH SIDE OF BUILDING 809 - DRLV STORAGE BUILDING.

Symbol	Description	Date	Approved
	Amendment 3 - All Drawings Changed	10/99	

Revisions

DEFENSE REUTILIZATION AND MARKETING SERVICE
BATTLE CREEK, MICHIGAN

U.S. ARMY ENGINEERING AND SUPPORT CENTER, HUNTSVILLE
HUNTSVILLE, ALABAMA

Site adopt A/E:

US Army Corps of Engineers

CONFORMING STORAGE FACILITY
DRMO
OKLAHOMA CITY, OKLAHOMA

DHWPF STORM DRAINAGE PLAN
MODIFICATION AND ADDITION

Dwn. by: TJH | Ckd. by:

Reviewed by:

Approved by:

Date: OCT 99

Drawing code:

Fig. 5-7A

Design file no. 62892

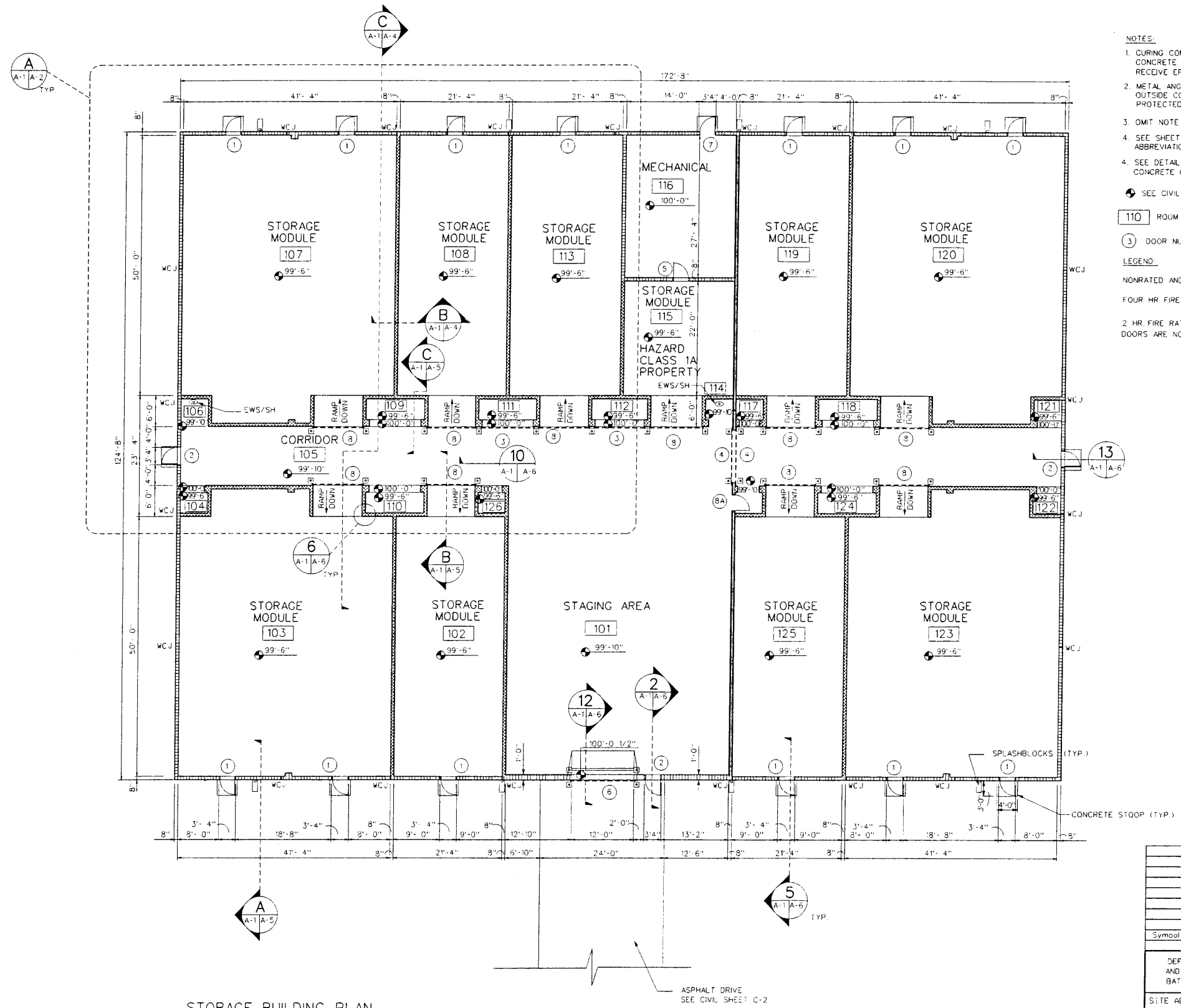
Rev

Sheet of

5 | 4 | 3 | 2 | 1

6411C010.DGN

CORPS OF ENGINEERS | 4 | 3 | 2 | 1 | U.S. ARMY



STORAGE BUILDING PLAN

SCALE: 1/8"=1'-0"

NOTES:

1. CURING COMPOUND SHALL NOT BE USED ON CONCRETE FLOOR AND CURBS WHICH ARE TO RECEIVE EPOXY COVERING.
2. METAL ANGLES SHALL BE INSTALLED AT ALL OUTSIDE CORNERS WITHIN THE BUILDING NOT PROTECTED BY BOLLARDS. SEE DETAIL ON SHEET A-6.
3. OMIT NOTE
4. SEE SHEET G-1 FOR ARCHITECTURAL ABBREVIATION LEGEND
4. SEE DETAILS ON SHEET A-4 AND A-5 FOR 4" CONCRETE CEILING IN ROOM 109

SEE CIVIL DRAWINGS

110 ROOM NUMBER

(3) DOOR NUMBER

LEGEND:

NONRATED AND UNINSULATED CMU WALLS

FOUR HR FIRE SEPARATION WALL

2 HR. FIRE RATED WALL- NOTE, THE EXTERIOR DOORS ARE NOT REQUIRED TO BE FIRE RATED.

NORTH

GRAPHIC SCALES

1/8"=1'-0" 5' 0 5'

Symbol	Description	Date	Approved
	Amendment 3 - All Drawings Changed	10/99	

Revisions

DEFENSE REUTILIZATION AND MARKETING SERVICE BATTLE CREEK, MICHIGAN

U.S. ARMY ENGINEERING AND SUPPORT CENTER, HUNTSVILLE CORPS OF ENGINEERS HUNTSVILLE, ALABAMA

SITE ADAPT A/E:

US Army Corps of Engineers

CONFORMING STORAGE FACILITY DRMO OKLAHOMA CITY, OKLAHOMA

STORAGE BUILDING PLAN

DWN. BY: PD | CKD. BY: RR

REVIEWED BY:

DATE: OCT 99

APPROVED BY:

DRAWING CODE: F 442-85-54

Fig. 5-8

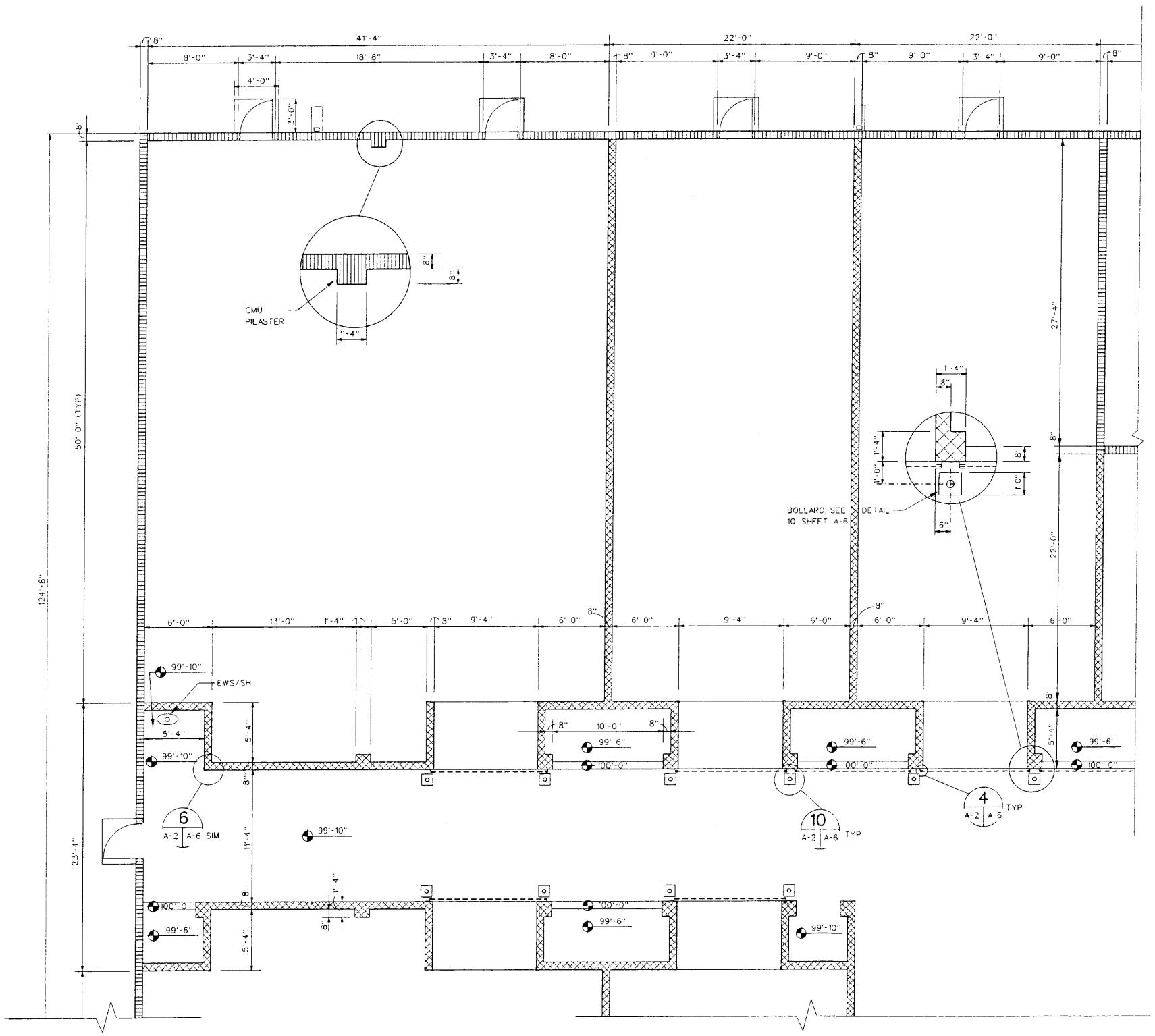
DESIGN FILE NO.: 82895

REV.

SHEET OF

5 | 4 | 3 | 2 | 1

CORPS OF ENGINEERS | 4 | 3 | 2 | 1 | U.S. ARMY



TYPICAL MODULES ENLARGED (A / A-1 A-2)

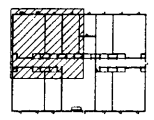
SCALE: 1/4" = 1'-0"

LEGEND:

NONRATED AND UNINSULATED CMU WALLS

FOUR HR FIRE SEPARATION WALL

TWO HR FIRE RATED WALL, NOTE, THE EXTERIOR DOORS ARE NOT REQUIRED TO BE FIRE RATED



KEY PLAN

GRAPHIC SCALES

1/4" = 1'-0" 5' 0 5'

NORTH

Symbol	Description	Date	Approved
	Amendment 3 - All Drawings Changed	10/99	

Revisions

DEFENSE REUTILIZATION AND MARKETING SERVICE BATTLE CREEK, MICHIGAN

U.S. ARMY ENGINEERING AND SUPPORT CENTER, HUNTSVILLE CORPS OF ENGINEERS HUNTSVILLE, ALABAMA

SITE ADAPT A/E:

US Army Corps of Engineers

CONFORMING STORAGE FACILITY DRMO OKLAHOMA CITY, OKLAHOMA

TYPICAL MODULES (ENLARGED)

DWN. BY: PD | CKD. BY: RR

REVIEWED BY:

APPROVED BY:

DATE: OCT 99

DRAWING CODE: F 442-85-54

Fig. 5-9

DESIGN FILE NO.: 82896

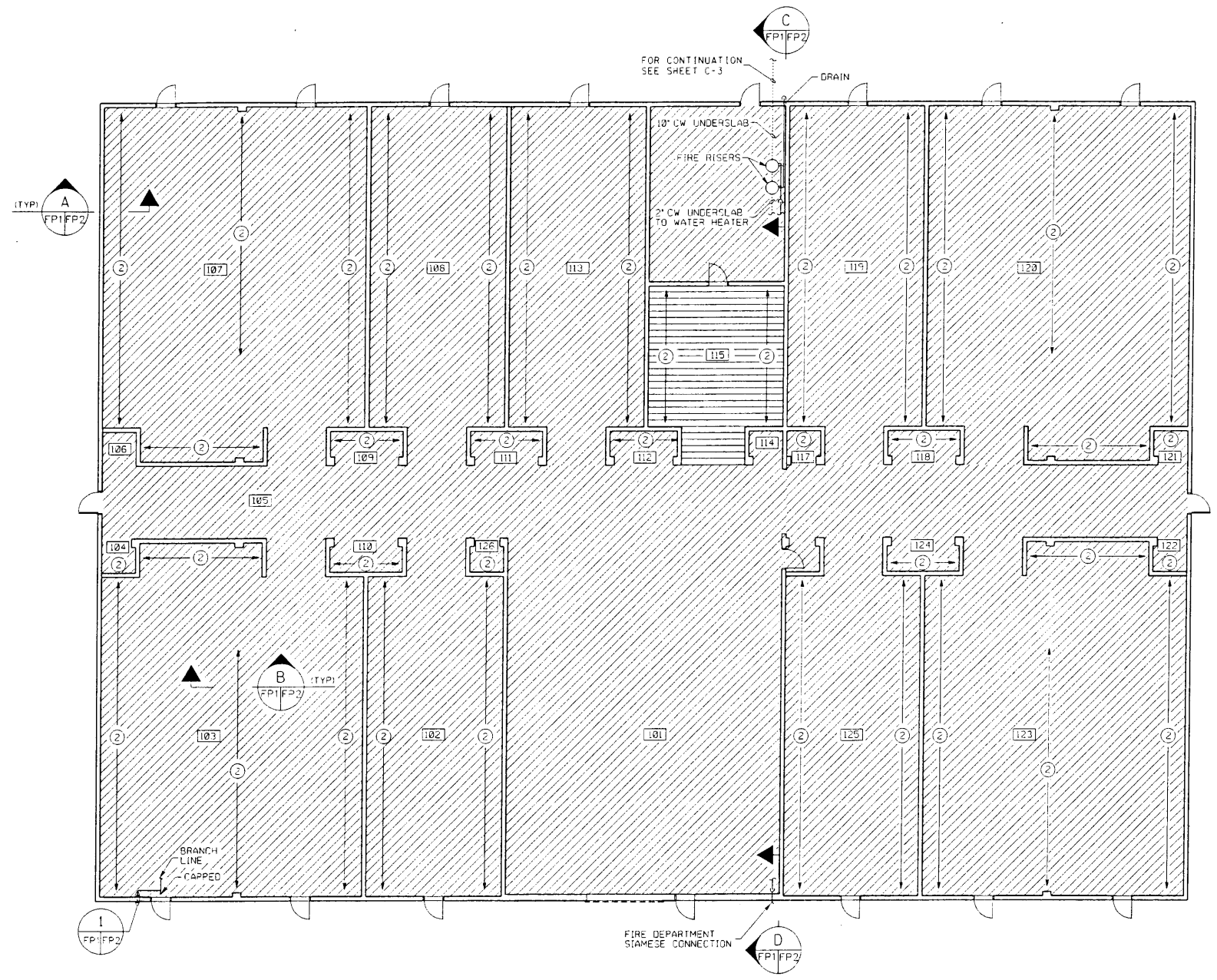
REV.

SHEET OF

5 | 4 | 3 | 2 | 1

E D C B A

CORPS OF ENGINEERS | 4 | 3 | 2 | 1 | U.S. ARMY



SPRINKLER DENSITY REQUIREMENTS

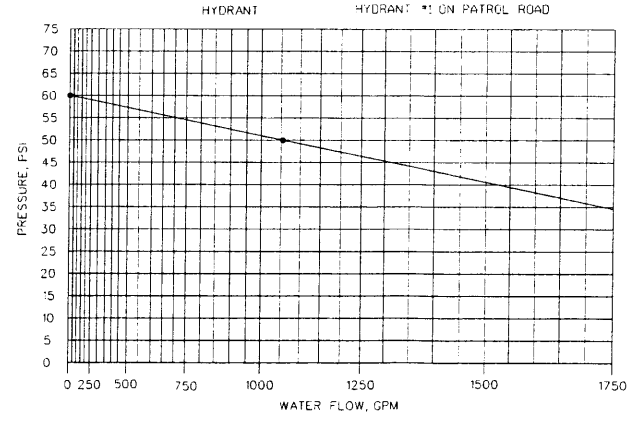
SCALE: 1/8" = 1'- 0"

GENERAL NOTES:

1. THE ENTIRE FACILITY SHALL BE PROTECTED WITH AN AUTOMATIC CEILING SPRINKLER SYSTEM. THE CEILING SPRINKLER SYSTEM SHALL BE THE PREACTION TYPE AND SHALL PROVIDE THE WATER DENSITIES INDICATED. SPECIFIC INSTALLATION INFORMATION ON CEILING SPRINKLERS SHALL BE IN ACCORDANCE WITH NFPA 13.
2. PROPERTY WITHIN THE FACILITY WILL BE STORED ON PALLETS AND THEN PLACED ACCORDINGLY ON STORAGE RACK SHELVES. STORAGE RACKS FOR THIS FACILITY WILL BE PROVIDED BY OTHERS AND IS NOT PART OF THIS CONTRACT. THE INSTALLATION OF THE IN-RACK SPRINKLERS SHALL BE COORDINATED WITH THE RACK INSTALLER.
3. EACH STORAGE RACK WITHIN THE FACILITY SHALL BE PROVIDED WITH ONE LINE OF AUTOMATIC IN-RACK SPRINKLERS LOCATED ABOVE THE FIRST 2 RACK SHELVES. REFER TO THE IN-RACK SPRINKLER SYMBOLS ON THE PLAN FOR APPROXIMATE LOCATION OF THE IN-RACK SPRINKLER BRANCHES. THE IN-RACK SPRINKLER SYSTEM SHALL BE THE PREACTION TYPE AND SHALL BE SUPPLIED WITH WATER FROM A RISER SEPARATE FROM THE CEILING SPRINKLER SYSTEM. SPRINKLERS SHALL BE DESIGNED IN ACCORDANCE WITH NFPA 30. MAXIMUM STORAGE HEIGHT WILL BE 13' 4".
4. THE ENTIRE FIRE PROTECTION SYSTEM SHALL BE HYDRAULICALLY DESIGNED.
5. CEILING SPRINKLERS SHALL BE THE UPRIGHT TYPE. IN-RACK SPRINKLERS SHALL BE THE PENDANT SIDEWALL TYPE WITH WATER SHEILD AND PROTECTOR GUARD. CEILING SPINKLER HEADS SHALL HAVE A HIGH TEMPERATURE RATING (286 DEG F). IN-RACK SPRINKLER HEADS SHALL HAVE AN ORDINARY TEMPERATURE RATING (165 DEG F).
6. INSIDE HOSES OR FIRE EXTINGUISHERS SHALL NOT BE INSTALLED INSIDE THE FACILITY.
7. THE OUTSIDE HOSE STREAM SHALL BE 250 GPM.
8. EACH HIGH POINT OF THE PIPING SYSTEMS SHALL BE PROVIDED WITH AN AIR VENT. EACH PIPING SYSTEM SHALL BE DESIGNED TO ALLOW COMPLETE DRAINAGE USING THE DRAIN LINES IN THE MECHANICAL/ELECTRICAL ROOM.
9. FOR FIRE WATER AVAILABILITY, SEE TABLE 1 BELOW. FOR FIRE DOOR REQUIREMENTS, SEE SHEETS A-1 AND A-7.
10. MOUNT AIR COMPRESSORS PER MANUFACTURER'S INSTRUCTIONS AND ROUTE COMPRESSED AIR PIPING AS REQUIRED TO SUPPLY COMPRESSED AIR TO THE SPRINKLER SYSTEMS IN ACCORDANCE WITH NFPA 13 AND DRY PIPE VALVE MANUFACTURER'S INSTRUCTIONS.
11. FOR ABBREVIATIONS AND SYMBOLS NOT DEFINED WITHIN THE FIRE PROTECTION SHEETS, PLEASE REFER TO SHEET M-1 FOR A DESCRIPTION.
12. ALL ROOF SUPPORTED FIRE PROTECTION PIPING SHALL BE SUPPORTED FROM THE WEB OF THE ROOF PURLINS OR FROM DIRECTLY BENEATH THE WEB OF THE W36 BEAMS. NO PIPING SHALL BE SUPPORTED FROM THE W7 HORIZONTAL ROOF BRACING THAT IS LOCATED 3" BELOW THE BOTTOM OF THE ROOF PURLINS.

TABLE 1
FIRE FLOW DATA

STATIC PRESSURE	60 PSI
RESIDUAL PRESSURE	50 PSI
FLOWING	1057 GPM
HYDRANT	HYDRANT #1 ON PATROL ROAD



DENSITY PATTERNS FOR CEILING SPRINKLER SYSTEM:

DENSITY PATTERNS	SPRINKLER DENSITIES (GPM/SQ-FT)	STORAGE
	0.60	CLASS IA LIQUID (SEE NFPA 30)
	0.40	CLASS IB, IC, II & III LIQUID (SEE NFPA 30)

IN-RACK SPRINKLER SYMBOLS:

(2) - TWO LINES OF IN-RACK SPRINKLERS

GRAPHIC SCALES

1/8" = 1'- 0" 8' 4' 0' 8 16

Symbol	Description	Date	Approved
	Amendment 3 - All Drawings Changed	10/99	

Revisions

DEFENSE REUTILIZATION AND MARKETING SERVICE
BATTLE CREEK, MICHIGAN

U.S. ARMY ENGINEERING AND SUPPORT CENTER, HUNTSVILLE
CORPS OF ENGINEERS
HUNTSVILLE, ALABAMA

SITE ADAPT A/E:

US Army Corps of Engineers

CONFORMING STORAGE FACILITY
DRMO
OKLAHOMA CITY, OKLAHOMA

FIRE PROTECTION PLAN

DWN. BY: SLW | CKD. BY: SLW

REVIEWED BY: JCH | DATE: OCT 99

APPROVED BY: | DRAWING CODE: F 442-85-54

Fig. 5-10

DESIGN FILE NO.: 82935

REV:

SHEET OF

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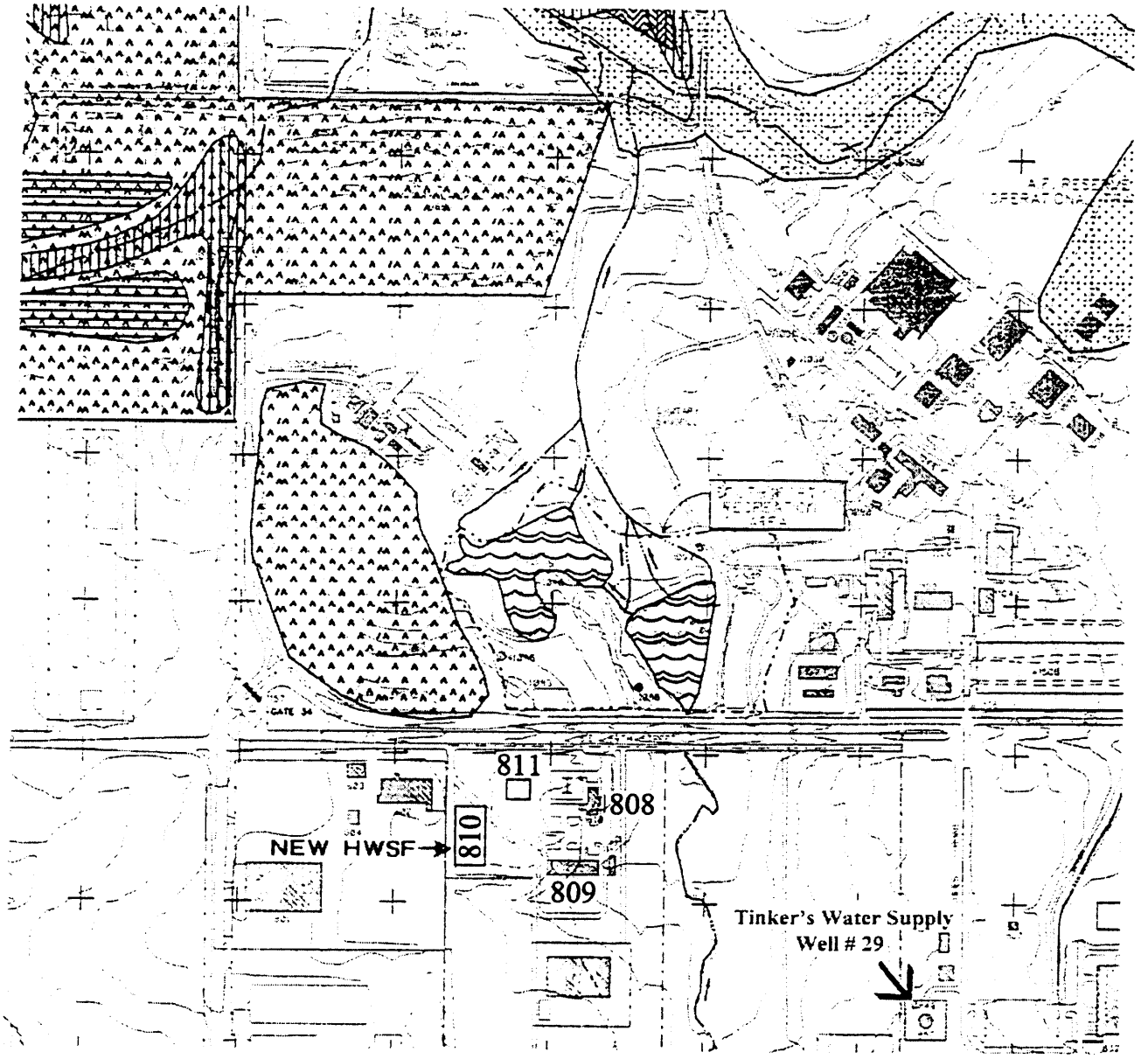


TRUE NORTH

MAGNETIC DECLINATION: 6.5° EAST
DATE: SEPTEMBER, 1991
ANNUAL CHANGE 4' WEST

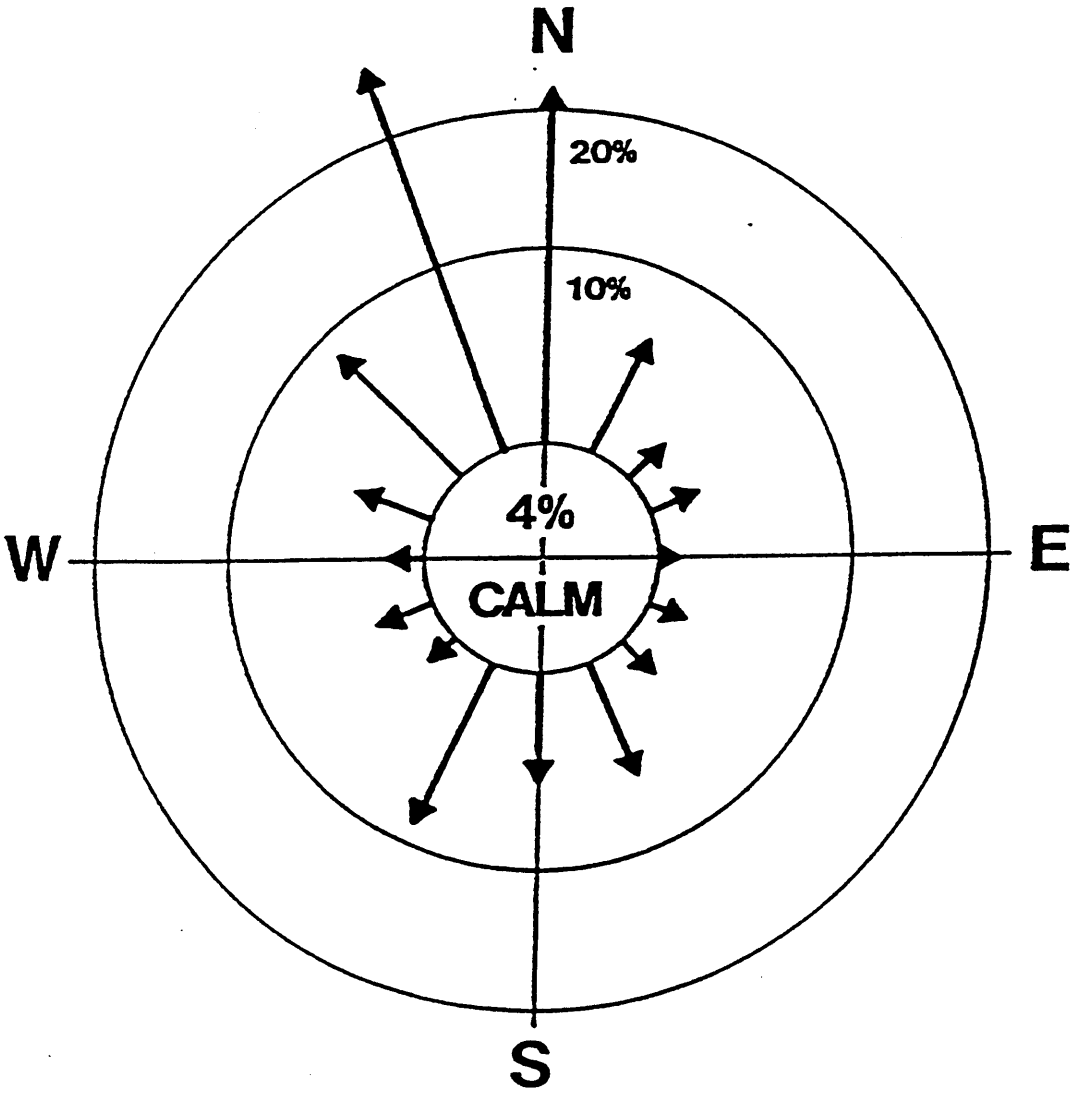
PRAIRIE AREA
WOODLANDS
WATER COURSE
PONDS
KNOWN TEXAS HORNED LIZARD HABITAT
PRIME FARMLAND (ACCORDING TO SOIL TYPE)
DRAINAGE SUB-BASINS' DIVIDES
100-YEAR FLOODPLAIN
FLOW DIRECTION
WILDLIFE RESERVE BOUNDARY

0 200 400 800 1200
SCALE IN FEET

Source: Base Comprehensive Plan, 1994

Designed By: DDN	Tinker Air Force Base		
	Oklahoma City, OK		
Drawn By: DDN	TITLE: Composite Natural Resources Map		
Checked By: DJK			
Submitted By: F95513	PROJECT NUMBER F95513	DATE 8/8/97	FIG. NO. 5-11

Augu 1997 4:13:10 p.m.
Drawi 3551301.DWG.DWG (JWB)



TAFB WIND ROSE

(% time)

Figure 5-12

TAFB Wind Rose Data Compiled from 1991. (Arrows indicate wind direction and length of arrows shows percentage of time wind blows that direction)

ATTACHMENT 6

ATTACHMENT 6

MANAGEMENT PROCEDURES AND INSPECTION

FOR STORAGE OF HAZARDOUS WASTE AT TINKER AFB

6.1 INTRODUCTION

The following procedures refer to those used at the HWSF by DRMO personnel, the operators of the facility. For waste management procedures used throughout Tinker Air Force Base see Permit attachment 15, *Hazardous Waste Management Instruction*, OC-ALC TAFBI 32-7004. A policy of "No Endangerment or Degradation" in accordance with OAC 252:205-9-1 is practiced throughout Tinker AFB.

Most hazardous waste received at the HWSF operated by DRMO comes originally from Initial Accumulation Points (IAPs) scattered throughout TAFB, is channeled through the Hazardous Waste Management Facility (HWMF) (Building 809), and is transported by tractor, truck, or trailer to the HWSF. Hazardous waste generated from spills or from cleaning out a process tank may be turned in directly to the HWSF. In addition, hazardous materials that are excess, past shelf-life or off-specification may be turned in directly to the HWSF. Typically, the waste from the HWMF is contained in 55-gallon steel drums filled to approximately 90% capacity. Excess, past shelf-life, or off-specification hazardous materials are typically in the original containers which may be cardboard boxes, plastic or glass bottles, tin cans, bags, and wooden crates. Other container types include glass carboys, metal hoppers, and plastic wrapping.

All containers holding hazardous wastes are visually inspected when they arrive at the HWSF to ensure they meet DOT specification packaging, are compatible with the waste, not leaking, and capable of withstanding sustained storage. Enclosure

6-1 outlines acceptance requirements. If found unacceptable the waste will be rejected until proper containment is provided.

Following inspection the waste containers are removed from the vehicles and placed into Staging Area 101 within the HWSF. See Figure 5-8 in Permit Attachment 5. A determination of the compatibility of the waste being stored is made prior to moving the containers into the appropriate storage module or closet for storage.

An inventory is maintained showing the name, storage location, and quantity of all wastes being stored. This inventory is maintained as part of the HWSF operating record.

DRMO and TAFB have waste minimization programs that attempt re-utilization, transfer, donation, or sale (RTDS) of all hazardous wastes or materials that are generated within the base. If arrangements cannot be made to RTDS a hazardous waste or material, it is stored until arrangements can be made through a contract administered by DRMS to transport it to an EPA or State permitted off-site treatment, storage, and disposal (TSD) facility. However, wastes subject to land disposal restrictions are not be stored longer than one year unless demonstration is made to show that such storage is necessary to facilitate proper recovery, treatment, or disposal.

Hazardous wastes are shipped off-site to a permitted hazardous waste TSD facility, all containers and overpacks will meet DOT specifications for those wastes. Hazardous waste may be temporarily stored in Staging Area 101 prior to removal from the facility.

6.2 SECONDARY CONTAINMENT

Permit Attachment 13 reviews the requirements for secondary containment system for the HWSF. In the event that hazardous waste containers with free liquids are stored overnight in Staging Area 101, the containers will be provided with secondary containment trays. The capacity of the a secondary containment tray

will be equal to or greater than the volume of the largest container stored in the tray, or at least 10% of the total volume of containers stored in the tray.

6.3 CONTINGENCY

The Contingency Plan, Permit Attachment 8, presents actions taken to prepare for and prevent spills, fires, and explosions. Response procedures are also discussed there. A complete copy of the TAFB OC-ALC Plan 19-2, Spill Prevention and Response Plan shall be available in the office at Building 811.

6.4 SECURITY

Permit Attachment 10 contains security requirements for the HWSF.

6.5 CONTAINER MANAGEMENT

- A waste that is incompatible with any other waste or material that is stored such that contact between them might occur during a mutual spill must be separated or protected from contact by a dike, berm, wall, or other device.

- Wastes will be placed in containers that are in good condition without excessive dents, rust, or other corrosion.

- Wastes will be placed in containers that are compatible with those wastes so the ability of the device to hold the waste is not impaired. Containers containing residues of incompatible wastes will not be used.

- Containers must be closed except when sample verification is necessary to determine the hazardous nature or characteristics of the contents, or transferring contents to a good container.

- Hazardous wastes shall never be handled or stored in a manner, which will impair the integrity of the container.

- Palletized containers holding hazardous waste must be placed vertically and placed on metal storage racks.

- No more than four 55-gallon drums will be placed on a single pallet.

- When used to hold 55-gallon drums, the pallets will not be stacked more than three high.

- Pallets holding flammable liquid wastes will not be stacked directly on top of one another; however, stacking one flammable waste pallet above another on a pallet storage rack will not be considered direct stacking.

- When moving containers on pallets within the facility, they shall be strapped to each other to provide extra stability and prevent damage from falling. Containers of hazardous waste will always be closed during storage, except when collecting samples or when transferring waste from one container to another which requires prior approval from the Environmental Management Directorate.

- Leaking containers will be placed in an 85-gallon DOT approved overpack drum. Labels and markings identical to those on the leaking container will be placed on the overpack. Any spills will be contained and cleaned-up. The absorbents utilized for clean-up will be properly disposed.

- Containers without free liquids will be managed in the same manner as containers with free liquids.

6.6 MARKING AND LABELING

Hazardous waste shall be properly identified at all times by appropriate markings and labels on the container in which it is being stored in accordance with 40 CFR 262.31 and 262.32.

- All containers of hazardous waste will be marked with the words "HAZARDOUS WASTE." The accumulation start date will also appear on individual containers.

- Affix appropriate shipping labels on hazardous waste containers for off-site waste shipment. The use of a yellow, vinyl "Hazardous Waste" label is recommended. Ensure the following information required for the label is provided:

ITEM	EXAMPLE
EPA WORDS	HAZARDOUS WASTE
EPA ADDITIONAL WORDS	FEDERAL LAW PROHIBITS IMPROPER DISPOSAL, ETC.
CONTENTS	FLAMMABLE LIQUID
ACCUMULATION START DATE	2 JANUARY 2005
CONTAINER NUMBER	914235
EPA WASTE CODE	F005, D001, D035

- When transporting, or offering for transportation off-site, any shipment of hazardous waste will comply with DOT regulations on hazardous materials under 49 CFR part 172.

6.7 INSPECTIONS

The following formal inspection program is designed to monitor compliance with regulations and to occur often enough to prevent threats to human health and the environment. A complete visual inspection of the hazardous waste management property, facility storage areas, and personal protective clothing and equipment will be made weekly. Inspection of hazardous waste containers and their storage sites for leakage is largely qualitative. Visual observations are used by DRMO personnel to detect small leaks. However, it is relatively easy to detect whether or not hazardous waste containers are marked and stacked properly and whether the

incompatible wastes are segregated from each other. Regular inspection of the hazardous waste storage facility and its contents will ensure that hazardous waste is stored safely.

6.7.1 Facility and Container Inspections

Inspections of the containers will be conducted weekly using DRMS Form 1713, Inspection Log (Enclosure 6-2) or equivalent to record comments by an employee trained in hazardous waste management procedures. These visual inspections will concentrate on integrity of containers and their management including labeling, handling, and compatibility issues.

DRMO personnel will conduct general inspections at the hazardous waste storage facility for structural integrity of the facility, secondary containment system, security devices, operating machinery, operating procedures, and evidence of potential leaks or discharges using DRMS Form 1713, Inspection Log (Enclosure 6-2) or equivalent. The inspection of applicable items will reduce the potential for release of hazardous waste constituents that may adversely impact human health and the environment. The frequency of general inspections depends upon equipment malfunctions, incidents of environmental or human health problems, and nature of problems identified. As part of the general inspection, the secondary containment structures shall be checked for cracks or gaps.

When a container is found to be seriously deteriorated or is leaking, authorized personnel will cleanup and properly containerize, store or dispose of all spilled material. As necessary, waste may be transferred to another 55-gallon container that is in good condition, or place the leaking container in an 85-gallon DOT approved overpack drum. Labels and markings identical to those on the leaking container will be placed on the overpack.

Containers will be inspected to ensure proper storage. Pallets and palletiers holding drums of flammable liquid wastes will not be stacked directly one upon another; however, stacking one flammable waste pallet above another on a pallet storage rack will not be considered direct stacking.

Containers with ignitable or reactive hazardous wastes will be stored at least 50 feet from the HWSF property line. If the containers are within the confines of the HWSF, they will meet this requirement.

The inspector will ensure that sufficient aisle space (where forklifts are used, at least 10 feet) is provided between stacks or groups of drums within each storage module to allow for the movement of forklifts and personnel.

6.7.2 Inspection Log

Information gathered during general and container inspections will be recorded on DRMS Form 1713, Inspection Log (Enclosure 6-2) or equivalent, which will be stored at the DRMO. Information on these logs includes the name of the inspector, date and time of inspection, item, problems observed, and the date and nature of repairs and remedial action(s).

6.7.3 Remedial Action

If inspections reveal that non-emergency maintenance is needed, the hazardous waste inspector and the DRMO Chief are authorized to initiate immediate action for the correction of the unacceptable conditions. If a hazard is imminent or has already occurred during the course of an inspection or at any time between inspections, remedial action will be taken according to the Contingency Plan as explained in Permit attachment 8.

6.8 Inventory Control

In accordance with 40 CFR 264.73(b)(2), a procedure of recording the quantity and location of hazardous wastes at the storage facility has been established as follows:

DRMS Form 1712, Hazardous Waste Log (Enclosure 6-3) or equivalent, which can be computerized, is used to monitor the storage and movement of containers through the DRMO facility. The date of receipt is indicated by the date entered on the DD

Form 1348-1 (turn-in document) as having physically arrived at the DRMO Compound. DRMS Form 1712 provides information on the date in which the container of waste was transported off-site; a description of the waste, the quantity, and the generating organization: and a container number assigned for internal tracking by the TAFB HWMF. When completed, DRMS Forms 1712 are maintained permanently on-site.

6.9 Record Keeping

Records of all phases of hazardous waste management shall be maintained on site to enable certification of compliance with regulations and to document results of waste minimization efforts.

- DRMS Forms 1713, Inspection Logs, (or equivalent, which can also be computerized) shall be maintained on site for at least three years.

- DRMS Forms 1712, Hazardous Waste Logs, (or equivalent, which can also be computerized) shall be maintained on site until closure of the facility.

- Job descriptions and records of training received for all personnel shall be maintained at the site until closure for current employees; and for three years after former employees last worked there.

- A complete copy of OC-ALC Plan 19-2, Spill Response Plan, shall be available at the permitted facility, and Chief of Engineering/TAFB Hazardous Waste Coordinator's Office.

- A site-specific contingency plan for the DRMO facility is also maintained at the permitted facility, and Chief of Engineering/TAFB Hazardous Waste Coordinator's Office.

- A copy of this permit shall be available for review in the office area of the permitted facility, and Chief of Engineering/TAFB Hazardous Waste Coordinator's Office.

6.10 CLOSURE

When the storage facility ceases operations, it will be closed in a manner that ensures no further threat to human health or the environment. See Permit Attachment 9 for information related to closure.

ENCLOSURE 6-1

DRMO CONTAINER ACCEPTANCE REQUIREMENTS

Containers and packaging material for hazardous wastes generated by waste operations or DoD components must meet DOT requirements prior to acceptance by DRMO.

1. Drums

a. No rust which is deteriorating the metal.

b. No sharp dents or creases in the metal.

c. No extensive denting on the sides of the drum.

d. No dents in the lip or rings.

e. No bulging in the top or bottom (above or below rim).

f. Bung gaskets and covers in place and bung cover tight.

g. Drums upright and strapped to each other.

h. No more than four 55-gallon drums to a pallet.

i. Pallets in good condition and sturdy enough to contain the weight of the drums.

j. Drums may not exceed approximately 90% full. Unit of issue will be pounds and the quantity must be accurate.

k. Department of Defense Turn-In Document (DD Form 1348-1 or 1348-1A or equivalent) properly completed.

2. Bags or Cartons

   a. Bags must be intact.

   b. Cartons must be sound and able to support the inner materials.

   c. Inner packages must not be broken, uncapped, torn or otherwise not able to contain the product completely.

DRAFT

ENCLOSURE 6-2

DRMS INSPECTION LOG -- DRMS FORM 1713

INSPECTION LOG

(Prescribing Authority: DRMS-M 6050.1)

DATE/TIME	AREA/BLDG *(Specify when HM/HW is stored off-site of DRMO)*	SIGNATURE OF INSPECTOR

LEGEND

NA - Not applicable

ITEM	TYPE OF PROBLEM	SAT	UN-SAT	NA	LOCATION AND PROBLEMS OBSERVED	DATE & NATURE OF CORRECT ACTION	FREQUENCY
SAFETY AND EMERGENCY EQUIPMENT							
Face shield & chemical goggles	Broken, dirty or missing						Weekly
Protective clothing	Holes, worn, missing						Weekly
Absorbents (e.g., sorb-all Vermiculite)	Saturated contaminated, below minimum quantity						Weekly
Empty drums/containers	Corrosion structural damage securely stored						Weekly
Emergency eyewash/shower	Water pressures, leaking, flushed						Weekly
Ventilation systems	Not operating, blocked						Weekly
Shovel nonsparking	Missing, damaged						Weekly
Fire extinguishers	Not charged, not mounted, missing						Monthly
Fire alarm system	Not operating						Monthly
Telephone system	Not operating						Monthly
First Aid equipment & supplies	Items out of stock, outdated, expired supplies						Monthly
Non-sparking bung wrench	Missing, damaged						Weekly
Push broom	Missing, damaged						Weekly
SECURITY							
Warning signs	Illegible, missing						Weekly
Security lights	Not operating						Weekly
Building doors, locks, fence and gates	Locks missing, unlocked, signs of tampering						Weekly*

DRMS Form Jan 91 1713

*Daily when in use

(Previous edition is obsolete)

Enclosure 6-2

ITEM	TYPE OF PROBLEM	SAT	UN SAT	NA	LOCATION AND PROBLEMS OBSERVED	DATE & NATURE OF CORRECT ACTION	FREQUENCY
BUILDING Load/Unload Area							
General debris & refuse	Orderliness, obstructions, general housekeeping						Weekly*
Odor, fumes	Detectable by smell, eye or nose irritation						Weekly*
Bases or foundation, containment trenches, ramps, roof, walls	Wet spots from containers						Weekly*
	Evidence of leaking						Weekly*
	Structural integrity, e.g., erosion, uneven settlement, cracks and spalling in concrete						Monthly
Battery charging area	Well ventilated, identified, located outside Flammable storage area						Monthly
CONTAINER STORAGE AREA							
Containers	Corrosion, structural defects, serious dents						Weekly*
Sealing of containers	Open lids, leaking contents						Weekly
Labeling of containers	Improper identification; date or missing; not intact, or not readable						Weekly
Housekeeping	Aesthetics, obstruction						Weekly*
Containment area coating/sealant	Cracks, worn spots, presence of accumulated liquids						Weekly*
Load/unload area and valves	Leaks, incorrect position, spots indicating spills						Weekly*
Container placement and stacking	Insufficient aisle space, heights of stacks excessive						Weekly
Segregation of incompatible wastes	Storage of incompatible wastes in same area improper distance between barriers						Weekly
Pallets	Damaged (e.g., broken wood, warping, nails missing)						Weekly
Containment system coating/sealant	Present, cracks, worn spots, presence of liquid						Weekly*
Identification of storage areas (rooms)	Signs posted (e.g., FLAMMABLE, ACID, TOXIC)						Weekly*
Lighting	Bulbs missing, burned out, broken fixtures						Weekly

*Daily when in use

ITEM	TYPE OF PROBLEM	SAT	UN SAT	NA	LOCATION AND PROBLEMS OBSERVED	DATE & NATURE OF CORRECT ACTION	FREQUENCY
MATERIAL HANDLING EQUIPMENT							
Breaks	Worn pads, rotors, bands						PTEU**
Hydraulics	Leaking						PTEU**
Lights-running emergency	Not operational						PTEU**
Horns/sirens	Not operational						PTEU**
Battery	Not operational						PTEU**
Lubrication (oil, grease)	Low level, lack of						PTEU**
Tires	Worn, low pressure						PTEU**
Safety equipment	Not operational, missing						PTEU**
Instruments	Not operational, missing						PTEU**
General condition	Deficiencies						PTEU**
Lift, shift, tilt, control mechanisms	Not functional, loose, worn						PTEU**
Accessories	Missing, inoperative						PTEU**
Fire extinguisher	Missing, serviceable						PTEU**
Rated for area of use	DY, EE, EX for flammable storage areas						PTEU**
Overhead protection (forklifts)	Missing, damaged						PTEU**

PTEU Prior to each use but not more often than once per day

ENCLOSURE 6-3

DRMS HAZARDOUS WASTE LOG -- DRMS FORM 1712

DRUM NO.	DTID NO. / MEN/LGN	GENERATOR DATA: ORG SYMBOL / NAME	GENERATOR DATA: BLDG. NO. / PHONE	DESCRIPTION OF CONTENTS / TYPE OF OPERATION	PHY FORM / EPA HAND-	EM DRUM NO# / HAZ WASTE #	EST MANIFESTED: WT/VALUE / CONT NO#	EST MANIFESTED: SYMBOL / NAME INIT	STORAGE LOCATION / DATE IN	STORAGE DATE OUT	DISPOSAL MANIFEST NO. OR REQUISITION DOCUMENT NO.: CONTRACT NO.	DO# / LI#
	FB2037							P	Z0			
				# (see code listing)	S01							
	FB2037							P	Z0			
				# (see code listing)	S01							
	FB2037							P	Z0			
				# (see code listing)	S01							
	FB2037							P	Z0			
				# (see code listing)	S01							
	FB2037							P	Z0			
				# (see code listing)	S01							
	FB2037							P	Z0			
				# (see code listing)	S01							
	FB2037							P	Z0			
				# (see code listing)	S01							
	FB2037							P	Z0			
				# (see code listing)	S01							
	FB2037							P	Z0			
				# (see code listing)	S01							

DRMS Form 1712
Dec 89
NSN 7540-00-L001712

(Previous edition is obsolete)

HAZARDOUS WASTE LO

ATTACHMENT 7

ATTACHMENT 7

PERSONNEL TRAINING

7.1 OVERVIEW OF TRAINING REQUIREMENTS

Personnel involved in hazardous waste management at TAFB must complete a program of instruction that enables them to perform their duties in a manner that meets Department of Defense/Air Force policy and procedures, as well as the regulatory requirements of the DEQ. DEQ requirements are outlined in 40 CFR 264.16, and 40 CFR 262.34 for the less than 90-day storage facility (i.e., the HWMF) and other generator accumulation areas.

Personnel who work with hazardous waste and their immediate supervisors must receive and successfully complete hazardous waste training before working with hazardous waste. The required training courses for a job level must be completed within six months of an individual's job assignment. Personnel must not work unsupervised until training is received.

The training requirements outlined below are "general" requirements. DRMO or TAFB courses can be used to satisfy these requirements and depending on job responsibilities, some personnel may not require training in all segments. For example, administrative or management personnel who are not the first-line supervisors will only receive those segments most appropriate for their job functions. The segments are as follows:

- Introduction to the Resource Conservation and Recovery Act
- Identification of Hazardous Waste
- Container Selection and Management
- Accumulation Point Management

- Waste Turn-in Procedures
- Waste Minimization
- Manifesting and Transportation of Hazardous Waste
- Spill Prevention and Response
- Personnel Safety

Training requirements for all TAFB personnel are reviewed in detail in the *Hazardous Waste Management Instruction*, OC-ALC TAFBI 32-7004. (See attachment 15.) Job descriptions for DRMO employees are kept on file by DRMO. Certain training requirements have been determined for each DRMO job description. Training courses, which cover the nine segments listed above, have been developed by DRMS. The title of individual courses may change without a change of the course subject matter. Current training requirements for each job description, and training course contents, are maintained on the Headquarters DRMS web site, and are accessible by computer from the permitted facility.

7.2 KEY PERSONNEL REQUIRING TRAINING.

DRMO personnel (by job title) requiring training on hazardous waste management and other related training (e.g., HAZWOPER, per 29 CFR 1910) are listed in the DRMS headquarters web site mentioned above.

ATTACHMENT 8

ATTACHMENT 8

CONTINGENCY PLAN

The contingency plan for Tinker Air Force Base (TAFB) is outlined in OC-ALC Plan 19-2, Spill Prevention and Emergency Response Plan and is on file at the HWSF, the HWMF, and other offices where hazardous material spills could occur. A summary of the Plan's contents is presented in Paragraph 16 of OC-ALC TAFBI 32-7004 (Permit Attachment 15).

8.1 EMERGENCY COORDINATORS (OC-ALC Plan 19-2)

In the event of an uncontrolled/non-permitted release of a hazardous material (including hazardous waste) or a petroleum, oil and lubricant (POL) product within the boundaries of TAFB, the following personnel will serve as the Emergency Coordinator, until relieved of the responsibility by the appropriate authority (Base Commander, Base Civil Engineer, or their designees).

JOB TITLE	EXTENSION	
EM Spill Response Beeper	734-5088-0085	
Shop Supervisor	On Site	
Tinker Fire Chief	911	72 ABW/CEF
Emergency Spill Response Team Manager	736-3259	

Additional information and emergency contacts at TAFB are presented in Enclosure 8-1.

8.2 INITIAL SPILL RESPONSE PROCEDURES

Enclosure 8-2 is the Spill Response Plan for the HWSF (Building 810). This Plan outlines the initial spill response procedures and evacuation routes for Building 810.

8.3 REQUIRED REPORTS

The emergency coordinator will ensure that the incident reporting requirements identified in the basic plan portion of OC-ALC Plan 19-2 are completed. The coordinator will ensure that the emergency and post-emergency notifications outlined in 40 CFR 264.56 are met. Records of the incidents including initial spill response records will be maintained in the operating record at the facility until closure. Implementation of the contingency plan will be documented in the Tinker Command Post log, the Tinker Fire Department log, and the pollution incident log maintained by OC-ALC/EMX. Also, within 15 days a report will be submitted as required by 40 CFR 264.56(j) or sooner as required by OAC 252:205-13-1.

8.4 FOR FIRE EMERGENCIES

TAFB has signed mutual assistance agreements with the Fire Departments of Oklahoma City, Midwest City, and Del City. For Medical and ambulance assistance TAFB has access to hospitals and other facilities in the regional area through an arrangement with the Veteran's Affairs Medical Center in Oklahoma City. For support in incidents involving explosive ordnance, agreements have been made with the 61st Ordnance Detachment at Ft. Sill, OK, McAlester Army Ammunition Depot, and with the Oklahoma County Sheriff's Department. Copies of these mutual aid agreements are in Enclosure 8-3.

ENCLOSURE 8-1

TINKER AFB

INFORMATION AND EMERGENCY CONTACTS

TINKER AFB
INFORMATION AND EMERGENCY CONTACTS

ORGANIZATION	ON-DUTY EXTENSION
a. Tinker Air Force Base	(405) 732-7321
(1) Fire Department	24 Hour, On-Base: 911 Off-Base: 911
(2) Ambulance	911
(3) Command Post	OC-ALC 92171/552 ACW 47319
(4) DynPar Service Desk	**43933**
(5) Environmental Management/EMCO	**44111/45199**
(6) Ground Safety Office	93263
(7) Security Police (emergency)	42000
(8) Disaster Preparedness Office	43515
(9) Bioenvironmental Engineering	47844
(10) Liquid Fuels Maintenance	42753
(11) Staff Judge Advocate/(Envr)	95811/97397
(12) Public Affairs Office	92026

TINKER AFB
INFORMATION AND EMERGENCY CONTACTS - *continued*

ORGANIZATION	ON-DUTY EXTENSION
(13) Service Contracts Section	43301
(14) Base Locator	42456
(15) Barrel Yard	43285
(16) DRMO	97033

b. Headquarters AFMC, Wright-Patterson AFB OH

(1) Command Post	DSN 787-6314
(2) Environmental Office (CEV)	DSN 787-5879

c. Other Off-Base Organizations

- Federal and State Agencies:

National Response Center	(800) 424-8802
Regional Response Center	(214) 767-2720
(If NRC is unavailable)	
Oklahoma Dept of Envr Quality	(405) 702-5100

TINKER AFB
INFORMATION AND EMERGENCY CONTACTS- *continued*

d. Contingency Contacts

If, in the judgment of the On-Scene-Coordinator (OSC), additional off-base resources are required, the Disaster Preparedness Plan will be implemented and the following agencies and organizations can be contacted if deemed necessary:

ORGANIZATION	ON-DUTY EXTENSION	
	Administrative / Emergency	
Oklahoma City Police Department	297-2250	911
Oklahoma City Fire Department	297-3439	911
Midwest City Police Department	739-1300	911
Midwest City Fire Department	739-1340	911
Del City Police Department	677-2443	911
Del City Fire Department	671-2891	911
Veterans Affairs Medical Center	270-0501	
Fort Sill EOD Unit		DSN 639-5209
OK County Sheriff (Bomb Unit)		236-1717

If adequate spill response information is not available for a spill product which can be identified by either chemical, trade name, or manufacturer, the following organizations can be contacted by telephone to assist in providing specific information concerning the spill product:

CHEMTREC	(800) 424-9300
ETIS	(904) 283-1667

ENCLOSURE 8-2

SPILL RESPONSE PLAN FOR BUILDING 810 (HWSF)

DRMO-UFPB (D. Blott/DSN 339-7033)

06 June 2002

SUBJECT: Spill Response Plan for the DRMO Hazardous Material/Hazardous Waste (HM/HW) Storage Site and Conforming Storage Facility (Building 810)

TO: All DRMO-UFPB Employees

1. References:

a. 40 CFR 264.30

b. OC-ALC Plan 19-2, Site Specific Spill Contingency Plan

c. Evacuation Route (attached)

2. Purpose: To provide guidance and direction to DRMO personnel working in the HM/HW storage area. Methods for controlling, reporting, and seeking assistance in the event of a spill are covered.

3. Definition: HM/HW spill is defined as the accidental discharge by spilling, leaking, pumping, pouring, emitting, emptying or dumping of a hazardous substance into or on the land, water or air.

4. Initial Spill Response: When any hazardous substance spill occurs at building 810 or areas surrounding these building under the control of DRMO-UFPB, the following steps will be implemented by the employee/employees at the scene:

a. Small quantity spill: 5 gallons or less and "does not" pose an immediate or catastrophic danger to personnel or facilities.

(1) Evacuate the immediate spill area of all unnecessary personnel (see attached evacuation diagram)

(2) Contain and confine the flow by absorbent, sand bags, absorbent pads, etc. if containment can be safely performed.

(3) Restrict all sources of ignition in the area, which can be accomplished without risking personnel injury. Again, attempt this action only if it can be accomplished in a safe manner.

(4) Notify the Base Fire Department at extension 911. Be prepared to provide the substance name and quantity spilled, location of spill, building/area number, and your name.

(5) Notify DRMO Chief or the Acting Chief at extension 97882/97885.

b. Large quantity or immediate dangerous spills: Spills over 5 gallons, or small quantity spills that pose an immediate or catastrophic danger to personnel.

(1) Notify Base Fire Department at extension 911. Be prepared to provide the substance name, quantity spilled, location of spill, building/area number, and your name.

NOTE: If a condition exists which risks the health of personnel or detriment of the facilities and warrants the immediate evacuation of the facility, pull the alarms, move to the proper evacuation assembly area, ensure all personnel are present, then locate the nearest phone and notify the Fire Department.

(2) Contain spill using absorbent, sand bags, absorbent pads, etc. if containment can be safely performed.

(3) If emergency medical care is needed, call extension 911.

(4) Evacuate all personnel upwind from the spill site.

(5) Conduct an employee/visitor roll call. Using the visitor sign in/out register can ensure accuracy.

(6) Notify DRMO Chief or Acting Chief at extension 97882/97885.

(7) Restrict all sources of ignition in the area, which can be accomplished without risking personal injury. Again, attempt this action only if it can be accomplished in a safe manner.

(8) Act as On Scene Coordinator (OSC) until relieved by higher level supervisor or until the host OSC arrives.

c. DRMO Chief will:

(1) Receive briefing from DRMO employee and function as the OSC and direct operations until relieved by the host OSC.

(2) Report within 8 hours after occurrences that exceed "reportable" quantities notification requirements under 40 CFR 302.6 or must be reported under other federal, state, local or permit requirements. In addition, the following must be reported within 1 hour to DRMS-FH and the host.

(a) Any mixture listed below containing .1% equal to or greater than, by mass or volume of the following OSHA carcinogens.

4-Nitrobiphenyl
Methyl-chloromethyl ether
bis-Chloromethyl ether
beta-naphthylamine
Benzidene
4-Aminodiphenyl

And any mixture listed below containing 1% equal to or greater than, by mass or volume of the following OSHA carcinogens.

alpha-Naphthylamine
3,3'-Dichlorobenzidene (and its salts)
Ethyleneimine
beta-Propionlactone
2-Aetylaminofluorene
4-dimethylaminoazobenezene
N-Nitrosodimethylamine

(3) DRMO Chief will report to DRMS-FH the DRMO name, substance spilled, area affected, injuries involved, if HQ assistance is required, host involvement, organization responsible for spill and what hazards exist.

(4) Act as coordinator with host cleanup teams.

(5) Notify Environmental Management at extension 45199.

5. Spill Instructions: Proper safety equipment will be worn when handling hazardous substances as prescribed by DRMS-M 6050.1. DRMO personnel cannot contain or clean up any spill requiring above level "D" PPE. DRMO personnel are not authorized to use respirators.

6. Containment, Cleanup and Disposal:

a. If possible, spill will be contained by creating dikes using absorbent material.

b. If area affected by the spill is too large or considered too dangerous by DRMS-FH, DRMO personnel will act in accordance with instruction from DRMS-FH.

c. DRMO personnel will not clean up any spill unless directed by the DRMO Chief. DRMO personnel are not authorized to clean up any spills requiring PPE above level "D".

d. In no instance are DRMO personnel to attempt clean up of PCB spills. In accordance with ISA category, code BO (Environmental Quality Control) the Host will be promptly contacted for clean up.

7. Emergency Equipment: Available at storage site.

a. Fire extinguishers are located in building 810.

b. Telephones are located in building 810.

c. Emergency showers are located throughout the conforming storage facility.

d. Evacuation Plan: Evacuation of building 810 will be by voice command. Evacuation routes are shown at attachment 1. All personnel will assemble upwind from the spill area at either the north or southwest gates. If the wind is out of the east or west, personnel will assemble outside the southwest gate.

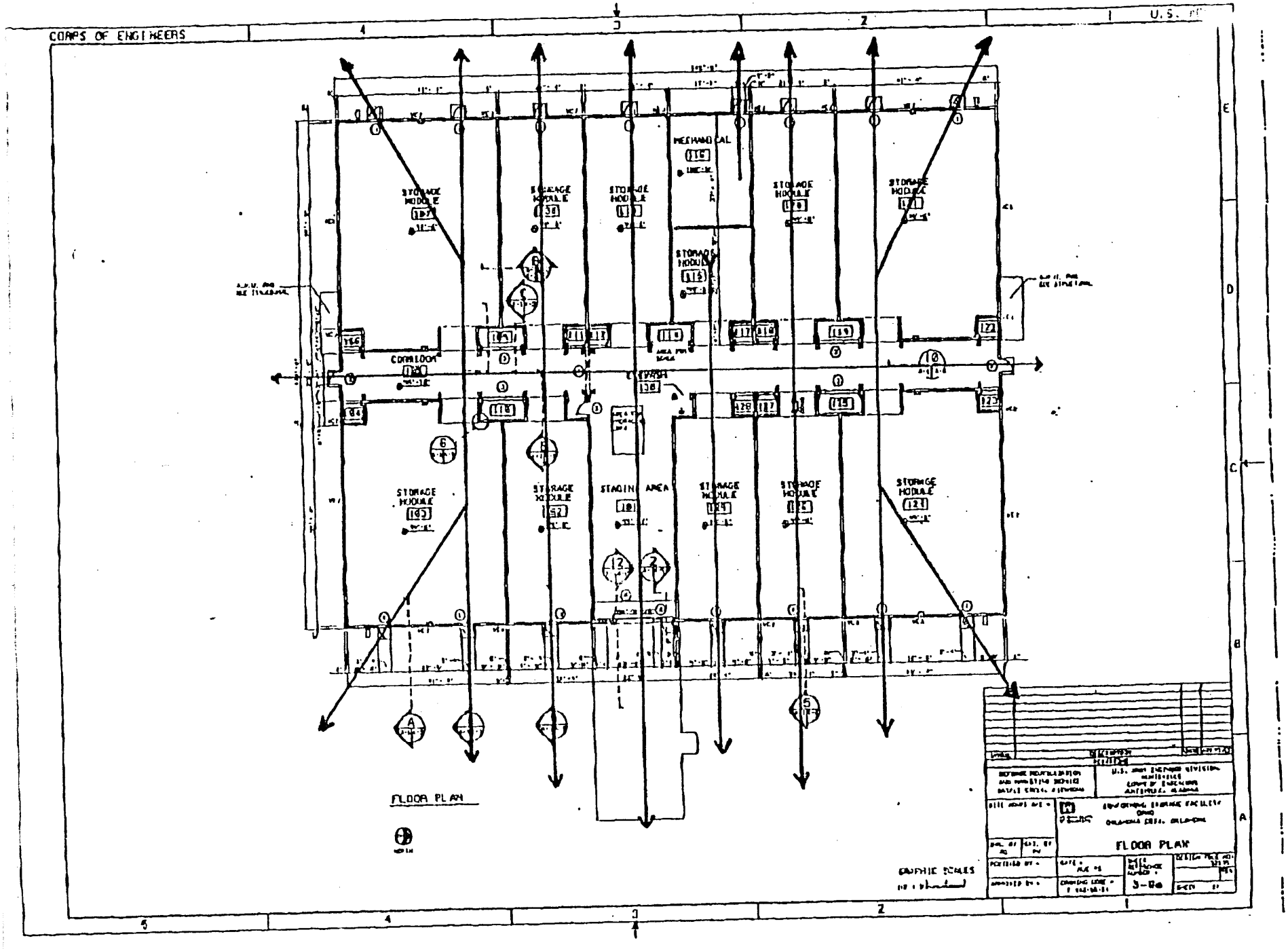
9. Posting Requirements: This site specific contingency plan will be posted prominently in building 810 .

10. All personnel working in or around hazardous materials/ hazardous waste to include supervisors will familiarize themselves with this plan, OC-ALC Plan 19-2 and DRMS-M 6050.1.

11. This plan supersedes all previous DRMO-UFPB published plans for this subject.

Jesse Rodgers, Chief
DRMO-Oklahoma City

1 attachment



EMERGENCY ESCAPE

ENCLOSURE 8-3

CONTINGENCY AGREEMENTS

WITH

LOCAL INSTITUTIONS

Enclosure 7-4

RESOLUTION

WHEREAS, The Secretary of the Air Force at Tinker Air Force Base has agreed to provide certain items of equipment and fire fighting services for use by the Fire Department of The City of Oklahoma City for use throughout the City of Oklahoma City; and

WHEREAS, The City of Oklahoma City by and through its Fire Department is desirous of providing its fire fighting ability to the residents and property in The Secretary of the Air Force at Tinker Air Force Base in order to protect the lives of the citizenry, the protection of property, and for the common good; and

WHEREAS, the fire fighting services provided by The Secretary of the Air Force at Tinker Air Force Base will be helpful in combating fire and protecting the lives of its citizenry and property of the City of Oklahoma City; and

WHEREAS, it is in the furtherance of the best interest of the citizens of The Secretary of the Air Force at Tinker Air Force Base and the City of Oklahoma City to enter into the mutual aid agreement for protection from fire and its natural consequences.

NOW, THEREFORE, BE IT RESOLVED, by the City Council of The City of Oklahoma City that the mutual aid agreement should be, and the same is hereby, approved.

ADOPTED by the Council and SIGNED by the Mayor of The City of Oklahoma City this 14 day of November, 1995.

MAYOR

ATTEST:

CITY CLERK

APPROVED as to form and legality this 8 day of November, 1995.

Assistant Municipal Counselor

AGREEMENT FOR MUTUAL AID IN FIRE PROTECTION

This Agreement entered into this 14 day of November, 1995, by and between the Secretary of the Air Force acting pursuant to the authority of 42 U.S.C. 1856(a) and the City of Oklahoma City, is securing to each the benefits of mutual aid in fire prevention, in the protection of life and property from a fire, and in firefighting. It is agreed that:

a. On request to a representative of the Tinker Air Force Base Fire Department by a representative of the Oklahoma City Fire Department, firefighting equipment and personnel of the Tinker Air Force Base Fire Department will be dispatched to any point within the area for which the Oklahoma City Fire Department normally provides fire protection as designated by the representatives of the Oklahoma City Fire Department.

b. On request to a representative of the Oklahoma City Fire Department by a representative of the Tinker Air Force Base Fire Department, firefighting equipment and personnel of the Oklahoma City Fire Department will be dispatched to any point within the firefighting jurisdiction of the Tinker AFB Fire Department as designated by the representative of the Tinker AFB Fire Department.

c. Any dispatch of equipment and personnel pursuant to this Agreement is subject to the following conditions:

1. 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.

2. 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.

3. 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.

4. 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 Oklahoma City Fire Department normally provides fire protection, the Chief of the Tinker AFB Fire Department or his/her representative may assume full command of the aircraft and area immediately surrounding the aircraft on arrival at the scene of the crash.

d. The Oklahoma City 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 for in 44 C.F.R., Part 151.

e. 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. This provision does not waive any right of reimbursement pursuant to paragraph d above.

f. All equipment used by the Oklahoma City Fire Department in carrying out this agreement will, at the time of action hereunder, be owned or be under the jurisdiction of the Oklahoma City Fire Department; and all personnel acting for the Oklahoma City Fire Department under this Agreement will, at this time of such action, be an employee or volunteer member of the Oklahoma City Fire Department.

g. This Agreement shall be subject to review every three years or when either signatory is no longer the binding authority.

SO AGREED this _____ day of _____, 1995, pursuant to authority delegated to the Secretary of the Air Force

SECRETARY OF THE AIR FORCE

By: Kenneth E. Eickmann
KENNETH E. EICKMANN
Major General, USAF
Commander, Tinker AFB

ADOPTED by the Council and SIGNED by the Mayor of the City of Oklahoma City, this 14 day of November, 1995.

THE CITY OF OKLAHOMA CITY

Ronald J. Norick
MAYOR

ATTEST:

Thomas P. Hanley
City Clerk

APPROVED as to form and legality this 7 of November, 1995.

ASST MUNICIPAL COUNSELOR

AGREEMENT FOR MUTUAL AID IN FIRE PROTECTION (US)

This agreement, entered into this 27th day of February 19 92, between the Secretary of the Air Force acting pursuant to the authority of 42 U.S.C. 1856(a) and the City of Midwest City, Oklahoma, is 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:

a. On request to a representative of the Tinker Air Force Base Fire Department by a representative of the Midwest City Fire Department, firefighting equipment and personnel of the Tinker Air Force Base Fire Department will be dispatched to any point within the area for which the Midwest City Fire Department normally provides fire protection as designated by the representative of the Midwest City Fire Department.

b. On request to a representative of the Midwest City Fire Department by a representative of the Tinker Air Force Base Fire Department, firefighting equipment and personnel of the Midwest City Fire Department will be dispatched to any point within the firefighting jurisdiction of the Tinker Air Force Base Fire Department as designated by the representative of the Tinker Air Force Base Fire Department.

c. Any dispatch of equipment and personnel pursuant to this agreement is subject to the following conditions:

(1) 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.

(2) 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.

(3) 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.

(4) In the event of a crash of an aircraft owned or operated by the United States or military aircraft of any foreign nation within the area for which the Midwest City Fire Department normally provides fire protection, the Chief of the Midwest City Fire Department or his or her representative may elect to allow the Chief of the Tinker Air Force Base Fire Department to assume command of the incident if it is believed to be in the best interest of the City of Midwest City to do so. It is also understood by both parties that the Air Force may elect to declare a crash site a National Defense Area and assume full command of the incident if it is in the best interest of the United States of America.

d. The Midwest City 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.

e. 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. This provision does not waive any right of reimbursement pursuant to paragraph d above.

f. All equipment used by the Midwest City Fire Department in carrying out this agreement will, at the time of action hereunder, be owned by it; and all personnel acting for the Midwest City Fire Department under this agreement will, at the time of such action, be an employee or volunteer member of the Midwest City Fire Department.

FOR THE MIDWEST CITY FIRE DEPARTMENT

MIKE BOWER, FIRE CHIEF
Midwest City Fire Department

DATE: 2-28-92

FOR THE SECRETARY OF THE AIR FORCE

JOHN R. CLARK, Colonel, USAF
Base Commander

DATE: 2/27/92

AGREEMENT FOR MUTUAL AID IN FIRE PROTECTION (US)

This agreement, entered into this 10th day of February 1992, between the Secretary of the Air Force acting pursuant to the authority of 42 U.S.C. 1856(a) and the City of Del City, Oklahoma, is 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:

a. On request to a representative of the Tinker Air Force Base Fire Department by a representative of the Del City Fire Department, firefighting equipment and personnel of the Tinker Air Force Base Fire Department will be dispatched to any point within the area for which the Del City Fire Department normally provides fire protection as designated by the representatives of the Del City Fire Department.

b. On request to a representative of the Del City Fire Department by a representative of the Tinker Air Force Base Fire Department, firefighting equipment and personnel of the Del City Fire Department will be dispatched to any point within the firefighting jurisdiction of the Tinker Air Force Base Fire Department as designated by the representative of the Tinker Air Force Base Fire Department.

c. Any dispatch of equipment and personnel pursuant to this agreement is subject to the following conditions:

(1) 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.

(2) 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.

(3) 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.

(4) 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 Del City Fire Department normally provides fire protection, the Chief of the Tinker Air Force Base Fire Department or his or her representative may assume full command on arrival at the scene of the crash.

d. The Del City 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.

e. 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. This provision does not waive any right of reimbursement pursuant to paragraph d above.

f. All equipment used by the Del City Fire Department in carrying out this agreement will, at the time of action hereunder, be owned by it; and all personnel acting for the Del City Fire Department under this agreement will, at the time of such action, be an employee or volunteer member of the Del City Fire Department.

FOR THE DEL CITY FIRE DEPARTMENT	FOR THE SECRETARY OF THE AIR FORCE
Tom Tollison	John Clark
Fire Chief	JOHN R. CLARK, Col, USAF Base Commander
DATE: 10 FEB. 92	DATE: 27 Jan 92

MEMORANDUM OF UNDERSTANDING

Between

654th Medical Group, Tinker AFB, OK

and

Veterans Affairs Medical Center, Oklahoma City, OK

The purpose of this Memorandum of Understanding is to set forth the terms under which the Veterans Affairs Medical Center, Oklahoma City will support the 654th Medical Group, Tinker AFB in the event of a local disaster. This includes industrial or natural disasters that occur within the environs of Tinker AFB and overwhelms the capability of the 654th Medical Group.

The Veterans Affairs Medical Center agrees:

- to be the primary medical facility for the 654th Medical Group to refer adolescent and adult patients, both litter and ambulant.
- to activate their external disaster plan upon request by 654th Medical Group officials.
- to provide a daily status report on all patients referred by the 654th Medical Group.
- to prepare and submit charges for services rendered according to established interagency policies and procedures.

The 654th Medical Group agrees:

- to provide transportation of patients both to and from the Veterans Affairs Medical Center.
- to provide a Patient Administrative Team to ensure that the affairs of active duty patients are administered appropriately.
- to pay all charges incurred according to interagency policies and procedures.

This agreement becomes effective upon signatures of both parties and may be modified or cancelled by either party upon written notification. This agreement is effective for calendar year 1994.

DAVID D. BISSELL, Col, USAF, MC, FS
Commander
654th Medical Group, Tinker AFB, OK

STEVEN J. GENTLING, Director
Veterans Affairs Medical Center
Oklahoma City, OK

OPERATIONAL PROCEDURE

Emergency Disposal of Explosive Ordnance

TYPICAL SITUATION: Some explosive or incendiary ordnance (bombs, mines, shells, mortar rounds, dynamite, flares, grenades, ejection seat propellants), is discovered in an off-specification condition that poses a threat to the safety of personnel, or to the sound condition of property and equipment.

RESPONSE ACTIONS: In the event of a situation as described above, the following actions shall be taken:

1. Immediately notify the following organizations:

   a. Munitions Operations (654 ABG/LGSWK), TSgt Doyle, ext 94409.

   b. Weapons Safety (OC-ALC/SEW), Jim Eddy, ext 93511.

   c. Security Police (654 ABG/SP), MSgt Kelly Fields, ext 42870.

   d. Fire Department (654 CES/CEF), A. J. Stanford, ext 42042.

   e. Environmental Management (OC-ALC/EM), Leaman Harris, ext 45199, who will coordinate with OC-ALC/JAV, EMX, and ODEQ, (see 5 below).

2. Arrange for handling of Ordnance: Two sources for this service are as follows:

   a. Fort Sill Explosive Ordnance Disposal (EOD): Contact: DSN 639-5209 or 639-2313.

   b. Oklahoma County Sheriffs Department: Contact: Capt Bob Heady, Bomb Disposal Unit, (405) 236-1717.

3. Minimize danger posed by Ordnance: Until a permit has been obtained and proper disposal procedures determined, the following actions may be appropriate:

   a. Clear area of personnel.

   b. Contain and isolate ordnance.

   c. Remove to remote location on base.

4. Determine Disposal Method: Notify EM with the following information as soon as it is determined that the ordnance must be disposed of:

a. Type and quantity of ordnance.

b. Disposal location.

c. Disposal method.

d. Organization in charge of disposal.

5. Obtain Emergency Disposal Permit: EM will coordinate with appropriate State agencies to secure Emergency Permit as follows:

a. Ensure the Air, Water, and Hazardous Waste programs at EM are aware of situation.

b. Notify Oklahoma Department of Environmental Quality (ODEQ), Customer Service, (405) 271-1400, with information needed to obtain emergency disposal permit.

c. Notify Tinker AFB organizations and disposal service as soon as permit is received.

6. Proceed with disposal: The disposal service organization should dispose of the ordnance as soon as possible and in accordance with the emergency permit. Representatives from at least the following organizations shall be in attendance:

a. 654 ABG/LGSWK
b. OC-ALC/SEW
c. 654 CES/CEF
d. OC-ALC/EM

FOLLOW-UP ACTIONS: EM will perform the following after disposal takes place:

1. Gather samples of disposal debris and soil beneath disposal site to determine if hazardous constituents remain.

2. Prepare and deliver written report within 24 hours to ODEQ, describing the situation and sequence of actions. Transmit sample analyses to ODEQ when available.

3. Perform remedial action at disposal site if hazardous constituents are found.

SUPPORT AGREEMENT

T-646

GREEMENT NUMBER (Provided by Supplier)	2. SUPERSEDED AGREEMENT NO. (If this replaces another agreement)	3. EFFECTIVE DATE (YYMMDD)	4. EXPIRATION DATE (May be "Indefinite")
W9M-89045-037	W44W9M-89145-032	25 May 89	

ING ACTIVITY

AND ADDRESS
cAlester Army Ammunition Plant
cAlester, OK 74501-5000

6. RECEIVING ACTIVITY

a. NAME AND ADDRESS
Oklahoma City Air Logistics Center
654 SPTG/XP
Tinker AFB, OK 73145

AJOR COMMAND

AMC

b. MAJOR COMMAND

AFMC

UPPORT PROVIDED BY SUPPLIER (Specify what, when, where, and how much)	b. BASIS FOR REIMBURSEMENT	c. ESTIMATED REIMBURSEMENT
-13 Explosive Ordnance	Per Short Ton	$4,411

ADDITIONAL SUPPORT REQUIREMENTS ATTACHED: [X] YES [ ] NO

SUPPLYING COMPONENT

COMPTROLLER SIGNATURE: Donna R. Adam
b. DATE SIGNED: 12/08/92
ONNA R. ADAM, Director, Resources Mgmt.

APPROVING AUTHORITY

) Typed Name: GREGORY A. BLACK, Deputy Commander
) Organization: WCMC-DC
(3) Telephone Number: 421-2211
Signature: Gregory A. Black
(5) Date Signed: 12/10/92

9. RECEIVING COMPONENT

a. COMPTROLLER SIGNATURE: EDWARD A. HUSCH, ESQ. DIRECTOR, FINANCE MANAGEMENT
b. DATE SIGNED: 15 JAN 1993

c. APPROVING AUTHORITY

(1) Typed Name: JOHN R. CLARK, Colonel, USAF
(2) Organization: Commander 654 SPTG/CC Tinker AFB, OK
(3) Telephone Number: (405)734-2101
(4) Signature: John Clark
(5) Date Signed: 25 JAN 93

0. TERMINATION (Complete only when agreement is terminated prior to scheduled expiration date.)

a. APPROVING AUTHORITY SIGNATURE
b. DATE SIGNED
c. APPROVING AUTHORITY SIGNATURE
d. DATE SIGNED

ERAL PROVISIONS (Complete blank spaces and add additional general provisions as appropriate: e.g., exceptions to p
visions, additional parties to this agreement, billing and reimbursement instructions.)

receiving components will provide the supplying component projections of requested support. (Significant changes in the
iving component's support requirements should be submitted to the supplying component in a manner that will permit
ely modification of resource requirements.)

he responsibility of the supplying component to bring any required or requested change in support to the attention of
54SPTG/XP, Tinker AFB, OK 73145 prior to changing or cancelling support.

component providing reimbursable support in this agreement will submit statements of costs to:
OC-ALC/FMFF

rates expressing the unit cost of services provided in this agreement are based on current rates which may be subject to
nge for uncontrollable reasons, such as legislation, DoD directives, and commercial utility rate increases. The receiver will be
ified immediately of such rate changes that must be passed through to the support receivers.

s agreement may be cancelled at any time by mutual consent of the parties concerned. This agreement may also be
icelled by either party upon giving at least 180 days written notice to the other party.

case of mobilization or other emergency, this agreement will remain in force only within supplier's capabilities.

Receiver will provide MIPR to Supplier as applicable to each shipment of material to be demilitarized. MIPR should be mailed to Commander, McAlester Army Ammunition Plant, ATTN: SMCMC-RMB, Mc Alester, Oklahoma 74501-5000.

Points of Contact:

(1) McAlester - Mr Calvin Sullivan DSN 956-6437

(2) Tinker - Mr. Charles Klotz DSN 884-5808

DDITIONAL GENERAL PROVISIONS ATTACHED: [ ] YES [✓] NO

PECIFIC PROVISIONS (As appropriate: e.g., location and size of occupied facilities, unique supplier and receiver responsibilities,
nditions, requirements, quality standards, and criteria for measurement/reimbursement of unique requirements.)

ADDITIONAL SPECIFIC PROVISIONS ATTACHED: [ ] YES [ ] NO

SUPPORT AGREEMENT

T-602

1. AGREEMENT NUMBER (Pr ied by Supplier)	2. SUPERSEDED AGREEMENT NO. (If this replaces another agreement)	3. EFFECTIVE DATE (YYMMDD)	4. EXPIRATION DATE (May be "Indefinite")
45NQP-93125-068	W45NQP-91058-068	93-05-01	Indefinite

PLYING ACTIVITY	6. RECEIVING ACTIVITY
. NAME AND ADDRESS HQ, Fifth US Army & Fort Sam Houston ATTN: AFZG-RM-MMS Fort Sam Houston, Texas 78234-5000	a. NAME AND ADDRESS Oklahoma City Air Logistics Center (654SptG/XP) Tinker AFB, 73145-5000
. MAJOR COMMAND FORSCOM	b. MAJOR COMMAND AFMC

. SUPPORT PROVIDED BY SUPPLIER

. SUPPORT (Specify what, when, where, and how much)	b. BASIS FOR REIMBURSEMENT	c. ESTIMATED REIMBURSEMENT
B-13 Explosive Ordnance		$1,218

ADDITIONAL SUPPORT REQUIREMENTS ATTACHED: [ ] YES [X] NO

SUPPLYING COMPONENT		9. RECEIVING COMPONENT	
COMPTROLLER SIGNATURE MARK A. FALETTE	b. DATE SIGNED MAY 05 1993	a. COMPTROLLER SIGNATURE JOE W. SIMMONS Acting Director, Financial Mgt	b. DATE SIGNED 9 MAR 1993
APPROVING AUTHORITY		c. APPROVING AUTHORITY	
(1) Typed Name KENNETH B. ROBERTS		(1) Typed Name JOHN R. CLARK, Colonel, USAF	
(2) Organization GARRISON MANAGER	(3) Telephone Number (210) 221-1832 DSN 471-1832	(2) Organization 654 SPTG/CC	(3) Telephone Number (405)734-2101
(4) Signature	(5) Date Signed MAY 05 1993	(4) Signature	(5) Date Signed 31 Mar 93

I. TERMINATION (Complete only when agreement is terminated prior to scheduled expiration date.)

APPROVING AUTHORITY SIGNATURE	b. DATE SIGNED	c. APPROVING AUTHORITY SIGNATURE	d. DATE SIGNED

ATTACHMENT I
SPECIFIC PROVISIONS

TIONAL REIMBURSEMENT SUPPORT CATEGORIES

ATEGORY OF SUPPORT	SUPPLIER WILL	RECEIVER WILL
(E-13) EXPLOSIVE ORDNANCE	Coordinate the date, time and place for receipt and disposal of excess and/or suspended small arms ammunition and miscellaneous items such as pyrotechnics and aircraft ejector seat cartridges and some high explosives.	Contact SMCMC-AOS-R DSN 956-6570 for access. Notify SMCMC-AOS-R 36 hours prior to anticipated arrival date.
	McAAP will reply within 14 days of receipt of acceptancy list and confirm capability to accept proposed items or state why items cannot be handled at McAAP.	Provide an acceptance list of planned items for delivery to McAAP not later than 30 days prior to scheduled delivery date to identify items selected for disposal at McAAP. This list will be supplied to CDR, McAAP, Attn: SMCMC-AOT-P with a copy furnished Attn: SMCMC-EM.
		Consolidate items by explosives compatibility.. Items that can be certified as "empty" or "inert" at Tinker Air Force Base should not be sent for disposal. Reimburse supplier on the basis of $4410 per short ton received for demilitorization.
		Deliver excess items to SCMC-AOS-R at McAlester Army Ammunition Plant.

ATTACHMENT I
SPECIFIC PROVISIONS

'TIONAL REIMBURSEMENT SUPPORT CATEGORIES

CATEGORY OF SUPPORT	SUPPLIER WILL	RECEIVER WILL
B-13 EXPLOSIVE ORDNANCE	A. Provide explosive ordnance disposal (EOD) support within capabilities and in accordance with AR 75-15.	1. For actual emergencies only request EOD support from the 61st Ordnance Detachment, Fort Sill, Oklahoma. Notification will be made by the Tinker Air Force Base Consolidated Command Post contacting the 61st Ordnance Detachment at Fort Sill, Oklahoma (AUTOVON: 639-5209). Secondary back up number will be the 546th Ordnance Detachment (EODCC), Fort Sam Houston, Texas, (AUTOVON: 471-1308). For extended recovery operations, request back-up support from the 2701st EOD Squadron, Hill Air Force Base, Utah.
	B. For aircraft battle damage simulation: (1) Provide, within capabilities, a minimum of two explosive qualified personnel for temporary duty at Tinker AFB on dates and times mutually agreed upon. (2) Provide explosive kits for electrical detonations. (3) Provide vehicles that meet Army directives for the transportation of explosives. Transport explosives from and return those unused to the munitions storage area on Tinker AFB. (4) Conduct explosive operation in accordance with US Army and US Air Force directives.	2. The 654th CLSS, Tinker AFB, will: (a) Assign a NCO as liaison with the 61st Ordnance Detachment Fort Sill, Oklahoma. Focal point is 654th CLSS Maintenance Branch/ ABDR Section, AUTOVON: 339-2071 with alternate AUTOVON: 339-5213. (b) Maintain explosives munitions account and provide sufficient C-4 plastic explosives and electrical detonating caps to support explosive operations at Tinker AFB. (c) Provide all personnel, other than explosive qualified personnel, to support operations. (d) Coordinate with all base agencies required to support explosive operations at Tinker AFB.

CATEGORY OF SUPPORT	SUPPLIER WILL	RECEIVER WILL
B-13 :PLOSIVE ORDNANCE (CONTINUED)	C. Cost which are in addition to normal operating expenses are defined in AR 75-14/AFR 136-8 as cost such as replacement of expended consumables, fuel, batteries, maintenance or replacement of damaged equipment and personnel travel and per diem. Military labor is not reimbursable.	3. Provide funds (via DD form 448, Military Interdepartmental Purchase Request) for and reimburse the Supplier for assistance costs that are directly attributable to incidents involving the Receiver and which are in addition to normal operating expenses.

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 72 AIR BASE WING (AFMC)
TINKER AIR FORCE BASE, OKLAHOMA

26 Jan 95

FROM: 72dABW/XPR
7460 2nd. Str., Rm 222
Tinker AFB, 73145

SUBJ: Memorandum of Agreement T-505, Oklahoma County Sheriff Department

TO: See Distribution

Attached for your records is completed Memorandum of Agreement T-505 between the Oklahoma County Sheriff Department and Tinker AFB. This MOA establishes EOD support from the OK Co. Sheriff Department to Tinker AFB upon request. Question regarding this correspondence should be directed to Charles Klotz, ext 4-5809 (Commercial 734-5809).

CHARLES KLOTZ
Base Resources

1 Atch
1. Memorandum of Agreement T-505

OC-ALC/EMX
JA

72dABW/LGSPS

72dSPS/SPMP

OK Co. Sheriff Dept.
Attn: Capt. Bob Heady
4001 N. Air Depot
OKC, OK 73141

RECEIVED
27 JAN 1995
STAFF JUDGE ADVOCATE OFFICE
TINKER AFB
OKLA

MEMORANDUM OF AGREEMENT
BETWEEN
72d AIR BASE WING
AND
OKLAHOMA COUNTY SHERIFF DEPARTMENT

I. PURPOSE: This memorandum of agreement establishes the relationship between the the Oklahoma County Sheriff Department, hereinafter referred to as the Sheriff Department, and the 72d Air Base Wing, hereinafter referred to as the Base, for Explosive Ordnance Disposal (EOD) support.

II. The following agreement between the Sheriff Department and Tinker AFB is set forth to define the responsibilities of both organizations.

A. OKLAHOMA COUNTY SHERIFFS DEPARTMENT

The Oklahoma County Sheriff Department will upon request of the 72d Security Police Squadron respond immediately to request for support in disarming explosive devices and/or explosive materials. The Sheriff Department will respond immediately to the affected area, identify suspected explosive devices/materials, or identify contents of packages, containers, vessels, et cetera, suspected of being explosive devices. The Sheriff Department will remove such devices/materials, disarm and/or disassemble such devices/ materials and properly dispose of the same.

1. Proper Disposal: The Sheriff Department will comply with requirements established in the Resource Conservation and Recovery Act (RCRA) which requires that in the event of an explosion of ordnance that any residue be analyzed to determine whether such residue meets the definition of Hazardous Waste. Residue samples, if any, will be provided to the Operations Branch of the Compliance Division of the Base Environmental Management Directorate (OC-ALC/EMCO) for analysis. If the residue samples are determined to be hazardous the Base will ensure that proper disposal procedures are employed.

2. Claims: The Sheriff's Department will bear all costs of any emergency EOD services it performs under this agreement. The base will bear all costs of testing residue and disposeing of residue that qualifies as hazardous waste.

3. Training: The Sheriff Department will maintain all support equipment and train all personnel in accordance with applicable permitting standards. Technical data will be up to date. The Sheriff will provide properly permitted transport and disposal facilities for handling of EOD and hazardous waste.

4. Courtesy Storage: The Sheriff Department will maintain a current

"Courtesy Storage Agreement" with the Munitions Section of the Technical and Industrial Support Directorate. The storage agreement will cover all items specified on by Air Force regulations. Only munition types of supplies and equipment will be placed into Munitions Storage Area. A current inventory of material stored will be maintained at all times.

B. TINKER AIR FORCE BASE

The Base will, for actual emergencies, request support from the Sheriff Department to assist in identifying and disposing of any live explosive device/material. In the event that such device is determined to be beyond capabilities of Sheriff personnel then such devices will be referred to proper Military EOD staff as prescribed in current Interservice Support Agreements. The responsibility of determining which avenue of relief is to be pursued, Military EOD or Sheriff Department, is solely the purview of the Base.

1. Proper Disposal: The Base will analyze residue provided by the Sheriff Department to determine if such residue is classified as Hazardous Waste. If in the event that such residue is identified as Hazardous Waste the Base will ensure that proper disposal procedures are employed. If necessary to transport ordnance/materials to a location outside Tinker AFB then EMCO will take possession of any residue and return it to the base for analysis.

2. Courtesy Storage: The Base will make available to the Sheriff Department "Courtesy Storage" for such items necessary to support the Base explosive disposal needs provide by the Sheriff Department. Courtesy Storage will be subject to appropriate Air Force Regulations and a formal agreement will be established with the Munitions Section of the Technical and Industrial Support Directorate (OC-ALC/TISB).

C. DURATION OF AGREEMENT

All provisions of this agreement shall become effective immediately upon signature of the persons shown below. This agreement will continue in force until terminated by either agency. It may be revised or amended by mutual consent.

THE UNITED STATES AIR FORCE

[illegible], 246!

GNATURE

23 Jan 95

ATE

FOR OKLAHOMA COUNTY SHERIFF DEPARTMENT

[illegible]

SIGNATURE

12-8-94

DATE

ATTACHMENT 9

ATTACHMENT 9

CLOSURE PLAN

This section is submitted in accordance with the requirements of 40 CFR 270.14(b)(13), 264.110, 264.115, and 264.178. This Plan identifies steps that will be necessary to completely close the hazardous waste management facility, located in Building 810 near the southwest corner of Tinker AFB, at the end of its intended operating life. The operator of the facility, DRMO, will maintain on site a copy of the approved closure plan, and of all revisions to the plan. Revisions will be made whenever any modifications are made to the existing equipment, structures, instruments, or procedures related to the management of the facility.

9.1 CLOSURE PERFORMANCE STANDARD

This closure plan is designed to ensure that the facility will not require further maintenance and controls, and to eliminate threats to human health and the environment upon completion of closure.

9.2 CLOSURE ACTIVITIES

The estimated timetable for the closure of Building 810 will follow the schedule presented in paragraph 9.6 with the starting date being when the final volume of hazardous waste is received.

9.3 MAXIMUM WASTE INVENTORY

At a maximum there will be 158,796 gallons of hazardous waste stored in 55-gallon drums or smaller containers at building 810 at any one time during its operational life.

9.4 INVENTORY DISPOSAL, REMOVAL OR DECONTAMINATION OF EQUIPMENT (40 CFR 264.114)

Upon formal notification to proceed with facility closure, no additional hazardous property will be accepted at the storage facilities. Furthermore, all hazardous waste/property remaining in inventory will be removed in accordance with a contractual agreement to permitted TSDFs or recycling site(s). If this process cannot be accomplished within 90 days after starting closure activity, the hazardous property will be transferred to an operational DRMO with a valid approved TSD facility permit. After the final inventory of waste has been removed, the hazardous waste storage facility will be inspected for loose items, i.e., paper, pallets, or empty containers. These items will be removed and disposed of properly.

Trained personnel wearing appropriate protective equipment (including, but not limited to rubber gloves, rubber boots, and coveralls) will remove and clean-up all visible signs of contamination. The building (modules, closets, staging area, and other areas that may store or has the potential for directly come into contact with hazardous wastes or solid wastes) will be power washed or steam cleaned. Samples of the washwater will be analyzed to determine if they meet any definitions of hazardous waste outlined in 40 CFR 261 Subparts C and D. If the analysis indicates that the washwater is hazardous, it will be collected in drums and disposed of as hazardous waste. If the analysis shows no evidence of contamination, the washwater will be discharged into the base's Industrial Wastewater Treatment Plant after approval has been received from the Oklahoma DEQ. If the Oklahoma DEQ does not give approval, the washwater will be collected in drums and transferred off-site to an approved disposal facility.

Unless the equipment will continue to be used at some new HWSF (another future HWSF at Tinker Air Force Base) the equipment which has come into contact with hazardous waste will be decontaminated at closure, or shipped off-site to a permitted hazardous waste disposal site. Decontamination will be performed last in an enclosed area where washing, scrubbing, or triple rinsing can be performed and the washwater collected.

The facility is designed to prevent contamination of the surrounding soil if there is an accidental spill inside the building. Each storage module and closet is designed to contain a spill and thereby prevent hazardous waste from reaching the surrounding soil. If an accident occurs involving release of hazardous waste in or adjacent to the HWSF in such a quantity that cannot be safely handled by DRMO personnel, the Contingency Plan will be followed and any soil contamination will be thoroughly cleaned up.

The above procedures should ensure that no releases have occurred prior to closure. To test the possibility that releases could have occurred, soil samples will be taken around the HWSF and analyzed for the same parameters as the washwater. If preliminary results indicate contamination, further sampling may be conducted to identify the extent of contamination, assess risk, and determine if remedial action is required.

Facility decontamination procedures will be conducted by trained personnel. The services of these personnel will be obtained at the time of closure notification with contractual procedures established by DoD. DoD will prescribe requirements for decontamination and will require the contractor to provide all necessary equipment and protective clothing. As appropriate, swipe tests could be performed to ensure proper decontamination.

9.5 CLOSURE OF CONTAINERS

Containers remaining at the time of facility closure (in the event that a HWSF does not exist at TAFB) will be sealed and labeled prior to shipment in accordance with 40 CFR 262 and applicable Dept of Transportation regulations. Manifests for container removal will be maintained by the Defense Reutilization and Marketing Service, DRMS-LHP, 74 North Washington Avenue, Battle Creek, Michigan 49015-3092, in the event closure involves the whole of TAFB. If closure merely involves relocating the DRMO facility on TAFB, manifests will be maintained at the Directorate of Environmental Management.

9.6 SCHEDULE FOR CLOSURE

TAFB is an integral part of the Defense system of the United States. It is not anticipated that closure of the entire base will occur in the foreseeable future. However, a closure date of 2050 can be estimated for the HWSF. It is more likely that the existing DRMO facility will be closed and a new facility constructed at a different location on TAFB.

Notification of intent to close will be sent to the Executive Director of the Oklahoma DEQ at least 45 days before beginning final closure. Upon receipt of the final volume of hazardous wastes, closure activities will be initiated. Table 9-1 presents an estimated schedule for closure, which gives an estimate of the total time required to close the facility and the time required for intervening closure activities. The schedule may be affected by the terms of the Anti-Deficiency Act, 31 U.S.C. 1341. Any payment or obligation of funds in the absence of appropriated funds would be a violation of this act.

Final closure will be supervised and certified by an independent registered professional engineer. Within 60 days after completion of final closure, a certification that the facility has been closed will be submitted to Oklahoma DEQ.

9.7 EXTENSIONS FOR CLOSURE TIME

No extension for closure time is anticipated. If, however, an extension would be necessary to properly close the facility, then a petition will be sent amending the closure schedule listed in Table 9-1. This petition will demonstrate:

(i) The need for more than 90 days to remove all hazardous waste inventory, or more than 180 days to complete all closure activities.

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

(iii) Closure would be incompatible with continued operation.

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

DRAFT

Table 9-1

ESTIMATED 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 (if needed)	80-110
7. Removal, manifesting, and disposal of contaminated soil (if needed)	110-140
8. Accounting of all waste shipment manifests	170
9. Completion of all closure activity and performance of closure inspection by a Professional Engineer	180
10. Submittal of closure certification	240

ATTACHMENT 10

ATTACHMENT 10

SECURITY PLAN

10.1 LOCATION

TAFB has closed the section of 59th Street east of Air Depot to the DRMO compound. See figure 5-2 in attachment 5. A six foot high chain link fence which is topped by three strands of barbed wire has been constructed across 59th Street at the base, public access to the DRMO compound is restricted through Tinker's security gates. As part of an active military installation, entrance into the base is restricted by guards and a 24-hour security patrol.

10.2 DRMO COMPOUND/HAZARDOUS WASTE STORAGE FACILITY

10.2.1 Minimum Construction and Gates

Guards at gate entrances to the base restrict access to Tinker personnel and other properly escorted individuals. Twenty-four hour surveillance of the DRMO compound is provided by Tinker Security Police in roving car patrols.

The Hazardous Waste Storage Facility (HWSF) will be located within the DRMO compound. (Figure 5-2). The DRMO compound will be surrounded by a six-foot-high chain-link security fence, which will be topped by three strands of barbed wire. Entrance to the DRMO compound will be limited to three gates. Typically, the gates will be opened only during hours of operation which are from 7:00 A.M. to 4:00 P.M., Monday through Friday. This is a safety precaution to allow an escape route for DRMO personnel in the event of a fire or other emergency.

During operating hours, entrance to the DRMO hazardous waste storage area will be controlled by DRMO. DRMO visitors will be required to register with receiving personnel in building 811 before entering building 810. Visitors must state the purpose of the visit and the organization represented. No visitors are allowed to

enter the hazardous waste storage buildings without a DRMO escort. If for any reason receiving personnel must leave the DRMO compound unattended during operating hours, the gates will be locked. Outside of operating hours gates will be always locked.

10.2.2 Warning Signs

Warning signs will be attached to the DRMO perimeter fence at each gate and at intervals of approximately 50 feet. They will be at a height of 4-6 feet and will not be obscured. The signs will be in English and legible from at least 25 feet. The signs will carry the legend:

> "Danger -- Unauthorized Personnel Keep Out." Signs stating "No Smoking" will be posted at the entrances to HWSF.

Inside the HWSF, there will be signs indicating the types of hazardous waste stored, and location of emergency showers and eye washes. A phone number to call in the event of an emergency will be posted inside the DRMO Administration Building (Building 811).

10.2.3 Surveillance

The site will be under 24-hour surveillance by the base Security Police. Access will be controlled by TAFB Security Police outside of normal operating hours.

ATTACHMENT 11

ATTACHMENT 11

PREPAREDNESS AND PREVENTION

The Hazardous Waste Storage Facility (HWSF), Building 810, is designed, constructed, operated, and maintained in a manner to minimize the possibility of fire, explosion, or any unplanned sudden or non-sudden releases of hazardous waste or hazardous waste constituents to the environment. This section addresses the appropriate subject areas of 40 CFR 270.14 and the corresponding Oklahoma DEQ requirements for the prevention of hazards at a HWSF.

11.1 EQUIPMENT REQUIREMENTS

The HWSF is equipped with emergency response, spill control, and decontamination equipment to respond to a fire, explosion, or unplanned release of hazardous waste. This equipment consists of internal and external communication capabilities; alarm system equipment; portable fire extinguishers; fire control equipment; spill control equipment; decontamination equipment; and access to adequate water supply volume and pressure to supply water hose streams or foam producing equipment.

11.1.1 Internal Communication

Personnel within the HWSF carry two-way radios at all times or implement the buddy system. In the event of an emergency, the HWSF personnel will report the emergency by pulling the fire alarm, using two-way radios, or via voice command with the administrative office. Personnel located at the administrative office under the authority of the Incident Command System, will summon emergency assistance using a telephone system that can access assistance as outlined in Enclosure 8-2 of Attachment 8.

11.1.2 External Communication

As determined by the Incident Commander to be necessary, the Incident Commander or his/her designee will activate the Spill Prevention and Response Plan (Contingency Plan to summon off-site assistance (e.g., local emergency response of fire departments, hospitals, etc.). See Enclosure 8-3, Attachment 8.

11.1.3 Emergency Equipment and Materials

There is portable dry chemical fire extinguishers stored at various convenient locations within the HWSF where a potential for fire hazards could exist, i.e., the flammable and reactive storage areas. Spill control equipment such as absorbents, shovels and brooms, overpack drums and sodium bicarbonate are located in designated storage closets within the HWSF (Enclosure 8-2 of Attachment 8). Personnel decontamination equipment includes two eyewash/shower stations located within the HWSF building.

11.1.4 Water for Fire Control

A fire hydrant with adequate volume and pressure is available for the HWSF to combat non-chemical or non-electrical fires. A fire hydrant is located within the DRMO compound near the front of Building 810. The fire hydrant has a static pressure of 60 psi, a residual pressure of approximately 50 psi and will produce approximately 1057 gpm.

11.2 AISLE SPACE REQUIREMENT

A minimum of 10 feet of aisle space is maintained in the HWSF storage areas that require the use of a forklift for movement of pallets. A minimum of 2 feet of aisle space is maintained in all other areas of the HWSF that store hazardous waste. This allows the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment in the event of an emergency.

11.3 PREVENTATIVE PROCEDURES, STRUCTURES, AND EQUIPMENT

11.3.1 Unloading Operations

Unloading operations at the HWSF take place at Staging Area 101 which is located within the HWSF. Accidental spills during loading or unloading will be swept up or soaked up using an absorbent material and containerized.

11.3.2 Run-Off

The HWSF is constructed so that all waste handling, including loading and unloading activities, will be conducted within the covered and diked building. Therefore, any waste that is spilled within the HWSF building will be contained and will not run-off or contact environmental media during routine operations. In the unlikely event of an emergency, the TAFB fire department and responders will take necessary measures to contain any run-off that has the potential of being contaminated.

11.3.3 Water Supplies

The HWSF is operated in such a way that it should not release hazardous waste to environmental media. In the unlikely event that a release should occur, the release would be immediately cleaned up and/or contained. The operational practices of the HWSF protect surface and groundwater supplies from contamination.

11.3.4 Equipment, Instruments and Power Failure

The HWSF relies on the local power company for power to light and ventilate the HWSF. Operations will be shut down when the power supply is interrupted. During a power outage, waste handling will cease, i.e., waste will not be moved or staged.

11.3.5 Personnel Protection Equipment

Personnel associated with the HWSF who handle hazardous wastes and their immediate supervisors are given adequate initial and annual training in accordance with the OSHA hazardous worker operations (HAZWOPER) training requirements (29 CFR 1910.120[b]) to prevent undue exposure to hazardous waste. Personnel are required to wear protective clothing when exposure to waste could occur (e.g., sampling of drums and bulking). Only properly trained and authorized personnel sample or open waste containers.

Level D personal protective equipment (PPE) (coveralls, gloves, chemical resistant disposable overboots, safety glasses or chemical splash goggles, and face shields) are maintained and provided to personnel working at the HWSF. Emergency equipment available for the HWSF is listed in Enclosure 8-2 of Attachment 8.

11.3.6 Prevention of Releases to the Atmosphere

Hazardous wastes that are handled at the HWSF are in containers of 55-gallons or less. The containers remain closed at all times unless the waste must be sampled or transferred to a different container. Transfer of wastes will not be performed regularly, and when necessary will be performed in the staging area away from sources of heat or ignition. Overpack drums are available for highly volatile waste that must be transferred to a different container. In this case, the waste may be left in its original container and then placed in the overpack drum. The potential of release to the atmosphere is considered minimal due to the small volumes of containers that will be opened or transferred. Waste transfer or handling will only be undertaken by authorized personnel.

11.4 PREVENTION OF REACTION OF IGNITABLE, REACTIVE, AND INCOMPATIBLE WASTE

Smoking in the load/unload area and in the HWSF is banned. In addition, before performing hot work (e.g., welding, cutting, etc.) within the HWSF, permission must be obtained from management of the DRMO and the Tinker Fire Department.

11.4.1 Procedures for Handling Ignitable, Reactive, Or Incompatible Waste

11.4.1.1 Management of Ignitable or Reactive Wastes in Containers

The HWSF is located at least 50 feet away from the nearest property line of the base, and therefore will be in compliance with the recommended National Fire Protection Association (NFPA) standards for container storage holding ignitable or reactive wastes. Also, pallets holding drums of flammable liquid material/wastes are not stacked, except on pallet storage racks. This ensures stability in the event of accidental impact and allows easy inspection for spillage. Visual inspections of loading and unloading areas, on days of their use, are conducted daily. Visual inspections are conducted weekly in the storage areas to detect spills or leaks, to ensure maintenance of aisle space, and to minimize the potential for accidents.

11.4.1.2 Precautions to Prevent Ignition or Reaction of Ignitable or Reactive Wastes

Hazardous wastes received at the facility are in non-leaking containers that comply with DOT container regulations (49 CFR Parts 173, 178 and 179). This minimizes the potential for ignition and reaction of hazardous wastes.

The compatibility of wastes with other wastes is determined in accordance with the most current compatibility chart located in Appendix V of 40 CFR 264. DRMO shall have the option to use a more stringent compatibility comparison if they elect to do so. As with other compatibility groups, wastes will be classified as ignitables/reactives. Other available information to determine hazard characteristics and compatibility are the Department of Defense's Hazardous Materials Information System (HMIS) information, other standard hazardous material reference data such as Material Safety Data Sheet (MSDS)/lab analyses. Specific precautions include the following:

- Incompatible wastes will not be placed in the same container per procedures described in TAFB's Hazardous Waste Management Plan and DRMO Directives.

- Containers will not be placed in an unwashed container that previously held an incompatible waste. Only new or reconditioned DOT approved or equivalent containers will be used to store waste.

- Containers holding incompatible wastes will be separated and protected from nearby wastes by physical means. These wastes will be segregated at the storage facility as described in attachments 5 and 14.

- Incompatible and reactive wastes are 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). The largest cause of accidents associated with handling and storing ignitable waste is facility personnel smoking. For this reason, smoking is prohibited inside

the HWSF building and in the load/unload area. A sign with the legend "NO SMOKING BEYOND THIS POINT" is posted at the entrance to the facility. Areas with drums containing ignitable and reactive wastes prominently display a sign clearly marked with the legend "No Smoking." Spark-proof tools (brass hammers, wrenches) are used in the management of containers storing ignitable/reactive wastes. No welding or other activities that are known to produce open flames, hot surfaces, frictional heat, spontaneous ignition or radiant heat are allowed in the HWSF building or load/unload area without the prior approval of the Tinker Fire Department.

- Mixing of wastes is prohibited at this facility. Wastes are not transferred from one container to another on a regular basis at this facility unless previously approved by the Environmental Management Directorate. The transferring of waste is performed only by trained personnel.

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ATTACHMENT 12

ATTACHMENT 12

AISLE SPACING/LOADING AND UNLOADING OPERATIONS

12.1 AISLE SPACE AND FORKLIFT REQUIREMENTS

Pallets loaded with one to four 55-gallon drums each, or loaded with smaller containers are placed in pallet storage racks located in the storage modules. The pallet sizes are either approximately 49 inches by 56 inches or approximately 48 inches by 48 inches in size.

The storage configurations provide for efficient use of floor space, convenient material handling, and ease of container inspection. The pallet storage racks are arranged in the storage modules so that at least 10 feet of aisle space is present to allow for direct access by a forklift to all pallets holding waste. An EE, DX, or greater designated forklift with capacity to move the pallets is used to load/unload in Building 810. For areas that do not require the use of a forklift, a minimum of 2 feet of aisle space is maintained.

12.2 LOADING AND UNLOADING OPERATIONS

Hazardous wastes are brought to the DRMO by many types of vehicles including pick-up trucks, forklifts and semi-tractor trailers. The drivers of these vehicles turn off their engines and obtain permission to load/unload. In the process, the drivers either wait in their vehicles or are escorted to an area such as the Administrative Building while awaiting such permission or instruction.

All containers are sealed when loaded or unloaded. The largest containers stored at the HWSF are 55-gallon drums that will be filled to approximately 90 percent capacity. All 55-gallon drums are stored on pallets. Pallets with wastes are lifted onto or off of vehicles using the same forklifts used for hazardous waste storage and handling. Loading and unloading occurs in Staging Area 101, which is located within the HWSF.

ATTACHMENT 13

ATTACHMENT 13
SECONDARY CONTAINMENT PLANS AND SPECIFICATIONS

13.1 HAZARDOUS WASTE STORAGE CAPACITY

Storage capacity volumes for the Building 810 HWSF have been calculated based on rows of pallet storage racks placed inside each storage module or closet. The hazardous wastes to be stored within the storage modules will be placed first on pallets before they are placed in the racks. Calculations were made assuming pallets could be stacked three tiers high on storage racks in all storage modules and storage closets. All pallets were assumed to hold four 55-gallon drums at 90 percent full (49.5 gallons). Occasionally overpack drums (85 gallons) may be used to contain leaking 55-gallon drums or 55-gallon drums with poor integrity. The 85-gallon overpack drum does not affect the following volume calculations since they are not used as primary containers. The effective volume would still be 49.5 gallons. Based on these assumptions the following volumes were calculated for each storage module and closet.

- Modules 103, 107, 120, and 123: 420 55-gallon drums (90% full) for a total volume of 20,790 gallons in each module

- Modules 102, 108, 113, 119, and 125: 216 55-gallons drums (90% full) for a total volume of 10,692 gallons in each module

- Module 115: 96 55-gallon drums (90% full) for a total of 4,752 gallons

- Closets 109, 110, 111, 112, 118, and 124: 24 55-gallon drums (90% full) for a total of 1,188 gallons in each closet

- Closets 104, 117, 121, and 122: 12 55-gallon drums (90% full) for a total of 594 gallons in each closet

Storage of hazardous waste beyond normal hours of operation in the staging area may at times be necessary before loading onto vehicles or transferring to other designated modules or closets within the HWSF. In this case, hazardous waste containers with free liquids will be provided with secondary containment trays; each tray will have a

containment capacity equal to or greater than the total volume of containers in the tray. Maximum overnight storage in the staging area will be two 10-pallet rows stacking two high, or 40 pallets holding 160 55-gallon drums (90% full) for a total of 7,920 gallons.

Including the staging area, the maximum storage capacity of the HWSF is 158,796 gallons.

13.2 SECONDARY CONTAINMENT SYSTEM DESIGN AND CAPACITY

In accordance with 40 CFR 264.175 (b)(3), the containment system must have sufficient capacity to contain 10 percent of the volume of all containers in the system, or the volume of the largest container in the system, whichever is greater. The maximum sized containers used to store wastes in the HWSF will be 55-gallon drums which will hold 49.5 gallons of liquid when filled approximately 90 percent full according to DRMO operating procedures. All secondary containment areas will far exceed the required containment capacity for a 55-gallon drum and will meet the 10 percent total volume capacity requirement.

The base of each storage module or closet is made of concrete and is six inches lower than the corridor elevation. This design provides a six-inch deep concrete containment area the size of the storage module or closet

The secondary containment capacity was determined by multiplying the horizontal dimensions of each module or closet by the height of the curbing, then converting to gallons with the factor, 7.48 gallons/cubic foot. See Enclosure 13-1 for actual calculations.

Based on each area's dimensions, the following secondary containment capacities were calculated:

- Storage modules 103, 107, 120, and 123 will provide secondary containment for 8,114 gallons in each module

- Storage modules 102, 108, 113, 119, and 125 will provide secondary containment for 3,989 gallons in each module

- Storage module 115 will provide secondary containment for 1399 gallons

- Storage closets 109, 110, 111, 112, 118, and 124 will provide secondary containment for 170 gallons in each closet

- Storage closets 104, 117, 121, and 122 will provide secondary containment for 91 gallons in each closet

Based on these calculations, each containment module and closet was compared to 10 percent of the maximum storage capacity determined for each module or closet and was determined to have sufficient capacity to hold over 10 percent of the maximum volume of liquid planned for storage. A comparison of the intended storage capacities and secondary containment volumes is shown in Table 13-1.

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TABLE 13-1: Storage Capacities vs. Secondary Containment Capacity Requirements

Module or Closet Number	Hazardous Waste Storage Capacity (gallons)	Secondary Containment Capacity Required (10% of Hazardous Waste Capacity) (gallons)	Secondary Containment Capacity Available (gallons)
103, 107, 120, and 123	20,790 gallons in each module	2079 gallons in each module	8,114 gallons in each module
102, 108, 113, 119, and 125	10,692 gallons in each module	1,069 gallons in each module	3,989 gallons in each module
115	4,752 gallons	475 gallons	1,399 gallons in each module
109, 110, 111, 112, 118, and 124	1,188 gallons in each closet	119 gallons in each closet	170 gallons in each closet
104, 117, 121, and 122	594 gallons in each closet	59 gallons in each closet	91 gallons in each closet

Note: The Staging Area will only be used to stage drums during their shipment. Should hazardous waste containers with free liquids be stored in this area, the containers will be provided with secondary containment trays. Each tray will have a containment capacity equal to or greater than the largest container placed on a pallet.

ENCLOSURE 13-1

SECONDARY CONTAINMENT CALCULATIONS

Height of containment is based on:

1. Level concrete floor

2. Concrete curbing 6 inches (0.5 feet) high

Area of containment is based on:

1. Horizontal dimensions of inside curbing

Volume of containment is determined by the relationship:

Volume = Area x Height

Conversion to gallons by factor: 7.48 gallons/cubic foot

A. Modules: 107, 103, 120, and 123

Rectangle 1: 50 feet x 41.33 feet x 0.5 feet = 1,033.25 cubic feet

Rectangle 2: 5.33 feet x 19.33 feet x 0.5 feet = 51.51 cubic feet

Total Volume: 1,033.25 cubic feet + 51.51 cubic feet = 1,084.76 cubic feet

Convert to Gallons: 1,084.76 cubic feet x 7.48 gallons/cubic foot = 8,114.04 gallons

B. Modules: 102, 108, 113, 119, and 125

50 feet x 21.33 feet x 0.5 feet = 533.25 cubic feet

Convert to Gallons: 533.25 cubic feet x 7.48 gallons/cubic foot = 3,988.71 gallons

C. Module: 115

17 feet x 22 feet x 0.5 feet = 187 cubic feet

Convert to Gallons: 187 cubic feet x 7.48 gallons/cubic foot = 1,398.76 gallons

D. Closets: 109, 110, 111, 112, 118, and 124

4 feet x 11.33 feet x 0.5 feet = 22.66 cubic feet

Convert to Gallons: 22.66 cubic feet x 7.48 gallons/cubic foot = 169.50 gallons

E. Closets: 104, 117, 121, and 122

(4.66 feet x 4.66 feet + 0.67 feet x 4 feet) x 0.5 feet = 12.2 cubic feet

Convert to Gallons: 12.2 cubic feet x 7.48 gallons/cubic foot = 91.26 gallons

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ATTACHMENT 14

ATTACHMENT 14

PROCESS INFORMATION

14.1 DESCRIPTION OF STORAGE CONTAINERS

The container types that will be used to store hazardous waste at the HWSF include, but are not limited to: metal drums, barrels, kegs, plastic drums, carboys, cans, pails, boxes, and bottles. Containers will be visually inspected by DRMO personnel prior to taking receipt of a shipment to ensure that they are compatible with the waste, not leaking and capable of withstanding sustained storage. Containers of hazardous waste transported into and from the HWSF shall meet DOT specifications.

14.2 CONTAINER MANAGEMENT PRACTICES

Loading and off-loading of wastes will be conducted at Staging Area 101 where they will be separated and categorized based on their contents. The content or chemical characteristic of a waste that arrives at the HWSF will be used to determine where the waste will be stored within the HWSF. The DRMO will track all incoming waste with a DD Form 1348-1, or equivalent. This form, known as a "Turn-In Document," must accompany all incoming shipments of hazardous waste into the HWSF. The form provides the necessary information, such as a profile number, and/or MSDS number, and/or waste analysis or appropriate attachments, to determine the type of waste and where it should be stored. A sample of this form is provided in Figure 14-1.

The compatibility of a waste with other wastes will be determined in accordance with the most current compatibility chart located in Appendix V of 40 CFR 264. DRMO shall have the option to use a more stringent compatibility comparison if they elect to do so. The HWSF building will be configured to accept three basic compatibility groups: toxics, flammables, and, corrosives (acids and bases, separately). An inventory will be maintained showing the name, storage location, and quantity of all wastes being stored. This inventory will be maintained as part of the HWSF operating record.

Flammable wastes constitute the largest of the waste groups so require the most space, especially since pallets holding drums of flammable liquids cannot be stacked. The volume of toxic and flammable waste varies considerably. Therefore, it is frequently necessary to convert the use of a bay from storage of one compatibility group to storage of another. An entire bay is normally converted. If it becomes necessary to place more than one compatibility group in the same bay, only one group will be subject to that bay's secondary containment. The other group will be placed in secondary containment devices which are compatible with, and which can hold one-hundred percent of, the waste being contained.

In the event that incompatible wastes must be stored within the same storage module, the incompatible wastes will be separated from one another by means of temporary diking, berms, or some other similar device in accordance with the requirement of 40 CFR 264.177(c). While the entire HWSF will be permitted for hazardous waste storage, unused hazardous materials will also be stored on a space available basis.

A detailed description of container management practices is contained in the Tinker Air Force Base *Hazardous Waste Management Instruction*, OC-ALC-TAFBI 32-7004, (See Permit Attachment 15), and Permit Attachments 6 and 11.

Typically, the storing, labeling, and consolidation (as needed) of wastes will be performed at the 90-day storage area, i.e., the Hazardous Waste Management Facility (HWMF, Building 809), prior to being transported to the HWSF. Occasionally, wastes may be staged at the generation sites and transported directly to the HWSF. The wastes will be transported to the HWSF by tractor, trucks, or trailers. Appropriate warning signs or labels will be affixed to such vehicles while the hazardous waste is in transit throughout the base. Upon arrival at the HWSF, inspections of containerized hazardous wastes will be performed. If the containers are accepted, they will be removed from the transport vehicles using forklifts and placed in the staging area of the HWSF. From the staging area, the containers will be placed directly into the appropriate storage module in the HWSF.

Containers of hazardous waste will always be closed during storage, except when collecting samples or when transferring waste from one container or more to another which requires prior approval from the Environmental Management Directorate. Inspections with recorded results will be conducted weekly, checking for leaking or deteriorating containers as reviewed in Permit Attachment 6.

Hazardous wastes will not be handled or stored in a manner which will impair the integrity of the container. Containers will typically be stored on pallets for ease of inspection and movement with forklifts and to avoid contact with accumulated liquid, if any, in the containment area.

Typically, pallets of size 49 inches by 56 inches will be used to store four 55-gallon drums. Smaller pallets, measuring approximately 48 inches square, may be used to hold 1 to 10 gallon cans, cartons, bottles, and other containers. When used to hold 55-gallon drums, the pallets will not be stacked more than three high. Pallets holding flammable liquid wastes will not be stacked on top of one another, however, stacking one flammable waste pallet above another on a pallet storage rack (up to three levels) will not be considered direct stacking. The use of multi-layered pallet storage racks to store stacked drums on pallets is permissible.

Containers without free liquids will be managed in the same manner as containers with free liquids.

14.3 AIR EMISSION STANDARDS FOR CONTAINERS

The RCRA 40 CFR 264 Subpart CC regulations (§264.1080 et seq.) apply to containers with hazardous waste that has an average volatile organic (VO) concentration at the point of waste generation greater than 500 parts per million by weight (ppmv) as determined by direct measurement method. For a container having a design capacity of greater than 0.1 cubic meters (m^3) (approximately 26.4 gallons) and less than or equal to 0.46 m^3 (approximately 121.5 gallons), the owner or operator is required to control air pollutant emissions from the container in accordance with the Container Level 1 standards. Among other control measure, the standards can be satisfied by using containers that meet the applicable U.S. Department of

Transportation (DOT) regulations on packaging of hazardous materials for transportation.

Some of the containers that will be managed at the HWSF will have an average VO content greater than 500 ppmw at the point of generation, but none of the containers will exceed 0.46 m^3 cubic meters. All containers that enter into the HWSF from other DRMO locations and the Hazardous Waste Management Facility (HWMF) will be packaged in accordance with DOT 49 CFR 178 to ensure compliance with Subpart CC.

14.4 STORAGE SYSTEM DESIGN

Storage capacity volumes for the HWSF and the secondary containment plans and specifications are discussed in Permit Attachment 13.

14.5 INSPECTION OF HAZARDOUS WASTE CONTAINERS

Inspection of hazardous waste containers is discussed in Permit Attachment 6.

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FIGURE 14-1

DD FORM 1348-1

DoD SINGLE LINE ITEM RELEASE/RECEIPT DOCUMENT

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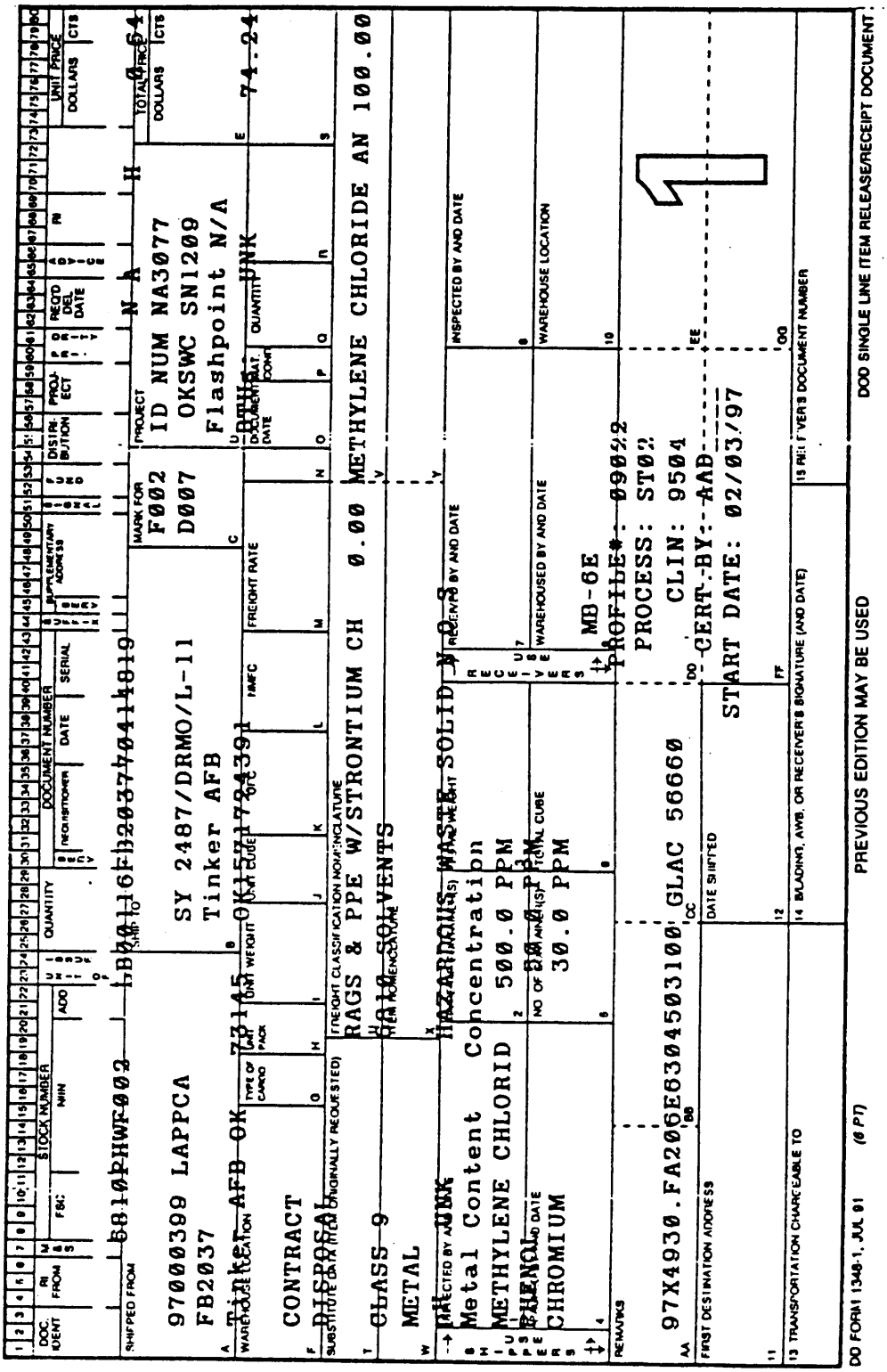

FIGURE 14-1

DOD SINGLE LINE ITEM RELEASE/RECEIPT FORM

ATTACHMENT 15

BY ORDER OF THE COMMANDER
HQ TINKER AIR FORCE BASE (AFMC)
HQ OKLAHOMA CITY AIR LOGISTICS CENTER (AFMC

OC-ALC-TAFB INSTRUCTION 32-7004
15 August 2001

Civil Engineering

HAZARDOUS WASTE MANAGEMENT INSTRUCTION

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

NOTICE: This publication is available digitally on the Tinker World Wide Web site at: http://www-int.tinker.af.mil/tafbforms/docs/ocpubs.htm If you lack access contact your Publications and Forms Office, DSN: 4-5531/33.

OPR: OC-ALC/EMC (Mr. Leaman Harris) Certified By: OC-ALC/EMCO (Trudi Logan)
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SUMMARY OF CHANGES: This document is substantially revised and must be completely reviewed. Changes include: Reorganization of Paragraphs to include moving the Waste Analysis Plan and List of Definitions to Attachment sections, Section 3. Organizational Responsibilities for EM have been realigned, and Section 19. Universal Waste Lamp Management Procedures have been added.

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1. INTRODUCTION:

1.1. An Air Force goal is to be the DoD leader in environmental compliance and protection. This instruction contains information that shall be used at Tinker AFB to meet Federal, State, DoD, Air Force, and local hazardous waste management standards.

1.2. Past failure to properly manage hazardous waste has created one of the most serious environmental problems in the United States. Some consequences include pollution of surface and ground water, declining real estate values, and in some cases, degradation of human health. This background prompted Congress in 1976 to enact the Resource Conservation and Recovery Act (RCRA). Major amendments to this law in 1980 and 1984 established requirements to track hazardous waste from point of generation to point of disposal (cradle to grave), to clean up sites previously contaminated (corrective action), to ensure that untreated hazardous wastes are not placed in the land (land disposal restrictions), and to reduce its generation (pollution prevention).

1.3. A list of Federal laws and implementing regulations concerning hazardous waste management is shown in Figure 1.

List of Federal Laws and Regulations with Regulating Agency

L: Resource Conservation and Recovery Act (RCRA), 42 USC 6901-6992K
R: 40 CFR Parts 260-279; EPA

L: Federal Facilities Compliance Act
(FFCA), Pub. Law 102-386 (1992); DOJ

L: Hazardous Material Transportation Act (HMTA), 49 USC 1801 et. seq.
R. 49 CFR Parts 171-179; DOT

L: Toxic Substance Control Act (TSCA), 15 USC 2601-2692
R: 40 CFR Parts 700-799; EPA

L: Comprehensive Environmental Response, Compensation, and Liability Act
(CERCLA), 42 USC 9601-9675
R: 40 CFR Parts 300-372; EPA

L: Occupational Safety and Health Act (OSHA), 29 USC 651 et seq.
R: 29 CFR Parts 1900-1999 (especially 1910); DOL

(L: Law, R: Regulation) (Regulating agency is underlined.)

Figure 1.

1.4. Because Tinker AFB is located in the State of Oklahoma; the laws of that state also apply. For hazardous waste management, the applicable state law is the "Oklahoma

Hazardous Waste Management Act," 27A O.S. Section 2-7-101 et seq. Implementing regulations for that law is in Title 252, Oklahoma Administrative Code, and Chapter 205: "Hazardous Waste Management." The State agency responsible for administering those rules is the Oklahoma Department of Environmental Quality (DEQ). The DEQ has EPA authorization to administer the RCRA program in Oklahoma, including provisions of the 1984 Hazardous and Solid Waste Amendments (HSWA).

1.5. The Defense Logistics Agency (DLA), and its component, the Defense Reutilization and Marketing Service (DRMS), are responsible for recycling, reuse, and disposal of DoD hazardous property. Chapter IX of DoD Manual 4160.21-M, Defense Reutilization and Marketing Manual, and DRMS Manual 6050.1, Environmental Compliance for the DRMS Hazardous Property Program, explain general procedures for implementing the DRMS hazardous property program.

1.6. AFI 32-7042, *Solid and Hazardous Waste Compliance* outlines U.S. Air Force policy on hazardous waste management. AFPAM 32-7043, *Hazardous Waste Management Guide*, contains details for maintaining compliance at all Air Force installations. AFMC Supplement 1 to AFI 32-7042 outlines Standard Operating Procedures for all AFMC installations.

1.7. Current copies of the laws, rules, and regulations are located in the Office of the Staff Judge Advocate. Most are also available at the Environmental Management Directorate.

1.8. In the event of conflict between this instruction and any federal or state laws or regulations, or Air Force instructions, follow the most stringent requirement.

1.9. Dissemination of information and coordination of environmental projects among organizational units at Tinker AFB is accomplished through the Environmental Safety and Occupational Health Council (ESOH). This council is composed of Directors of the base organizations and chaired by the OC-ALC Executive Director (OC-ALC/CD). Monthly meetings of the Hazardous Waste Working Group (HWWG) composed of Unit Environmental Coordinators from each organization and chaired by EMC, ensure that information needed to operate and stay in compliance reaches those handling the waste.

1.10. The delegated authority to manage the hazardous waste program is:

Environmental Management Directorate -- OC-ALC/EM
7701 Arnold Street Suite 204
Tinker AFB OK 73145-9100

Environmental Management Compliance Division -- OC-ALC/EMC
7701 Arnold Street Suite 114
Tinker AFB OK 73145-9100
(405) 734-5199
DSN 884-5199

1.11. This instruction applies to all generators of hazardous and non-hazardous industrial waste at Tinker AFB including contractors. Information in Attachment 1, Waste Analysis Plan, can be used to help determine if you are such a generator. If that determination appears to be positive, you should contact EM and proceed with proper management of that waste.

1.12. All personnel should keep the following principles of good Hazardous Waste Management in mind as they perform their assigned duties. Non-Hazardous industrial wastes will be managed in the same manner as Hazardous Wastes.

1.12.1. Each generator is ultimately responsible for its own waste. Although the Environmental Management Directorate serves as overseer of the Hazardous Waste Management Program, no goals can be met without active participation from generating units. On the other-hand, if violations are discovered, they can only be resolved by going to the source of the trouble.

1.12.2. Generated wastes will be characterized to determine the nature and extent of any potential hazard. All waste streams at Tinker AFB must be characterized to determine if they are hazardous wastes and if so, what type. This may be done by chemical analysis or by generator's knowledge. Characterization is based on the concept that each waste stream is generated by a specific process. Therefore, the characterization process involves correlating waste streams with specific processes.

1.12.3. Hazardous wastes shall be maintained in appropriate containers and handled in a safe manner. Proper holding devices such as drums or tanks, in good condition, compatible with the waste held must be used. Devices holding wastes must be handled and moved from place to place in a safe manner. Proper precautions shall be taken to prevent a spill or leak, or any uncontrolled release.

1.12.4. Devices holding hazardous waste will be identified with appropriate information to warn of hazards to health and environment and to maintain proper records of treatment, storage, and disposal. Each holding device must have a unique identifying number, be marked with content information, and be labeled with proper hazard warnings.

1.12.5. Hazardous wastes shall be maintained, prior to disposal, in storage facilities designed and operated to prevent adverse health and environmental effects in the event of an unexpected release. This concept is the basis for establishing initial accumulation points for the initial collection of hazardous wastes; accumulation sites to allow for characterization and preparation for transport and disposal; and a permitted storage facility (DRMO) to allow resolution of logistics and contractual problems.

1.12.6. A trail of records shall be established to enable tracking of hazardous wastes from their point of generation (cradle) to their point of disposal (grave). OC-ALC Form H-266, EMC Serialized Container Receipt, and DD Form 1348-1,

DoD Single Line Item Release/Receipt Document, establish the beginning of the trail at Tinker AFB. EPA Form 8700-22, Manifest, and the Certificate of Disposal establish the remainder of the trail from Tinker AFB to the disposal site and back.

1.12.7. Personnel involved in handling hazardous wastes shall be provided training appropriate to their assigned duties. The intent of this training is to inform personnel about hazardous waste management procedures including how to perform their duties safely and how to respond effectively to emergencies.

1.12.8. Compliance with appropriate laws and regulations shall be monitored by an established system of inspections that occur often enough to prevent a threat to human health or the environment. This concept includes both internal checks performed on a regular basis by Tinker AFB personnel, and external checks in which base personnel cooperate with officials from EPA, State, Air Force, and DoD.

1.12.9. Records shall be kept and maintained of identified hazardous wastes, and the manner in which they are treated, stored, and disposed. Records of all phases of hazardous waste management must be kept and maintained for inspection. The purpose is partly to enable certification of compliance with regulations, but also to document proper disposal and results of pollution prevention efforts.

1.12.10. A pollution prevention program shall be implemented to reduce the quantity and toxicity of hazardous wastes produced. Such a program has been implemented at Tinker AFB based on substitution of non- or less hazardous chemicals and development of new processes that produce less toxic waste.

1.12.11. When a facility ceases operations, it will be closed in a manner that ensures no further threat to human health and the environment. This concept applies to Tinker AFB as a whole, and also to each individual hazardous waste management site when it is no longer needed or is moved to a different location.

2. BACKGROUND INFORMATION:

2.1. Facility Description. Tinker AFB is located in central Oklahoma, within the corporate limits of Oklahoma City about six miles southeast of the downtown area and adjacent to the suburbs of Midwest City and Del City. The base is bordered by Interstate 40 on the north side, Douglas Boulevard on the east, Sooner Road on the west, and industrial and undeveloped land between SE 59th Street and Interstate 240 on the south.

Tinker AFB is a military installation owned and operated by the United States Air Force, a component of the Department of Defense. Its primary mission is the maintenance, repair, and modification of military aircraft. The principal organization at the base is the Oklahoma City Air Logistics Center (OC-ALC), which controls and directs that mission. Several other organizations are based at Tinker, however they depend upon the ALC for custodial support. Approximately 22,000 military and civilian personnel are employed at the base. OC-ALC

reports directly to Headquarters, Air Force Materiel Command, Wright-Patterson AFB, OH. OC-ALC is organized into directorates that reflect the major products and services produced. See Organizational Chart (Pocket 1). It also serves as the custodian, providing day-to-day housekeeping services and materiel for all organizations at Tinker AFB.

The Product Directorates are the largest generators of hazardous waste. They include the Aircraft Directorate (LA) which is responsible for all phases of aircraft maintenance, modification, and repair; the Propulsion Directorate (LP) which is responsible for aircraft engine repair and maintenance; and the Commodities Directorate (LI) which maintains and repairs aircraft parts, instruments, and equipment such as hydraulic systems, air-driven accessories, flight control systems, navigation aids, and oxygen supply components.

Service Directorates involved in hazardous waste generation include the Technology and Industrial Support Directorate (TI), which performs material testing, and failure analysis, installation and maintenance of plant equipment, and calibration of test and measuring equipment. Another is the 72nd Air Base Wing (72 ABW), which provides custodial maintenance for all organizations on base, controls flightline operations, manages ground transportation services, contracts for solid waste disposal, and operates a recycling program for aluminum, plastic, glass, and paper.

Several associate organizations at Tinker contribute to the generation of hazardous waste. The 552nd Air Control Wing (552 ACW) operates, modifies, and maintains the "E-3 Sentry" aircraft that provide distant surveillance, warning, and interception control on a worldwide basis. The Third Combat Communications Group (3 CCG) operates and maintains mobile communication equipment for quick deployment to any part of the globe. The 507th Air Refueling Wing (507 ARW), the only AF reserve unit in Oklahoma, operates and maintains KC-135R aircraft that support U.S. Military and NATO aircraft with aerial refueling. The U.S. Navy Strategic Communications Wing (CSCW-1) operates and maintains E-6 Mercury jet aircraft that provide a vital, secure communications link to submerged ballistic missile submarines.

2.2. Waste Generation. The majority of waste streams generated at Tinker AFB are from aircraft maintenance, modification, and jet engine overhaul activities.

The largest waste streams result from surface preparation of aircraft skin, structural members, and engine parts. This activity includes paint removal and application; grease, dirt and carbon removal; metal etching and priming; and abrasive blasting. These processes generate toxic solvents, corrosive acids and bases, ignitable liquids, and solutions contaminated with toxic metals. Other large waste streams result from alteration of metal surfaces through removal by grinding and cutting operations, or through build-up by electroplating and plasma-spray operations. These processes generate toxic metals, cyanide solutions, contaminated cutting and coolant fluids, and corrosive liquids.

Maintenance of both aircraft and ground vehicles including oil, filters, and antifreeze replacement as well as purging of tanks, fuel systems, and hydraulic lines generates large

quantities of used oil, aircraft fuel, gasoline, antifreeze and hydraulic oil. Much of this material is sent to recyclers for energy recovery or reclamation. Occasionally, contamination by heavy metals or solvents requires shipment to disposal.

Sludges resulting from operation of the Industrial Wastewater Treatment Plant (IWTP) are large hazardous waste streams at the base. The sludges result from treatment of dilute rinsewater inflowing from nearly all of the above-described processes. The sludge of greatest volume is contaminated with toxic metals and may be corrosive. Another sludge from the bottoms of oil separators has a high organic content and also contains toxic metals. Liquid oils and fuel from the tops of these separators are shipped to recyclers for energy recovery.

Other significant waste streams resulting from daily operations include soil, sorbents, and debris contaminated with solvents, oils, fuels, and corrosives from clean up of spills; photographic chemicals; and miscellaneous items such as batteries, aerosol cans, mercury instruments, glues, and adhesives.

Another large hazardous waste stream generated at Tinker results from RCRA corrective actions on past-contaminated sites, and remediation of a Superfund site on the base. These wastes consist of solvent, hydrocarbon, and metal contaminated soil and debris removed during remediation projects.

2.3. Hazardous Waste Management Overview. Since 1979 disposal of hazardous waste or of any solid waste has not been allowed on Tinker AFB. In fact, the remediation of past disposal sites on the base is the subject of extensive current activity.

A large portion of the hazardous waste generated at Tinker AFB is not accumulated or stored on site. This includes sludge from the IWTP; corrosive and heavy metal contaminated liquids from process tanks, and contaminated soil and debris from remediation projects. These wastes are pumped or loaded directly into tank trucks or dump trucks and transported offsite to a permitted TSDF. Disposal is accomplished through contracts managed by the EM Directorate or Civil Engineering.

Most wastes that are accumulated and stored on-site are disposed of through DRMO and its contractor. These wastes require more management effort because of the inspection and inventory requirements, and the fact that most are held in 55-gallon drums.

Most rinse water and dilute industrial wastes are treated at the IWTP. Although the sludge generated at this plant is disposed of as hazardous waste, the plant operation itself is excluded from RCRA regulation. The IWTP meets the definition of a wastewater treatment unit at 40 CFR 264.1(g)(6).

3. ORGANIZATIONAL RESPONSIBILITIES: Although the EM Directorate is responsible for overall management of the hazardous waste program at Tinker, all base personnel are responsible for compliance. Disposal by DRMO or by contractors does not remove the responsibility to comply with applicable laws and regulations.

Each generating organization is responsible for conducting proper management and pre-disposal practices when managing its hazardous waste. In addition to that basic responsibility, the following responsibilities are designed to ensure a smooth flow in the hazardous waste management system at Tinker AFB. In the event of regulatory modifications and/or amendments, each generating organization, as advised by Environmental Management Compliance Division, will be responsible for ensuring their actions are in compliance with Federal, State, and Air Force requirements until this instruction has been modified.

3.1. Environmental Management Compliance Division (OC-ALC/EMC) will:

3.1.1. Serve as the central base coordinator for the hazardous waste program and for questions regarding compliance with Federal, State, DoD, and Air Force requirements.

3.1.2. Set forth policies on all issues related to hazardous waste compliance regulations.

3.1.3. Chair the Hazardous Waste Working Group, provide space for its meetings, and coordinate between it and the Environmental Protection Committee.

3.1.4. Maintain a hazardous waste database to include the following: type, quantity, location, process of generation, disposal cost, disposal method, and disposal location.

3.1.5. Represent the base during compliance inspections by federal, state, and local regulatory officials, and respond to inspection related questions.

3.1.6. Coordinate with the Staff Judge Advocate's Office and respond to inquiries regarding policy or management decisions and interpretation of regulations.

3.1.7. Advise Unit Environmental Coordinators and 72 MSS/DPE on changes to regulations, manuals, and other directives as appropriate.

3.1.8. Monitor industrial operations and disseminate information among organizations that generate hazardous waste.

3.1.9. Review applications for new, or modifications to, hazardous waste management sites and issue approval documents as appropriate.

3.1.10. Conduct periodic compliance monitoring visits within each Directorate/ Organization to determine status of accumulation methods and management procedures.

3.1.11. Verify suitability of off-site TSDFs.

3.1.12. Develop, review at least annually, and update as necessary, base regulations/ instructions, manuals, unit operating instructions, contingency plans, and other documents dealing with hazardous waste management.

3.1.13. Monitor and modify as necessary the RCRA "Part A" and "Part B" operating permits for Tinker AFB.

3.1.14. Coordinate with DRMO and OC-ALC/JAV concerning modifications to permits.

3.1.15. Ensure proper closure of hazardous waste management sites.

3.1.16. Coordinate with DEQ to update and maintain a current Oklahoma State Disposal Plan for Tinker AFB.

3.1.17. Prepare and transmit reports concerning the generation, shipment, and disposal of hazardous wastes. These include the Biennial Report (40 CFR 262.41), Exception Reports (40 CFR 262.42), and monthly and quarterly reports to DEQ.

3.1.18. Monitor the Hazardous Waste Training Course provided by 72 MSS/DPE and provide information to ensure its currency.

3.1.19. Oversee operation of the Hazardous Waste Management Facility (HWMF) and the Container Processing Facility (CPF) and instruct users on proper procedures.

3.1.20. Provide guidance to those not using the HWMF on pre-disposal processing of hazardous waste property.

3.1.21. Coordinate with HPP to ensure that waste stream constituents correspond to chemicals approved for use.

3.1.22. Coordinate with DRMO and its disposal contractor to ensure smooth flow of hazardous waste to permitted storage, ultimate disposal, or recycling facilities.

3.1.23. Assist DRMO on disposal contract modifications, claims, or disputes.

3.1.24. Assist Service Contracts Section to develop and modify a base hazardous waste contract, and help resolve any claims or disputes.

3.1.25. Coordinate with base contractor on shipments of hazardous waste.

3.1.26. Package, mark, label, and offer placards for bulk shipments of hazardous waste to be disposed of off-base according to DOT regulations on hazardous materials in 49 CFR Part 172.

3.1.27. Assist generators not using HWMF with completion of DD Forms 1348-1, to track waste streams from generation point to DRMO and to monitor disposal funds.

3.1.28. Initiate an annual characterization of waste streams generated at Tinker AFB.

3.1.29. Develop and maintain a current file of hazardous waste profile sheets in conjunction with DRMO.

3.1.30. Ensure hazardous waste manifests for generators other than HWMF users, DRMO, and Service Contract Section are properly completed.

3.1.31. Maintain an updated list of persons authorized to prepare and sign manifests, and LDR forms.

3.1.32. Maintain files of manifests and LDR forms from all Tinker AFB generators for at least three years.

3.1.33. Ensure a copy of each manifest, with the handwritten signature of the disposal facility owner or operator, is received within 45 days of shipment.

3.1.34. Maintain files of Certificates of Disposal permanently; and the disposal contractor's delivery orders for at least three years.

3.1.35. Maintain a record of waste disposal cost information and update as necessary when those costs are altered by DRMO versus contractor negotiations or other reasons.

3.1.36. Coordinate with Accounting and Finance to track funding of hazardous waste disposal, and verify billing charges.

3.1.37. Develop and manage a spill response capability.

3.1.38. Conduct an annual review of the Spill Prevention and Response Plan OC-ALC Plan 19-2, and revise as necessary.

3.1.39. Manage the EPCRA program.

3.1.40. Conduct and coordinate a base-wide ECAMP Hazardous Waste Protocol inspection annually, and assist the team when an external ECAMP is conducted.

3.1.41. Coordinate meetings of the Environmental Protection Committee.

3.1.42. Maintain minutes of EPC and HWWG meetings.

3.1.43. Maintain training records for personnel within the EM Directorate.

3.2. TIESE - EM Environmental Section Laboratory will:

3.2.1. Maintain a credible chemical laboratory.

3.2.2. When necessary, collect samples, conduct analysis, and prepare appropriate reports.

3.2.3. Review the Waste Analysis Plan annually and update as necessary.

3.3. Hazardous Materials Management Program (HMMP) will:

3.3.1. Process all hazardous substance requisitions. When a requisition is made for a hazardous substance that has never obtained previous authorization, the HMMP coordinates with Environmental Management, Safety, Fire Department, and Bioenvironmental Engineering for environmental, safety, fire, and human health impact review, and for authorization requirements. During the review make sure appropriate use and disposal restrictions are placed on the substance.

3.3.2. Make provisions for quarterly reviews of hazardous substance authorizations.

3.3.3. Ensure that Material Safety Data Sheets (MSDSs) are available for previously and newly purchased hazardous substances.

3.3.4. Assist users in research of alternate materials that are less hazardous to both personnel and the environment.

3.3.5. Require valid justifications from organizations requesting material to verify that it is the proper material for the process involved.

3.3.6. Search for vendors who can supply hazardous substances in the required amount and deliver it to the user (within the provisions of the Just-in-Time contract).

3.3.7. Tie issues of hazardous substances to a specific process, job order or work order.

3.3.8. Manage the flow of material to the laboratory for shelf life testing.

3.3.9. Manage the return of usable materials for reuse by other organizations.

3.3.10. Attempt to locate non-weapon system uses of shelf life expired materials.

3.3.11. Maintain data on use of hazardous materials for TRI reporting.

3.4. EM Pollution Prevention Division (EMV) will:

3.4.1. Manage the Tinker AFB Pollution Prevention Program.

3.4.2. Manage Air Quality, asbestos abatement, lead based paint, and TRI programs.

3.4.3. Manage the Solid Waste Recycling and Disposal Programs.

3.4.4. Manage the Hazardous Material Management Program (HMMP), to include the Hazardous Pharmacy Program (HPP), and the Hazardous Material Management System (HMMS).

3.4.5. Prepare and submit a Hazardous Waste Minimization Report quarterly to AFMC.

3.4.6. Coordinate funding requirements for disposal of hazardous waste.

3.4.7. Provide consultation and assistance in maintaining compliance with air emission standards in subparts AA, BB, and CC of 40 CFR 264 and 265.

3.5. EM Restoration Division (EMR) will:

3.5.1. Manage corrective action and remediation projects at Solid Waste Management Units (SWMUs) and National Priorities List (NPL) sites at Tinker AFB.

3.5.2. Ensure that manifests for shipment of hazardous waste from SWMUs and NPL sites are coordinated through EMC.

3.5.3. Ensure that generator's copy of manifest is delivered to EMC within two hours after initial transporter accepts shipment.

3.5.4. Manage the Underground Storage Tank (UST) Program.

3.5.5. Manage the Environmental Impact Analysis Process (EIAP), Natural Resources and Cultural Resources Programs.

3.6. Units that Generate Hazardous Waste will:

3.6.1. Comply with all applicable guidelines in this plan.

3.6.2. For Directorates and other Major organizations: appoint Unit Environmental Coordinators (UECs) and alternates to be primary contacts for hazardous waste management issues.

3.6.3. For each unit: designate in writing, primary and alternate HW managers for that unit's hazardous waste management sites.

3.6.4. Provide names, office symbols, and telephone numbers of primary and alternate UECs and HW Managers to EMC within 5 days of appointment.

3.6.5. Ensure that all personnel involved in hazardous waste management receive training according to Part 13 of this instruction.

3.6.6. Ensure that supervisors maintain training records for personnel involved in hazardous waste management. Records for current personnel will be maintained until closure of the facility, and records of former personnel will be maintained for three years from the last date of employment at Tinker AFB.

3.6.7. Ensure that job descriptions, individual training plans, and performance plans reflect hazardous waste management duties and responsibilities.

3.6.8. For proper characterization of waste streams, provide essential information to EMC and the UEC annually, or when changes occur or new waste streams are identified.

3.6.9. Report any inability to comply with this instruction to EMC at ext. 44585.

3.6.10. Ensure all record keeping and reporting requirements are met.

3.6.11. Ensure no accumulation of hazardous wastes occurs except in areas established according to Part 8 of this instruction.

3.6.12. Package, mark, and label all containers of hazardous waste as instructed herein during accumulation and prior to turn-in to DRMO if containers are not processed through the Hazardous Waste Management Facility (HWMF).

3.6.13. Take active measures to reduce the volume of hazardous waste generated.

3.6.14. Coordinate with DRMO to ensure surplus hazardous materials are made available to all potential users.

3.6.15. Operate and maintain hazardous waste management sites according to Part 8 of this instruction.

3.6.16. Coordinate with the HWMF for receipt of bar-coded hazardous waste containers, and for their return when full according to Parts 6 and 9 of this instruction.

3.6.17. Perform Initial Response actions outlined on page vii of this instruction upon spilling a hazardous substance or waste.

3.6.18. Ensure that statements of work (SOW) for projects that involve generation of hazardous waste are routed to EMC for review. Such statements must include training requirements for contractor personnel and proper handling and disposal procedures for wastes generated. Contractor QAEs shall insure that requirements of this instruction are included in the contract, and brought to the contractor's attention.

3.6.19. If SOW requires 72 MSS/DPE training of contractor personnel; provide SOW to them for review.

3.6.20. Supervisors at hazardous waste management sites shall sign inspection forms and inventory logs before copies are supplied to the UEC each month.

3.6.21. When a site is no longer needed, ensure that all hazardous waste management sites comply with the guidelines in this instruction for hazardous waste facility closure.

3.6.22. Maintain list of hazardous waste streams currently generated within the unit.

3.6.23. Conduct periodic surveys to ensure proper identification of processes generating hazardous waste.

3.7. Unit Environmental Coordinators (UECs) will:

3.7.1. Serve as the coordinator in their organization for disseminating information, and providing guidance on proper accumulation and management of hazardous wastes.

3.7.2. Provide current information to the organization commander, and unit supervisors, about hazardous waste issues.

3.7.3. Coordinate with EM on meeting needs of the organization's hazardous waste management program, and on correcting any deficiencies that may be discovered.

3.7.4. Represent their organization at all Hazardous Waste Working Group meetings.

3.7.5. Ensure that Site Specific Contingency Plans (SSCPs) are current and posted in proper locations, and that equipment is maintained in usable condition.

3.7.6. Maintain a current list of HW management sites within their organization, and coordinate with EMC for approval to establish new sites or change existing sites.

3.7.7. Maintain a current list of personnel who handle, monitor, or manage hazardous waste operations within their organization. Ensure that training requirements are met.

3.7.8. Coordinate with organizational training manager about number of personnel needing annual Hazardous Waste Training from 72 MSS/DPE.

3.7.9. Annually present EMC training video to organization management in conjunction with program status briefing.

3.7.10. Ensure that copies of inspection forms and waste inventory logs for initial accumulation points and accumulation sites are maintained at the generation site for at least one year. The originals should be received each month by the UEC.

3.7.11. Review inspection forms and waste inventory logs for completeness of inspections and problems, then maintain in files for at least three years.

3.7.12. Conduct a written inspection of all hazardous waste management sites within their organization every month and report findings to EMC, except when serving as a member of the Hazardous Waste Site Inspection Team (HWSIT).

3.7.13. Serve as a member of the HWSIT, which will conduct periodic inspections of all organizations hazardous waste programs under direction of EMC.

3.7.14. Serve as the organization's point of contact for all inspections.

3.7.15. Conduct continuous review of their organization's waste stream inventory. Submit information to EMC upon discovery of new or modified waste streams.

3.7.16. Oversee coordination with HPP if unauthorized chemicals appear in waste streams.

3.7.17. Attend training as outlined in Part 13.

3.8. IAP HW Manager will:

3.8.1. Operate IAP in accordance with Part 8.2. of this instruction.

3.8.2. Ensure that operational checklist is posted and compare condition of IAP with its provisions daily.

3.8.3. Perform written weekly inspections using OC-ALC Form H-487, Initial Accumulation Point Management Aid.

3.8.4. Record Fill-Date and other information in Part B of Form H-487 before IAP container is removed from site.

3.8.5. Mark Fill-Date on OC-ALC Form O-141 (on container) when container becomes filled.

3.8.6. Ensure that container arrives at the HWMF within three calendar days after the Fill-Date (plan ahead for long weekends).

3.8.7. Within the first week of each month obtain unit supervisor's signature on Form H-487 for previous month; maintain a copy for one year, and forward original to UEC.

3.8.8. Coordinate with HWMF for new waste containers as needed.

3.8.9. Activate Spill Plan as necessary if leaks or spills occur.

3.8.10. Immediately inform supervisor, UEC, or EMC if problems threaten compliance with this instruction.

3.8.11. Attend training as outlined in Part 13 of this instruction.

3.9. ACCS HW Manager will:

3.9.1. Operate Accumulation Site in accordance with Part 8.3 of this instruction.

3.9.2. Ensure that Operational Checklist is posted and compare condition of ACCS with its provisions daily.

3.9.3. Conduct written weekly and monthly inspections for containers on OC-ALC Form H-486, Accumulation Site Inspection Checklist (Containers), and daily and monthly inspections for tanks on OC-ALC Form H-485, Accumulation Site Inspection Checklist (Tanks).

3.9.4. Maintain an inventory for containers on OC-ALC Form H-170, Container Inventory Log for Accumulation Sites, and an inventory for tanks on OC-ALC Form H-132, Tank Inventory Log for Accumulation Sites.

3.9.5. No later than the first week of each month obtain supervisor's endorsement on above forms, maintain copies on-site for one year, and send originals to the UEC.

3.9.6. Ensure no Hazardous Waste remains on-site longer than 90 days. Containers may go to DRMO or an off-site TSDF; tank contents must be sent to an off-site TSDF.

3.9.7. Ensure that communications equipment, showers, eyewashes, PPE, spill clean-up tools, internal alarm, fire suppression equipment and decontamination equipment are operational at all times; and that Site Specific Contingency Plan is posted and current.

3.9.8. Activate Spill Plan as necessary if spills or leaks occur.

3.9.9. Immediately notify supervisor, UEC, or EMC if problems threaten compliance with this instruction.

3.9.10. Attend training as outlined in Part 13 of this instruction.

3.10. Fire Protection Branch (72 CES/CEF) will:

3.10.1. Provide technical assistance and advice concerning necessary fire protection for hazardous waste management sites.

3.10.2. Provide a subject matter expert when requested for initial and annual hazardous waste training.

3.10.3. Respond to spills as outlined in OC-ALC Plan 19-2.

3.10.4. Inspect hazardous waste management sites on a periodic basis to ensure compliance with USAF and National Fire Protection Association standards.

3.10.5. Coordinate on establishment of hazardous waste management sites.

3.11. Operations Branch (72 CES/CEZ) will: Respond to hazardous waste spills as outlined in OC-ALC Plan 19-2.

3.12. Safety Office (OC-ALC/SE) will:

3.12.1. Provide technical assistance and advice concerning protective equipment and safe handling procedures at hazardous waste management sites.

3.12.2. Provide a subject matter expert when requested to discuss safety issues at initial and annual hazardous waste training.

3.12.3. Inspect hazardous waste management sites on a periodic basis to ensure compliance with USAF and OSHA directives.

3.12.4. Coordinate on establishment of hazardous waste management sites.

3.13. Service Contracts Section (72 CEG/CECS) will:

3.13.1. Request delegation of authority from EM for personnel who will prepare and sign Hazardous Waste Manifests and Land Disposal Restriction forms. Proof of training is required to receive that delegation.

3.13.2. Deliver generator's copy of manifest to EMC within two hours of shipment.

3.13.3. Coordinate with EM on all contracts that generate hazardous or industrial waste.

3.13.4. For shipments of hazardous waste handled by Service Contract Section, package, mark, label, and provide placards according to DOT regulations in 49 CFR Part 172.504.

3.14. Staff Judge Advocate (OC-ALC/JA) will:

3.14.1. Advise EM of proper legal interpretation of hazardous waste laws and regulations and any changes in applicable legal requirements.

3.14.2. Coordinate on reports and inquiries submitted to the DEQ or EPA concerning hazardous waste management issues.

3.14.3. Review all proposed contracts relating to hazardous waste management, particularly statements of work and specifications, in the earliest stages of procurement.

3.14.4. Provide representative to Hazardous Waste Working Group.

3.14.5. Review modifications to this instruction and other documents pertaining to hazardous waste management.

3.14.6. Handle all enforcement actions arising out of hazardous waste management activities, including responses to notices of violations, negotiation with regulatory authorities on compliance agreements, and defense of Tinker AFB in litigation. Coordinate with higher headquarters and the Department of Justice (DOJ) as required.

3.15. Classification Section (72 SPTG/DPCCO) will:

3.15.1. Upon request from supervisors of areas that produce hazardous waste, advise them of conditions that could make it necessary to describe hazardous waste managers and operators duties in their job descriptions.

3.15.2. Ensure supervisors properly describe duties in job descriptions and that necessary administrative actions are taken to properly update job descriptions.

3.16. Bioenvironmental Engineering Services (72 AMDS/SGBP) will:

3.16.1. Provide technical assistance and advice concerning proper handling and storage procedures at hazardous waste management sites.

3.16.2. Provide a subject matter expert when requested to discuss chemical hazard issues at initial and annual hazardous waste training.

3.16.3. Provide advice on industrial hygiene to all work areas for employee health.

3.16.4. Provide and maintain Material Safety Data Sheets (MSDS).

3.16.5. Coordinate on establishment of hazardous waste management sites.

3.16.6. Provide representative to the Hazardous Waste Working Group.

3.16.7. Provide assistance in disposal of mixed waste.

3.17. Occupational Medicine (72 MG/SGPO) will: Ensure employees involved in the handling of hazardous waste receive appropriate occupational health physical examinations.

3.18. Industrial Training Branch (72 MSS/DPE) will:

3.18.1. Provide Level Two formal classroom training outlined in Part 13.

3.18.2. Review Statements of Work (SOW) involving DPE training of contractors.

3.18.3. Ensure Instructors receive Level One or equivalent training.

3.19. Defense Reutilization and Marketing Office (DRMO) will:

3.19.1. Operate permitted hazardous waste storage facility for containers of hazardous waste.

3.19.2. Advise generators about how and when segregation of waste streams would increase the probability of recycling the waste.

3.19.3. Advise EMC when a market is available for reutilizing hazardous materials and wastes that are being generated.

3.19.4. Advise EM of any changes in defense turn-in document procedures or in packing, marking, and labeling requirements.

3.19.5. Provide a subject matter expert when requested for initial and annual hazardous waste training to explain role of DRMO, and turn-in requirements.

3.19.6. Complete EPA Form 8700-22, Manifest, or equivalent, for all shipments of Tinker AFB hazardous wastes from the DRMO storage yard and transmit a copy to EMC within two hours after acceptance by the transporter. If transporter acceptance takes place after duty hours the manifest will be delivered to the Fire Department, if possible, or held until the next duty day and delivered to EMC.

3.19.7. Request delegation of authority from EM for personnel who will prepare and sign Hazardous Waste Manifests and Land Disposal Restriction forms. Proof of training will be required to receive that delegation.

3.19.8. Package, mark, label, and offer placards (if these actions have not already been taken) for shipments of hazardous waste from the DRMO storage yard according to applicable DOT hazardous materials regulations and DRMS requirements.

3.19.9. Ensure input from Tinker AFB operations by coordinating with EM and JA during negotiations for hazardous waste disposal contracts.

3.19.10. Ensure that Certificates of Disposal are deliverable items in disposal contracts.

3.19.11. Coordinate with EMC prior to using new transporters or TSD facilities not listed on the Tinker AFB State Disposal Plan.

3.19.12. Confirm that each hazardous waste shipment reached the disposal site safely, and the disposal site received the shipment described on the manifest.

3.19.13. Ensure compliance with the permitted storage facility requirements of the "Part B" RCRA Operating Permit, as well as EPA and State regulations.

3.19.14. Report any inability to comply with these regulations to EM.

3.19.15. Activate their site-specific contingency plan upon spilling a hazardous substance, or during any other applicable emergencies.

3.19.16. Attend initial and annual HW training , or equivalent, as outlined in Part 13 of this instruction.

3.19.17. Appoint a Unit Environmental Coordinator and Alternate.

3.19.18. Maintain a current copy of the RCRA Part B Operating Permit for Tinker AFB, a copy of the base Spill Response Plan 19-2, and a copy of this instruction.

4. ENFORCEMENT: As a result of the serious consequences for hazardous waste violations, all personnel must ensure compliance with all requirements of this instruction. This instruction is binding on all Tinker AFB personnel including associate organizations and contractors.

4.1. Enforcement Liability.

4.1.1. Individual Liability. All Tinker AFB personnel, military and civilian, are subject to criminal prosecution by federal, state, or local authorities for violation of any hazardous waste laws or regulations. Military personnel are also subject to prosecution by the Air Force under the Uniform Code of Military Justice, and civilian personnel are subject to Air Force disciplinary action under civilian personnel regulations.

4.1.2. Supervisory Liability. Even if they do not directly commit a criminal offense, supervisors may be liable if the violation occurred in their supervisory area, they had the power to prevent it, and they failed to act.

4.1.3. Organizational Liability. Violations of hazardous waste laws or regulations can result in enforcement action against the Air Force including the assessment of civil fines and penalties. Under the Federal Facility Compliance Act, the Air Force can be fined up to $25,000 per day per violation by state or federal regulators. Air Force policy is that the civil fines and penalties for violations are to be paid from the responsible organization's budget. Personnel who cause the Air Force to be subject to civil action for environmental violations are themselves subject to disciplinary action.

4.2. Enforcement Procedures. Wherever possible, violations of hazardous waste laws, regulations, or this instruction should be corrected on the spot. Minor violations that can be corrected immediately and are not recurring do not necessarily warrant investigation or enforcement action.

4.2.1. More serious or continuing violations may be reported to EMC, OC-ALC/JAV, or OSI. Observed or reported violations will be investigated by these offices to determine the facts and individuals responsible.

4.2.2. If serious or continuing violations have occurred, the appropriate levels of command will determine whether disciplinary action is warranted.

5. WASTE MANAGEMENT INVENTORIES. Proper hazardous waste management and tracking requires several types of inventories. Inventory information frequently changes so a concerted effort must be made to keep them current. These inventories are included in "Pockets" in this instruction for easy replacement when new ones are announced by EMC.

5.1. Process Code Inventory. Figure 2 illustrates a list of identified processes that cause environmental pollution at Tinker AFB. Most have the potential of generating hazardous waste. Other processes are most likely to cause air emissions, or water pollution. The inventory includes process names, a description of the pollutant generated or specific operation involved, and an alphanumeric code to symbolize the process.

PROCESS CATEGORY	DESCRIPTION	CODE
CLEANING:		**CL**
Wipe/Brush	Applied by hand using cloth, brush, etc.	CL01
Mechanical Wash	Applied with a mechanical object (e.g. Aircraft Wash, High Pressure Spray Wash)	CL02
Tank	Cleaned by submerging into tank	CL03
ABRASIVE BLASTING:		**AB**
Blast Cleaning	Removal of Dirt, Grease, Grime through Mech. Blasting Methods	AB01
Blast Tempering	Mechanically strengthening metal through blasting methods (Peening)	AB02
Blast Stripping	Removal of paint through mechanical blasting methods (Plastic, AL, Glass, Rice, Porcelain, etc)	AB03
STRIPPING:		**ST**
Chemical Coating	Removal of all chemical coating (except paint) either through mechanical/chemical stripping	ST01
Chemical Paint	Removal of paint using application of chemical strippers	ST02
PAINTING:		**PA**
Aircraft	Aircraft, Aircraft Related Parts/Components	PA01
Accessories	Accessories and related parts/components	PA02
Engine	Engines and related parts/components	PA03
Support Equipment	Ground support equipment and related parts/components	PA04
Motor Vehicles	Motor vehicles, forklifts and related parts/components	PA05
Surface Prep	Surface Preparation for Painting	PA06
Facility/Structure	Painting buildings and other facilities	PA07
Avionics	Avionics and related parts/components	PA08

Figure 2. Process Code Inventory

METAL TMNT:		**MT**
Plating	Electroplating, Cr, Ni, Cd, Cyanide	MT01
Thermal Spray	Plasma Spray, Powder Flame Spray, Wire Flame Spray, Arc Spray, HVOF Spray	MT02
Heat Treatment	Heating and cooling metal parts	MT03
Corrosion Protection	Rust Inhibitors, Alodine, Sermetal	MT04
Welding	Welding	MT05
Soldering	Soldering	MT06
Preservation/Packaging	Pentrachlorophenol, Copper Arsenic	MT07
Metal Etching	Scribing with a chemical etching agent	MT08
Rework	Cutting, Machining, Sanding, Grinding	MT08
Foundry	Molded, Forged, Dropped Metal Parts/Component	MT10
Engine Preservation	Jet Engine Pickling or Preservation Processes	MT11
SEALANT:		**SE**
Sealing	Sealant, Epoxy Primer, Adhesives, Resins	SE01
FLIGHTLINE:		**FL**
Fuel Operations	Dispensing/Storage of Diesel, Mogas, Jet Fuel	FL01
Fluids Change-out/ Purging	Oily Waste, Turbine Oil, Lube Oil, Hyd Fluid, Antifreeze, and Contaminated Fuel	FL02
WOODWKG/FINISH:		**WF**
Woodworking	Particulate and VOC Emissions	WF01
TESTING:	(May or May Not Involve Test Stands, Equipment)	**TS**
Accessories	GTE Equipment, Fuel Cells, Life Support	TS01
Avionics	Avionics and Electrical Equipment	TS02
Engines	Jet Engines, Engine Related Parts/Components	TS03
Non-Destructive	Penetrants and Developer	TS04
INST SVCS AND OPS:		**SV**
Security	Explosives, Propellant, Pyrotechnic	SV01
Printing	Fixer, Developer, Ammonia, Inks	SV02
Telecom	Installation/Repair Computer Lines, Phone	SV03
Morale, Welfare & Recreation	MWR Services such as Pools, Youth Center, Child Care, Hobby Shop, Bowling Alley	SV04
Food	Preparation and Handling of Food (Kitchens)	SV05
PREVENTIVE MAINT:		**PM**
Industrial Equipment	Industrial Equipment and Related Parts/Components	PM01
Support Equipment	Ground Support (AGE) Equipment, Related Parts and Equipment to work on them	PM02
Motor Vehicles	Motor Vehicles, Forklifts, Related Parts/Components and Repair Equipment	PM03
Aircraft	Insulation	PM04

Figure 2. Process Code Inventory (continued)

FACILITY OPS/ MAINTENANCE:		**FA**
Housekeeping	Janitorial Supplies, Laundry	FA01
Office Related	Office Supplies, Light Bulbs	FA02
Pest Management	Pesticides, Herbicides, Fertilizers	FA03
Grounds	Maintaining Installation Grounds, Roads, Trees, Etc.	FA04
Facility/Structure	Maintaining Buildings and Other Facilities (Excluding Painting Materials)	FA05
MISCELLANEOUS:		**MI**
Permanent		MI01
Temporary		MI02
RADIOACTIVE:		**RA**
Radioactive Isotopes	Electronic Tubes, Ignition Exciters, Aircraft Parts	RA01
REFRIGERANTS:		**RE**
Stationary Equipment	Industrial Process Equipment, Test Stands	RE01
AGE Equipment	Ground Support Equipment	RE02
Aircraft	Galley Refrigerators, On-Board Air Conditioning	RE03
Facilities	Air Conditioning, Chillers	RE04
Vehicles	Motor Vehicle Maintenance	RE05
FIRE SUPPRESSANT:		**FS**
Fire Department	Halons, AFFF	FS01
Aircraft	Halons	FS02
Facilities/Flightline	Halons, AFFF	FS03
BATTERIES:		**BA**
Battery Usage	Batteries, Lead, Battery Acid, Electrolyte	BA01
EXPIRED ITEMS:		**EX**
Expired Shelf Life	Paints, Solvents, Resins	EX01
COMBUSTION:		**CO**
External Combustion	Boilers, Fuel-Burning Ovens, Furnaces (Morpholine, Nitrates)	CO01
Internal Combustion	Generators, Diesel Pumps, Jet Engines, Missiles	CO02
LABORATORY:		**LA**
Lab Functions	Samples, Chemical Testing	LA01
MEDICAL:		**MD**
Medical (ALL)	Medical Services and Ops (Hospital, Dental, Veterinary)	MD01
ENVIRONMENTAL:		**EN**
Waste Treatment	Waste Treatment Sludge, Sanitary Sewer, Chlorine	EN01
Hazardous Mtrl/Waste	Barrel Yd, Sludge Clean-Out (Trench, Lift Station, Separator)	EN02
Installation Restoration	Waste and Emissions From IRP Sites	EN03
SPILLS:		**SP**
Spills	Accidental Releases and Associated Cleanup Activities	SP01

Figure 2. Process Code Inventory (continued)

5.2. Waste Type Inventory. Pocket 2 is a list of specific waste types generated at Tinker. Each waste type listed may be generated at several different places by different organizations. Wastes generated by different processes may be chemically similar enough to include in the same type; however, regulatory issues may require different management methods. The inventory includes descriptions of each waste type and the associated four-digit number.

5.3. Generating Organization Inventory:

5.3.1. Pocket 3 contains a list of organizations that generate hazardous waste and locations of management sites. The list is grouped by two-letter acronyms (See Figure 3) that correspond to a directorate, associate organization, or other major organization.

Acronyms for Significant Hazardous Waste Generators

AA: Army Air Force Exchange Service, Service Station
AW: 552d Air Control Wing
BO: Boeing Aircraft Company
CE: 72d Civil Engineer Group
CY: 3d Combat Communications Group
DD: Defense Depot Oklahoma City
DP: Defense Printing Services
DR: Defense Reutilization and Marketing Office
EM: Environmental Management Directorate
FL: 10th Flight Test Squadron
LA: Aircraft Management Directorate
LG: Logistics Directorate
LI: Commodities Management Directorate
LP: Propulsion Management Directorate
NA: U.S. Navy, Strategic Communications Wing 1
SC: 72d Support Group, Communications Squadron
SG: 72d Medical Group
SP: 72d Support Group, Security Police Squadron
SV: 72d Support Group, Services Division
TF: 507th Air Refueling Wing
TI: Technology and Industrial Support Directorate
TP: Day and Zimmerman, Contractor for 72 ABW/LGTV
ZZ: Miscellaneous Generators

Figure 3. Acronyms for Significant Hazardous Waste Generators

5.3.2. The Generating Organization Inventory includes the following information for each hazardous waste generator:

5.3.2.1. Acronym for each major organization.

5.3.2.2. Specific number for each generating shop within the major organization.

5.3.2.3. Routing Symbol for each generating shop.

5.3.2.4. Site of waste management by building, post number and/or location.

5.3.2.5. Name and telephone number of the site Hazardous Waste Manager.

5.3.3. Pocket 4 is a map of Tinker AFB showing the location of buildings where hazardous wastes are managed. A Tinker AFB map may be obtained from the 72d Civil Engineering Group or users may make a copy of the Tinker AFB map near the back cover of the Tinker AFB Telephone Directory.

5.4. Management Method Inventory. At Tinker AFB ten different methods of management of hazardous waste take place. Each method requires a specific set of rules and management techniques. These rules and techniques are outlined in Parts 7, 8, 10, 11, and 19 of this instruction. Definitions can be found in Attachment 2.

5.4.1. Management Method Code. Figure 4 is an outline of the different management methods with an identifying code for each.

Types of Management Methods

TYPE	CODE
Collection Point	01
Initial Accumulation Point	02
Waste Staging Area	03
Accumulation Site (Container)	4C
Accumulation Site (Lamps)	4L
Accumulation Site (Tank)	4T
Accumulation Site (Gondola)	4G
Immediate Removal Location (Container)	5C
Immediate Removal Location (Truck)	5T
Permitted Storage Facility	06

Figure 4. Types of Management Methods

5.4.2. Management Method Descriptions:

5.4.2.1. Collection Point (CP). Some organizations at Tinker AFB manage a particular process at several different locations each of which generates only small amounts of the same hazardous waste. It would be wasteful of space and inefficient in time and resources to maintain a full-size 55-gallon drum at each location according to full Initial Accumulation Point rules. This management method provides for small containers, ten gallons or less in size, to collect those wastes at each location and then be emptied into a centrally located IAP, controlled by that organization, at the end of each work shift, or when full, whichever comes first. Basic IAP rules apply to Collection Points such as: a

sound closed container, labeled with contents, isolated if incompatible, and operator controlled. No periodic written inspection or monthly report is required from the operator, however, CP management is an item on the supervisor's operating checklist, and inspections will be conducted quarterly by the UEC and as outlined in part 14 of this instruction.

5.4.2.2. Initial Accumulation Point (IAP). This management method is based on the EPA Regulations at 40 CFR 262.34(c)(1) and (2). Each container being used to accumulate hazardous waste is considered an IAP, unless it is a CP. Most of the hazardous waste generated by normal, daily operation is initially collected and managed in this manner. The number and location of IAPs at Tinker AFB changes frequently as workloads and operations change. The usual container at an IAP is a 55-gallon drum DOT approved for the waste it contains. Management procedures for IAPs include written weekly inspections and reporting. When the drum has been filled, operators are instructed to seal the drum and move it to the Hazardous Waste Management Facility (HWMF) within three days.

5.4.2.3. Waste Staging Area (WSA). At Tinker AFB each 55-gallon drum accumulating hazardous waste is managed as an IAP. Thus several IAPs may be located nearby each other in a small area as long as: each contains a separate, distinct waste; each waste is generated nearby; the wastes are compatible with each other; and all are under control of the generator. Experience has shown that, for generators managing several IAPs, keeping them together in a designated area contributes to safer working conditions and better control, which in turn leads to more reuse and recycling possibilities. The generator must ensure that each drum is dedicated to a distinctly different waste stream and that wastes are compatible.

5.4.2.4. Accumulation Site (ACCS). This management method is based on the regulations at 40 CFR 262.34(a). The most active ACCS at Tinker AFB is the Hazardous Waste Management Facility (HWMF). Its purpose is to control the distribution of containers, serve as a central assembly location for containers from IAPs, analyze contents of containers to ensure proper labeling, and prepare documents for turn-in of waste containers to the Permitted Storage Facility. Other ACCSs at Tinker AFB include tanks in the Chemical Cleaning Shop, a staging area for the plating shop renovation projects where waste is collected in gondolas, and an area to hold remediation wastes that cannot be removed immediately. The number of accumulation sites varies but is normally less than ten.

5.4.2.5. Immediate Removal Location (IRL). Several operations take place at Tinker AFB where large amounts of hazardous waste are generated in a very short span of time. Examples include the cleaning out of a process tank where the operable solutions have become unusable or a sludge has precipitated from the solutions, cleaning of paint application or stripping facilities where sludges have collected, and remediation sites where contaminated soil and debris have been displaced from their normal situation. The solutions, sludges, soil, or debris may

be loaded directly into a tank truck or gondola and transported to an off-site facility. Alternatively, the waste may be placed in containers and moved to the HWMF. Removal usually takes place within a few hours after the material becomes a waste but never more than three days, which is the deadline for an excess of 55-gallons (40 CFR 262.34(c)(2)).

5.4.2.6. Permitted Storage Facility (PSF). At Tinker AFB the Defense Reutilization and Marketing Office (DRMO) operates the facility for long-term storage of hazardous waste. The need for long-term storage is based on the large volume and variety of hazardous wastes generated at the base. Over 3000 tons are generated each year, about one-half of which is cycled through DRMO. Analysis, labeling, and contracting for disposal of that volume of hazardous waste would be very difficult within the 90 days allowed at an ACCS. The PSF allows storage of large enough quantities of specific waste streams to award efficient, cost effective contracts for disposal, or to find recyclers willing to purchase the large quantity of raw material at premium prices.

NOTE: Nearly all hazardous waste stored at the DRMO Facility originates from mission-related processes at Tinker AFB. A small amount originates as new material shipped to DRMO from other Federal Facilities to be sold or distributed for use elsewhere. Occasionally another use for this material cannot be found and it is unsuitable for shipment back to the original owner. In these cases the material (if it meets the definition) must be disposed of as hazardous waste. At that time it is properly labeled and managed as hazardous waste.

5.5. Waste Stream Inventory. Pocket 5 is an inventory of all the waste streams that are currently being managed at Tinker AFB. Each waste stream is identified using information from inventories discussed above, and other information as discussed below.

5.5.1. Development of Waste Stream Inventory. A typical waste stream is identified as follows:

5.5.1.1. AW: 552 Air Control Wing.

5.5.1.2. 0002: The second of the listed generating shops in the 552 Air Control Wing. (See Pocket 3 for shop information.)

5.5.1.3. 1018: The waste type is a solvent.

5.5.1.4. Thinners and solvents: specific description of waste.

5.5.1.5. 3: The hazard class is flammable.

5.5.1.6. PA04: The generating process is painting ground support equipment.

5.5.1.7. 02: The waste is originally managed at an Initial Accumulation Point (IAP).

5.5.2. Specific Information. For each drum of a waste stream, additional information such as EPA waste codes, Oklahoma Waste Stream number, Disposal Route, and cost can be found in HMMS.

5.5.3. Summary Information. For each waste stream, the quantity disposed by year, by specific shop, or by process can be obtained by generating a report from HMMS. The total disposal cost, or total number of drums may also be obtained.

5.6. Profile Sheets. For each waste stream identified that is disposed of through DRMO, a DRMS Form 1930 or equivalent format will be completed and a copy given to DRMO. For waste streams disposed of through contractors, the appropriate profile sheet will be completed using the information in paragraph 5.5. A copy of all profile sheets will be reviewed for currency at least annually and updated as necessary.

5.7. State Disposal Plan. Using information from the Waste Stream Inventory the Tinker AFB Disposal Plan, No. 55066 will be kept current by coordinating with DEQ.

6. OBTAINING APPROVAL TO ACCUMULATE HAZARDOUS WASTE AND RECEIVE CONTAINERS FROM THE HWMF. Because improper management of hazardous waste could result in serious consequences to Tinker AFB, and to the individuals involved, any accumulation must be approved through the following procedures:

6.1. Approval when waste stream is identified while requesting authorization for a new chemical. Any organization requesting first-time authorization for a hazardous chemical shall follow procedures in paragraph 6.3 if that chemical will become part of a waste stream.

*NOTE: **Inspection team** surveillance visits (see paragraph 14.2) will include a review of Item 20 on OC-ALC Forms H-521 submitted to the HPP during the past month.*

6.2. Approval when waste stream is identified during mission related operations. If a previously unidentified waste stream is discovered, follow procedures in paragraph 6.3.

NOTE: Proper identification of waste streams will be reviewed during surveillance visits.

6.3. Requesting approval. The UEC of the organization generating a new waste stream shall apply to EMC in writing for approval to accumulate by providing the following:

6.3.1. Name and address of generating organization.

6.3.2. Description of waste stream.

6.3.3. HPP approval for hazardous chemicals in waste.

6.3.4. Process generating waste stream.

6.3.5. Volume to be generated each month.

6.3.6. Type of management site planned.

6.3.7. Management device to be used.

6.3.8. Location of accumulation.

6.3.9. Name and telephone of site HW manager.

6.4. Site inspection. Upon receipt of the above information, EMC will schedule a site visit. EMC will request a follow-up inspection by SGPB, SEG, and/or CEF if there are concerns with the location of the site. EMC will consolidate comments and respond to the generating organization's Unit Environmental Coordinator stating one of the following:

6.4.1. Full approval to Operate.

6.4.2. Approval to operate (with stated modifications promptly implemented).

6.4.3. A cease and desist order effective until stated requirements are met.

6.5. Approval by EMC. When approval to accumulate is given, EMC will enter appropriate information into the Hazardous Waste Tracking System (HWTS). This information will be used to print labels when a drum is requested from the HWMF.

6.6. Approval documentation. The HW Manager of the generating organization shall maintain an "Approval Package" which will consist of the letter of application, supporting information, letter of authorization, and any modifications.

6.7. Changes. Any changes that may affect an approval package will be coordinated in writing with EMC.

6.8. Obtaining Containers from the Hazardous Waste Management Facility (HWMF).

6.8.1. Upon receipt of "Approval To Operate", generating organizations may obtain containers from the HWMF by completing all items except 1 and 6 on OC-ALC Form H-266 and presenting it to the HWMF or by phoning in the request to the HWMF contractor at ext. 43285.

6.8.2. HWMF will issue containers in accordance with paragraph 10.2.

6.8.3. If prior arrangements have been made, a newly issued container will be delivered by the HWMF when a full drum is being picked up. However, the generator is responsible for ensuring that containers are available at the management site.

7. PROCEDURES FOR USE OF ACCUMULATION AND HOLDING DEVICES:

7.1. Procedures for Containers:

7.1.1. Whenever possible use serialized containers from the HWMF.

7.1.2. If the waste being contained has a Volatile Organic Compound (VOC) concentration greater than or equal to 100 parts per million by weight (ppmw) the container must meet DOT specifications for transport of that waste.

7.1.3. Containers must be in good condition, which means no severe rusting, no sharp-edged creases or dents, no bulging heads caused by over-pressuring a container (usually from overfilling), and no severe structural defects.

7.1.4. If a container is in poor condition or begins to leak, the HW must be immediately transferred to another container or overpacked. Containers with pools of HW on the top must be decontaminated or overpacked. Implement the spill response plan if necessary. Overpack drums can be obtained from the HWMF. Ensure that labels and markings on the overpack are identical to those on the leaking container.

7.1.5. Containers (or liners) must be compatible with the waste being contained.

7.1.6. Container will be under control of the waste generator.

7.1.7. Each container will be designated for waste generated by a specific process. No other wastes or materials will be placed in a designated container.

7.1.8. Containers must be closed except when adding, or transferring waste, or analyzing contents for waste characterization.

7.1.9. Containers must not be handled or moved from place-to-place in a manner that may cause them to rupture or leak.

7.1.10. Never fill containers holding liquids to more than 90 percent capacity (four inches from top for a 55-gallon drum).

7.1.11. A funnel may be left in a container bung if it is attached as an integral part of the container (such as with screw threads) and it has a lid that can be closed and latched.

7.1.12. Containers holding hazardous waste must be placed vertically and be separated from the floor by pallets, enviropacs, wheeled dollies, or other means. No more than four 55-gallon drums will be placed on a single pallet.

7.1.13. When containers are moved while on pallets, those pallets shall be the larger and sturdier "pallatiers" measuring approximately 49 inches by 56 inches in size.

7.2. Procedures for Existing Tank Systems:

7.2.1. Each tank will be marked with the following information in easily readable letters on an easy to view part of the above ground area of the tank, or for an underground tank, on an aluminum or plastic sign placed above the tank.

7.2.1.1. Contents (include percentages if mixture).

7.2.1.2. Functional address symbol.

7.2.1.3. HW Manager's name and telephone number.

7.2.1.4. The words "HAZARDOUS WASTE."

7.2.1.5. The "Accumulation Start Date."

7.2.2. Each tank cap must be closed except when being filled, drained, or inspected by authorized personnel.

7.2.3. Hazardous waste will not be placed in a tank if it is incompatible with the waste previously held unless the tank has been completely rinsed between uses. The rinsing must be recorded on OC-ALC Form H-485, Accumulation Site Inspection Checklist (Tanks) and OC-ALC Form H-132, Tank Inventory Log for Accumulation Sites.

7.2.4. The appropriate controls and practices must be used to prevent spills and overflows from tank or secondary containment systems. These include at a minimum:

7.2.4.1. Spill prevention controls (check valves, dry disconnect couplings).

7.2.4.2. Overfill prevention controls (level sensing devices, high level alarms, automatic feed cutoff, or bypass to a standby tank that exceeds the volume of the top two feet).

7.2.4.3. Maintenance of sufficient freeboard in uncovered tanks to prevent overtopping by wave or wind action, or by precipitation.

7.2.5. An ignitable or reactive waste can be placed in a tank only if:

7.2.5.1. It is managed in a way that it cannot ignite or react.

7.2.5.2. The tank is used solely for emergencies.

7.2.6. A facility that treats or stores ignitable or reactive waste in covered tanks must comply with buffer zone requirements of the National Fire Protection Association, 470 Atlantic Avenue, Boston MA 02210. (Ask for Flammable and Combustible Liquids Code, 1977 or 1981).

7.2.7. Existing tank systems that do not have a secondary containment system must have a written assessment completed and certified by a professional engineer attesting to the tank system's integrity. This assessment must determine that the tank system is adequately designed and has sufficient structural strength and compatibility with the wastes to be stored to ensure that it will not collapse, rupture, or fail.

7.2.8. At a minimum, secondary containment systems for tanks require the following:

7.2.8.1. Constructed of or lined with materials that are compatible with the wastes to be placed in the tank system.

7.2.8.2. Sufficient strength and thickness to prevent failure due to pressure gradient, physical contact with the waste to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation.

7.2.8.3. Placed on a foundation or base capable of providing support to the secondary containment system and resistance to pressure gradients above and below the system and capable of preventing failure due to settlement, compression, or uplift.

7.2.8.4. A leak detection system that is designed and operated to detect the failure of either the primary and secondary containment structure or system, or any release of hazardous waste or accumulated liquid in the secondary containment system within 24 hours.

7.2.8.5. Sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. Such liquids must be removed within 24 hours.

7.2.8.6. Sufficient capacity to contain 100 percent of the volume of the largest tank within its boundary.

7.2.8.7. One or more of the following devices:

7.2.8.7.1. A liner (external to the tank).

7.2.8.7.2. A vault.

7.2.8.7.3. A double-walled tank.

7.2.8.7.4. An equivalent device approved by the EM Directorate.

7.3. Procedures for New Tank Systems:

7.3.1. A new tank system and components must obtain a written assessment to be reviewed and certified by a registered professional engineer (according to paragraph 7.2.7.), attesting that the system has sufficient structural integrity and is acceptable for storing and treating of hazardous waste.

7.3.2. The assessment must have at a minimum:

7.3.2.1. Design standards according to which the tanks will be constructed, which may include the following items, but not limited to:

7.3.2.1.1. Tanks will be designed with strong shells.

7.3.2.1.2. Closed tanks will be designed with vents or other ways of controlling pressure to ensure they do not collapse or rupture; the minimum shell thickness is based on width, height, and construction materials of the tank, plus specific gravity of the waste to be stored.

7.3.2.1.3. Tanks should be designed to allow removal of all waste, since, at closure, all hazardous waste, hazardous waste residues, discharge control equipment, and discharge confinement structures must be removed.

7.3.2.2. Hazardous characteristics of the wastes to be handled.

7.3.2.3. Factors affecting the potential for corrosion in the exterior shell or external metal parts of the tank system, which are in contact with soil or water.

7.3.2.4. Design or operational measures that protect the tank system against potential damage by vehicular traffic when placed underground.

7.3.2.5. Design considerations must show that:

7.3.2.5.1. The foundation will support full tanks.

7.3.2.5.2. The tank system will be anchored to prevent flotation or dislodgment.

7.3.2.5.3. The tank system will withstand the effects of frost heave.

7.3.3. Proper procedures must be used during installation to prevent damage.

7.3.4. When placed underground, new tank systems, including components and piping, must be provided backfill material that is a non-corrosive, porous substance.

7.3.5. All new tank systems and ancillary equipment must be tested for tightness and necessary repairs completed before being covered, enclosed, or placed in use

7.3.6. Ancillary equipment must be supported and protected against physical damage and excessive stress due to settlement, vibration, expansion, or contraction.

7.3.7. Corrosion protection must be provided to protect the tank system based on the factors determined according to paragraph 7.3.2.3.

7.3.8. Written statements certifying proper installation, testing, and repairs of tank systems must be kept on file by the organization operating the tank system.

8. PROCEDURES FOR OPERATION OF MANAGEMENT SITES:

8.1. Collection Point (CP) Operating Requirements:

8.1.1. Operating Approval. Before operating a collection point, obtain approval from EMC according to Part 6.

8.1.2. Physical Plan:

8.1.2.1. Collection Points are to be used only when accumulation in a 55-gallon drum would require an unreasonable length of time to fill (more than one year), or where small amounts of waste are being generated continuously and it would be unduly burdensome to interrupt the work to transport that waste to the IAP.

8.1.2.2. Small closeable containers of ten gallons or less are to be used.

8.1.2.3. A conveniently accessible IAP must be designated as the receiving site for the collection point.

8.1.3. Container Management:

8.1.3.1. Container procedures outlined in paragraphs 7.1.3. through 7.1.10. apply.

8.1.3.2. The contents of containers will be transferred to the designated IAP at the end of each work shift, workday, or when full, whichever comes first.

8.1.4. Marking and Labeling: The contents of containers or the words "Hazardous Waste" will be identified on the containers with easily readable letters.

8.1.5. Inspections: The generating unit supervisor will include CPs in a daily operational checklist. CP management will also be included on periodic EMC and UEC inspections.

8.1.6. Record Keeping:

8.1.6.1. A copy of the CP Approval Package shall be readily available for inspection at the generating unit.

8.1.6.2. The supervisor will maintain job descriptions and training records until closure for all current personnel and for three years for former personnel.

8.1.7. Closure of a Collection Point:

8.1.7.1. When operations cease at a CP all contaminated equipment will be properly disposed of, or decontaminated.

8.1.7.2. EMC will be notified in writing when a decision is made to discontinue use of CPs.

8.1.8. Training: All personnel involved in hazardous waste management will receive instruction pursuant to their assigned duties within six months of their assignment, and on an annual basis, as outlined in Part 13 of this instruction.

8.2. Initial Accumulation Point (IAP) Operating Requirements:

8.2.1. Operating Approval. Before operating a new initial accumulation point, obtain approval from EMC according to Part 6 of this instruction.

8.2.2. Physical Plan:

8.2.2.1. The IAP will be under the direct control of the operator who generates the waste and near enough to the generation point to be convenient.

8.2.2.2. Unless Collection Point management is being used, no accumulation or disposal device should exist between the generation point and the IAP.

8.2.2.3. Secondary containment may be required if inspections reveal a need for more control. See OC-ALC-TAFBI 32-7006, Secondary Containment Requirements.

8.2.2.4. When required, secondary containment shall have a dike at least four inches in height enclosing enough area to contain the volume of the container.

8.2.2.5. If the type of secondary containment utilized obscures markings and labels on the containers, such as cabinets with doors, or enviropacs with lids, hazardous waste labels with appropriate information, and proper hazard labels will be placed in a clearly visible location on the outside of the secondary containment device.

8.2.2.6. A waste that is incompatible with any other waste or material that is placed such that contact between them might occur during a mutual spill must be separated or protected from contact by a dike, berm, wall, 3 feet, or other device.

8.2.2.7. An Emergency Response Plan will be posted in a prominent location near the management device. (See example in Figure 5).

8.2.2.8. A site containing flammable wastes must be either serviced by automatic sprinklers or have the authorized number of Class ABC portable fire extinguishers within easy access unless the Fire Department specifies differently.

HAZARDOUS WASTE MANAGEMENT SITE
DANGER!
IN CASE OF FIRE OR SPILL:

1. Sound Alarm: Voice Call or Mechanical Device.
2. Evacuate Affected Area.
3. If Possible, Shut Down Equipment when Evacuating.
4. **CALL FIRE DEPARTMENT:** DIAL: 911 (Give Type, Location, Size, Your Name)
5. Inform Supervisor.
6. Contain Spill if it can be done **Safely**.
7. Conduct Roll Call, and report to Fire Department On-Scene Commander.

Figure 5. Emergency Response Plan

8.2.3. Container Management:

8.2.3.1. During accumulation, procedures outlined in paragraph 7.1 apply.

8.2.3.2. Containers of 55-gallon maximum capacity will be used to accumulate wastes at IAPs. No tanks will be used.

8.2.3.3. All base organizations will use serialized containers obtained from the HWMF during normal operations. If a spill or other unexpected event requires the use of a non-serialized container, follow procedures in paragraph 9.1.2.

8.2.3.4. If two or more IAPs (containers) are located in close proximity prevent mixing of waste streams by using signs, instructions, and surveillance.

8.2.3.5. Hazardous waste may be accumulated in IAP containers until they are full. However, once an IAP container becomes full, the IAP HW Manager must initiate turn-in actions and transfer the container to the HWMF within 72 hours.

8.2.3.5.1. Process workers who add waste to a container must inform the IAP HW Manager when a container is full.

8.2.3.5.2. On the date the container becomes full, the IAP HW Manager must mark the "Filled-Date" on OC-ALC Form O-141 on the container.

8.2.3.5.3. The IAP HW Manager must arrange for and ensure container is moved to the HWMF within 72 hours of the filled-date. Use of the HWMF drum pick-up service does not relieve this responsibility. This is a strict legal requirement that must be planned for and observed in all cases. Plan ahead for three-day weekends! If necessary, turn the container in early, even if not completely full. If the IAP HW Manager is not available, supervisors must ensure turn-in requirement is met.

8.2.3.6. All sealing mechanisms (locking rings, bung caps, bolts and nuts) will be installed and tightened prior to turn-in to the HWMF.

8.2.4. Marking and Labeling:

8.2.4.1. Ensure that containers are labeled with OC-ALC Form O-141 (EM), Waste Drum Label.

NOTE: *If the generating process has been characterized as a producer of hazardous waste, the label title should read: "Hazardous Waste Drum Label."*

8.2.4.2. Ensure containers obtained from the HWMF have the first six items of OC-ALC Form 0-141 (EM) correctly filled out.

8.2.4.2.1. Contents: A short description of the waste to be collected.

8.2.4.2.2. Date Issued: Date issued to shop by the HWMF.

8.2.4.2.3. Generating RCC: Organization Symbol of shop.

8.2.4.2.4. Telephone Ext: Telephone number of HW Manager.

8.2.4.2.5. Bldg/Post: Building number and Post location of site.

8.2.4.2.6. HW Manager: Name of person responsible for inspecting and managing that IAP.

8.2.4.3. Filled Date: The HW Manager must ensure that this item on OC-ALC Form O-141 is marked with the date the container becomes full.

8.2.4.4. Date Received by HWMF: HWMF personnel will mark this item on OC-ALC Form O-141 upon arrival at the HWMF. If this date is more than three days after the Filled-Date an Environmental Deficiency Record will be sent to the responsible Directorate or Associate Organization.

8.2.5. Hazard Labels: Before accumulation begins, the generator will ensure appropriate hazard labels are affixed to containers as specified in 49 CFR 172.400.

8.2.6. Inspections:

8.2.6.1. An operational checklist (see Figure 6) shall be posted near the IAP and all personnel working in the area shall be briefed on the checklist items. The supervisor, and the IAP HW Manager, shall compare site conditions with checklist items daily.

OPERATIONAL CHECKLIST
INITIAL ACCUMULATION POINT

1. Container has no Leaks, Dents, Rust, or evidence of excess internal pressure.
2. Container is Closed. (No visible opening)
3. No Waste is visible outside of Container.
4. Support Device prevents Container/Floor contact.
5. Metal Container accumulating Flammable Waste is Grounded.
6. Ensure integrity of Secondary Containment (if required).
7. Hazard Label is visible on Container.
8. Contents Label is Visible and is Legible.
9. Filled-Date is marked on Full Container.
10. Filled-Date is less than Three (3) Days Old.
11. Container with Filled-Date is Sealed.

Figure 6. Operational Checklist Initial Accumulation Point

8.2.6.2. At least once per week record appropriate information in Part I of OC-ALC Form H-487, Initial Accumulation Point Management Aid.

8.2.6.3. If significant events (such as spills) occur, a description of actions taken to return the IAP to compliance shall be recorded on OC-ALC Form H-487. This information will satisfy inspection documentation for that week.

8.2.7. Inventory Control:

8.2.7.1. Whenever a container becomes full, the Filled-Date and other indicated information should be recorded in Part II of OC-ALC Form H-487.

8.2.7.2. The same Filled-Date will be annotated on OC-ALC Form O-141 before the container is removed from the site.

8.2.8. Record Keeping:

8.2.8.1. During the first week of each month OC-ALC Forms H-487 used the previous month will be sent to the Unit Environmental Coordinator.

8.2.8.2. The supervisor of the generating unit will review and sign OC-ALC Forms H-487 before they are sent to the UEC.

8.2.8.3. Copies of OC-ALC Forms H-487 will be maintained by the generating unit for at least one year, and be readily available for inspection.

8.2.8.4. The UEC will review the original forms for problem trends, maintain them in an orderly manner for three years, and keep them on hand for inspection.

8.2.8.5. A copy of the IAP Approval Package shall be available for inspection at the generating unit.

8.2.8.6. The supervisor will maintain job descriptions and training records until closure for all current personnel and for three years for former personnel.

8.2.9. Closure of IAP:

8.2.9.1. When operations cease at an IAP all contaminated equipment, structures, and soil will be properly disposed of, or decontaminated.

8.2.9.2. EMC will be notified in writing at time of closure.

8.2.10. Training: All personnel involved in hazardous waste management will receive training pursuant to their assigned duties within six months of their assignment, and on an annual basis, as outlined in Part 13 of this instruction.

8.3. Waste Staging Area (WSA) Operating Requirements.

8.3.1. Operating Approval. Before operating a WSA, approval must be obtained from EMC in accordance with Part 6 of this instruction.

8.3.2. Physical Plan:

8.3.2.1. All WSA borders must be at least 50 feet inside Tinker AFB boundaries.

8.3.2.2. Sufficient aisle space shall be provided to allow unobstructed movement of personnel and fire control equipment to any part of the area.

8.3.2.3. Containers of not more than 55-gallons capacity will be used to accumulate wastes at WSAs. No tanks will be used.

8.3.2.4. Secondary containment shall be provided with minimum capability to hold 100% of the volume of the largest container or 10% of the total volume of all containers whichever is greater.

8.3.3. Safety and Preparedness:

8.3.3.1. Fire protection will be provided according to paragraph 8.2.2.8.

8.3.3.2. An internal communication or alarm system will be provided within easy access distance to warn personnel of an emergency situation.

8.3.3.3. A telephone or similar device capable of summoning emergency assistance from the local fire department or response team will be within easy access distance.

8.3.3.4. An Emergency Response Plan (Figure 5) will be posted in a prominent location within the area.

8.3.3.5. Post an IAP Operational Checklist (Figure 6) and add line items: "12. All wastes are compatible with each other." and "13. No more than 55-gallons of any one waste stream."

8.3.4. Management of Holding Devices:

8.3.4.1. Each container will be dedicated to a different and distinct waste stream.

8.3.4.2. Container procedures outlined in paragraph 7.1. apply.

8.3.4.3. Each container will be managed as an IAP as outlined in paragraph 8.2.

8.3.4.4. One Hazardous Waste Manager will control all containers in the WSA.

8.3.5. Inspections and Inventory. Part I of OC-ALC Form H-487 may be used to document inspection of the entire WSA, but an inventory of each container must be maintained in Part II.

8.4. Accumulation Site (ACCS) Operating Requirements:

8.4.1. Operating Approval. Before operating an ACCS, approval must be obtained from EMC in accordance with Part 6 of this instruction.

8.4.2. Physical Plan:

8.4.2.1. All ACCS borders must be at least 50 feet inside Tinker AFB boundaries.

8.4.2.2. Secondary containment shall be provided. See specifications in paragraph 8.3.2.4. for containers, and in paragraph 7.2.8. for tanks.

8.4.2.3. Sufficient aisle space will be provided to allow unobstructed movement of personnel and spill or fire control equipment to any part of the site. The following rules are based on AFOSH Standard 127-43.

8.4.2.3.1. Outdoor storage container piles will be separated by at least five feet. Also, within 200 feet of each container, there will be a 12-foot wide access way to permit approach of fire control apparatus.

8.4.2.3.2. Indoor storage main aisles will be at least eight feet wide, and side aisles at least four feet wide. No container will be more than 12 feet from an aisle. All container piles will be separated by at least four feet.

8.4.2.3.3. The allowable height of container piles is a function of the flammability of the material being stored.

8.4.2.3.4. The storage of flammable or combustible liquids shall not physically obstruct a means of egress from a building or area.

8.4.3. Safety and Preparedness:

8.4.3.1. Incompatible wastes will be separated according to paragraph 8.2.2.6.

8.4.3.2. Fire protection will be provided according to paragraph 8.2.2.8.

8.4.3.3. An internal communication or alarm system will be provided within easy access distance to warn personnel of an emergency situation.

8.4.3.4. A telephone or similar device capable of summoning emergency assistance from the local fire department or response team will be within easy access distance.

8.4.3.5. Spill control and decontamination equipment, in good working order, including protective clothing, will be available for immediate use, as well as water at sufficient volume and pressure to supply required equipment.

8.4.3.6. All required emergency equipment must be tested and maintained to ensure its reliability during an incident.

8.4.3.7. Each ACCS will prepare a Site Specific Contingency Plan indicating preferred evacuation route; location of communications, fire and spill control equipment; and names and phone numbers of emergency response personnel. The plan will be reviewed annually and updated as needed for inclusion in OC-ALC Plan 19-2.

8.4.3.8. A copy of the Site Specific Contingency Plan will be posted at or near emergency communication devices.

8.4.3.9. Emergency Response Plans will be posted in prominent locations in the working area (See Figure 5).

8.4.3.10. A freeze-proof emergency eye wash and deluge shower will be located so that they can be reached within 10 seconds of a harmful exposure at the site.

8.4.3.11. Areas where flammables are managed will be clearly marked and signs indicating "No Smoking Within 50 Feet" will be conspicuously posted.

8.4.4. Management of Holding Devices:

8.4.4.1. Accumulation sites must comply with applicable federal, state, and local regulations including requirements stated in this instruction.

8.4.4.2. Wastes will be held in either containers that meet DOT specifications for that waste (See 49 CFR 173.), or tanks that are compatible with the waste, and properly installed according to paragraphs 7.2 and 7.3.

8.4.4.3. Container rules listed in paragraph 7.1. apply. In addition, all sealing mechanisms (locking rings, bung caps, bolts and nuts) will be installed and tightened, except when necessary to sample or transfer container contents.

8.4.4.4. Tank rules listed in paragraphs 7.2. and 7.3. will be followed.

8.4.4.5. Immediately upon arrival at the ACCS, the "Date Received by HWMF" line on the OC-ALC Form O-141 attached to containers shall be annotated with the current date. (That date is the "Accumulation Start Date" for that container).

8.4.4.6. Proper eye and body protection will be worn when opening sealed holding devices for testing or transfer of contents.

8.4.4.7. No hazardous waste will be stored at the site longer than 90 days after the Accumulation Start Date. Containers and the contents must be moved to permitted storage (DRMO), or to an off-site TSDF, within that time limit.

8.4.4.8. Tanks must be completely drained no later than 90 days after their latest Accumulation Start Date.

8.4.5. Waste Identification:

8.4.5.1. The contents of all containers or tanks at the ACCS will be:

8.4.5.1.1. Compared with the contents label for accuracy.

8.4.5.1.2. Reviewed for waste versus material status.

8.4.5.1.3. Reviewed for hazardous versus non-hazardous status.

8.4.5.1.4. Reviewed for compatibility with the container or tank.

8.4.5.2. If questions remain about the identity of the container or tank contents, chemical analysis may be requested per Attachment 1 to this instruction.

8.4.6. Marking and Labeling:

8.4.6.1. Containers arriving at the site holding waste generated by processes that have been characterized as hazardous waste generators will be immediately and prominently marked with the following, if they are not already so marked:

8.4.6.1.1. The words "HAZARDOUS WASTE."

8.4.6.1.2. Accumulation Start Date.

8.4.6.2. If hazardous wastes are being accumulated at the site in containers or tanks, those devices will be marked as in paragraphs 8.4.6.1.1. and 8.4.6.1.2.

8.4.6.3. Waste in containers arriving at the site, or in tanks, generated by processes that have not been characterized will be identified as outlined in paragraph 8.4.5. If the waste is identified as hazardous, the containers, or tanks, will immediately be marked as in paragraphs 8.4.6.1.1. and 8.4.6.1.2.

8.4.6.4. All container marking shall be done on OC-ALC Form O-141. If that form is not already affixed to the container obtain a form from EMC.

8.4.6.5. Tanks will be marked as outlined in paragraph 7.2.1.

8.4.7. Inspections:

8.4.7.1. An operating checklist shall be posted at the ACCS and all personnel working in the area shall be briefed on the checklist items (See Figure 7). The supervisor of the generating unit, and the ACCS HW Manager, shall ensure on a daily basis that conditions at the site comply with the checklist.

OPERATIONAL CHECKLIST

ACCUMULATION SITE

1. No leaks, spills, or evidence of excess pressure are visible around containers or tanks.
2. Containers and Tanks are sealed except when sampling or transferring waste.
3. Hazardous Waste Containers and Tanks are labeled "HAZARDOUS WASTE."
4. Containers are all marked with "Received Date," tanks with "Accumulation Start Date".
5. Received dates and ASDs are all less than 90 days old.
6. Incompatible wastes are separated.
7. Secondary Containment is sound.
8. Aisle Space is sufficient to allow passage of emergency equipment.
9. Site Specific Contingency Plan is prominently posted.
10. Internal Communication or Alarm System is operational.
11. Emergency Assistance Summoning Device is Operational.
12. Fire Extinguishers are Operational.
13. "No Smoking Within 50 Feet" signs are posted near flammable Wastes.
14. Emergency Eyewashes and Shower are Operational.
15. Spill Control Equipment is readily available.

Figure 7. Operational Checklist Accumulation Site

8.4.7.2. Containers:

8.4.7.2.1. At least once per week appropriate information will be recorded on OC-ALC Form H-486, Accumulation Site Inspection Checklist (Containers).

8.4.7.2.2. Part I of OC-ALC Form H-486 will be completed each week, except the last week of each month, and Part II will be completed during the last week of each month.

8.4.7.3. Tanks:

8.4.7.3.1. Part I of OC-ALC Form H-485, Accumulation Site Inspection Checklist (Tanks), will be annotated daily.

8.4.7.3.2. During the last week of the month Part II of OC-ALC Form H-485 will be completed.

8.4.8. Inventory Control:

8.4.8.1. Containers. OC-ALC Form H-170, Container Inventory Log for Accumulation Sites, will be completed. A computer-generated inventory may be substituted if all required information is included.

8.4.8.2. Tanks. OC-ALC Form H-132, Tank Inventory Log for Accumulation Sites, will be completed.

8.4.9. Record Keeping:

8.4.9.1. During the first week of each month, the four above described forms, used the previous month, will be sent to the UEC.

8.4.9.2. The supervisor of the generating unit shall review and sign the four above described forms before they are sent to the UEC.

8.4.9.3. Copies of the above described forms shall be maintained by the generating unit for at least one year, and be readily available for inspection.

8.4.9.4. The UEC will review the original forms for problem trends, maintain them in an orderly manner for three years, and keep them on hand for inspection.

8.4.9.5. A copy of the ACCS Approval Package shall be readily available for inspection at the generating unit.

8.4.9.6. The supervisor will maintain job descriptions and training records until closure for all current personnel and for three years for former personnel.

8.4.10. Closure of an Accumulation Site:

8.4.10.1. When operations cease at an ACCS all contaminated equipment, structures, and soil will be properly disposed of, or decontaminated.

8.4.10.2. If tank systems are involved a closure plan will be submitted to EMC describing how the tanks, containment systems, associated equipment, and surrounding soil will be disposed of, or decontaminated.

8.4.10.3. EMC will be notified in writing at least one month prior to closure of a container operation, and be supplied with a closure plan at least three months prior to closure of a tank operation.

8.4.11. Training. All personnel involved in hazardous waste management will receive training pursuant to their assigned duties within six months of their assignment, and on an annual basis, as outlined in Part 13 of this instruction.

8.5. Immediate Removal Location (IRL) Operating Requirements:

8.5.1. Operating Approval. Before operating a new Immediate Removal Location, obtain approval from EMC according to Part 6 of this instruction.

8.5.2. Physical Plan. Sufficient space must be allowed to transfer waste into a truck or containers without blocking emergency response or contingency egress routes.

8.5.3. Safety and Preparedness:

8.5.3.1. Fire protection will be provided according to paragraph 8.2.2.8.

8.5.3.2. An internal communication or alarm system will be provided within easy access distance to warn personnel of an emergency situation.

8.5.3.3. A telephone or similar device capable of summoning emergency assistance from the local fire department or response team will be within easy access distance.

8.5.4. Management of Holding Devices:

8.5.4.1. Wastes will be placed either in containers that meet DOT specifications for those wastes (See 49 CFR 173.), or trucks that have proper licenses.

8.5.4.2. All holding devices shall be removed from the IRL within three days (72 hours) after having waste placed into them.

8.5.4.3. Before moving holding devices from the site all sealing mechanisms (locking rings, bung caps, bolts and nuts) will be installed and tightened.

8.5.5. Waste Identification. Wastes being transported directly to off-site TSDFs shall be identified in accordance with Attachment 1 of this instruction before transfer into a

holding device. Those being moved to the HWMF in containers may be analyzed there, or at the IRL, whichever is most practical.

8.5.6. Marking and Labeling:

8.5.6.1. Containers being shipped off-site will be affixed with a completed Hazardous Waste shipping label, and proper hazard labels. The date of waste transfer into the containers will be the "Accumulation Start Date."

8.5.6.2. For those containers being moved to the HWMF the date of waste transfer into the containers shall be marked as the "Filled Date" on OC-ALC Form O-141.

8.5.6.3. If the shipment weighs more than 1000 pounds, the transporter must be offered DOT approved placards. See 49 CFR Part 172.500.

8.5.7. Inspections. When waste is transferred into holding devices Part I of OC-ALC Form H-487 will be completed to indicate any spills, leaks, damage to equipment, or other problems that occur, and the corrective action taken.

8.5.8. Inventory Control:

8.5.8.1. When waste is transferred into holding devices Part II of OC-ALC Form H-487 will be completed. Leave "Replacement Serial Number" blank. List all drums under "Container Serial Number" continuing into Part III if necessary. If waste is placed directly into a truck make note in Part III stating (1) "name of transporter" and (2) "vehicle license tag number."

8.5.8.2. When hazardous waste is shipped off-site it must be accompanied by a properly completed and signed Manifest (EPA Form 8700-22). Coordinate with EMC when preparing this document.

8.5.9. Record Keeping:

8.5.9.1. During the first week of each month, OC-ALC Forms H-487 used the previous month will be sent to the UEC.

8.5.9.2. The supervisor of the generating unit shall review and sign OC-ALC Forms H-487 before they are sent to the UEC.

8.5.9.3. Copies of OC-ALC Forms H-487 shall be maintained by the generating unit for at least one year, and be readily available for inspection.

8.5.9.4. The UEC will review the original forms for problem trends, maintain them in an orderly manner for three years, and keep them on hand for inspection.

8.5.9.5. A copy of the IRL Approval Package shall be readily available for inspection at the generating unit.

8.5.9.6. The supervisor will maintain job descriptions and training records until closure for all current personnel and for three years for former personnel.

8.5.9.7. EMC will file and maintain manifests.

8.5.10. Closure. The generating organization shall notify EMC in writing if the IRL will no longer be used.

8.5.11. Training. All personnel involved in hazardous waste management will receive training pursuant to their assigned duties within six months of their assignment, and on an annual basis, as outlined in Part 13 of this instruction.

9. PROCEDURES FOR TURN-IN OF HAZARDOUS WASTE BY GENERATORS.

When a generator releases immediate control (but not ultimate responsibility) of a hazardous waste to another person, a "Trail of Records" must be established using the following procedures:

NOTE: *All Tinker AFB organizations will design their hazardous waste management program around use of the HWMF.*

9.1. Container Turn-in through the Hazardous Waste Management Facility (HWMF).

9.1.1. Turn-in of Waste in 55-gallon Drums Obtained from the HWMF.

NOTE: *The following assumes that approval to accumulate has been obtained, and drums have been issued as outlined in paragraph 6.8.*

9.1.1.1. When a container becomes full, the generator shall mark the Filled Date on OC-ALC Form O-141 (on the container), using an indelible pen, and on OC-ALC Form H-487, Part II. Sealing mechanisms shall be installed and tightened.

9.1.1.2. The container will be moved to the HWMF within three days (72 hours) after the Filled Date between the hours of 0700 and 1500 on weekdays. Properly trained personnel, using safe handling practices and proper equipment will accomplish movement of containers.

NOTE: *Partially filled drums will be accepted only in unusual circumstances such as: closure of a management site, spill clean-up, cessation of generating process, to avoid violation of three-day turn-in rule, or full drum would have excessive weight. If this becomes necessary, note reason for partially filled drum in Part III (Comment) of OC-ALC Form H-487.*

9.1.1.3. If the HWMF drum pick-up service is used, the generator must call the HWMF at extension 43285 no later than 1400 hours to receive same day service.

NOTE: Use of the HWMF pick-up service does not relieve the generator's responsibility to meet the three-day limit. Plan ahead for long weekends! Drums with Filled Dates on Friday must arrive at the HWMF by Monday!

9.1.1.4. If a replacement drum is needed, call the HWMF at extension 43285. The HWMF will prepare OC-ALC Form H-266 as outlined in paragraph 6.8.

NOTE: If prior arrangements are made, a newly issued container will be delivered by the HWMF when a full container is picked up. However, the generator is responsible for ensuring that containers are available at the management site.

9.1.2. Turn-in of Wastes not in Drums Obtained from the HWMF.

NOTE: The intention of this paragraph is for unusual circumstances such as spills of unknown materials; clean-out of a chemical storage cabinet; hazardous materials in open, partially emptied, or leaking containers; or other unexpected generation of waste.

9.1.2.1. Characterize the Waste.

NOTE: Until characterization is complete waste must be contained using rules in paragraph 7.1.3 through 7.1.10 and be labeled with a descriptive name.

9.1.2.1.1. Gather the following information: Name of Material, Manufacturer, Material Safety Data Sheet (MSDS), or chemical analysis, Quantity, Weight of packaged material if possible, Point of Contact, Routing Symbol, Telephone Extension, Building and Location

9.1.2.1.2. If MSDS or chemical analysis is not available arrange for chemical analysis as outlined in Attachment 1 to this instruction.

9.1.2.2. Obtain Turn-in Instructions.

9.1.2.2.1. Notify UEC for coordination with EMC.

9.1.2.2.2. UEC delivers characterization information to EMC.

9.1.2.2.3. EMC prepares turn-in documentation, and advises on packaging requirements.

9.1.2.3. Package as Instructed and Turn-In Waste. Options Include:

9.1.2.3.1. Obtain drum from HWMF as in paragraph 6.8, place waste into drum and return to HWMF. (Mark Filled Date).

9.1.2.3.2. DRMO contractor may come to site and package waste.

9.1.2.3.3. Use some container other than a 55-gallon drum.

9.1.2.3.4. If waste stream is large and bulky, provisions in paragraph 9.2. may be recommended.

9.2. Bulk Removal of Hazardous Waste. For removal of large quantities of waste in tank trucks, gondolas, large containers, or other such devices, the generator should:

9.2.1. Contact EMC at extension 43278 for DRMO contract removed process tanks and recyclable petroleum oil products or extension 43546 for Safety-Kleen contracted services.

9.2.2. Cooperate with and provide information to EMC and/or Service Contracts Section as necessary to properly dispose of the waste.

9.2.3. Enter appropriate information in organizational logs and files.

9.2.4. When transporting or offering for transportation off-site, any shipment of hazardous waste that weighs 1000 pounds or more, the transporter must be offered DOT approved placards. Appropriate placards can be determined by inspection of 49 CFR Part 172.500.

9.3. Hazardous Materials Disposal Procedures. Maximum use of hazardous material must be made before sending it to DRMO for disposal. Excess hazardous materials that are in original, unopened packages in good condition must be handled as follows:

9.3.1. Transfer through Tinker AFB Channels:

9.3.1.1. Contact Hazardous Pharmacy Program (HPP) to determine if authorized users at Tinker AFB or other DoD facilities could use the material.

9.3.1.2. If another user is available, follow HPP guidance for transfer of material. If an alternate user is not available, proceed with RTDS program outlined below.

9.3.2. Transfer to Reutilization, Transfer, Donation, or Sale (RTDS) Program:

9.3.2.1. Contact DRMO, who will pre-inspect the material to determine its status as a candidate for the program.

9.3.2.2. If a market currently exists for the material, DRMO will instruct the generator on turn-in procedures.

NOTE: *For acceptance by DRMO, all material turn-ins must meet DOT requirements for transport.*

9.3.2.3. If a market does not currently exist for the material, submit a memorandum to EMC requesting turn-in assistance. Include the information in paragraph 9.1.2.1.1. and a statement certifying that attempts to transfer the material through HPP, and turn-in to DRMO were unsuccessful.

9.3.2.4. Using the above information EMC will prepare a DD Form 1348-1 (Turn-In Document) for turn-in to DRMO. The generator will be notified when the turn-in document is completed.

9.3.2.5. Generator will pick-up turn-in document and deliver it and excess material to the DRMO storage yard within three (3) days of being notified that the document is complete. Generator will make prior arrangements with DRMO for delivery and ensure containers are in good condition and not leaking.

9.3.2.6. DRMO will attempt to find alternate user through the RTDS program.

9.3.2.7. If RTDS program is successful DRMO will notify EMC within 10 days to de-obligate funds represented by the turn-in document. If RTDS program is unsuccessful DRMO will declare the material a waste and proceed as follows:

9.3.3. Hazardous Waste Declaration. If and when the material fails the RTDS program, and meets the definition of hazardous waste, DRMO will proceed with disposal as follows:

9.3.3.1. DRMO will prepare waste for transport in accordance with DOT and EPA requirements.

9.3.3.2. DRMO will notify EMC that funding represented by appropriate DD Form 1348-1 is committed, and will identify the manifest used to ship the waste.

9.3.4. Disposal of Special Category Wastes.

9.3.4.1. Hazardous Materials. Those hazardous materials in open, partially emptied, or leaking containers shall be handled as in paragraph 9.1.2.

9.3.4.2. Used Batteries. Those containing Nickel/Cadmium, Lithium, Mercury, Silver, and others shall be handled as in paragraph 9.1.2. There is currently a market for Lead/Acid batteries so they may be turned-in as in paragraph 9.3.2.2. If the market disappears follow paragraph 9.1.2. Small "alkaline" batteries are

not now regulated as hazardous waste so may be disposed of as non-hazardous solid waste.

9.3.4.3. Used Oil Filters. These will be handled as hazardous waste unless procedures in the following three paragraphs have been implemented:

9.3.4.3.1. The filters will be allowed to drain for at least 12 hours.

9.3.4.3.2. The draining operation must include puncturing, crushing, dismantling, or other equivalent method that ensures removal of the oil.

9.3.4.3.3. The filters have been determined not to be "Terne-Plated." "Terne" is an alloy of tin and lead, which exhibits toxicity for lead, so must be handled as hazardous waste.

9.3.4.3.4. Properly drained filters will be collected in 55-gallon drums obtained from the HWMF, labeled "Non-Hazardous Drained Oil Filters," and returned to the HWMF for processing. Oil drained from the filters must be collected for recycling.

9.3.4.4. Medical and Pharmaceutical Waste. The State of Oklahoma does not consider waste derived from materials intended for medical or pharmaceutical use hazardous. Coordinate with EMC and Bioenvironmental (SGPB) for disposal instructions.

9.3.4.5. "Classified" Hazardous Waste. This waste will be handled according to appropriate DoD guidelines that include provisions for meeting EPA and DOT rules.

9.3.4.6. Abandoned Waste. The discovery of an unlabeled or otherwise unidentified container or other accumulation of waste will be handled as follows:

9.3.4.6.1. Report discovery to UEC responsible for that industrial area who will attempt to find the owner within that organization.

9.3.4.6.2. If unable to find the owner of the waste the UEC will report the discovery to EMC who will conduct a wider search.

9.3.4.6.3. If EMC is unable to identify the owner of the waste the discovery will be referred to the Office of Special Investigations.

9.3.4.7. Mixed Waste. This waste must be managed in accordance with both EPA and Nuclear Regulatory Commission (NRC) Rules.

9.3.4.7.1. Control the waste while on site using the appropriate management method outlined in paragraph 8.

9.3.4.7.2. Coordinate with Bioenvironmental Engineering to ensure that NRC rules are followed.

9.3.4.7.3. Ensure that the shipping manifest, LDR forms, NRC forms, and other tracking procedures are properly completed.

9.3.4.8. Polychlorinated Biphenyl (PCB) Waste. This waste must be managed in accordance with the Toxic Substances Control Act (TSCA) and EPA regulations at 40 CFR 761. Items removed for disposal must be disposed of or incinerated within one year.

9.3.4.8.1. Control PCBs and PCB items in DOT approved containers. Follow management rules in paragraph 8.2. and mark the date of first accumulation on the label (OC-ALC Form 0-141). Ensure all items contained are listed on the label. Wait for further instruction before disturbing PCB oils in non-leaking equipment.

9.3.4.8.2. Contact EMC at 44188 to coordinate proper handling of PCB waste.

10. OPERATING PROCEDURES FOR THE HAZARDOUS WASTE MANAGEMENT FACILITY (HWMF).

10.1. The purpose of this facility is multi-fold:

10.1.1. The HWMF serves as a center for processing containers of hazardous waste en-route to DRMO and off-base shipment, creating a standard for turn-in procedures at Tinker AFB.

10.1.2. Through issue of serialized containers to generators of hazardous wastes, the HWMF initiates the record trail, which documents the beginning of the "Cradle-to-Grave" hazardous waste tracking procedure.

10.1.3. The facility provides a service by supplying waste containers as needed and by relieving generators of the work of processing filled containers for off-base shipment. The generators' responsibilities are to maintain their waste streams and to follow management procedures outlined in Part 8. As an ACCS, the HWMF must follow rules for those facilities in paragraph 8.4.

10.1.4. The facility provides an avenue for recycling or disposal of empty containers. See Part 17 of this instruction for information about handling empty containers.

10.1.5. The HWMF provides for proper disposal of waste lamps as detailed in Part 19 of this instruction.

10.2. HWMF Procedures for Distribution of 55-Gallon Drums with Bar-coded Labels:

10.2.1. When drum is requested compare information on the OC-ALC Form H-266 with information in the Hazardous Waste Tracking System (HWTS).

10.2.2. If information compares, instruct HWTS to generate bar-coded label. All spaces except "Filled Date" and "Date Received" should be completed at this time.

10.2.3. If the waste to be accumulated is known to be hazardous, ensure that the words "HAZARDOUS WASTE" appear on the label.

10.2.4. Provide bar-coded label to generator to be placed on the drum when waste is accumulated. See 49 CFR 173 for container specifications.

10.2.5. Place appropriate hazard label on drum. (See 49 CFR 172 Subpart E.)

10.2.6. If information on OC-ALC Form H-266 does not compare with HWTS information instruct generator to follow:

10.2.6.1. Part 6 if waste is result of ongoing operations.

10.2.6.2. Paragraph 9.1.2. if waste is a result of one-time generation.

10.2.7. Enter appropriate information on OC-ALC Form H-266 as follows:

10.2.7.1. In Block 1 enter current date.

10.2.7.2. In Block 6 enter code numbers of labels issued.

10.2.8. Distribute OC-ALC Form H-266 as follows:

10.2.8.1. Original to be kept in files at HWMF for three years.

10.2.8.2. Copy for generator's files.

10.2.9. Notify generator that a copy of the form and the container are ready for use.

10.3. HWMF Procedures for Processing Waste Containers:

10.3.1. Operation of the Drum Pick-Up Service.

10.3.1.1. When a request for container pick-up is received (see paragraphs 9.1.1.3. and 9.1.1.4), HWMF personnel will respond within one hour to pick-up the container and move it to the HWMF.

10.3.1.2. Properly trained personnel, using safe handling practices and proper equipment shall accomplish movement of containers.

10.3.2. Accepting Containers from Management Sites.

10.3.2.1. Ensure Filled-Date is marked on OC-ALC Form O-141.

10.3.2.2. Ensure container is in good condition, with no leaks, no waste residue on top or sides, and sealing devices installed.

10.3.2.3. Ensure container is full (90% if holding liquids), or legitimate reason provided for partially filled container. (See **NOTE** at paragraph 9.1.1.2)

10.3.2.4. If above items are in compliance; mark the Date Received on OC-ALC Form O-141 using an indelible pen. This date is the Accumulation Start Date.

10.3.2.5. If above requirements are not met, do not accept container or mark Date Received.

10.3.3. Determining Actual Contents of Containers:

10.3.3.1. Each drum shall be sampled or inspected to determine actual contents.

10.3.3.2. Immediately after a sample is taken from a container an OC-ALC Form O-140, Chemical Waste Sampling Label, will be marked and affixed to the container.

10.3.3.3. Samples will be collected and analyzed in accordance with Attachment 1 to this instruction.

10.3.3.4. Results of analysis or inspection shall be entered into the Hazardous Waste Tracking System using the bar code on that container.

10.3.3.5. If waste identification differs significantly from OC-ALC Form O-141 or OC-ALC Form H-266, generator will be contacted for explanation.

10.3.4. Holding Procedures On-Site:

10.3.4.1. Containers shall not remain on-site longer than 90 days from the "Date Received" (Accumulation Start Date) marked on OC-ALC Form O-141.

10.3.4.2. Management procedures outlined in paragraphs 8.4.2. through 8.4.4., 8.4.6.2., and 8.4.7. through 8.4.10. will be followed.

10.4. Turn-In of Containers to DRMO:

10.4.1. For each container EMC shall prepare, through the HWTS, a DD Form 1348-1 annotated with the information in paragraph 10.4.2, a funding code, and initials of a certifying EMC official.

10.4.2. In addition to the unique bar-code, description, origin, process, and waste analysis information previously entered into the HWTS, the following information pertaining to that container and its contents shall be entered into the system: DOT shipping information, EPA waste codes, document number, weight in pounds of drum and waste, and disposal costs. Disposal costs will be determined according to the current DRMO disposal contract.

10.4.3. Instruct the HWTS to print a DD Form 1348-1 for each container being turned-in to DRMO.

10.4.4. After arranging an appropriate time, deliver the certified DD Forms 1348-1 and corresponding waste containers to the DRMO permitted management site.

10.4.5. Properly trained personnel, using safe handling practices and proper equipment shall accomplish movement to DRMO.

10.4.6. Appropriate entries will be made in waste inventory logs and organizational files according to paragraphs 8.4.8 and 8.4.9.

11. MANAGEMENT OF PERMITTED STORAGE FACILITY (DRMO):

11.1. Operating Permit. The "Part B" RCRA Operating Permit that is jointly issued by EPA and DEQ controls operation of permitted storage facilities. Because the facility is located entirely on Tinker AFB property it operates under the same EPA ID number as Tinker AFB: OK1571724391. The Defense Reutilization and Marketing Office (DRMO) is the operator of the permitted facility. Modifications to the "Part B" permit will be coordinated through EMC.

11.2. Physical Plan. The "Part B" Permit describes in detail the location and construction of the permitted facilities. Containers are the only holding devices allowed by the permit.

11.3. Specific Management Requirements. Refer to the "Part B" Permit for hazardous waste management and handling requirements at the permitted storage facility. See paragraph 3.19 of this instruction for coordination with Environmental Management and Tinker AFB.

12. OFF-SITE TRACKING OF HAZARDOUS WASTE SHIPMENTS. This section is concerned with the preparation of containers for off-site shipment of hazardous waste, and the tracking procedures to be used after shipment to a designated facility. It completes the trail of records that previous parts have followed only as far as DRMO, or Service Contracts Section.

12.1. Container Selection. All containers shipped off-site must meet DOT specifications for the waste contained. See 49 CFR 173.

12.2. Container Preparation. Before containers are transported off-site they will be marked in accordance with 49 CFR 172 Subpart D, 40 CFR 262.32(b), and labeled in accordance with 49 CFR 172 Subpart E.

12.2.1. Marking. Marking information may be stenciled in one-inch block lettering in paint on the side of the container. However, the use of a "hazardous waste shipping label" made of a durable material such as vinyl, and of a contrasting color, to combine DOT and EPA information is recommended. Information will be written on the label with an indelible marker. See example in Figure 8.

ITEM	EXAMPLE
EPA WORDS	HAZARDOUS WASTE
EPA ADDITIONAL WORDS	FEDERAL LAW PROHIBITS IMPROPER DISPOSAL. IF FOUND---ETC.
DOT SHIPPING NAME	"RQ" WASTE PAINT RELATED
MATERIAL	
HAZARD CLASS	3
PACKING GROUP	III
DOT ID NUMBER	UN1263
GENERATOR INFORMATION	OC-ALC/EM TINKER AFB OKC OK 73145
EPA ID NUMBER FOR BASE	OK1571724391
EPA WASTE NO.	D001, D035, F005
ACCUMULATION START DATE	02 JUNE 94
MANIFEST DOCUMENT NO.	0025858

Figure 8. Example of Label Information

12.2.1.1. EPA WORDS. Enter the words specified in 40 CFR 262.32(b).

12.2.1.2. PROPER DOT SHIPPING NAME. Enter the proper DOT shipping name as found in 49 CFR Part 172.101 (Column 2).

12.2.1.3. HAZARD CLASS. Enter the DOT hazard class, as found in 49 CFR Part 172.101 (Column 3) on the same line.

12.2.1.4. PACKING GROUP. Enter the DOT packing group as found in 49 CFR Part 172.101 (Column 5) on the same line.

12.2.1.5. DOT ID NUMBER. Enter the DOT identification number as found in 49 CFR Part 172.101 (Column 4).

12.2.1.6. GENERATOR INFORMATION. Enter the organization symbol for the Environmental Management Directorate, installation name, and address. This may be preprinted on the label.

12.2.1.7. EPA ID NUMBER. Enter the EPA identification number for Tinker AFB (OK1571724391). This may also be preprinted.

12.2.1.8. EPA WASTE NO. Enter applicable four digit codes for the hazardous waste (found in 40 CFR Part 261, Subparts C and D).

12.2.1.9. ACCUMULATION START DATE. See definition in Attachment 2 to this instruction.

12.2.1.10. MANIFEST DOCUMENT NUMBER. Enter the number from Block 1, or from Block A, of the manifest that includes this container when shipped off-site.

12.2.2. Hazard Labels. If not already present, hazard labels, including bung labels if necessary, as specified in 49 CFR 172 Subpart E will be affixed to the container.

12.3. Shipment Documentation (Hazardous Waste Manifest, EPA Form 8700-22). A manifest must accompany a shipment of hazardous waste being transported on a public highway. A manifest is the shipping paper for hazardous waste. As of 20 September 1984, all generators are required to use the Uniform Hazardous Waste Manifest. Each state may have a version of the Uniform Hazardous Waste Manifest. If so, the manifest for the state in which the designated facility is located should be used.

12.3.1. The blocks on the manifest are completed as follows:

12.3.1.1. BLOCK 1: Enter the generator's U.S. EPA ID Number and manifest document number.

12.3.1.2. BLOCK 2: Enter the total number of pages used to complete the manifest.

12.3.1.3. BLOCK 3: Enter the generator's name and mailing address.

12.3.1.4. BLOCK 4: Enter a generator phone number for general information purposes. A 24-hour emergency response telephone number will also be placed here, in Block 15 below, or in some other prominent, highlighted, location.

12.3.1.5. BLOCK 5: Enter the company name of the initial transporter of the waste.

12.3.1.6. BLOCK 6: Enter the initial transporter's U.S. EPA ID Number.

12.3.1.7. BLOCK 7: Enter the second transporter's company name, if needed.

12.3.1.8. BLOCK 8: Enter the second transporter's U.S. EPA ID Number.

12.3.1.9. BLOCK 9: Enter the designated facility name and site address.

12.3.1.10. BLOCK 10: Enter the U.S. EPA ID Number for the designated facility.

12.3.1.11. BLOCK 11: Enter the Proper Shipping Name, Hazard Class, Packing Group, and DOT ID Number. Use Lines a. through d. for different waste streams. Use a Continuation Sheet (EPA Form 8700-22A) if needed.

12.3.1.12. BLOCK 12: Enter the number of containers and type (DM = drum, CW = wooded boxes, etc.). See 40 CFR 262, Table I.

12.3.1.13. BLOCK 13: Enter the total quantity of waste described.

12.3.1.14. BLOCK 14: Enter the unit (wt/vol). See 40 CFR 262, Table II.

12.3.1.15. BLOCK 15: Enter special handling instructions and additional information. Emergency Response number may be here.

12.3.1.16. BLOCK 16: Only authorized representatives of the generator may sign this certification for accuracy of information on the manifest, and for compliance with waste minimization requirements.

12.3.1.17. BLOCK 17: The initial transporter's acknowledgment of receipt of the waste shipment.

12.3.1.18. BLOCK 18: The second transporter's acknowledgment of receipt of the waste shipment.

12.3.1.19. BLOCK 19: If the designated facility finds a discrepancy between the waste actually received and information on the manifest it will note the

discrepancy in this space and contact the generator. If the discrepancy cannot be resolved within 15 days DEQ must be notified.

12.3.1.20. BLOCK 20: An authorized representative of the designated facility shall sign in this space to acknowledge receipt of the hazardous waste shipment. One copy of the signed manifest will be given immediately to the transporter. Another copy will be sent to the generator within 30 days.

NOTE: *Information in Blocks A through K, and L through R on the Continuation Sheet, is not required by Federal statutes but is required by DEQ, and local practice.*

12.3.1.21. BLOCK A: If a State requires a particular numbering system place the appropriate number here.

12.3.1.22. BLOCK B: DEQ requires Tinker's Oklahoma ID number (55066) in this space. If another State requires its ID for Tinker in this space place the Oklahoma number in Block 15.

12.3.1.23. BLOCK C: Place the transporter's Oklahoma ID No. here.

12.3.1.24. BLOCK D: This should be a 24-hour response number.

12.3.1.25. BLOCK E: Place the transporter's ID number for the State in which the shipment is accepted in this space.

12.3.1.26. BLOCK F: Same as Block D.

12.3.1.27. BLOCK G: If the State in which the designated facility is located has an ID number for that facility, place it here.

12.3.1.28. BLOCK H: DEQ requires this entry. It should be a 24-hour response number.

12.3.1.29. BLOCK I: DEQ requires that applicable EPA waste codes be placed in these spaces for each line.

12.3.1.30. BLOCK J: No required entries, however, information to help identify and track the waste in Block 11 are usually placed here.

12.3.1.31. BLOCK K: No Oklahoma required entries, but some States may want applicable codes from 40 CFR 264, Appendix I, Table 2.

12.4. Responsibility for Originating the Manifest: Federal and state regulations assign responsibility for originating or signing manifests on the generator. At Tinker AFB the EM Directorate has been delegated to act as generator for all base activities. The EM Directorate has further delegated authority to originate manifests as follows:

12.4.1. DRMO originates manifests for all shipments through the DRMO disposal contract.

12.4.2. Environmental Compliance Division or Service Contracts Section originates manifests for shipments through a contract awarded by Service Contracts Section.

12.4.3. All other organizations, and their contractors, needing to ship hazardous waste off base shall coordinate with EMC, extension 44585 or 43278.

12.4.4. DRMO and Service Contracts Section will request delegation from Environmental Management Directorate for their personnel who originate manifests.

12.4.5. All personnel who receive delegation of authority to sign Hazardous Waste Manifests and Land Disposal Restriction forms must maintain currency with hazardous waste training requirements outlined in paragraph 13. They must also maintain currency with DOT training requirements outlined in 49 CFR 172 subpart H, which requires refresher training at least once every three years.

12.5. Tracking the Manifest:

12.5.1. The generator's copy of the manifest will be delivered to EMC within 2 hours after the initial transporter accepts shipment. For after duty hours see paragraph 3.19.6.

12.5.2. EMC will monitor return of manifest signed by designated facility, then:

12.5.3. When copy of manifest signed by designated facility is received, place with generator's copy in files and maintain for at least three years.

12.5.4. Exception Report:

12.5.4.1. If a copy of the manifest signed by the designated facility is not received within 35 days after acceptance by the initial transporter, the transporters, the designated facility, and/or others, will be contacted to verify the status of the waste.

12.5.4.2. Submit Exception Report (40 CFR 262.42) to DEQ if manifest copy signed by designated facility is not received within 45 days after initial transporter accepts the waste shipment.

12.5.4.3. Exception Reports will be kept on file for at least three years after the due date of the reports.

12.6. Shipment Documentation (Land Disposal Restriction Notification and Certification):

12.6.1. If the waste being shipped does not meet applicable treatment standards set forth in Subpart D of 40 CFR 268 or if it exceeds prohibition levels in 40 CFR 268.32 or RCRA 3004(d), the receiving facility must be notified in writing of the appropriate treatment standards and other information set forth in 40 CFR 268.7(a)(1).

12.6.2. If the waste being shipped is subject to restrictions but can be land disposed without further treatment, the receiving facility must be notified as above, and also be provided with a written certification stating that the waste meets applicable treatment standards as outlined in 40 CFR 268.7(a)(2).

NOTE: The certification must be signed by an authorized representative and state the following: "I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment."

12.6.3. The same person who prepares the manifest shall prepare the above described notification and certification documents. The documents shall accompany the manifest to the designated facility. A copy will be filed with the manifest signed by the designated facility for record keeping purposes.

12.7. Certificate of Disposal (COD). This document certifies that the waste was treated, or disposed of in a proper manner, where, when, and by what method.

12.7.1. All hazardous waste disposal contracts will include a clause requiring delivery of CODs within one month after treatment or disposal takes place.

12.7.2. EMC will monitor return of COD.

12.7.3. If not received within six months after initial transporter accepted the waste, the designated facility will be contacted.

12.7.4. When COD is received; it will be filed with the appropriate manifest.

13. HAZARDOUS WASTE MANAGEMENT TRAINING. Personnel involved in hazardous waste management must complete a program of instruction that enables them to perform their duties in a manner that meets Federal, State, Department of Defense, Air Force, and local laws, regulations, and requirements. EPA requirements are outlined in 40 CFR 264.16 for permitted management sites, and 40 CFR 265.16 for non-permitted management sites. Hazardous waste generators are included by reference at 40 CFR 262.34(a)(4).

13.1. AFI 32-7042, Solid and Hazardous Waste Compliance, 12 May 1994, states, "All personnel who work with HW and their supervisors must receive and successfully complete HW training before working with HW" (paragraph 2.3.1.). Initial training will be provided within six months of an assignment involving exposure to hazardous waste. Untrained personnel must work under the direct supervision of trained personnel. The supervisor will provide site-specific procedures.

13.2. The following elements of training are considered essential (Figure 2.1. AFI 32-7042):

13.2.1. Introduction to the Resource Conservation and Recovery Act (RCRA).

13.2.2. Identification of hazardous waste.

13.2.3. Accumulation point management.

13.2.4. Container use, marking, and labeling, and on-base transportation.

13.2.5. Waste turn-in procedures.

13.2.6. Manifesting and off-base transportation of hazardous waste.

13.2.7. Spill prevention and emergency response.

13.2.8. Waste reduction.

13.2.9. Personnel safety and health and fire safety.

13.3. Air Force Materiel Command announced a "Three Level" training requirement in its memorandum describing a "Standard Hazardous Waste Management System" (22 December 1994). The "Three Level" system is defined for Tinker AFB in paragraphs 13.4. through 13.6.

13.4. Level One Training:

13.4.1. Description: Intense formal contract instruction that in the initial phase acquaints the student with the details of the Resource Conservation and Recovery Act, regulations in 40 CFR 260 through 279, applicable State Laws and regulations, DoD, Air Force, and local requirements; and in annual refresher classes, updates the student on changes to those rules.

13.4.2. Who Needs This Training: Those persons who manage and are expected to be a source of knowledge about the hazardous waste management program at Tinker AFB. These include, but are not limited to the following: EMC HW Program Managers, Unit Environmental Coordinators, permitted facility managers, JAV attorney for hazardous waste, and instructors of the Level Two formal classroom instruction.

13.4.3. Method Of Obtaining Training: This is a three-part procedure involving attendance in Level One formal contract instruction at least once every three years, attendance in Level Two formal instruction in years when Level One training is not received, and personal access to and study of State and Local laws, regulations, and rules.

13.5. Level Two Training:

13.5.1. Description: Formal classroom, and on-the-job, instruction that would acquaint the student with the training elements outlined in AFI 32-7042, Figure 2.1. and how they apply to the student's duties at Tinker AFB.

13.5.2. Who Needs This Training: Those persons actually managing hazardous waste at the shop level. These include IAP and ACCS HW managers, inspectors of management sites, those who prepare and sign manifests, prepare reports and keep records, transport hazardous waste containers, respond to spills, collect and analyze samples, make decisions about what is a hazardous waste, and the supervisors of those persons.

13.5.3. Method Of Obtaining Training: This is a three-part procedure involving the following steps: annual attendance in Level Two formal classroom instruction. (Level Two training is currently provided by 72 MSS/DPE. Substitute training must include Tinker specific procedural information.), participation in periodic safety briefings conducted by their unit, and personal access to and study of this TAFB Instruction, and any organizational Operating Instructions on hazardous waste management.

13.6. Level Three Training:

13.6.1. Description: General awareness training that summarizes RCRA, acquaints the students with their responsibility under that law, and explains the possible consequences of not paying proper attention to that responsibility.

13.6.2. Who Needs This Training: Two groups of personnel need this type of training:

13.6.2.1. Group 1: The Center Commander, Directors/Deputy Directors and Division and Branch Chiefs who have hazardous waste management responsibilities.

13.6.2.2. Group 2: Those employees who work in shops where hazardous waste is generated, but who are not directly involved in management of the waste. (For example, an employee whose only involvement is to place waste into an IAP).

13.6.3. Method Of Obtaining Training: Training for each group is as follows:

13.6.3.1. Group 1: A video provided by EMC, and a short program status briefing prepared and presented annually by the UEC of the organization.

13.6.3.2. Group 2: A Safety Briefing supplement approved by EMC presented at least once per quarter during regularly scheduled safety briefings by the person who normally conducts the briefing. The briefing will include a review of the items on the Operational Checklist and Emergency Response Plan.

13.7. Scheduled Training:

13.7.1. Supervisors are responsible for ensuring their employees are properly trained.

13.7.2. Supervisors will contact the organizations training manager to request training. The training manager will then contact 7MSS/DPE to schedule personnel for training.

13.8. Training Records: Supervisors shall maintain training records for their employees. UECs shall maintain a tracking list of personnel who need training for their organization.

13.8.1. Records should include the type of training, description, date, and source of training, score, if available, and projected date of refresher training.

13.8.2. Training records must be maintained as long as the individual is associated with or for three years after the individual is no longer working with, hazardous waste. The records may be kept in hard copy or electronic format.

14. ENVIRONMENTAL MANAGEMENT COMPLIANCE MONITORING:

14.1. Management Site Approvals. Whenever a request is received in accordance with paragraph 6.3 EMC will conduct a pre-approval inspection as follows:

14.1.1. Approval inspections are scheduled as soon as possible after request is received.

14.1.2. EMC prepares and distributes a list of inspection sites to Bioenvironmental Engineering, Ground Safety, and the Fire Department.

14.1.3. The approval inspection team will inspect sites on the list in accordance with requirements outlined in paragraphs 8.1, 8.3, 8.4, and 8.5.

14.1.4. After reviewing comments from all team members EMC will prepare an authorization letter as described in paragraph 6.5.

14.2. Periodic Inspections of Organization HW Programs:

14.2.1. Hazardous Waste Site Inspection Team (HWSIT) will inspect all organizations semi-annually.

14.2.2. The HWSIT will consist of hazardous waste trained personnel including an EMC representative, and one or more UECs. The primary contact will be the UEC of the organization being inspected.

14.2.3. EMC will develop the inspection checklists, schedule UECs on a rotating basis to conduct inspections, and maintain results of the inspections.

14.2.4. The inspection will cover all aspects outlined in this instruction concerning the organization's hazardous waste management program including: container management, self-inspections, waste turn-in procedures, record keeping, training, contingency planning, waste stream identification, and reporting.

14.2.5. Inspection reports will be prepared under the direction of EMC and sent to organization commanders.

14.2.6. A reply to EM will be expected within 30 days concerning corrective actions for any discrepancies found.

14.3. Hazardous Waste Working Group (HWWG):

14.3.1. Purpose. The Hazardous Waste Working Group provides a forum for coordination, dissemination of information, and serves as a steering group to guide the overall conduct of the hazardous waste management program.

14.3.2. Role. The role of the HWWG is to review hazardous waste management policy and make recommendations based upon operational experience. EM uses this forum to present policy, disseminate information, and monitor program effectiveness. Other organizations use this forum to stay current with base policy, call attention to areas of the program that are no longer effective, and make recommendations.

14.3.3. Membership. The Director of Environmental Management appoints the chairperson of the HWWG. That person would normally be the manager of the Hazardous Waste Management Program within the EM Directorate. Members of the HWWG include the UECs, representatives from Contracting, Legal, DRMO, Bioenvironmental,

the Fire Department, and Safety, who are appointed by their respective organizational directors. These persons must be knowledgeable of hazardous waste management requirements in their organization. Others involved in hazardous waste management are welcome to attend.

14.3.4. Responsibilities. The Chairperson, as an appointee of the EM Director, ensures that EM policies are represented at HWWG meetings. Other members ensure that responsibilities outlined in this instruction are carried out in their organizations.

14.3.5. Operating Procedure. Meeting minutes will be recorded and a copy of those minutes will be distributed to members no later than the next meeting. An agenda will be distributed before the start of the meeting. Unless otherwise announced, meetings will be held monthly, on the same day of each month.

14.4. Coordination with Regulatory Agencies:

14.4.1. EMC will serve as the point-of-contact for hazardous waste issues raised by regulatory agencies such as EPA, DEQ, and Air Force IG teams.

14.4.2. Reports to regulatory agencies such as the Biennial Report to EPA, monthly and quarterly reports to DEQ and status reports to AFMC will be prepared by EMC.

14.5. Facility-Wide Documents. Documents relating to the hazardous waste program for Tinker AFB will be prepared and updated by EMC. Including this instruction and the "Part B" RCRA Operating Permit.

14.6. Hazardous Waste Database. EMC will maintain a database of waste streams, chemical analysis, waste shipments, TSDFs used, and other information for all generating activities at Tinker AFB.

14.7. EMC Review of DRMO Manifests:

14.7.1. At least three working days prior to shipping hazardous waste off-site, manifests for that waste shall be prepared by DRMO and delivered to EMC for review.

14.7.2. EMC shall review the manifests with special emphasis on waste identification, waste codes, shipping names, quantities, and costs as outlined on the DD Forms 1348-1 corresponding to the wastes being shipped.

14.7.3. Any differences found will be resolved between EMC and DRMO before the waste is shipped off-site.

14.8. Environmental Compliance Assessment and Management Program (ECAMP). This is an Air Force-wide program that serves as a self-auditing mechanism to determine the status of compliance with Federal, State, Local, DoD, and Air Force rules concerning environmental areas. Hazardous waste management typically receives a large amount of attention during these audits.

14.8.1. An "Internal ECAMP" involves only Tinker AFB personnel. An "External ECAMP" involves personnel from HQ AFMC/CE and other Air Force bases.

14.8.2. The EM Directorate will organize and direct internal ECAMPs. Assistance may be requested from any organization whose activities impact environmental areas.

14.8.3. External ECAMPs will be organized and led by HQ AFMC/CE with support from a contractor. Tinker AFB EM will assist and facilitate coordination with Tinker organizations.

14.8.4. External ECAMPs will be conducted every three years. Internal ECAMPs will be conducted in all intervening years.

14.8.5. An ECAMP report will be prepared and sent through the Center Commander and the Major Command to Air Force headquarters.

14.8.6. Any violations discovered will require a monthly status report until corrective action is complete.

15. PREPAREDNESS AND SPILL PREVENTION:

15.1. HazMat Team. A fully trained and equipped hazardous materials emergency response team is located at the Fire Department on Tinker AFB. In any fire, spill, or other emergency the HazMat Team can be contacted by calling **"911"**.

15.2. Required Equipment at Management Sites:

15.2.1. At IAPs and CPs. The following items shall be available to each of these sites: granular absorbent material, shovel and/or broom, dust pan, spill container (55-gallon drum), disposable coveralls or apron, gloves, face shield, and fire extinguisher.

15.2.2. At ACCSs, and IRLs: In addition to the items in para. 15.2.1 the following shall be available: absorbent blankets and/or tubular diking items, rubber boots, overpack drums.

15.2.3. Posted Warning Signs:

15.2.3.1. In the immediate vicinity of each IAP and ACCS a sign shall be posted displaying the following words: "DANGER," Hazardous Waste Management Site," "In Case of Fire or Spill call 911."

15.2.3.2. At CPs and IRLs the containers hazard labels will serve this purpose.

15.2.3.3. "No Smoking" signs will be posted in the vicinity of flammable wastes.

15.2.4. Secondary Containment Requirements. Tinker AFB Instruction 32-7006 outlines requirements for secondary containment around tanks and containers of liquid fuels, oils, hazardous waste, and other materials.

15.3. Agreements with Off-Base Organizations:

15.3.1. For fire emergencies Tinker AFB has signed mutual assistance agreements with the Fire Departments of Oklahoma City, Midwest City, and Del City.

15.3.2. For medical and ambulance assistance Tinker AFB has access to hospitals and other facilities in the regional area through an arrangement with the Veterans Affairs Medical Center in Oklahoma City.

15.3.3. For support in incidents involving explosive ordnance, agreements have been made with the 61st Ordnance Detachment at Ft. Sill, OK and with the Oklahoma County Sheriff's Department.

16. CONTINGENCY PLANNING:

16.1. Name. The contingency plan for Tinker AFB is outlined in OC-ALC Plan 19-2, Tinker AFB Spill Prevention and Emergency Response Plan for Hazardous and Extremely Hazardous Substances.

16.2. Availability:

16.2.1. Copies of this plan have been distributed to all major staff offices, and associate organizations at Tinker AFB, as well as to local communities and civic organizations.

16.2.2. A copy of OC-ALC Plan 19-2 is required near an external communication device (telephone) at all Accumulation Sites and at the Permitted Facility.

16.2.3. A copy of the Site Specific Contingency Plan included in OC-ALC Plan 19-2 for a particular management site will be prominently posted at that site.

16.3. Plan Summary:

16.3.1. Spill response procedures are outlined in detail in the "Basic Plan." Initial response actions and emergency contacts are summarized in the introductory material at the front of this Hazardous Waste Management Instruction.

16.3.2. The first part of the "Operations" section of OC-ALC Plan 19-2 discusses procedures to prevent spills from happening.

16.3.3. A section on Site Specific Contingency Plans contains separate plans for each site where significant amounts of hazardous material, including waste, are stored. These plans include a list of SARA Title III chemicals stored there, and maps showing the area of potential exposure.

16.3.4. An inventory of spill response equipment for major spills is outlined in Appendix 6 of OC-ALC Plan 19-2.

16.3.5. Notification, Record Keeping, and Reporting Requirements are outlined in Appendices 7 and 8 of OC-ALC Plan 19-2.

16.3.6. A final section in OC-ALC Plan 19-2 contains indexed maps of Tinker AFB to rapidly locate the site of a spill.

16.4. Required Reports. The on-scene coordinator will ensure that the incident reporting requirements identified in the basic plan portion of OC-ALC Plan 19-2 are completed. The on-scene coordinator will also ensure that the emergency and post-emergency notifications required by 40 CFR 264.56 and Oklahoma Administrative Code section 252:200-13-2 are made. Records of the incidents including initial spill response records will be maintained in the operating record at the facility until closure. Any implementation of the contingency plan will be documented in the Tinker Command Post log, the Tinker Fire Department log, and the pollution incident log maintained by OC-ALC/EMCS. Also, within 15 days a report will be submitted as required by 40 CFR 264.56(j).

17. EMPTY CONTAINER HANDLING PROCEDURES. Most containers that previously held materials used in various operations at Tinker AFB can be disposed of as non-hazardous waste if they meet the definition of "empty" in 40 CFR 261.7. In view of base-wide efforts toward waste minimization and to reduce disposal costs, the procedures outlined below will be followed. While the containers meet the EPA definition of "empty" they must still be given special handling consideration because large numbers of them are frequently accumulated in one place. This increases the threat of fire and release of a toxic substance. The Container Processing Facility (CPF) in Building 3125 has been established to facilitate these procedures.

17.1. Containers with more than one-inch of hazardous residual material (that would meet the definition of hazardous waste), or more than three percent by weight of the total capacity of the container, are not considered empty and must be handled as a hazardous waste.

17.2. Industrial shops will handle empty containers as follows:

17.2.1. All empty 55-gallon metal and plastic containers will be labeled with a 6-inch by 6-inch vinyl "EMPTY" label (NSN 7690012406572). The correct stock number and chemical name of the material previously held, generating functional address symbol, and telephone extension will be written with an indelible ink marker (NSN 7520010083873). The drums shall be placed on pallets, four drums per pallet, and taped together to prevent falling. Call extension 43285 to arrange for container pick up by the CPF contractor.

17.2.2. Other metal containers greater than five (5) gallons in size, and plastic containers five (5) gallons or greater in size, will be marked with the word "EMPTY," chemical name of the material previously held, the generating organization's functional address symbol, and telephone extension. These containers shall be taken to the CPF by the generator. Call the CPF (extension 43285) to arrange a convenient time.

17.2.3. The residue in small containers (5 gallons or less for metal, less than 5 gallons for plastic) will be air dried, allowing volatiles to escape and any remaining residue to attain a non-dripping condition. The drying area must be well ventilated and designed to contain any solid or liquid residue that may drain from the containers. Such drained residue shall be disposed of properly. No more than two 55-gallon drums, or equivalent volume, of dried containers will be accumulated on site. If accumulation devices are used they shall be labeled as: "Dried Empty Containers." Dried plastic containers shall be disposed of in solid waste dumpsters. Dried metal containers shall be taken to the CPF by the generator and placed into a designated holding device. Call the CPF at Building 3125 (Extension 43285) to arrange a convenient time. (552 ACW may maintain a similar facility for its own use).

17.2.4. Empty aerosol cans shall be accumulated separately in devices labeled "Empty Aerosol Cans" then delivered into a designated container at the CPF.

17.2.5. Empty hand-held compressed gas cylinders will be accumulated separately in accumulation devices labeled "Empty Hand-Held Compressed Gas Cylinders." These shall be delivered into a designated container at the CPF.

NOTE: Partially full aerosol cans and gas cylinders are handled as excess material.

17.3. The CPF Will Handle Empty Containers as Follows:

17.3.1. Large Containers. All containers discussed in paragraphs 17.2.1. and 17.2.2. shall be tripled-rinsed to ensure that all residue has been removed.

17.3.1.1. Markings on these containers shall be painted over by roller or brush.

17.3.1.2. Metal containers shall be crushed and turned in to DRMO as scrap metal.

17.3.1.3. Plastic containers shall be turned in to DRMO for recycling.

17.3.2. Small Metal Containers. The metal containers discussed in paragraph 17.2.3. will be disposed of through a solid waste disposal contractor.

17.3.3. Empty Aerosol Cans. These shall be punctured in a manner such that the contents are expelled into a 55-gallon hazardous waste accumulation device. The cans will then be air-dried and placed into a 55-gallon drum, which will be crushed and will be turned-in to DRMO as scrap.

17.3.4. Empty Hand-Held Compressed Gas Cylinders. These shall be depressurized and turned-in to DRMO for disposal as scrap metal.

18. POLLUTION PREVENTION. The pollution prevention program at Tinker AFB is explained in the Tinker AFB Pollution Prevention Management Plan. The following excerpts from this plan summarize the program.

18.1. Pollution Prevention Hierarchy. Tinker AFB will use the following environmental management hierarchy while assessing each pollution prevention option:

18.1.1. Source reduction (i.e. environmentally friendly design of new products, product changes, and source elimination);

18.1.2. Recycling (i.e. reuse, reclamation);

18.1.3. Treatment (i.e. stabilization, neutralization, precipitation, evaporation, incineration, scrubbing).

18.1.4. Disposal (i.e. disposal at a permitted facility).

18.2. Hazardous Pharmacy Program (HPP). The first priority of a pollution prevention program is to control the purchase and use of hazardous materials that will eventually turn into hazardous waste or airborne emissions. The Hazardous Pharmacy Program is responsible for implementing a "pharmacy concept" to improve control of hazardous materials at Tinker AFB. The "Pharmacy" provides single point control and accountability over the acquisition,

receipt, distribution, issue and reissue of hazardous materials. The Pollution Prevention Division of the Environmental Management Directorate is the office of primary responsibility for maintaining the Hazmat Pharmacy concept.

19. UNIVERSAL WASTE LAMP MANAGEMENT PROCEDURES. Universal Waste Lamps are defined as the bulb or tube portion of an electric lighting device designed to produce radiant energy, most often in the ultraviolet, visible, and infrared regions of the electromagnetic spectrum. Examples include fluorescent, high intensity, neon, mercury vapor, high-pressure sodium, and metal halide lamps. Refer to 40 CFR 273.5 and 273.9 for additional information.

19.1. Accumulation Procedures for Waste Lamp Accumulation Sites (WLAS). For each Directorate, or other Major Organization, at Tinker AFB that generates UW Lamps, the Commander of that organization and its UEC shall choose one or more convenient WLAS and appoint a Waste Lamp Manager for the site. These sites shall be coordinated with EMC in accordance with paragraph 6. All personnel in that organization shall be notified about the purpose and location of these sites.

19.1.1. All types of UW lamps generated by an organization shall be brought to the WLAS and placed in an appropriate container.

19.1.2. Each WLAS shall be completely cleared of UW lamps and broken lamp debris within 3 months after accumulation begins. Generators may call the WLCS at extension 43285 for container pick up, and new container delivery, or they may provide their own transportation.

19.1.3. A "Universal Waste Lamp Tracking Log" (available from OC-ALC/EMC) shall be prominently displayed in the immediate vicinity of each WLAS.

19.1.3.1. An "Accumulation Start Date" shall be posted on the tracking log reflecting the date the first lamp is placed in the WLAS. The "Clean-Out Date" shall reflect the date lamps and debris are cleaned out and moved to the WLCS.

19.1.3.2. The Waste Lamp Manager will maintain completed "Universal Waste Lamp Tracking Logs" in a file, onsite, for at least three years.

19.1.4. Containers for accumulating UW Lamps shall provide protection from breakage, and be appropriate to the type of lamp being accumulated. The box in which the lamps were supplied may be used for accumulation, or containers may be obtained from the WLCS, ext. 43285. If the generator provides containers, a "Contents Label", and a "Class 9" DOT label shall be obtained from the WLCS and placed on the container. The container should be situated so that both labels are visible and legible.

19.1.5. The Waste Lamp Manager shall be responsible for the proper accumulation of UW Lamps, management of the WLAS, and containers. All additions to UW Lamp containers shall be coordinated through this person.

19.1.6. Rules in paragraph 7.1.1 through 7.1.9 apply.

19.2. Waste Lamp Consolidation Site Functions. The Waste Lamp Consolidation Site (WLCS) is located in the Hazardous Waste Management Facility, building 808.

19.2.1. Procedures in paragraph 10.2 shall be followed for issuing containers with the following exceptions:

19.2.1.1. Containers issued by the WLCS shall be DOT approved for UW Lamp transportation and shall include OC-ALC Form O-141, and hazard labels. There is no volume limit.

19.2.1.2. The wording at the top of OC-ALC Form O-141 shall be: "Contents Label."

19.2.1.3. The wording in the "Contents" block of OC-ALC Form shall be "Universal Waste Lamps."

19.2.1.4. Containers issued shall be appropriate to the type, and estimated volume, of lamps being accumulated.

19.2.1.5. Containers may be reissued with new labels after transferring contents to a container at the WLCS.

19.2.2. Consolidation of Universal Waste Lamps at the WLCS shall include:

19.2.2.1. The WLCS shall provide secure temporary storage of UW lamps to prevent breakage of lamps and damage to containers.

19.2.2.2. Containers of UW lamps, including bags of broken lamp debris, shall be picked up from generators when requested in accordance with paragraph 10.3.1 and brought to the WLCS.

19.2.2.3. If containers received at the WLCS are DOT approved and full, they shall be placed in secure storage at the WLCS and held until transported off-site.

19.2.2.4. Partially empty, or non-DOT approved containers received at the WLCS may, at the discretion of the WLCS manager, be held in secure storage, or reissued with a new OC-ALC Form O-141 after transferring contents into a container at the WLCS.

19.2.2.5. An IAP for broken lamp debris from all areas of Tinker AFB shall be maintained at the WLCS.

19.2.3. Holding Time Limit.

19.2.3.1. The contents of the secured storage area at the WLCS shall be completely cleared and transported off-site within 6 months after consolidation begins. Any UW Lamp debris shall be placed in the IAP maintained for that purpose.

19.2.3.2. A "Universal Waste Lamp Tracking Log" (available from OC-ALC/ EMC) shall be prominently displayed in the secured storage area at the WLCS.

19.2.3.2.1. An "Accumulation Start Date" shall be posted on the log reflecting the date the first lamp is placed in the WLCS. The "Clean-Out Date" shall reflect the date UW lamps are transported off-site, and the area swept clean of debris.

19.2.3.2.2. The WLCS Manager shall maintain completed "Universal Waste Lamp Tracking Logs" in a file, onsite, for at least three years.

19.3. Off-Site Shipments. UW lamps received by the WLCS shall be shipped off-site to an acceptable facility within the 6-month time limit. Shipments shall be coordinated through the DRMO following proper DOT shipping guidelines for Universal Waste.

19.3.1. Prior to shipment, all UW Lamps shall be packaged in DOT approved containers appropriate to the type of lamp.

19.3.2. Records of all UW Lamp shipments shall be maintained for at least three years. Records shall include: name and address of receiving facility, shipping date, quantity in pounds.

19.4. Spill Response. All spills, leakage, or releases from UW lamps, such as from accidental breakage, shall be immediately contained, then cleaned up and placed in a bag for accumulation at the WLCS.

Vicki Preacher, Director
Environmental Management Directorate

ATTACHMENT 1

A1. WASTE ANALYSIS PLAN:

A1.1. Purpose. To establish procedures for the analysis of hazardous wastes required before treatment, storage, or disposal by RCRA (40 CFR Parts 264.13, 265.13, and 268.7), and Title 252, Oklahoma Administrative Code, Chapter 200-3-2.

A1.2. Responsibilities. EM is responsible for ensuring that proper analysis of hazardous wastes is accomplished before treatment, storage, or disposal. The Tinker Environmental Laboratory will conduct most analysis needed to support hazardous waste management at Tinker AFB. It is capable of performing all normal operational waste stream analysis requirements including the TCLP. EM will maintain a contract with an outside laboratory to provide analysis in case of work overload, an analytical confirmation is needed, or when a special procedure is required.

A1.3. Requests for Analysis. The following information shall be provided when a customer of the Tinker Environmental Laboratory needs a waste analyzed. For purposes of quality control the customer will be asked to complete the Sample Request Form (Figure A-1).

A1.3.1. A written memorandum addressed to OC-ALC/EMC that provides the following:

A1.3.1.1. Name, organization, and telephone number of requesting individual.

A1.3.1.2. General description of waste.

A1.3.1.3. Location and quantity of waste.

A1.3.1.4. Description of process generating waste.

A1.3.1.5. Any problems of access to obtain sample.

A1.3.2. If sample is supplied to the laboratory provide a written memorandum to OC-ALC/EMC with information in A1.3.1.1. through A1.3.1.4. and the following:

A1.3.2.1. Sampling method.

A1.3.2.2. Time and Date when sample was obtained.

A1.3.3. In an emergency (i.e. a spill) contact the laboratory directly at extension 65871.

SAMPLE REQUEST FORM

TINKER ENVIRONMENTAL LABORATORY
OC-ALC/EMC
TINKER AFB OK 73145-9100

DATE SAMPLED:_____ EMC LAB NO._____

DATE RECEIVED:_____

ORGANIZATION INFORMATION

ORGANIZATION:_____

POC:_____

SAMPLE INFORMATION

SAMPLE DESCRIPTION:_____
_____
_____

SAMPLE LOCATION:_____
_____

SAMPLE TYPE: ROUTINE_____ EMERGENCY_____ SPILL_____

RESULTS NEEDED BY:_____

NOTE: NORMAL TURNAROUND TIME IS 15 WORKING DAYS. IF YOU NEED QUICKER TURNAROUND, PLEASE INCLUDE JUSTIFICATION BELOW:

_____
_____
_____

PLEASE DO NOT FILL IN ANY BLANKS BELOW THIS LINE - FOR LABORATORY USE ONLY

JUSTIFICATION APPROVED: YES_____ NO_____

APPROVED BY:_____

RECEIVED BY:_____

Figure A-1. Sample Request Form

A1.4. Procedures for Analysis.

A1.4.1. All hazardous wastes generated at Tinker AFB will be analyzed as often as waste streams or processes change to ensure characterization is accurate and up-to-date. At the very least, EM will review the current set of hazardous waste analysis annually. The analytical procedures discussed herein are to be used by the Tinker Environmental Laboratory as well as by laboratories that perform hazardous waste analysis for Tinker AFB. Figure A-2 is a list of abbreviations used for the various analytical procedures discussed. Elements are identified by standard chemical symbols.

Abbreviations Used in the Waste Analysis Plan

AA - Atomic absorption spectrophometry using direct flame aspiration or furnace atomization
AES - Atomic emission spectrometry using flame photometry or spark emission
Cr - Chromium (Total)
Cr(VI) - Hexavalent Chromium
ECD - Electron capture detector for CC.
FID -Flame ionization dector for GC.
GC - Gas Chromatograph, usually with a capillary column.
HCD - Halogen selective detector such as Hall or Coulson detectors for GC.
HCL - Hydrochloric Acid
ICP - Inductively coupled plasma atomic emission spectrophotometry
IR - Infrared spectroscopy, preferably by Fourier transform method
MIBK - Methyl Isobutyl Ketone
MS - Mass spectrometer detector for GC
NPD - Nitrogen-Phosphorous specific detector for GC
PID - Photoionization detector for GC
pH - Hydrogen Ion Concentration
TCLP - Toxicity Characteristic Leaching Procedure
XRD - X-ray diffraction
XRF - X-ray fluorescence

Figure A-2. Abbreviations Used in the Waste Analysis Plan.

A1.4.2. Representative samples will be collected from all drums, tanks, and vats using the sampling procedures outlined in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods," EPA Office of Solid Waste Bulletin No. SW-846. Samples will be submitted to the Tinker Environmental Laboratory, or to contract laboratories for analysis as required. Contract laboratories must participate in the EPA Contract Laboratory Program.

A1.4.3. Waste analysis will be accomplished as required by 40 CFR Parts 264.13 and 268.7 using methods outlined in EPA Office of Solid Waste Bulletin SW-846. Quality assurance/quality control procedures will meet or exceed those outlined in "Tinker AFB Quality Assurance/Control Guide," June 1994.

A1.4.4. In addition to information for a complete Material Profile Sheet per waste stream sample, all hazardous waste analysis will provide information required by the Oklahoma Department of Environmental Quality Form 858. The parameters analyzed are: primary chemical and physical form, characteristics, chemical element, composition, percent solids, specific weight, pH, flash point, organic and inorganic components, and heavy metals.

A1.4.5. From these analyses, the laboratory will supply the correct DOT shipping name, DOT hazard class, DOT identification number, EPA hazardous waste number, waste land disposal acceptability, and a reason the waste is a "hazardous waste" in Oklahoma.

A1.4.6. Profile Sheets for each waste stream generated will be filed by OC-ALC/EMC.

A1.5. Rationale for Analysis. Paragraph A1.7 discusses 16 types of wastes and the analytical procedures needed for each. The procedures are designed for the efficient analysis of the various categories of wastes. Although not all encompassing, the procedures cover the majority of the waste streams that the base generates. Therefore, additional analytical procedures will need to be added on a case-by-case basis.

A1.5.1. The rationale for selecting the analytical procedures listed in this waste analysis instruction are based on our knowledge of the chemicals used, processes performed and contaminants generated during these processes.

A1.5.2. Except for plating solution rinse water and oils with traces of PCBs, the majority of the hazardous waste streams will contain constituents in the low percentage range. Analytical methods will reflect this policy.

A1.5.3. The methods discussed require that the waste being analyzed has been isolated, containerized, and not commingled. The problems created by commingling are: risk of mixing incompatible materials; increased difficulty in obtaining a representative sample; increased time and costs of analysis; reduction of resale value of the wastes, and additional treatment difficulty and cost increase of disposal.

A1.5.4. EPA methods are cited for various analytical procedures and are designed primarily for trace determinations, and may not always be best suited for a given sample. If a method other than the EPA method is used to analyze a sample, the analytical report will be annotated to indicate the method used. Non-EPA methods will be documented and kept on file by the Tinker Environmental Laboratory.

A1.6. Testing for Land Disposal Restrictions. In accordance with 40 CFR Part 268.7 all waste streams must be analyzed to determine if they are restricted from land disposal. The general extraction procedure to be used for this purpose is outlined in Appendix II of 40 CFR Part 261 and is known as the "Toxicity Characteristic Leaching Procedure" or "TCLP." After an extract has been obtained additional analysis as outlined below are required to test for particular constituents.

A1.6.1. Metals Analysis.

A1.6.1.1. Metals will generally be analyzed by ICP (Inductive Coupled Plasma) or AA (Atomic Absorption). Direct flame aspiration, graphite, or atomic emission spectroscopy are all acceptable. EPA 6000 series methods for Sb, As, Ba, Be, Cd, Cu, Pb, Ni, Os, Se, Ag, Tl, V, and Zn as listed in SW-846 are recommended.

A1.6.1.2. Plating solutions may have severe matrix interferences, these are best overcome by the method of standard additions. Ion chromatography is also an acceptable method for determining inorganic cations and anions.

A1.6.1.3. Plating wastes will routinely be analyzed for Ag, Cd, Cr, Cu, Ni, Pb, and Zn. Analysis can be performed for Co, Mo, Au, Rh, Sn, etc. by special request.

A1.6.1.4. Sludge will be measured on a wet weight basis. The sludge shall be digested in concentrated nitric acid for total metal content analysis, and the results reported in parts per million (ppm). If no metal concentration is more than its Total Threshold Limit Concentration (TTLC), and any metal concentration is greater than its Soluble Threshold Limit Concentration (STLC), then the citric acid extraction (W.E.T.) procedure for soluble metals shall also be done.

A1.6.1.5. Paint, paint remover and degreasers containing paint chips will be analyzed for Ba, Pb, Cr, Cd, Cu, and Zn.

A1.6.1.6. Cleaners and degreasers will be analyzed for Ba and Mo.

A1.6.1.7. Hydraulic fluid contaminated wastes will be analyzed for Ba.

A1.6.1.8. Chromium analysis will be for hexavalent chromium when colormetric (EPA 7196) or chromatographic methods are used. When AA and ICP methods are used, the concentration for chromium will be total chrome. Cr(VI) specific sample separation methods EPA 7195 or 7197 are also suitable.

A1.6.2. Solvents can be analyzed by GC (Gas Chromatograph) in either liquid or vapor phase. IR (Infrared Spectroscopy) also can analyze solvents.

A1.6.3. Hydraulic Oil. Since hydraulic oil may contain phosphate (TCP) or barium naphtenate additives, whenever hydraulic oil is found or suspected in a waste, these additives must be checked. TCP can be analyzed by GC/MS. Barium can be analyzed by dissolving the sample in MIBK and measuring by AA or ICP. An alternative analysis for Ba would use liquid-liquid extraction into dilute aqueous nitric acid, followed by AA or ICP measurement.

A1.7. Specific Waste Type Analysis.

A1.7.1. ABSORBENTS:

A1.7.1.1. VISUAL PARAMETERS:

A1.7.1.1.1. Solid, dry or absorbed liquid.

A1.7.1.1.2. Color of material.

A1.7.1.1.3. Free liquid.

A1.7.1.1.4. Odor.

A1.7.1.2. PHYSICAL PARAMETERS.

A1.7.1.2.1. Flash Point (Free liquid).

A1.7.1.2.2. Toxicity: solvents, oils, metals, additives, etc.

A1.7.1.3. CHEMICAL PARAMETERS.

A1.7.1.3.1. Percent extractable organics, identify by GC or IR.

A1.7.1.3.1.1. Hydraulic fluid, tricresyl phosphate by GC and Ba by ICP.

A1.7.1.3.1.2. Transformer oils, PCB's by GC.

A1.7.1.3.1.3. Fuels/motor oils Pb by ICP.

A1.7.1.3.2. Solid, for total for Pb, Zn, and Ba.

A1.7.2. ACIDS/PLATING SHOP:

A1.7.2.1. VISUAL PARAMETERS.

A1.7.2.1.1. Color of solution.

A1.7.2.1.2. Phases: number, type, and volume.

A1.7.2.2. PHYSICAL PARAMETERS:

A1.7.2.2.1. pH.

A1.7.2.2.2. Specific Gravity.

A1.7.2.2.3. Reactivity.

A1.7.2.2.3.1. All acids are incompatible with cyanide and sulfide containing waste.

A1.7.2.2.3.2. Nitric acid solutions/metals produce nitrogen oxide gases.

A1.7.2.2.3.3. Strong nitric acid solutions are oxidizers.

A1.7.2.2.3.4. Concentrated sulfuric acid/water releases heat.

A1.7.2.2.4. Toxicity: heavy metals and fluoride.

A1.7.2.3. CHEMICAL PARAMETERS:

A1.7.2.3.1. Analysis of liquid phase.

A1.7.2.3.1.1. Total Ag, Cd, Cr, Cu, Ni, Pb, and Zn; by AA, ICP.

A1.7.2.3.1.2. Percent Acid by titration or specific gravity.

A1.7.2.3.1.3. Free fluoride by specific ion electrode.

A1.7.2.3.1.4. Chromium (IV) by colorimetry or ion chromatography.

A1.7.2.3.2. Analysis of sludge phase.

A1.7.2.3.2.1. Identify by IR, X-ray Fluorescence, etc.

A1.7.2.3.2.2. Total Ag, Cd, Cr, Cu, Ni, Pb, and Zn; by AA, ICP.

A1.7.3. CAUSTICS AND ALKALINE CLEANERS:

A1.7.3.1. VISUAL PARAMETERS:

A1.7.3.1.1. Color of solution.

A1.7.3.1.2. Phases: number, type, and volume.

A1.7.3.2. PHYSICAL PARAMETERS.

A1.7.3.2.1. pH.

A1.7.3.2.2. Specific Gravity.

A1.7.3.2.3. Reactivity.

A1.7.3.2.3.1. Strong Caustic Solutions/aluminum and zinc produce hydrogen gas.

A1.7.3.2.3.2. Concentrated caustics/water releases heat.

A1.7.3.2.4. Toxicity: cyanides, sulfides, and heavy metals.

A1.7.3.3. CHEMICAL PARAMETERS.

A1.7.3.3.1. Analysis of liquid phase.

A1.7.3.3.1.1. Total Cd, Cr, Cu, Ni, Pb, and Zn; by AA and ICP.

A1.7.3.3.1.2. Water content by evaporation.

A1.7.3.3.1.3. Alkali content by titration.

A1.7.3.3.1.4. Total Cyanide by distillation and colorimetry or titrametric.

A1.7.3.3.1.5. Total Phosphate by ion chromatograph, colorimetry.

A1.7.3.3.2. Analysis of sludge phase.

A1.7.3.3.2.1. Identify by IR, XRF, XRD, etc.

A1.7.3.3.2.2. Total Cd, Cr, Cu, Ni, Pb, and Zn; by AA or ICP.

A1.7.4. CYANIDE PLATING SOLUTIONS:

A1.7.4.1. VISUAL PARAMETERS:

A1.7.4.1.1. Color of solution.

A1.7.4.1.2. Phases: number, type, and volume.

A1.7.4.2. PHYSICAL PARAMETERS:

A1.7.4.2.1. pH.

A1.7.4.2.2. Reactivity.

A1.7.4.2.2.1. All cyanide-containing solutions have severe toxic capabilities.

A1.7.4.2.2.2. Contact with acids of any type releases highly toxic hydrogen cyanide gas.

A1.7.4.2.2.3. Contact with acidic chlorine solutions releases highly toxic cyanogen chloride gas.

A1.7.4.2.3. Toxicity: cyanide and heavy metals.

A1.7.4.3. CHEMICAL PARAMETERS:

A1.7.4.3.1. Analysis of liquid phase.

A1.7.4.3.1.1. Total Ag, Cd, Cu, Ni, Pb, and Zn; by AA or ICP.

A1.7.4.3.1.2. Water content by evaporation.

A1.7.4.3.1.3. Total cyanide by distillation and colorimetry or titrametric.

A1.7.4.3.2. Analysis of sludge phase.

A1.7.4.3.2.1. Total Ag, Cd, Cu, Ni, Pb, and Zn; by AA or ICP.

A1.7.4.3.2.2. Total cyanide by distillation and colorimetry or titrametric.

A1.7.4.3.2.3. Identify by IR, XRF, XRD, or wet chemistry.

A1.7.5. PLATING SOLUTIONS (Metals):

A1.7.5.1. VISUAL PARAMETERS:

A1.7.5.1.1. Color of solution.

A1.7.5.1.2. Phases: number, type, and volume.

A1.7.5.2. PHYSICAL PARAMETERS:

A1.7.5.2.1. pH.

A1.7.5.2.2. Specific Gravity.

A1.7.5.2.3. Reactivity: Tank specific (e.g., cyanide) or reaction/acid solutions.

A1.7.5.2.4. Toxicity: cyanide, fluoride, and other heavy metals.

A1.7.5.3. CHEMICAL PARAMETERS:

A1.7.5.3.1. Analysis of liquid phase.

A1.7.5.3.1.1. Total Ag, Cd, Cr, Cu, Ni, Pb, and Zn; by AA or ICP.

A1.7.5.3.1.2. Water Content.

A1.7.5.3.1.3. Acid or Alkali.

A1.7.5.3.1.4. Special tests as requested.

A1.7.6. CHROMATE SOLUTIONS:

A1.7.6.1. VISUAL PARAMETERS:

A1.7.6.1.1. Color of solution.

A1.7.6.1.2. Phases: number, type, and volume.

A1.7.6.2. PHYSICAL PARAMETERS:

A1.7.6.2.1. pH.

A1.7.6.2.2. Specific Gravity.

A1.7.6.2.3. Reactivity.

A1.7.6.2.3.1. Many chromate solutions are strongly acidic.

A1.7.6.2.3.2. Same incompatibilities and reactions as with acid solutions.

A1.7.6.2.4. Toxicity: hexavalent chromium, other heavy metals or fluoride.

A1.7.6.3. CHEMICAL PARAMETERS:

A1.7.6.3.1. Analysis of liquid phase.

A1.7.6.3.1.1. Total Cr, Cd, Cu, Ni, Zn, and Pb; by AA or ICP.

A1.7.6.3.1.2. Water content.

A1.7.6.3.1.3. Percent acid titration.

A1.7.6.3.1.4. Optional analysis Cr(VI) by colorimetry, iodimetry, or ion chromatography.

A1.7.7. ELECTROLESS COPPER PLATING:

A1.7.7.1. VISUAL PARAMETERS:

A1.7.7.1.1. Color of solution.

A1.7.7.1.2. Phases: number, type, and volume.

A1.7.7.2. PHYSICAL PARAMETERS:

A1.7.7.2.1. pH.

A1.7.7.2.2. Specific Gravity.

A1.7.7.2.3. Toxicity: formaldehyde, presence copper.

A1.7.7.3. CHEMICAL PARAMETERS:

A1.7.7.3.1. Analysis of liquid phase.

A1.7.7.3.1.1. Water content.

A1.7.7.3.1.2. Formaldehyde by chromatropic acid/ sulfuric acid colorimetric method.

A1.7.8. ADHESIVES, SEALANTS AND PREPEGS:

A1.7.8.1. VISUAL PARAMETERS:

A1.7.8.1.1. Color of material.

A1.7.8.1.2. Phases: number, type, and volume.

A1.7.8.1.3. Viscosity.

A1.7.8.1.4. Layers.

A1.7.8.2. PHYSICAL PARAMETERS:

A1.7.8.2.1. Flash Point.

A1.7.8.2.2. Toxicity: Aromatic amines, expoxides, formaldehyde, phenols, isocynates, solvents.

A1.7.8.3. CHEMICAL PARAMETERS:

A1.7.8.3.1. Analysis of volatiles.

A1.7.8.3.1.1. Percent volatiles by distillation.

A1.7.8.3.1.2. Identify volatiles by GC, GC/MS, or IR.

A1.7.8.3.2. Analysis of nonvolatiles.

A1.7.8.3.2.1. Identify by IR: epoxy, polysulfide, acrylic, etc.

A1.7.9. WASTE PAINT: NEW, USED, OR PAINT CONTAMINATED RAGS:

A1.7.9.1. VISUAL PARAMETERS:

A1.7.9.1.1. Color of material.

A1.7.9.1.2. Phases: number, type, and volume.

A1.7.9.2. PHYSICAL PARAMETERS:

A1.7.9.2.1. Flash Point.

A1.7.9.2.2. Toxicity: Aromatic solvents, non-aromatic solvents, or heavy metals.

A1.7.9.3. CHEMICAL PARAMETERS:

A1.7.9.3.1. Analysis of volatiles.

A1.7.9.3.1.1. Percent of volatiles by distillation.

A1.7.9.3.1.2. Identify volatiles by GC, GC/MS, or IR.

A1.7.9.3.2. Analysis of nonvolatiles.

A1.7.9.3.2.1. Percent extractable organics.

A1.7.9.3.2.2. Identify extractables by GC, GC/MS, or IR.

A1.7.9.3.3. Analysis of nonextractable material.

A1.7.9.3.3.1. Identify material by IR.

A1.7.9.3.3.2. Total Cd, Pb, Cr, Ba, Cu, Zn, Hg, etc.

A1.7.9.3.4. Analysis of contaminated rags.

A1.7.9.3.4.1. Volatiles by Headspace/GC or GC/MS.

A1.7.9.3.4.2. Total Cd, Pb, Cr, Ba, Cu, etc. by AA or ICP.

A1.7.10. PAINT REMOVER (METHYLENE CHLORIDE TYPE):

A1.7.10.1. VISUAL PARAMETERS:

A1.7.10.1.1. Color of material.

A1.7.10.1.2. Phases: number, type, and volume.

A1.7.10.2. PHYSICAL PARAMETERS:

A1.7.10.2.1. pH.

A1.7.10.2.2. Flash Point.

A1.7.10.2.3. Toxicity: solvents, heavy metals, amines, ketones, or phenols.

A1.7.10.3. CHEMICAL PARAMETERS:

A1.7.10.3.1. Analysis of volatiles

A1.7.10.3.1.1. Identify volatiles by GC, GC/MS, or IR.

A1.7.10.3.2. Analysis of nonvolatiles.

A1.7.10.3.2.1. Percent extractable organics.

A1.7.10.3.2.2. Identify extractables by GC, GC/MS, or IR.

A1.7.10.3.3. Analysis of nonextractable material.

A1.7.10.3.3.1. Identify material by IR.

A1.7.10.3.3.2. Total Pb, Cd, Cr, Cu, etc. by AA or ICP.

A1.7.11. PAINT STRIPPER (SOLVENT TANK AND HOT STRIPPERS):

A1.7.11.1. VISUAL PARAMETERS:

A1.7.11.1.1. Color of material.

A1.7.11.1.2. Phases: number, type, and volume.

A1.7.11.2. PHYSICAL PARAMETERS:

A1.7.11.2.1. pH.

A1.7.11.2.2. Flash Point.

A1.7.11.2.3. Toxicity: solvents, amines, ethers, heavy metals.

A1.7.11.3. CHEMICAL PARAMETERS:

A1.7.11.3.1. Analysis of volatiles.

A1.7.11.3.1.1. Percent volatiles distillation.

A1.7.11.3.1.2. Identify volatiles by GC, GC/MS, or IR.

A1.7.11.3.2. Analysis of nonvolatiles.

A1.7.11.3.2.1. Identify nonvolatiles by IR.

A1.7.11.3.2.2. Total Pb, Cd, Cr, Cu, etc. by AA or ICP.

A1.7.12. DEGREASER SOLVENTS:

A1.7.12.1. VISUAL PARAMETERS:

A1.7.12.1.1. Color of solution.

A1.7.12.1.2. Phases: number, type, and volume.

A1.7.12.2. PHYSICAL PARAMETERS:

A1.7.12.2.1. Toxicity: solvents (aromatic, halogenated, etc.), heavy metals in sludge.

A1.7.12.3. CHEMICAL PARAMETERS:

A1.7.12.3.1. Analysis of liquid phase.

A1.7.12.3.1.1. Percent volatiles.

A1.7.12.3.1.2. Identify volatiles by GC, GC/MS, or IR.

A1.7.12.3.2. Analysis of sludge.

A1.7.12.3.2.1. Percent extractable organics.

A1.7.12.3.2.2. Identify extractables by GC, GC/MS, or IR.

A1.7.12.3.2.3. Identify nonextractables by IR.

A1.7.13. DEGREASING DETERGENTS:

A1.7.13.1. VISUAL PARAMETERS:

A1.7.13.1.1. Color of solution.

A1.7.13.1.2. Phases: number, type, and volume.

A1.7.13.1.3. Analysis of sludge.

A1.7.13.1.3.1. Percent extractable organics.

A1.7.13.1.3.2. Identify extractables by GC, GC/MS, or IR.

A1.7.13.1.3.3. Identify nonextractables by IR.

A1.7.13.1.3.4. Total Ag, Cr, Cd, Cu, Ni, Zn, Pb, etc. by AA or ICP.

A1.7.14. OILS NOT COMMINGLED (HYDRAULIC, AIRCRAFT):

A1.7.14.1. VISUAL PARAMETERS:

A1.7.14.1.1. Color of materials.

A1.7.14.1.2. Phases: number, type, and volume.

A1.7.14.2. PHYSICAL PARAMETERS:

A1.7.14.2.1. Flash Point.

A1.7.14.2.2. Toxicity: heavy metals, esters, solvents.

A1.7.14.3. CHEMICAL PARAMETERS:

A1.7.14.3.1. Analysis of oil phase.

A1.7.14.3.1.1. Identify by GC, GC/MS, or IR.

A1.7.14.3.1.2. Percent volatiles by Headspace GC.

A1.7.14.3.1.3. Identify volatiles by GC, GC/MS.

A1.7.14.3.1.4. Metals Pb, Cr, and Cd by AA, ICP, or AE.

A1.7.14.3.2. Analysis of rags contaminated with oil.

A1.7.14.3.2.1. Percent extractable organics.

A1.7.14.3.2.2. Identify extractables by GC, GC/MS, or IR.

A1.7.15. WASTE FUELS:

A1.7.15.1. VISUAL PARAMETERS:

A1.7.15.1.1. Color of material.

A1.7.15.1.2. Phases: number, type, and volume.

A1.7.15.2. PHYSICAL PARAMETERS:

A1.7.15.2.1. Flash Point.

A1.7.15.2.2. Specific Gravity

A1.7.15.2.3. Toxicity: solvents, lead, hydrocarbon fuels.

A1.7.15.3. CHEMICAL PARAMETERS:

A1.7.15.3.1. Identify type of fuel by GC, GC/MS, and IR.

A1.7.15.3.2. Percent volatiles by distillation.

A1.7.15.3.3. Identify volatiles by GC, GC/MS, and IR.

A1.7.15.3.4. Identify heavy hydrocarbons by GC, GC/MS, and IR.

A1.7.16. INDUSTRIAL WASTE TREATMENT SLUDGE:

A1.7.16.1. VISUAL PARAMETERS:

A1.7.16.1.1. Color of materials.

A1.7.16.1.2. Phases: number, type, and volume.

A1.7.16.2. PHYSICAL PARAMETERS:

A1.7.16.2.1. pH.

A1.7.16.2.2. Toxicity: heavy metals, cyanide, fluoride, sulfide, pesticides, herbicides, phenols.

A1.7.16.3. CHEMICAL PARAMETERS.

A1.7.16.3.1. Analysis of water.

A1.7.16.3.1.1. Ag, As, Ba, Be, Cd, Co, Cr, Cu, Hg, Mo, Ni, Pb, Sb, Se, Tl, V, and Zn by AA or ICP.

A1.7.16.3.1.2. Total cyanide by distillation and colorimetry or titrametric.

A1.7.16.3.1.3. Total fluoride by distillation and specific ion electrode.

A1.7.16.3.2. Analysis of volatiles.

A1.7.16.3.2.1. Identify volatiles by GC, GC/MS.

A1.7.16.3.3. Analysis of nonvolatiles.

A1.7.16.3.3.1. Percent extractable organics.

A1.7.16.3.3.2. Identify extractables by GC, GC/MS, or IR.

A1.7.16.3.4. Analysis of nonextractable material.

A1.7.16.3.4.1. Identify material by IR.

A1.7.16.3.4.2. Total Pb, Cd, Cr, Cu, etc. by AA or ICP.

ATTACHMENT 2

A2. LIST OF DEFINITIONS:

A2.1. Accumulation. The process of gathering portions of a hazardous waste stream and placing them into a controlled accumulation device.

A2.2. Accumulation Device. A container, tank, or gondola intended to be repeatedly opened for the purpose of adding to its contents.

A2.3. Accumulation Site. A specific area in an industrial complex where unlimited quantities of hazardous wastes may be accumulated or held for as long as 90 days without a formal permit. Such an area is normally used as a short term collection facility for wastes in tanks, or for containers of waste from various initial accumulation points, to allow for waste analysis, labeling, and tracking procedures prior to transfer to a permitted treatment, storage or disposal facility.

A2.4. Accumulation Start Date. Could have any one of three meanings depending on context:

A2.4.1. The date on which the first drop of hazardous waste is placed into a previously empty container at an accumulation site.

A2.4.2. The date on which a container of hazardous waste arrives at an accumulation site from an initial accumulation point (must be no later than 72 hours or 3 days after the filled date).

A2.4.3. The date on which the first drop of hazardous waste is placed in a tank that had previously been completely drained.

A2.5. Acute Hazardous Waste. Any waste containing commercial chemical products, manufacturing chemical intermediates, or off-specification products or intermediates listed in 40 CFR 261.33(e).

A2.6. Barrel. See definition of Drum.

A2.7. Bung/Bung Hole. The screw cap on the top of a steel barrel, drum, or other portable container/the opening left when the cap is removed.

A2.8. Bung Label. A 3-inch by 5-inch DOT label to be applied near the bungs of the drums containing flammable liquid having a vapor pressure between 16 and 40 p.s.i.a. at 100 degrees Fahrenheit. A pressure **FLAMMABLE LIQUID** label must accompany a BUNG LABEL.

A2.9. Characterization. An evaluation of a waste to determine if it is a hazardous waste. This evaluation can be conducted either by the generator's knowledge of the process generating the waste or by analytical testing.

A2.10. Characteristic Waste. A waste that exhibits any of the characteristics listed in 40 CFR 261, Subpart C (i.e. ignitability, corrosivity, reactivity, and toxicity).

A2.11. Closed. May have either of two meanings depending on context:

A2.11.1. The condition of a management device where no waste can escape if the device falls onto its side. Bung Cap must be rotated three complete revolutions with threads engaged. (See definition of "Sealed".)

A2.11.2. The condition of a management site that has met all the requirements for closure.

A2.12. Closure. The discontinuance of use of a hazardous waste management site and all actions taken to eliminate any future threat to human health or the environment.

A2.13. Collection Point. A location in an industrial shop where small quantities of hazardous waste are accumulated in a small container (10 gallons or less) for no longer than one work shift, or until it is full, whichever is less time.

A2.14. Combustible Liquid. Basically, a liquid that has a flashpoint greater than 141 degrees Fahrenheit and less than 200 degrees Fahrenheit, but see 49 CFR 173.120 for more detail.

A2.15. Container. Any portable device, in which waste is accumulated, held, stored, transported, treated, disposed, or otherwise handled.

A2.16. Container Processing Facility (CPF). Located in Building 3125, this facility is managed by a private firm under contract to EMC to receive empty containers and prepare them for recycling by cleaning or crushing as necessary, or consolidating them for disposal if recycling is not an option.

A2.17. Contingency Plan. A document setting out an organized, planned, and coordinated course of action to be followed in case of fire, explosion, or release of hazardous materials or hazardous waste constituents that could threaten human health or the environment. OC-ALC Plan 19-2, Spill Prevention and Response Plan, serves as the Tinker AFB contingency plan for hazardous waste spills.

A2.18. Corrosivity. An aqueous hazardous waste characteristic exhibited by pH values of 2.0 or less, 12.5 or greater, or a corrosion rate of steel greater than 0.25 inches per year. (40 CFR 261.22)

A2.19. Designated Facility. A hazardous waste treatment, storage, or disposal facility (TSDF) that has been designated on a manifest by the generator as the receiving site for hazardous waste pursuant to 40 CFR Part 262.20.

A2.20. Dike. An embankment or ridge of either natural or man-made materials used to prevent movement of liquids, sludges, solids, or other materials. (40 CFR 260.10)

A2.21. Discharge or Release. The accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of hazardous waste into or on any land or water. (40 CFR 260.10)

A2.22. Disposal. The discharge, deposit, injection, dumping, spilling, leaking or placing of any waste into or on any land or water so that such waste or any constituent thereof may enter the environment or be emitted into the air or discharge into any waters, including ground waters. (40 CFR 260.10)

A2.23. Disposal Facility. A facility or part of a facility at which wastes are intentionally placed into or onto any land or water and at which waste will remain after closure. (40 CFR 260.10)

A2.24. Drum. A cylindrical container with a capacity of 5 to 85 gallons capable of safely holding the material placed within it.

A2.25. Empty:

A2.25.1. A container or an inner liner removed from a container that has held any hazardous waste, except a waste that is a compressed gas or that is identified as an acute hazardous waste listed in 40 CFR, 261.31, 261.32, or 261.33(e) is empty if:

A2.25.1.1. All wastes have been removed that can be removed using the practices commonly employed to remove materials from that type of container, e.g. pouring, pumping, and aspirating.

A2.25.1.2. No more than 2.5 centimeters (one inch) of residue remain on the bottom of the container or inner liner.

A2.25.1.3. No more than three percent by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to 110 gallons in size.

A2.25.1.4. No more than 0.3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is greater than 110 gallons in size.

A2.25.2. A container that has held a hazardous material that is a compressed gas is empty when the pressure in the container approaches atmospheric.

A2.25.3. A container or an inner liner removed from a container that has held an acute hazardous waste listed in 40 CFR 261.31, 261.32, or 261.33(e) is empty if:

A2.25.3.1. The container or inner liner has been triple rinsed using a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate.

A2.25.3.2. The container or inner liner has been cleaned by another method that has been shown in scientific literature, or in tests conducted by the generator, to achieve equivalent removal.

A2.25.3.3. In the case of a container, the inner liner that prevented contact of the commercial chemical product or manufacturing chemical intermediate with the container has been removed.

A2.26. Environmental Deficiency Record (EDR). A tool used by EM to highlight a serious problem found in an organization's environmental management procedures. The problem will be outlined on AFLC Form 2510 and sent to the organization's commander.

A2.27. Enviropac. A large plastic, or metal box, usually with a lockable lid, designed to hold two to four 55-gallon drums, control access to them, and to contain their contents in the event of a leak or spill.

A2.28. EPA Identification Number. A number assigned by EPA to generators, transporters, and treatment, storage, or disposal facilities. The identification number for Tinker AFB is: OK 1571724391.

A2.29. EPA Waste Code. A number assigned by EPA to each hazardous waste listed in 40 CFR 261 Subpart D, and to each characteristic identified in 40 CFR 261 subpart C.

A2.30. F-waste. Any waste contaminated with a solvent having an EPA waste code of F001 through F005.

A2.31. Facility. All contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage, or disposal operational units (one or more landfills, surface impoundments, or combinations).

A2.32. Filled Date. The date when a container at an Initial Accumulation Point becomes full (90% of capacity for liquids). If, for any reason, a container is turned-in before it becomes full, the date the decision is made to do that becomes the filled date.

A2.33. Flammable Liquid. Any liquid having a flash point of not more than 141 degrees Fahrenheit, with the following exceptions:

A2.33.1. Any liquid meeting one of the definitions specified in 40 CFR Part 173.115.

A2.33.2. Any mixture having one component or more with a flash point greater than 141 degrees Fahrenheit or higher, that makes up at least 99 percent of the total volume of the mixture.

A2.34. Flammable Solid. Any of the following: (See 49 CFR 173.124.)

A2.34.1. Wetted Explosives.

A2.34.2. Self-Reactive Materials.

A2.34.3. Readily combustible solids.

A2.35. Flashpoint. The minimum temperature at which a substance gives off flammable vapors that in contact with sparks or flame will ignite. (49 CFR 171.8)

A2.36. Freeboard. The vertical distance between the top of a tank or surface impoundment dike and the surface of the waste contained therein. (40 CFR 260.10)

A2.37. Generation Point. The location within an industrial shop where some specific process first produces hazardous waste. This original production of hazardous waste is the cradle of the cradle-to-grave tracking system.

A2.38. Generator. Any person or organization whose act or process first produces hazardous waste identified in 40 CFR 261.3, or whose act first causes a material to become subject to hazardous waste regulations.

A2.39. Gondola. A large container mounted on wheels or skids that are designed to ease loading of the device onto a truck.

A2.40. Ground Water. Water below the land surface in a zone of saturation. (40 CFR 260.10)

A2.41. Hazardous Constituent. Any constituent identified in Appendix VIII of 40 CFR Part 261, or any constituent identified in Appendix IX of 40 CFR Part 264.

A2.42. Hazardous Material (HM). A designated substance or material which has been determined by the Secretary of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce.

A2.43. Hazardous Pharmacy Program (HPP). An organizational unit within OC-ALC/EMC that provides single point control and accountability over the requisitioning, receipt, distribution, issue and reissue of hazardous materials.

A2.44. Hazardous Waste (HW). A solid waste that is either specifically listed as a hazardous waste in 40 CFR 261 Subpart D, or that exhibits a characteristic of ignitability, corrosivity, reactivity, or toxicity as defined in 40 CFR 261 Subpart C. Also, any waste defined as hazardous by state laws or regulations. Note that the threshold term "solid waste" has its own complicated regulatory definition. Because of the complexity of determining what is a solid waste, and because sampling and laboratory testing are often required to determine whether a solid waste has hazardous characteristics sufficient to make it a hazardous waste, individuals are cautioned that EMC must make the final technical decision on whether a substance is a hazardous waste.

A2.45. Hazardous Waste Management. The systematic control of the accumulation, characterization, storage, transportation, processing, treatment, recovery, and disposal of hazardous waste.

A2.46. Hazardous Waste Management Facility (HWMF). Located in Buildings 808 and 809 this is an accumulation site composed of equipment, space, personnel, and services managed through a contract by EMC that is designed to standardize the issuance, turn-in, and tracking of containers of hazardous waste; and to facilitate waste sampling and analysis.

A2.47. Hazardous Waste Manager. A person assigned the responsibility of monitoring and maintaining a hazardous waste management site in compliance with this instruction and RCRA requirements.

A2.48. Hazardous Waste Site Inspection Team (HWSIT). A group of persons composed of Unit Environmental Coordinators and EM personnel that conduct periodic inspections of all organizational hazardous waste management programs.

A2.49. Hazardous Waste Tracking System (HWTS). A computer system that stores all information related to hazardous waste management at Tinker AFB.

A2.50. HazMat Team. A group of personnel specially trained to respond to spills of hazardous materials and other emergencies.

A2.51. Holding. The process of maintaining hazardous waste in a secure holding device.

A2.52. Holding Device. A container, tank, or gondola used to provide secure maintenance of hazardous waste, and is not to be opened except to sample or transfer the contents.

A2.53. Ignitability. A hazardous waste characteristic of a liquid having a flash point of 140 degrees Fahrenheit or less, a solid that may catch fire spontaneously, a compressed gas that may ignite as defined in 49 CFR 173.115, or of an oxidizer as defined in 49 CFR 173.127.

A2.54. Immediate Removal Location (IRL). The location of an industrial process where a decision is periodically made to declare a contaminated material being used in the process a hazardous waste. The waste is then moved within 72 hours to a more secure management site, or is transported to an off-site TSDF.

A2.55. Incompatible. A hazardous waste which is unsuitable for:

A2.55.1. Placement in a particular device or facility because it may cause corrosion or decay of containment materials (container inner liners or tank walls). (40 CFR 260.10)

A2.55.2. Commingling with another waste material under controlled conditions because the commingling might produce heat or pressure, fire, or explosion, violent reaction, toxic dusts, mists, fumes, or gases, or flammable fumes or gases. (40 CFR 260.10)

A2.56. Industrial Shop (or Area). Any location on Tinker AFB where activities are being conducted in support of U.S. Government Programs.

A2.57. Initial Accumulation Point (IAP). A designated container at or near a generation point in which as much as 55 gallons of a specified hazardous waste, or one quart of acute hazardous waste, may be accumulated over an unlimited amount of time. Its use is controlled by the generator and is to serve as a convenient initial repository of relatively small amounts of a hazardous waste that is generated on an intermittent basis by a particular process.

A2.58. Inner Liner. A continuous layer of material placed inside a tank or container that protects the construction materials of the tank or container from the contained waste or reagents used to treat the waste. (40 CFR 260.10)

A2.59. Inspection Checklist. A list of requirements, the status of which must be formally recorded on an established form on a periodic basis.

A2.60. Label. A piece of paper, vinyl, or other material attached to a container of hazardous material or hazardous waste, inscribed with information on the nature, ownership, or destination of the material or waste.

A2.61. Listed Waste. A specific chemical waste identified in 40 CFR 261, Subpart D.

A2.62. Management Device. General term including Accumulation and Holding Devices.

A2.63. Management Method. The set of procedures used to manage hazardous waste at a management site.

A2.64. Management Site. A general term that refers to any place where hazardous wastes are managed to include CP, IAP, WSA, ACCS, IRL, PSF, and TSDF.

A2.65. Manifest. EPA Form 8700-22 used to identify the quantity, composition, origin, routing, and destination of waste during its transportation from a point of generation to a treatment, storage, or disposal facility.

A2.66. Manifest Document Number. An alphanumeric code assigned to a manifest by the generator for tracking, recording, and reporting purposes.

A2.67. On-Site. The same or geographically contiguous property that may be divided by public or private right-of-way provided the entrance and exit between the properties is at a crossroads intersection, and access is by crossing as opposed to going along, the right-of-way. Noncontiguous properties owned by the same person but connected by a right-of-way, which the individual controls, and to which the public does not have access is also considered on-site property. (40 CFR 260.10)

A2.68. Operational Checklist. A short list of requirements prominently posted near hazardous waste management sites by which the sites shall be reviewed daily for compliance.

A2.69. Overpack Drum. A large drum, usually 85 gallons in size, used to contain a smaller, leaking drum and its contents.

A2.70. Oxidizer. A substance such as a chlorate, permanganate, peroxide, or a nitrate that yields oxygen readily to stimulate the combustion of the material.

A2.71. PCB Item. Any equipment or material that contains polychlorinated biphenyls, as defined in 40 CFR 761.3, in excess of 50-ppm concentration.

A2.72. Permitted Storage Facility (PSF). A facility having a formal EPA or State permit where hazardous waste may be stored for more than 90 days, but no more than one year in the case of wastes restricted from land disposal. At Tinker AFB building 810 operated by the DRMO is such a facility.

A2.73. Personnel (or Facility Personnel). All personnel who work at, or oversee the operation of, a permitted storage facility, or other management site, and whose action or failure to act may result in noncompliance with the requirements of the Tinker AFB RCRA Part B Operating Permit.

A2.74. Process. A sequence of events caused by human or machine activity that results, whether intentional or not, in some specific end product or effect.

A2.75. Profile Sheet. A document that describes the physical and chemical properties of a hazardous waste. DRMS Form 1930 is such a document.

A2.76. Reactivity. A hazardous waste characteristic exhibited by any of the violent reactions outlined in 40 CFR 261.23.

A2.77. Recycling. In general a process by which spent materials are transformed into usable products, however, for purposes of hazardous waste management, recycling has a special definition based on various provisions in 40 CFR 261.1, 261.2, and 261.4.

A2.78. Removal Date. The date when a container that has been accumulating hazardous waste at an IAP or IRL is moved to a more secure management site.

A2.79. Runoff. Any rainwater, leachate, or other liquid that drains over land from any part of a facility. (40 CFR 260.10)

A2.80. Sealed. A condition that prevents any leakage, discharge, or emissions of solids, liquids, or gases from a management device. Bung caps and locking rings are installed and tightened. (See definition of "Closed.")

A2.81. Secure. A condition that prevents unauthorized access. A secure site or device must preclude entry by unauthorized individuals, and unauthorized accumulation or disposal of hazardous waste.

A2.82. Segregation. Physical separation of material or wastes to prevent incompatible reactions, to facilitate their use, to make them more amenable to being recycled, or to prevent contamination of non-hazardous material or waste with hazardous waste.

A2.83. Sludge. Any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility exclusive of the treated effluent from a wastewater treatment plant or industrial process. (40 CFR 260.10)

A2.84. Solid Waste. Any discarded material as defined in 40 CFR 261.2. This CFR definition is very complicated. It includes any liquid or gaseous waste matter, as well as solids. In particular, the term "discarded" has a very specialized definition. Among other things, it includes any material that is abandoned by being (1) disposed of, (2) burned or incinerated, or (3) accumulated, stored, or treated in lieu of being disposed of, burned, or incinerated. For purposes of this instruction, the most important point is that a material may become a solid waste, and potentially a hazardous waste, as soon as the intent to discard the material is formed. Because of the complexity of determining what is a solid waste, EMC should make the final technical decision.

A2.85. Spill. Any accidental or unintentional leaking, pumping, pouring, emitting, emptying, or dumping of water or materials into or onto any surface, land, water, or air.

A2.86. Storage. The management of hazardous waste in secure holding devices at a permitted storage facility prior to its being treated, disposed of, or stored elsewhere.

A2.87. Tank. A stationary device with an open or closed top used to hold or accumulate liquid materials or wastes, which is constructed primarily of non-earthen materials (wood, concrete, steel, plastic, fiberglass), which provide structural support.

A2.88. Transportation. The act of moving hazardous waste from one management site to another.

A2.89. Transporter. A person who engages in transportation of hazardous waste.

A2.90. Treatment. Any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste or so as to recover energy or material resources from the waste; or so as to render such waste non-hazardous, or less hazardous, safer to transport, store, or dispose of; or amenable for recovery or storage, or reduce in volume. (40 CFR 260.10)

A2.91. Triple-Rinsing. A procedure for removing hazardous waste residue from a container by rinsing it three times with a solvent or steam to remove the chemical previously held in the container.

A2.92. Volatile Organic Compound. An organic compound that evaporates readily and participates in atmospheric photochemical reactions.

A2.93. Universal Waste Lamp. The bulb or tube portion of an electric lighting device designed to produce radiant energy, most often in the ultraviolet, visible, and infrared regions of the electromagnetic spectrum. Examples include fluorescent, high intensity, neon, mercury vapor, high-pressure sodium, and metal halide lamps.

A2.94 Waste Lamp Accumulation Site. A designated location in an industrial complex for temporary storage of Universal Waste Lamps.

A2.95. Waste Staging Area. A designated location in an industrial complex where more than one 55-gallon drum, each accumulating a different but compatible hazardous waste, are maintained in close proximity as Initial Accumulation Points. The purpose is to provide complete control of wastes being generated by the responsible organization, and maximum safety of personnel.

A2.96. Waste Stream. A waste of consistent composition and origin that is generated on a continuous or intermittent basis at a particular location by a particular process.

A2.97. Waste Type. The description or chemical analysis of an identified waste.

ATTACHMENT 3
INFORMATION AND EMERGENCY CONTACTS
TINKER AFB

ORGANIZATION	ON-DUTY EXTENSION
a. Tinker Air Force Base	**(405) 732-7321**
(1) Fire Department	911
(2) Base Hospital **(EMERGENCY)**	911
(3) Command Post	OC-ALC 92171
	AWACS 47313
(4) Civil Engineer Service Desk	44203
(5) Environmental Management/EMC	45199
(6) Ground Safety Office	93263
(7) Security Police **(EMERGENCY)**	911
(8) Disaster Preparedness Office	43515
(9) Bio-environmental Engineering	47844
(10) Liquid Fuels Maintenance	42753
(11) Staff Judge Advocate/(Environmental)	95811
(12) Public Affairs Office	92026
(13) Service Contracts Section	43301
(14) Base Locator	42456
(15) HWMF (Barrel Yard)	63398
(16) DRMO	97882
(17) OSI Criminal Investigations	47822

b. Headquarters AFMC, Wright-Patterson AFB OH

(1) Command Post	DSN 787-6314
(2) Environmental Office (CEV)	DSN 787-5873

c. Other Off-Base Organizations

Federal and State Agencies:

National Response Center	(800) 424-8802
Regional Response Center (If NRC is unavailable)	(214) 767-2720
Oklahoma Department of Environmental Quality	(405) 271-1400

d. Contingency Contacts

If, in the judgment of the On-Scene-Coordinator (OSC), additional off-base resources are required, the Disaster Preparedness Plan will be implemented and the following agencies and organizations can be contacted if deemed necessary:

Oklahoma City Police Department.....297-1000
Oklahoma City Fire Department.....297-3439
Midwest City Police Department.....739-1300
Midwest City Fire Department.....739-1340
Del City Police Department.....677-2443
Del City Fire Department.....671-2891
Veterans Affairs Medical Center.....270-0501
Fort Sill EOD Unit.....DSN 639-5209
OK County Sheriff (Bomb Unit).....236-1717

If adequate spill response information is not available for a spill product, which can be identified by chemical, trade name, or manufacturer, the following organizations can be contacted by telephone to assist in providing specific information concerning the spill product:

Chemtrec.....(800) 424-9300
Chem-Tel, Inc.....(800) 255-3924
Military Shipments (Explosives/Ammunition).....(703) 697-0218
Military Shipments (Non-Explosive/Ammunition).....(800) 851-8061
ETIS.....(904) 283-6167

ATTACHMENT 4
SPILL DISCOVERY AND INITIAL RESPONSE

Any person recognizing an oil, hazardous substance, hazardous material, or hazardous waste spill shall immediately:

a. Activate emergency alarm system, if any.

b. Evacuate the area, if warranted by the type of spill.

c. Make sure that all employees shut down their operation and secure their equipment.

d. Call the fire department at extension 911, and give the type, location, and size of spill and the name of the individual reporting.

e. Inform the Supervisor, Section Foreman, or Chief.

f. Contain the spill, if it can be done safely.

g. Perform cleanup operations within the unit's capabilities and assist the fire department upon its arrival.

h. The supervisor will conduct a roll call of employees and report status to Fire Department "On-Scene Commander."

ATTACHMENT 5
RECORD OF ANNUAL REVIEW

The Environmental Management Compliance Operations Branch (EMC) must review the Hazardous Waste Management Plan annually. The review will be conducted for three purposes:

1. To determine changes in the type or volume of hazardous waste generated.

2. To incorporate changes to regulatory requirements.

3. To incorporate changes or additions to procedures and responsibilities for managing hazardous waste.

Within each organization the Unit Environmental Coordinator (UEC) will review the plan annually and submit any needed changes to EMC.

DATE	PERSON CONDUCTING REVIEW	SIGNATURE	REMARKS

ATTACHMENT 6
RECORD OF CHANGES

When changes to the Hazardous Waste Management Instruction are made, the change number, date of change, and name of person entering the change, will be added to the record of changes.

CHANGE NUMBER	DATE POSTED	NAME OF PERSON ENTERING CHANGES

ATTACHMENT 7
LIST OF ACRONYMS USED IN THIS INSTRUCTION

ACCS - Accumulation Site
AFB - Air Force Base
ASD - Accumulation Start Date
CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
CFR - Code of Federal Regulations
COD - Certificate of Disposal
CP - Collection Point
CPF - Container Processing Facility
DEQ - Department of Environmental Quality (Oklahoma)
DLA - Defense Logistics Agency
DoD - Department of Defense
DOJ - Department of Justice
DOL - Department of Labor
DOT - Department of Transportation
DRMO - Defense Reutilization and Marketing Office
DRMS - Defense Reutilization and Marketing Service
ECAMP - Environmental Compliance Assessment and Management Program
EDR - Environmental Deficiency Record
EMIS - Environmental Management Information System
EOD - Explosive Ordnance Disposal
EPA - Environmental Protection Agency
EPCRA - Emergency Planning and Community Right-to-Know Act
ESOH - Environmental Safety and Occupational Health Council
ETIS - Environmental Technical Information System
HM - Hazardous Material
HMMP – Hazardous Materials Management Program
HPP - Hazardous Pharmacy Program
HSWA - Hazardous and Solid Waste Amendments (to RCRA, 1984)
HW - Hazardous Waste
HWMF - Hazardous Waste Management Facility
HWMI - Hazardous Waste Management Instruction
HWSIT - Hazardous Waste Site Inspection Team
HWTS - Hazardous Waste Tracking System
HWWG - Hazardous Waste Working Group
IAP - Initial Accumulation Point
IG - Inspector General
IRL - Immediate Removal Location
IWTP - Industrial Wastewater Treatment Plant
LDR - Land Disposal Restrictions
MSDS - Material Safety Data Sheet
NOV - Notice of Violation
NRC - National Response Center

NSN - National Stock Number
OC-ALC - Oklahoma City Air Logistics Center
OI - Operating Instruction
OSC - On Scene Commander
OSI - Office of Special Investigations (Air Force)
POL - Petroleum, Oils, and Lubricants
PSF - Permitted Storage Facility
RCRA - Resource Conservation and Recovery Act
RQ - Reportable Quantity
RTDS - Reutilization, Transfer, Donation, or Sale Program
SARA - Superfund Amendments and Reauthorization Act
SOW - Statement of Work
SSCP - Site Specific Contingency Plan
TRI - Toxic Release Inventory
TSDF - Treatment, Storage, or Disposal Facility
UEC - Unit Environmental Coordinator
VOC - Volatile Organic Compound
WAP - Waste Analysis Plan
WLAS – Waste Lamp Accumulation Site
WLCS – Waste Lamp Consolidation Site
WSA - Waste Staging Area

POCKET 1

TINKER AFB ORGANIZATION CHART

NOTE: *Unit Environmental Coordinators (UEC) shall inform their organizations when information in this Pocket changes as advised by EMC.*

POCKET 2
WASTE TYPE INVENTORY

vel 1	Level 2	Material Description	
00		**ACIDS**	
00	01	ACID AND CHROME SLUDGE	8
00	02	ACID SCALE CONDITIONER	8
00	03	ACID SCALE CONDITIONER SLUDGE	8
00	04	ACID, SODIUM BISULFATE, PHOSPHORIC, AND/OR OXALIC	8
00	05	PHOSPHORIC ACID SOLUTION AND ALODINE	8
00	06	BATTERY ACID RINSATE, NEUTRALIZED WITH LIMESTONE	9
00	07	CHROMIC ACID	8
00	08	CHROMIC/PHOSPHORIC ACID	8
00	09	FERRIC CHLORIDE SOLUTION (ACIDIC)	8
00	10	NITRIC ACID STRIP SOLUTION (GT301 A&B)	8
00	11	PHOSPHORIC ACID	8
01		**BASES**	
01	01	ALKALINE CLEANER	8
01	02	ALKALINE DETERGENT SOLUTION	
01	03	ALKALINE MATERIAL (POWDER)	
01	04	ALKALINE PERMANAGANATE	8 & 5.1
01	05	ALKALINE PERMANGANATE SLUDGE AND FILTERS	5.1
01	06	ALKALINE PRECLEANER SLUDGE	8
01	07	ALKALINE RUST AND SCALE REMOVER	8
01	08	ALKALINE RUST AND SCALE REMOVER SLUDGE	8
01	09	ALKALINE RUST AND SCALE REMOVER SLUDGE AND FILTERS	8
01	10	ALKALINE RUST REMOVER	8
01	11	ALKALINE SOAP, MACHINE CLEANER	
01	12	ALKALINE TOWER TREATMENT	8
01	13	CAUSTIC SOAP	8
01	14	CAUSTIC WATER FROM FRAC TANK	
01	15	SODA LIME	
01	16	SODIUM HYDROXIDE	8
02		**SEALANTS, ADHESIVES & RESINS**	
02	01	ACRYLIC RESIN (TRANSPO T-17 LIQUID COMPONENT)	
02	02	ADHESIVE FILMS, GRAPHITE, AND FM300	4
02	03	ADHESIVE, EPOXY RESINS, THINNERS, AND PRIMER	4
02	04	ADHESIVE, PAINT, AND BREAK FREE IN CONTAINERS	4
02	05	ADHESIVE, PAINT, SEALANTS, AND GREASE IN CONTAINERS	3
02	06	ADHESIVES IN CONTAINERS	4
02	07	ADHESIVES, SEALANTS, PRIMER, AND COATING IN CONTAINERS W/BRUSHES	
02	08	EPOXY RESIN AND RUBBER COMPOUND IN CANS	4
02	09	EPOXY RESIN, SILICONE, AND RUBBER IN CONTAINERS	4
02	10	RESIN WITH WATER SOFTENER	
02	11	SEALANT IN CONTAINERS	4
02	12	SEALANT IN CONTAINERS, W/CONTAMINATED RAGS AND PAPER	4
02	13	SEALANT IN TUBES AND CANS, RUBBER, ADHESIVE WITH SILVER, AND BRUSHES	4
02	14	SEALANT IN TUBES/CONTAINERS, EMPTY CONTAINERS/TUBES, RAGS	4
02	15	SEALANT RESIDUE	
02	16	SEALANT TUBES (RECYCLABLE)	4
02	17	SEALANT TUBES AND CONTAINERS	4
02	18	SEALANT TUBES AND RAGS WITH SEALANT	4
02	19	SEALANT TUBES AND SEALANT	4
02	20	SEALANT TUBES AND CONTAINERS WITH PRIMER RESIDUE	4
02	21	SEALANT TUBES, GLUES, AND ADHESIVES IN CONTAINERS	4
02	22	SEALANT, PRIMER AND ADHESIVES IN TUBES & CONTAINERS W/BRUSHES & CUPS	4
02	23	SEALANT, TOLUENE, METHANOL, TURCO, AND MEK	3

POCKET 2
WASTE TYPE INVENTORY

Level 1	Level 2	Material Description	
02	24	SEALANTS, ADHESIVES, AND GLUES IN CONTAINERS	4
02	25	SEALANTS, ADHESIVES, AND GREASE IN CONTAINERS	4
02	26	SILICONE JOINT SEALANT	
03		**HALOGENATED SOLVENTS**	
03	01	BG-CLEAN 634,(ASPHALT REMOVER)	
03	02	CARBON PACK WITH PERCHLOROETHYLENE	9
03	03	PERCHLOROETHYLENE, NAPHTHA, ISOPROPANOL	
03	04	PERCHLOROETHYLENE	6.1
03	05	PERCHLOROETHYLENE AND SLUDGE	6
03	06	PERCHLOROETHYLENE AND WAX	6.1
03	07	TRICHLOROETHANE, 1,1,1	6.1
03	08	TRICHLORTRIFUOROETHANE (CFC 111)	6
04		**NON-HALOGENATED SOLVENTS**	
04	01	ALCOHOL CLEANER FOR INK JET PRINTER	3
04	02	ALCOHOL, DENATURED, PHENOPHTHALEIN, AND WATER	3
04	03	CITRIKLEEN (PENETONE) CLEANER	
04	04	ISOPROPYL ALCOHOL WITH SOLVENTS	
04	05	METHYL ETHYL KETONE	3
04	06	METHYL ETHYL KETONE, FOUR PART CLEANER, AND TUFFY LUSTER	
04	07	METHYL ETHYL KETONE, PAINT, AND THINNER	3
04	08	PD-680	
04	09	PD-680 II	
04	10	PD-680, TYPE III	
04	11	PETROLEUM DISTILLATE (CLEANING SOLVENT)	
04	12	TOLUENE, MEK, METHANOL, PR 148, SEALANT, 4-PART CLEANER, COOLANT & WATER	3
04	13	TOLUENE, MEK, METHANOL, 4-PART, SEALANT, & COOLANT	3
05		**SOLVENTS - UNKNOWN**	
05	01	3-D SUPREME	
05	02	CLEANER, FIXER/WASH SYSTEM	
05	03	CLEANER, MACHINE WITH OIL (WATER MIX)	
05	04	CLEANER, WATER MIX MACHINE	
05	05	CLEANER, WATER MIX MACHINE AND OIL	
05	06	CLEANING COMPOUND, AIRCRAFT	
05	07	PENSOLVE L805 (STODDARD SOLVENT SOLUTION)	
05	08	RUNWAY DERUBBERIZER	
05	09	SOLVENT, SAFETY KLEEN 105	
05	10	SOLVENT, SAFETY-KLEEN	3
05	11	SOLVENTS, RECOVERED FROM GROUND WATER TREATMENT	
05	12	WASTE COSMOLINE	
06		**WASTEWATERS, RINSES, & LEACHATES**	
06	01	EFFLUENT WASTE WATER TREATMENT	9
06	02	INDUSTRIAL WASTE TREATMENT LINES	9
06	03	INDUSTRIAL WASTE TREATMENT ODOR SUPRESSENT MATERIAL	
06	04	INFLUENT SUMP: WASTE WATER TREATMENT	6
06	05	OIL WATER SEPARATOR FROM CAR WASH	9
06	06	PAINT CHIPS IN WATER W/BLAST MEDIA F002 D006 D007 D008 D027	9
06	07	WASH WATER FROM JET WASHER	
07		**FUELS**	
07	01	DIESEL FUEL	
07	02	DIESEL, MOGAS, AND WATER	
07	03	FUEL (JP-8)	3
07	04	FUEL, JET	3

POCKET 2
WASTE TYPE INVENTORY

Level 1	Level 2	Material Description					
07	05	FUEL, JP-4	3				
07	06	FUEL, JP-4/5/8		3			
07	07	FUEL, JP-4/JP-8					
07	08	FUEL, JP-8, DIESEL, MOGAS AND WATER				3	
07	09	MOGAS					
08		**OILS & LUBRICANTS**					
08	01	BRAKE FLUID "USED OIL"					
08	02	CALIBRATION FLUID		3			
08	03	DAMPING FLUID "USED OIL"					
08	04	EDM DIELECTRIC FLUID WITH METAL SHAVINGS					
08	05	FLUID, TRANSMISSION "USED OIL"					
08	06	GREASE IN CONTAINERS					
08	07	HYDRAULIC FLUID					
08	08	HYDRAULIC FLUID (DEXTRON)					
08	09	LUBE OIL					
08	10	NAPHTHA: FINGER PRINT REMOVER			3		
08	11	NAPHTHA: SONAR COMPENSATION FLUID					
08	12	NAPHTHA: STODDARD SOLVENT		3			
08	13	OIL, COMPRESSOR					
08	14	OIL, USED					
08	15	OIL, USED 1010					
08	16	OIL, USED 22851					
08	17	OIL, USED 30 WT.					
08	18	OIL, USED 7808					
08	19	OIL, USED BP DIELECTRIC					
08	20	OIL, USED COMPRESSOR					
08	21	OIL, USED INSULATING					
08	22	OIL, USED LAPPING					
08	23	OIL, USED LUBRICATING					
08	24	OIL, USED MACHINE					
08	25	OIL, USED MINERAL TRANSFORMER (LOW PCBS)					
08	26	OIL, USED MOTOR					
08	27	OIL, USED REFRIGERANT					
08	28	OIL, USED TURBINE ENGINE					
08	29	OIL, USED WAY					
08	30	POWER STEERING FLUID "USED OIL"					
08	31	RUBBER AND OIL BASE INK IN CONTAINERS					
08	32	TAR					
08	33	TRANSMISSION FLUID					
09		**OIL MIXTURES**					
09	01	HYDRAULIC FLUID "USED OIL", & TRANSMISSION FLUID, DEXTRON	2				
09	02	HYDRAULIC FLUID AND COOLANT					
09	03	HYDRAULIC FLUID AND FOUR PART CLEANER			3		
09	04	HYDRAULIC FLUID AND USED OIL WITH WATER					
09	05	HYDRAULIC FLUID W/METAL PARTICLES					
09	06	HYDRAULIC FLUID, 5606, - "USED OIL"					
09	07	HYDRAULIC FLUID, AND OIL "USED OIL", PD-680					
09	08	HYDRAULIC FLUID, FOUR PART CLEANER, AND PD-680				3	
09	09	HYDRAULIC FLUID, MEK, FUEL, AND 4-PART CLEANER			3		
09	10	HYDRAULIC FLUID, PD-680, FOUR PART CLEANER, AND JP-5 FUEL				3	
09	11	HYDRAULIC FLUID, SKYDROL "USED OIL"					
09	12	OIL (USED) (ALL TYPES) AND FUEL MIXED					
09	13	OIL WITH PCB					

POCKET 2
WASTE TYPE INVENTORY

Level 1	Level 2	Material Description		
09	14	OIL, 7808 WITH JP-10 FUEL AND FREON	3	
09	15	OIL, 7808, TURBINE, MOTOR (USED)		
09	16	OIL, ETHYLENE GLYCOL, FUEL, AND SOLVENTS		3
09	17	OIL, FUEL, HYDRAULIC FLUID, AND ETHYLENE GLYCOL		
09	18	OIL, GRINDING WITH WATER		
09	19	OIL, LUBRICATING, MOTOR AND HYDRAULIC FLUID (USED)		
09	20	OIL, MOTOR AND FUEL (USED)		
09	21	OIL, MOTOR, TRANSMISSION FLUID, AND ETHYLENE GLYCOL (USED)		
09	22	OIL, PD-680, TRICHLOROETHANE, FUEL		
09	23	OIL, USED #2 HEATING WITH WATER		
09	24	OIL, USED (HYDRAULIC FLUID, WAY, MOTOR)		
09	25	OIL, USED - ALL TYPES		
09	26	OIL, USED - ALL TYPES, JP-5		
09	27	OIL, USED 1010 WITH JP-4 FUEL		
09	28	OIL, USED 2108, 7808 AND 1010		
09	29	OIL, USED 699 & 7808		
09	30	OIL, USED 7808 AND 5606		
09	31	OIL, USED 7808 AND ETHYLENE GLYCOL		
09	32	OIL, USED 7808 AND JP-4/5 FUEL	3	
09	33	OIL, USED 7808 WITH JP-4 FUEL		
09	34	OIL, USED 7808 WITH JP-4/JP-8 FUEL		3
09	35	OIL, USED 7808 WITH JP-5 FUEL		
09	36	OIL, USED 7808, HYDRAULIC FLUID, AND COOLER OIL		
09	37	OIL, USED 7808, HYDRAULIC FLUID, AND JP-5 FUEL		
09	38	OIL, USED AND HYDRAULIC FLUID		
09	39	OIL, USED AND REFRIGERANT		
09	40	OIL, USED AND USED COOLANT W/METAL SHAVINGS		
09	41	OIL, USED AND WATER		
09	42	OIL, USED CUTTING, WAY, HYDRAULIC FLUID, AND COOLANT		
09	43	OIL, USED ENGINE (30 WT. & 40 WT.), USED HYDRAULIC FLUID		
09	44	OIL, USED ENGINE WITH FUEL AND ALCOHOL		
09	45	OIL, USED ETHYLENE GLYCOL, FUEL, AND HYDRAULIC FLUID		
09	46	OIL, USED LUBE AND HYDRAULIC FLUID		
09	47	OIL, USED LUBRICATING, HYDRAULIC FLUID, AND 7808 OIL		
09	48	OIL, USED LUBRICATING, LAPPING, AND WAY		
09	49	OIL, USED SKIMMED AND GREASE		
09	50	OIL, USED SYNTHETIC & ENGINE		
09	51	OIL, USED WAY AND HYDRAULIC FLUID		
09	52	OIL, USED WITH FILTERS		
09	53	OIL, USED, ANTIFREEZE, AND WATER		
09	54	OIL, USED, DEISEL FUEL, AND HYDRAULIC FLUID		
09	55	OIL, USED, HYDRAULIC FLUID AND WATER		
09	56	OIL, USED, HYDRAULIC FLUID, AND PD-680, USED ENGINE OIL		
09	57	OIL, USED, HYDRAULIC FLUID, PD-680, AND JP-5 FUEL		
09	58	OIL, USED, WITH PD-680 AND ALCOHOL		3
09	59	POL AND ANTIFREEZE		
09	60	TRANSMISSION FLUID, DEXTRON 2		
09	61	OIL, USED 7808, HYDRAULIC FLUID AND FUEL		
09	62	OIL, USED WITH JP-8 FUEL AND HYDRAULIC FLUID		
09	63	HYDRAULIC FLUID AND EDM FLUID "USED OIL"		
09	64	OIL, USED 7808 AND HYDRAULIC FLUID		
10		**PAINTS & STAINS**		
10	01	DYKEM		

POCKET 2
WASTE TYPE INVENTORY

Level 1	Level 2	Material Description
10	02	MIXED PAINTS/CLEANERS FROM AEROSOL CANS
10	03	PAINT 3
10	04	PAINT (LACQUER, ENAMEL, VARNISH), THINNER, AND PD-680 3
10	05	PAINT AND ADHESIVES IN CONTAINERS >1GAL
10	06	PAINT AND METHYL ETHYL KETONE 3
10	07	PAINT AND METHYL ETHYL KETONE, THINNERS 3
10	08	PAINT AND RELATED MATERIAL 3
10	09	PAINT AND THINNER IN CONTAINERS
10	10	PAINT AND THINNERS
10	11	PAINT AND VARNISHES 3
10	12	PAINT BOOTH RESIDUE
10	13	PAINT IN CONTAINERS 3
10	14	PAINT STRIPPER
10	15	PAINT STRIPPER (POLYSULFIDE, SR-145/125)
10	16	PAINT STRIPPER - UNUSED MATERIAL
10	17	PAINT STRIPPER AND CARBON REMOVER ,CEE BEE J-84L 8
10	18	PAINT THINNER 3
10	19	PAINT, ACETONE, AND ALCOHOL
10	20	PAINT, LATEX
10	21	PAINT, THINNERS, XYLENE AND ALCOHOL 3
10	22	PAINT, WATER BASED (EXCESS MATERIAL)
10	23	TACK COAT, ASPHALT EMULSION PRIMER
10	24	THINNERS AND METHYL ETHYL KETONE 3
10	25	THINNERS, MEK, AND CITRA SOL 3
10	26	THINNERS, USED 3
10	27	WASTE PAINT AND THINNERS
11		**DRIED PAINT & PAINTING MATERIALS**
11	01	BARRIER PAPER CONTAMINATED WITH PRIMER, CHROME 9
11	02	LEAD BASED PAINT CONTAMINATED DEBRIS
11	03	PAINT (PRIMER AND COATINGS), HARDENED IN CANS W/BRUSHES 4
11	04	PAINT CHIPS 9
11	05	PAINT CHIPS AND BLAST MEDIA 9
11	06	PAINT CHIPS FROM LIFT STATION 6 B2122
11	07	PAINT CHIPS, LEAD BASED
11	08	PAINT CONTAMINATED PAPER
11	09	PAINT CONTAMINATED PAPER, PPE, AND TOWELS 4
11	10	PAINT, BRUSHES, ADHESIVES 4
11	11	PAINT, BRUSHES, ROLLERS AND CANS 4
11	12	PAINT, DRIED 4
11	13	PAINT, HARDENED IN CANS 4
11	14	PAINT, HARDENED IN CANS AND BRUSHES 4
11	15	PAINT, HARDENED IN CONTAINERS & BRUSHES 4
11	16	PAPER WITH PAINT AND ALCOHOL
11	17	PPE WITH PAINT, STRIPPER AND STRONTIUM CHROMATE 4
11	18	RAGS AND ABSORBENT WITH PAINT AND PAINT IN CONTAINERS 4
11	19	RAGS AND BRUSHES WITH PAINT 4
11	20	RAGS AND CONTAINERS WITH PAINT, THINNERS, AND SEALANTS IN CONTAINERS 4
11	21	RAGS AND PPE WITH STRONTIUM CHROMATE DUST 9
11	22	RAGS WITH PAINT 4
11	23	RAGS WITH PAINT, THINNERS, MEK, AND OIL
11	24	RAGS, ABSORBENT, BARRIER PAPER, ROLLERS, AND BRUSHES WITH PAINT AND THINNNERS 4

POCKET 2
WASTE TYPE INVENTORY

Level 1	Level 2	Material Description
11	25	RAGS, ABSORBENT, PPE, ROLLERS, BRUSHES, & BARRIER PAPER WITH PAINT, THINNERS, OIL 4
11	26	RAGS, ABSORBENT, PPE, ROLLERS, BRUSHES, & BARRIER PAPER WITH PAINT & THINNERS 4
11	27	RAGS, AND BRUSHES WITH PAINT 4
11	28	RAGS, BARRIER PAPER, BRUSHES, ROLLERS, AND PPE WITH PAINT AND THINNERS 4
11	29	RAGS, PPE & MATERIALS WITH PAINT, THINNERS, AND STRONTIUM CHROMATE 4
11	30	RAGS, PPE, AND ABSORBENT WITH PAINTS, THINNERS, CALIBRATION FLUID & EPOXY 9
11	31	RAGS, PPE, AND PAPER WITH PAINT AND ACETONE 4
11	32	RAGS, ROLLERS, BRUSHES, AND MASKING TAPE WITH PAINT 4
11	33	RAGS,CUPS,BRUSHES,AL-WOOL,TAPE,BARRIER PAPER W/PAINT,THINNER,METH.CHLOR,PHENOL 4
11	34	SERMETAL CONTAMINATED RAGS AND PPE 9
11	35	SERMETAL CONTAMINATED RAGS, PAPER, CARDBOARD 9
11	36	SOIL, CONTAMINATED WITH PAINT
11	37	STRONTIUM CHROMATE CONTAMINATED DUST (VACUUM) 9
11	38	STRONTIUM CHROMATE CONTAMINATED DUST AND PPE
11	39	STRONTIUM CHROMATE CONTAMINATED MATERIAL
11	40	STRONTIUM CHROMATE DUST FROM CENTRAL VACUUM SYSTEM, PPE AND FILTERS 4
11	41	STRONTIUM CHROMATE DUST, CONTAMINATED PPE AND RAGS 9
11	42	STRONTIUM CHROMATE, METHYLENE CHLORIDE AND PHENOL CONTAMINATED PPE AND RAGS 9
11	43	PAINT CONTAMINATED HOSE FROM SPRAY GUN
12		**SOLID MATERIAL & DEBRIS**
12	01	CERAMIC MEDIA
12	02	CERAMIC ROCK
12	03	CHROMIC ACID CONTAMINATED PLASTIC BAGS 5.1
12	04	CHROMIC/PHOSPHORIC ACID PVC LINER 9
12	05	DESICCANT
12	06	DESICCANT WITH GEAR OIL
12	07	DESSICANT FROM BLDG 3221 AIR SYSTEM
12	08	DRILL CUTTINGS
12	09	EMPTY CANS - PAINT THINNER
12	10	EMPTY DRUMS WITH AFFF RESIDUE
12	11	EMPTY METAL OIL CANS
12	12	EMPTY TUBES OF 8802 SEALANT FOR RECYCLING
12	13	EPOXY, PAINT HARDENED IN CONTAINERS WITH BRUSHES 4
12	14	GREASE CARTRIDGES; RAGS AND TOWELS W/MOTOR OIL, HYDRAULIC FLUID, AND GREASE
12	15	GRINDING DUST CONTAINING HEAVY METALS 9
12	16	GRINDING DUST CONTAMINATED PPE
12	17	GRINDING DUST WITH NICKEL AND COBALT
12	18	GRINDING DUST WITH NICKEL, CHROME, AND COBALT
12	19	INSULATION BLANKET 9
12	20	LEAD SCREENS 9
12	21	LEAD TAPE RESIDUE FROM DEWAX
12	22	LIME BAGS, EMPTY
12	23	MATERIALS CONTAMINATED WITH SF-6
12	24	MERCURY CONTAMINATED INSTRUMENT
12	25	MERCURY THERMOMETERS
12	26	NICKEL GRAPHITE DUST
12	27	NON REGULATED DEBRIS 9
12	28	PLASMA SPRAY DUST

POCKET 2
WASTE TYPE INVENTORY

Level 1	Level 2	Material Description
12	29	PLATING EQUIPMENT, RECYCLE
12	30	PPE CONTAMINATED WITH CHEMICALS (CHROMIUM, SOLVENTS) 9
12	31	PPE, RAGS, AND ABSORBENT WITH PENETRANT
12	32	PRE-IMPREGNATED CLOTH
12	33	PVC PIPE CONTAMINATED WITH CHEMICALS 9
12	34	RUNWAY DEBRIS 9
12	35	SEALANT IN CONTAINERS (EMPTY CONTAINERS AND BUCKETS) 4
12	36	SEALANT TUBES W/ DRIED SEALANT 4
12	37	SEALANT, DRIED AND RAGS WITH SEALANT
12	38	SOIL AND DEBRIS CONTAMINATED WITH HEAVY METALS 9
12	39	SOIL CONTAMINATED W/DIESEL FUEL
12	40	TANK LINER WITH ACID 9
12	41	TRIPLE RINSED DRUMS
13		**AEROSOLS**
13	01	AEROSOL CANS
13	02	AEROSOL CANS (CLEANERS, STARTING FLUID, PAINT) 2.1
13	03	AEROSOL CANS (PAINT, CLEANERS, FURNITURE POLISH) 2.1
13	04	AEROSOL CANS (PAINT, SEALANT)
13	05	AEROSOL CANS - PAINT/CLEANERS
13	06	AEROSOL CANS WITH PAINT, ADHESIVES, AND LUBRICANT
13	07	AEROSOL PAINT CANS
13	08	AEROSOLS (LACQUERS, PAINTS) 2.1
13	09	AEROSOLS, EMPTY (PENETRANT, MAGNETIC PARTICLE SPRAY, CLEANERS, DEVELOPERS)
14		**POLYCHLORINATED BIPHENYL WASTES**
14	01	PCB CONTAMINATED BALLASTS
14	02	PCB CONTAMINATED CAPACITORS
14	03	PCB CONTAMINATED EQUIPMENT
14	04	PCB CONTAMINATED LIGHT BALLASTS
14	05	PCB CONTAMINATED POWER FILTERS
14	06	PCB CONTAMINATED POWER SUPPLY
14	07	PCB CONTAMINATED TRANSFORMER
15		**RAGS - POLs**
15	01	RAGS AND FILTERS WITH HYDRAULIC FLUID, JP-5 FUEL, AND FOUR PART CLEANER 4
15	02	RAGS AND FILTERS WITH OIL
15	03	RAGS AND MATERIAL WITH CALIBRATION FLUID, FUEL, AND OIL 4
15	04	RAGS AND MATERIAL WITH OIL RESIDUE
15	05	RAGS AND PPE WITH OIL
15	06	RAGS AND PPE WITH OIL (ALL TYPES) AND FUEL
15	07	RAGS WITH 7808 OIL
15	08	RAGS WITH FUEL 4
15	09	RAGS WITH FUEL, ANTIFREEZE, AND MOTOR OIL
15	10	RAGS WITH FUEL, OIL, DYE, ALCOHOL, AND ADHESIVES, FREON 4
15	11	RAGS WITH FUEL, OIL, DYKEM, PD-680, AND ALCOHOL 4
15	12	RAGS WITH GREASE
15	13	RAGS WITH GREASE, OIL, AND JP-8
15	14	RAGS WITH HYDRAULIC FLUID
15	15	RAGS WITH HYDRAULIC FLUID, EPOXY, AND FOUR PART CLEANER 4
15	16	RAGS WITH HYDRAULIC FLUID, MOTOR OIL, AND GREASE
15	17	RAGS WITH HYDRAULIC FLUID, PD-680, FUEL, 4-PART CLEANER, OIL, PRIMER 4
15	18	RAGS WITH JP-8 FUEL 4
15	19	RAGS WITH JP-8 FUEL, HYDRAULIC FLUID, AND GREASE 4
15	20	RAGS WITH MOTOR OIL
15	21	RAGS WITH OIL (PRINTING PRESS)

POCKET 2
WASTE TYPE INVENTORY

Level 1	Level 2	Material Description
15	22	RAGS WITH OIL - ALL TYPES
15	23	RAGS WITH OIL AND COOLANT
15	24	RAGS WITH OIL AND FUEL
15	25	RAGS WITH OIL AND GREASE
15	26	RAGS WITH OIL AND JP-5 FUEL
15	27	RAGS WITH OIL, 7808 AND PD-680 ,
15	28	RAGS WITH OIL, GREASE, HYDRAULIC FLUID, JP-8 AND JP-5 FUEL (TRACE)
15	29	RAGS WITH OIL, HYDRAULIC FLUID, AND GREASE
15	30	RAGS WITH OIL, HYDRAULIC FLUID, GREASE, PD-680, & ETHYLENE GLYCOL
15	31	RAGS WITH OIL, HYDRAULIC FLUID, PD-680, GREASE, AND ANTIFREEZE
15	32	RAGS WITH OIL, PD-680, AND FUEL
15	33	RAGS WITH OIL, PD-680, GREASE, AND HYDRAULIC FLUID
15	34	RAGS WITH OIL, PRIMER, AND FOUR PART CLEANER 4
15	35	RAGS WITH OIL, SEALANT, PRIMER, AND ADHESIVES 4
15	36	RAGS WITH PD-680
15	37	RAGS WITH PD-680 II, OIL, AND RIFLE ,BORE CLEANER
15	38	RAGS, PAPER, ROLLERS, BRUSHES WITH OIL, ALCOHOL, TRICHLOROETHANE PAINT & THINNERS
15	39	RAGS, PPE AND ABSORBENT WITH OIL
15	40	RAGS, PPE, AND CONTAINERS WITH OIL, RTV, GP460, DYKEM, AND LOCTITE 4
15	41	RAGS, STRING, AND TAPE WITH HYDRAULIC FLUID AND 4-PART 4
15	42	RAGS WITH HYDRAULIC FLUID, OIL, FUEL, AND ETHYLENE GLYCOL
15	43	RAGS WITH OIL, HYDRAULIC FLUID, AND FUEL
16		**RAGS & ABSORBENTS**
16	01	RAGS AND ABSORBENT MATERIAL WITH CALIBRATION FLUID AND OIL 4
16	02	RAGS AND ABSORBENT PADS WITH OIL
16	03	RAGS AND ABSORBENT WITH 7808 OIL, PD-680, 1,1,1-TRICHLOROETHANE, CUTTING FLUID 9
16	04	RAGS AND ABSORBENT WITH MACHINE OIL
16	05	RAGS AND ABSORBENT WITH OIL
16	06	RAGS AND ABSORBENT WITH OIL AND COOLANT
16	07	RAGS AND ABSORBENT WITH OIL AND CUTTING FLUID
16	08	RAGS AND ABSORBENT WITH OIL AND HYDRAULIC FLUID
16	09	RAGS AND ABSORBENT WITH OIL, 7808, PD-680
16	10	RAGS AND ABSORBENT WITH OIL, FUEL, PD-680, AND GREASE 4
16	11	RAGS AND ABSORBENT WITH OIL, FUEL, ALCOHOL, GREASE, AND PD-680 4
16	12	RAGS AND ABSORBENT WITH OIL, GREASE, AND HYDRAULIC FLUID
16	13	RAGS AND ABSORBENT WITH PD-680
16	14	RAGS AND ABSORBENT WITH ZYGLO AND NAPHTHA PETROLEUM BASED CLEANER
16	15	RAGS AND ABSORBENTS WITH OIL, FUEL, GREASE, JP-8, AND HYDRAULIC FLUID
16	16	RAGS, ABSORBENT, AND FILTERS WITH OIL AND COOLANT
16	17	RAGS, ABSORBENT, AND PPE WITH GRINDING PARTICLES 9
16	18	RAGS, ABSORBENT, AND CONTAINERS WITH SEALANTS AND ADHESIVES 4
17		**RAGS - OTHER**
17	01	RAGS & BRUSHES WITH 4-PART, JP-5, OIL, PAINT, THINNER, TUFFY LUSTER & GREASE 4
17	02	RAGS & PPE W/FUEL, HYDRAULIC FLUID, FOUR PART CLEANER, PRIMER, SEALANT 4
17	03	RAGS & PPE W/SOLVENTS, GREASE, OIL, DYK.,DICH.GLYSTAL, ALCOHOL, SOLDER FLUX 4
17	04	RAGS AND BARRIER PAPER WITH SEALANTS, PAINT, METHYL ETHYL KETONE, & THINNERS 4
17	05	RAGS AND CONTAINERS WITH ALODINE 9
17	06	RAGS AND PPE W/ULTRASONIC COUPLANT, ZYGLO, 1,1,1 PENETRANT & MAGNETIC PARTICLE 4
17	07	RAGS AND PPE WITH SEALANT
17	08	RAGS WITH ALCOHOL, DIESEL, MOGAS AND FUEL

POCKET 2
WASTE TYPE INVENTORY

vel 1	Level 2	Material Description
17	09	RAGS WITH ALODINE
17	10	RAGS WITH ALODINE 1001, METAL CLEANER , AND CONDITIONER 9
17	11	RAGS WITH AMMONIA
17	12	RAGS WITH ANTIFREEZE (ETHYLENE GLYCOL)
17	13	RAGS WITH ANTIFREEZE AND CORROSION INHIBITOR
17	14	RAGS WITH CADMIUM BRUSH PLATING SOLUTION 9
17	15	RAGS WITH CHROMIC ACID, ALODINE, NITRIC ACID AND HYDROFLUOSILIC ACID 9
17	16	RAGS WITH CITRIKLEEN, PENSOLV, AND ISOPROPYL ALCOHOL 4
17	17	RAGS WITH GRINDING DUST
17	18	RAGS WITH ISOPROPYL ALCOHOL AND SOLVENTS 4
17	19	RAGS WITH METHYL ETHYL KETONE 4
17	20	RAGS WITH METHYL ETHYL KETONE AND PAINT 4
17	21	RAGS WITH METHYL ETHYL KETONE, HYDRAULIC PAINT SLUDGE, AND STRIPPERS 4
17	22	RAGS WITH METHYL ETHYL KETONE, PRIMER, SEALANT TAPE 4
17	23	RAGS WITH METHYLENE CHLORIDE AND PHENOL 9
17	24	RAGS WITH SODIUM NITRATE (ACTIVATOR 8) 5.1
17	25	RAGS, BRUSHES, PATCHES WITH OIL AND RIFLE BORE CLEANER
17	26	RAGS, LINERS, AND PPE WITH ALODINE 4
17	27	RAGS, PAPER, ETC. WITH SEALANT 4
17	28	RAGS, PPE, & CONTAINERS WITH ALODINE 9
17	29	RAGS, PPE, AND STYROFOAM WITH SEALANT 4
17	30	RAGS W/ BERYLLIUM AND BERYLLIUM GASKETS
18		**ABSORBENTS - POLs**
18	01	ABSORBENT (PEAT MOSS) W/OIL, HYDRAULIC, FLUID, AND FOUR PART CLEANER 4
18	02	ABSORBENT AND DEBRIS WITH OIL
18	03	ABSORBENT AND FILTERS WITH 7808 OIL
18	04	ABSORBENT AND FILTERS WITH EDM FLUID AND 7808 OIL
18	05	ABSORBENT AND PAPER TOWELS WITH 7808 OIL AND JP-5 FUEL
18	06	ABSORBENT AND RAGS WITH HYDRAULIC FLUID AND OIL
18	07	ABSORBENT AND RAGS WITH OIL AND COOLANT ,
18	08	ABSORBENT AND RAGS WITH OIL, FUEL, AND FILTERS
18	09	ABSORBENT MATERIAL WITH REFRIGERANT OIL
18	10	ABSORBENT WITH 7808 OIL
18	11	ABSORBENT WITH 7808 OIL AND HYDRAULIC FLUID
18	12	ABSORBENT WITH FUEL, JP-4/5/8 4
18	13	ABSORBENT WITH FUEL, JP-8, MOGAS, DIESEL 4
18	14	ABSORBENT WITH FUEL, OIL, ETHYLENE, GLYCOL, AND HYDRAULIC FLUID
18	15	ABSORBENT WITH FUEL, OIL, HYDRAULIC, FLUID, AND METHYL ETHYL KETONE
18	16	ABSORBENT WITH HYDRAULIC FLUID
18	17	ABSORBENT WITH HYDRAULIC FLUID, FUEL, & ,SKYDROL 4
18	18	ABSORBENT WITH HYDRAULIC FLUID, JP-5 AND/OR COOLANT
18	19	ABSORBENT WITH HYDRAULIC FLUID, JP-5, AND 4-PART CLEANER 4
18	20	ABSORBENT WITH HYDRAULIC FLUID, JP-5, AND PD-680
18	21	ABSORBENT WITH HYDRAULIC FLUID, OIL AND FUEL
18	22	ABSORBENT WITH HYDRAULIC FLUID, SPILL RESIDUE
18	23	ABSORBENT WITH JP-5 & HYDRAULIC FLUID
18	24	ABSORBENT WITH JP-5 FUEL
18	25	ABSORBENT WITH JP-8 FUEL 4
18	26	ABSORBENT WITH JP-8 FUEL, OIL, GREASE ,AND HYDRAULIC FLUID
18	27	ABSORBENT WITH MECHANICAL PUMP OIL
18	28	ABSORBENT WITH MOGAS AND DIESEL
18	29	ABSORBENT WITH OIL (ALL TYPES) AND FUEL

POCKET 2
WASTE TYPE INVENTORY

Level 1	Level 2	Material Description	
18	30	ABSORBENT WITH OIL AND COOLANT	
18	31	ABSORBENT WITH OIL AND HYDRAULIC FLUID	
18	32	ABSORBENT WITH OIL AND JP-5 FUEL	
18	33	ABSORBENT WITH OIL AND PCB	
18	34	ABSORBENT WITH OIL, 4-PART, FUEL, HYDRAULIC FLUID, AND PD-680	4
18	35	ABSORBENT WITH OIL, 7808, CUTTING FLUID, HYDRAULIC FLUID, PD-680, TRICHLOROETHANE	
18	36	ABSORBENT WITH OIL, FOUR PART CLEANER, SEALANT, AND FUEL	4
18	37	ABSORBENT WITH OIL, FUEL, ADHESIVES, AND HYDRAULIC FLUID	
18	38	ABSORBENT WITH OIL, FUEL, AND FILTERS	
18	39	ABSORBENT WITH OIL, FUEL, HYDRAULIC FLUID AND ETHYLENE GLYCOL	
18	40	ABSORBENT WITH OIL, FUEL, HYDRAULIC FLUID, ANTIFREEZE	
18	41	ABSORBENT WITH OIL, HYDRAULIC FLUID AND GREASE	
18	42	ABSORBENT WITH OIL, MOGAS, DIESEL, AND/OR ANTIFREEZE	4
18	43	ABSORBENT WITH USED OIL - ALL TYPES	
18	44	ABSORBENT WITH: _____	(SPILL TRAILER)
18	45	ABSORBENT WITH:_____	
18	46	ABSORBENT (PEAT MOSS) WITH HYDRAULIC FLUID AND METHYL ETHYL KETONE	4
18	47	ABSORBENT, RAGS AND PPE WITH OIL, PD-680,HYDRAULIC FLUID AND ZYGLO	
18	48	OIL DRY WITH 7808 OIL	
18	49	ABSORBENT WITH HYDRAULIC FLUID, PD-680, JP-8, 4-PART, AND COOLANT FLUID	
18	49	SPILL RESIDUE WITH PROPYLENE GLYCOL, OIL, HYDRAULIC FLUID, JP-8	
18	50	ABSORBENT WITH OIL	
18	51	DESSICANT WITH WATER, OIL, AND METAL RESIDUE	
19		**ABSORBENTS - OTHER**	
19	30	ABSORBENT & PPE W/STRIPPING COMPOUND	9
19	31	ABSORBENT WITH ANTIFREEZE	
19	32	ABSORBENT WITH ANTIFREEZE AND OIL	
19	33	ABSORBENT WITH CHROMIC TRIOXIDE FROM FUME SCRUBBER	9
19	34	ABSORBENT WITH PENETRANT AND DEVELOPER	
19	35	ABSORBENT WITH PERCHLOROETHYLENE	9
19	36	ABSORBENT WITH RUST INHIBITOR (SODIUM NITRITE)	
19	37	ABSORBENT WITH SEALANT, FUEL, HYDRAULIC FLUID, AND FOUR PART CLEANER	4
19	38	ABSORBENT WITH SODIUM HYDROXIDE	
19	39	ABSORBENT WITH SOLV-IT	
19	40	ABSORBENT WITH: PAINT SPILL CLEAN UP MATERIAL/RESIDUE	
20		**FILTERS**	
20	01	FILTER AND/OR CARBON PACK WITH NICKEL	
20	02	FILTER ELEMENTS	
20	03	FILTER W/PLASMA SPRAY POWDER (METAL BASED), RUBBER	9
20	04	FILTER WITH SILVER	
20	05	FILTER WITH STRIPPING SOLUTION	
20	06	FILTER, 7808 OIL AND 1010 OIL	
20	07	FILTER, AIR	9
20	08	FILTER, AIR (FROM GLASS BEAD BARN)	9
20	09	FILTER, AIR (FROM PLASTIC BEAD BARN)	9
20	10	FILTER, AIR WITH PAINT DUST	9
20	11	FILTER, CHARCOAL	
20	12	FILTER, DIESEL AND OIL	
20	13	FILTER, DOWN DRAFT REWORK BOOTH	9
20	14	FILTER, FLUORESCENT PENETRANT	
20	15	FILTER, FUEL	4
20	16	FILTER, FUEL, JP-4/JP-8	

POCKET 2
WASTE TYPE INVENTORY

Level 1	Level 2	Material Description
20	17	FILTER, FUEL, JP-8
20	18	FILTER, GAS MASK, M17
20	19	FILTER, GEARBOX GRINDING BOOTH
20	20	FILTER, GRINDING DUST
20	21	FILTER, GRINDING DUST AND VACUUM BAGS
20	22	FILTER, HYDRAULIC FLUID
20	23	FILTER, HYDRAULIC FLUID AND OIL
20	24	FILTER, HYDRAULIC FLUID, OIL, AIR, AND FUEL
20	25	FILTER, JP-5/8 FUEL
20	26	FILTER, M13 GAS MASK
20	27	FILTER, M13A2
20	28	FILTER, MCU-2A/P PROTECTIVE MASK
20	29	FILTER, METAL, & HOSES WITH FUEL, OIL , AND CALIBRATION FLUID
20	30	FILTER, OIL
20	31	FILTER, OIL AND FUEL
20	32	FILTER, OIL AND HYDRAULIC FLUID
20	33	FILTER, OIL, TRANSMISSION FLUID & FUEL
20	34	FILTER, PAINT BOOTH
20	35	FILTER, USED (7808 OIL) ,
20	36	FILTERS, AIR, OIL AND FUEL WITH RAGS AND,DEBRIS
20	37	FUME SCRUBBER MEDIA
20	38	OIL AND DIESEL FILTERS WITH RAGS AND ABSORBENT
20	39	FILTER, OIL, FUEL AND HYDRAULIC FLUID
20	40	FILTER, GASOLINE, JP-8, AND DIESEL
20	39	FILTER, AIR FROM FOUNDRY SHOP
21		**SLUDGES, RESIDUES & STILL BOTTOMS**
21	01	ASBESTOS CONTAMINATED SLUDGE
21	02	BLACK OXIDE SLUDGE
21	03	CHROMIC ACID SLUDGE
21	04	CHROMIC PHOSPHORIC SLUDGE
21	05	COLD CARBON REMOVER SLUDGE
21	06	ENSTRIP STRIPPING SOLUTION SLUDGE
21	07	EPOXY, POLYURETHANE, AND ENAMEL PAINT SLUDGE, ACETONE
21	08	GRINDING SLUDGE
21	09	INDUSTRIAL SLUDGE (CHROMIUM HYDROXIDE)
21	10	INDUSTRIAL WASTE TREATMENT SLUDGE DRY
21	11	INDUSTRIAL WASTE TREATMENT SLUDGE FROM IWTP LINE REPLACEMENT
21	12	INDUSTRIAL WASTE TREATMENT SLUDGE, LIQUID
21	13	MACHINE SLUDGE WITH COOLANT, OIL, AND GRINDING MATERIAL
21	14	MOLTEN SALT SLUDGE
21	15	OIL WATER SEPARATOR BOTTOMS
21	16	PAINT DUST/SLUDGE FROM B2280 TUNNELS
21	17	PAINT SLUDGE
21	18	PAINT SLUDGE AND SOLVENTS, LATEX AND OIL BASED ENAMELS
21	19	PAINT SLUDGE AND THINNERS
21	20	PAINT SLUDGE FROM AEROSOL CANS
21	21	PAINT SLUDGE, PRIMER, THINNERS, AND OIL
21	22	PAINT SLUDGE, THINNERS, ADHESIVES, AND CEMENTS
21	23	PAINT SLUDGE, WATERBORNE
21	24	PAINT, THINNERS, AND MEK (PAINT SLUDGE)
21	25	PHOSPHORIC ACID SLUDGE
21	26	PRETREATMENT SLUDGE
21	27	SERMETAL PAINT SLUDGE AND WATER

POCKET 2
WASTE TYPE INVENTORY

Level 1	Level 2	Material Description				
21	28	SILVER CYANIDE STRIP SLUDGE	6.1			
21	29	SLUDGE AND LAPPING OIL				
21	30	SLUDGE AND OIL FROM SPRAY WASHER				
21	31	SLUDGE FROM CAR WASH RACK BLDG 2143				
21	32	SLUDGE FROM RINSE TANKS	9			
21	33	SLUDGE FROM TRENCHES	9			
21	34	SLUDGE FROM VACUUM TRUCK CLEANOUT		9		
21	35	SLUDGE WITH LAPPING OIL AND GRIT				
21	36	SLUDGE, ACETONE RECOVERY STILL BOTTOM	3			
21	37	SLUDGE, MINERAL DEPOSIT IN WATER TANKS				
21	38	SLUDGE, OIL				
21	39	SLUDGE, OIL WATER SEPARATOR				
21	40	SLUDGE, PAINT CHIPS, ALKALINE SOAP AND 7808 OIL				
21	41	SLUDGE, PAINT STRIPPER				
21	42	SLUDGE, WATER AND DIESEL OIL				
21	43	SODA ASH SLUDGE (ACID SPILL RESIDUE)				
21	44	SODIUM HYDROXIDE SLUDGE (ALKALINE RUST AND SCALE REMOVER)			8	
21	45	TRENCH SLUDGE	9			
21	46	TRENCH SLUDGE WITH DIRT, OIL, SANDING ,MATERIAL, SOAP, JP-8 AND WATER				
21	47	TRENCH SLUDGE WITH OIL AND DIRT				
21	48	VIBRATORY SLUDGE				
21	49	MERCURY & ASBESTOS CONTAMINATED SLUDGE				
22		**ANTIFREEZE & COOLANT**				
22	01	ANTI-ICERS/DE-ICERS (POTASSIUM ACETATE)				
22	02	ANTIFREEZE				
22	03	ANTIFREEZE AND WATER				
22	04	ANTIFREEZE: ETHYLENE GLYCOL AND PROPYLENE GLYCOL				
22	05	COOLANT				
22	06	COOLANT AND 7808 OIL				
22	07	COOLANT AND COOLANT OIL				
22	08	COOLANT AND OIL				
22	09	COOLANT AND SLUDGE				
22	10	COOLANT FLUID				
22	11	COOLANT OIL				
22	12	COOLANT SLUDGE				
22	13	COOLANT, MACHINE				
22	14	COOLANT, MACHINE AND OIL				
22	15	COOLANT, OIL, AND WATER				
22	16	DEICING FLUID				
22	17	ETHYLENE GLYCOL "USED"				
22	18	ETHYLENE GLYCOL AND WATER				
22	19	ETHYLENE GLYCOL CONTAMINATED MATERIAL				
22	20	ETHYLENE GLYCOL, COOLANT				
23		**BLAST MEDIA**				
23	01	ACRYLIC OR PLASTIC MEDIA - USED				
23	02	BLAST MEDIA WITH PAINT CHIPS				
23	03	BLAST MEDIA, GROUND SEED				9
23	04	BLAST MEDIA, PLASTIC WITH PAINT CHIPS				
23	05	BLASTING MEDIA				
23	06	BLASTING MEDIA (GLASS AND PLASTIC)	9			
23	07	RICE HULLS WITH HEAVY METALS				
23	08	SANDBLAST MEDIA WITH PAINT				
24		**BATTERIES**				

POCKET 2
WASTE TYPE INVENTORY

Level 1	Level 2	Material Description			
24	01	BATTERY, ALKALINE			
24	02	BATTERY, ALKALINE, WET	8		
24	03	BATTERY, LEAD ACID			
24	04	BATTERY, LITHIUM			
24	05	BATTERY, MAGNESIUM	8		
24	06	BATTERY, MERCURY			
24	07	BATTERY, NICKEL CADMIUM			
24	08	BATTERY, SILVER OXIDE	8		
99		**MISCELLANEOUS**			
99	01	AFFF FOAM			
99	02	BENZOIN TINCTURE COMPOUND			
99	03	CHLOROFORM (USED IN LAB)			
99	04	COPPER CYANIDE	6		
99	05	DECONTAMINATION KIT, PERSONAL, M258A1, DECON 1	3		
99	06	DENTAL AMALGUM	9		
99	07	DENTAL X-RAY FILM	9		
99	08	DEVELOPER			
99	09	DEVELOPER AND FIX			
99	10	DEVELOPER RESIDUE			
99	11	EMULSIFIER			
99	12	EXCESS MATERIAL			
99	13	EXPEDITED REMOVAL			
99	14	HYDROPHILIC EMULSIFER			
99	15	LAB WASTE F001,F002,F003,F005,D001,D006, D007, D008, D039			4
99	16	LEAD ABATEMENT MATERIAL	9		
99	17	LIMESTONE WITH HEAVY METALS	9		
99	18	MAGNETIC INSPECTION FLUID			
99	19	MAGNETIC PARTICLE FLUID			
99	20	NITROMETHANE, ALCOHOL, AEP32, AND COBALT NITRATE			
99	21	ORGANISOL WAX AND TOLUENE	4		
99	22	PENETRANT			
99	23	PENETRANT AND WATER			
99	24	PENETRANT RESIDUE			
99	25	PLATING DEBRIS, HAZARDOUS	9		
99	26	POLYMER			
99	27	POLYWATER			
99	28	POLYWATER LUBRICANT SPILL RESIDUE			
99	29	POTTING COMPOUND IN CONTAINERS			
99	30	PURGING FLUID			
99	31	RESIDUE FROM AIR DUCT	9		
99	32	ROLL-OFF FOR PLATING DEBRIS	9		
99	33	RUST INHIBITOR			
99	34	SILVER CYANIDE SOLUTION (SILVER RECOVERY)	6.1		
99	35	SOAP SOLUTION			
99	36	SODIUM NITRATE, NITRITE, GLUCONATE	9		
99	37	SPILL MATERIAL			
99	38	SPILL RESIDUE WITH:_____			
99	39	SPILL RESIDUE/PAINT RELATED MATERIAL			
99	40	TONER, PLOTTER			
99	41	UNKNOWN MATERIAL			
99	42	VERSENE 220 AND WETTING AGENT			
99	43	WIRE SPRAY RESIDUE, WITH NICKEL, CHROME, AND ALUMINUM			
99	44	CARBON REMOVER			

POCKET 2
WASTE TYPE INVENTORY

Level 1	Level 2	Material Description
99	45	FERROUS SULFATE
99	46	IRIDIUM 226 (0.15 MICROCURRIES)
99	46	LEAD DUST FROM BULLET TRAP
99	47	CYLINDER, QUICK START ETHER

POCKET 2

WASTE TYPE INVENTORY

NOTE: *Unit Environmental Coordinators (UEC) shall inform their organizations when information in this Pocket changes as advised by EMC.*

POCKET 3

GENERATING ORGANIZATION INVENTORY

NOTE: *Unit Environmental Coordinators (UEC) shall inform their organizations when information in this Pocket changes as advised by EMC.*

GENERATING ORGANIZATION INVENTORY

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Org.ID	Organization	Monitor/POC	Phone
AA0001	AAFES/SVC STATION	BECKY BARLOW	43040
Bldg.:740	Location:	Zone:	
AA0002	DECA/TINMW	RANDOLF GRAYSON	43200
Bldg.:477	Location:RECEIVING	Zone:IAP	
AW0001	552 CRS/LGMCP	SSGT REYNOLDS/SRA FORD	47109
Bldg.:230	Location:RM 117	Zone:IAP	
AW0002	552 EMS/LGMFC	SRA WHITE/SSGT SMITH	42450
Bldg.:289	Location:N.W CORNER	Zone:	
AW0003	552 EMS/LGMGS	SRA VELEZ/TSGT VANETTEN	45479
Bldg.:220	Location:WEST SIDE	Zone:IAP	
AW0004	552 CRS/LGMVC	WISEMAN/LOTTONE	42322
Bldg.:230	Location:RM 120	Zone:IAP	
AW0005	552 EMS/LGMTC	SRA GARCIA/SSGT DANIELS	45464
Bldg.:230	Location:DOCK 4	Zone:IAP	
AW0006	552 EMS/LGMTCI	SRA GARCIA/SSGT DANIELS	42883
Bldg.:230	Location:DOCK 4	Zone:IAP	
AW0007	552 CRS/LGMVR	SRA OCKMAN/SSGT GILG	47670
Bldg.:230	Location:RM 141	Zone:	
AW0008	552 AGS/MASH	SGT BRENNAN/CURT MAULLER	44123
Bldg.:230	Location:SOUTH RAMP	Zone:IAP	
AW0009	952 AGS/MASH	SGT BRENNAN/CURT MAULLER	44123
Bldg.:986	Location:SW OF BLDG	Zone:IAP	
AW0010	552 AGS/MASH	SGT BRENNAN/CURT MAULLER	44123
Bldg.:230	Location:RM 127L	Zone:IAP	
AW0011	552 LSS/LSCO	STANDFORD/LARRY CHAMLEE	44303
Bldg.:766	Location:SOUTH SIDE	Zone:IAP	
AW0012	552 LSS/LSCV	ANN SHEFFERT	45588
Bldg.:230	Location:ROOM 150	Zone:	
AW0013	552 AGS/MASH	ED BRENNAN/CURT MAULLER	44123
Bldg.:230	Location:NORTH RAMP	Zone:IAP	

AW0014 552 EMS/LGMGD TATE BEAUFEAUX/SRA HOSS 43191
Bldg.:985 Location:SOUTH SIDE Zone:IAP

AW0015 965 AACS/DORL MSGT ADAMS 42663
Bldg.:224 Location:RM 33A Zone:IAP

AW0016 964 AACS/DORL MSGT ADAMS 42660
Bldg.:224 Location:RM 27 Zone:IAP

Org.ID Organization Monitor/POC Phone
AW0017 552 AGS/MASH SGT BRENNAN/CURT MAULLER 44123
Bldg.:289 Location:NORTH RAMP Zone:IAP

AW0018 552 CSS/SCMW SSGT LANGNER/SSGT KIGGINS 47183
Bldg.:224 Location:RM Z 17 Zone:IAP

AW0019 552 CRS/LGMCE SRA BARNETT 47059
Bldg.:230 Location:RM 110 Zone:IAP

AW0020 552 EMS/LGMTF SSGT WEED 45123
Bldg.:976 Location:NORTH SIDE Zone:IAP

AW0021 552 CRS/LGMVOC SRA KAISER 47616
Bldg.: Location: Zone:

AW0022 963 ACCS/DORL MSGT ADAMS 47170
Bldg.:224 Location:RM 23 Zone:

AW0023 522 LSS/LSUM TSGT HUDSON 45606
Bldg.:296 Location:MOBILITY Zone:

AW0024 752 CSS/SCMK SGT SELDOMRIDGE 45177
Bldg.:282 Location:RM 181 Zone:

AW0025 552 EMS/LGMFM TSGT WHITTINGTON 47204
Bldg.:220 Location:ROOM 119 Zone:

AW0026 552 EMS/LGMTCS SSGT HARTHERGER 42883
Bldg.:230 Location:NW1018 Zone:

AW0027 552 OSS/OSOS MSGT MEEHAN 45595
Bldg.:224 Location: Zone:

AW0028 552 ACW SSGT PATRICK MORTON 43807
Bldg.:230 Location:ROOM 165 Zone:

AW0029 552 CRS/SE SSGT SHEEDY 43701
Bldg.:230 Location:RM 133 Zone:

AW0030 752 CSS/SCOO TSGT ANDERSON 43195
Bldg.:284 Location:RM 106 Zone:

AW0031 552 CRS/LGMZS A1C HERRON 45063
Bldg.:289 Location: Zone:

AW0032 752 CSS/SCMW AMN HELLER 47601
Bldg.:230 Location:RM 214 Zone:

AW0033 552 CRS/LGMVG A1C SHACKLE 43020
Bldg.:230 Location:RM 130 Zone:

AW0034 552 CRS/LGMJE SSGT TORZILLI 43274
Bldg.:230 Location:ROOM 1 Zone:

BO0002 HUGHES TRNG/AAR JACK BALDWIN/FRANK LOFTON 42974
Bldg.:267 Location:SW CORNER Zone:IAP

Org.ID Organization Monitor/POC Phone
BO0003 HUGHES TRNG LES STAHLY/JOHN ROE 45220
Bldg.:283 Location:NORTH SIDE Zone:

CA0001 CAP-USAF/LO (L-16) LT. COL. CHANDLER 43883
Bldg.:240 Location: Zone:

CE0001 72 ABW/CECOIP D.C. SMITH/SAM CABASSA 45030
Bldg.:24 Location:NORTH SIDE Zone:

CE0002 72 CEG/CECE NICHOLAS PHAM 42868
Bldg.:400 Location:BLDG 260 Zone:

CE0004 72 ABW/CEES JACKSON/BONICELLI/BRANSON 43301
Bldg.:62516 Location:IWTP/SAFTK Zone:

CE0005 72 ABW/CECOAH ANTHONY GUNNS/G. MILLER 45295
Bldg.:13 Location:SW PAD Zone:

CE0006 72 ABW/CECOIG MIKE EADES/CHRIS BARNES 42910
Bldg.:773 Location:CENTER Zone:SAP

CE0007 72 ABW/CECOPO KENNETH THORNE/LOU PRICE 43308
Bldg.:5802 Location:EAST SIDE Zone:

CE0008 72 ABW/CECS JACKSON/BONICELLI/BRANSON 43301

Bldg.:400 Location: Zone:

CE0009 72 ABW/CECOPI JASON KARAS/TONY LOPRESTE 43114
Bldg.:62516 Location:IWTP Zone:

CE0010 72 ABW/CECOPO LOU PRICE/KEN TAYLOR 42350
Bldg.:3001 Location:Y-65 Zone:IAP

CE0011 72 ABW/CECOPM LOREN TRACEY/JULES GOFF 43696
Bldg.:101 Location:BOILER RM Zone:

CE0012 72 ABW/CECOPO LOU PRICE/KENNETH THORNE 43070
Bldg.:208 Location:S/C/UPSTRS Zone:

CE0013 72 ABW/CECOIF KEN TILLMAN/V. ALVAREZ 42753
Bldg.:1137 Location:WEST WALL Zone:

CE0014 72 ABW/CECOCH PHYLLIS HALL/MIKE BARE 42055
Bldg.:3307 Location:HVAC Zone:

CE0015 72 ABW/CECOCC PHYLLIS HALL/MIKE BARE 42055
Bldg.:3320 Location:NW OUTSIDE Zone:SAP

CE0016 72 ABW/CECOB RUSSELL REEB/KEN TILLMAN 45039
Bldg.:1104 Location:ZONE B Zone:

CE0018 72 ABW/CECOAE ANTHONY GUNNS/G. MILLER 45295
Bldg.:13 Location:EAST WALL Zone:

CE0019 72 ABW/CECOIA K.SAYLORS/T. BYRD 42073
Bldg.:414 Location:NORTH SIDE Zone:SAP

Org.ID Organization Monitor/POC Phone
CE0020 72 ABW/CECOPO LOU PRICE/ROBERT KAISER 45365
Bldg.:821 Location:BOILER RM Zone:

CE0022 72 ABW/CEFO STANFORD/SHANNON 43981
Bldg.:117 Location:WEST WALL Zone:

CE0026 72 ABW/CECRL D. HEFLEN/S. CARTER 44256
Bldg.:413 Location:E. OF BLDG Zone:

CE0027 72 ABW/CECOS K. SAYLORS/T. BYRD 43255
Bldg.:414 Location:S.W. SIDE Zone:

CE0029 72 ABW/CECOIE D.C. SMITH/SAM CABASSA 42884
Bldg.:24 Location:EAST SIDE Zone:

CL0001 654 CLSS/LGX SRA DANNY BROWN 97723
Bldg.:1128 Location: Zone:

CL0002 654 CLSS/LGME MSGT J. TURDO/MSGT REED 93563
Bldg.:860/1 Location:ABDR PAD Zone:

CL0003 654 CLSS/LGMS SSGT PAUL RIDDLE 95237
Bldg.:2211 Location:SE CORNER Zone:

CL0004 654 CLSS/LGP TSGT. JENKINS 95927
Bldg.:4029 Location:DOOR 4 Zone:

CS0001 752 CSS/SCMW ARM HICKS 47601
Bldg.:230 Location: Zone:

CY0001 31 CCS/CYCP SRA SPLITTER/TSGT DUFFY 47475
Bldg.:1010 Location:S. OF BLDG Zone:

CY0002 3 CCSS/CYSSM SSGT OLIVER 43880
Bldg.:7007 Location: Zone:

CY0003 33 CCS/CYCD TSGT JOHNSON 43137
Bldg.:7001 Location: Zone:

CY0004 34 CCS/CYCD SSGT POSTROLLO/SSGT CRESS 47838
Bldg.:7042 Location: Zone:

CY0006 3 CCSS/CYSD SGT DEWITT 43877
Bldg.:7029 Location: Zone:

CY0008 31 CCS/CYCD SSGT SPORRE/SSGT LEHMAN 45416
Bldg.:7035 Location: Zone:

CY0009 3 CCSS/CYSM TSGT ABSHIRE/SHOENBERGER 42367
Bldg.:1001 Location:INSIDE BLD Zone:

CY0010 32 CCS/CYCD SSGT GARDNER/AMN WILBURN 43839
Bldg.:7010 Location: Zone:

CY0012 3 CCSS/CYST TSGT MITCH ECK 43862
Bldg.:7006 Location:SW CORNER Zone:

Org.ID Organization Monitor/POC Phone
DD0001 DLA/DDOO-SFD JOYCE MCGOVERN 94130
Bldg.:3705 Location: Zone:

DD0002 DLA/DDOO-SFB BETTYDEJEAR 95334
Bldg.:18 Location:NORTH END Zone:

DD0003 DLA/DDOO-SDB OTIS WARD 97916
Bldg.:416 Location: Zone:

DD0004 DLA/DDOO-SFC NOLAN LONG 95117
Bldg.:18 Location: Zone:

DD0005 DLA/DDOO-SFB HECTOR TUDYK 97119
Bldg.:16 Location:N.E.CORNER Zone:

DD0006 DLA/DDOO-TPB NORMA WELCH 92938
Bldg.:506 Location:NE CORNER Zone:

DD0007 DLA/DDOO-SDA VICKIE DETWEILER 97306
Bldg.:416 Location:DOOR 1 Zone:

DD0009 DLA/DDOO-SFB HECTOR TUDYK 97119
Bldg.:1139 Location:SOUTH 40 Zone:

DD0010 DLA/DDOO-WMF W. COLUNGA/R. BAKER 94112
Bldg.:1 Location:SR D, DR58 Zone:SAP

DD0013 DLA/DDOO-TPB FARON KESSLER 95319
Bldg.:3001 Location:ANNEX Zone:

DD0014 DLA/DDOO-TPA JANE GULLEY 97093
Bldg.:3 Location:DOOR 15 Zone:

DD0015 DLA/DDOO-EAA LADENA PAYNE 95027
Bldg.:506 Location:OUTSIDE Zone:

DD0016 DLA/DDOO-WMM CLAYTON LASHLEY/KEN WHITE 94821
Bldg.:1 Location:STOCKRM 3 Zone:

DD0017 DLA/DDOO-SFD GEORGIA MILLER 95122
Bldg.:510 Location: Zone:

DD0018 DLA/DDOO-WMA MIKE BEERS 94116
Bldg.:1 Location:POST F-1 Zone:

DD0019 DLA/DDOO-TPB SHANNON ALLEY/B. MCDONALD 93050
Bldg.:2210 Location:POST E-6 Zone:

DD0020 DLA/DDOO-XMS CLAYTON LASHLEY 94821
Bldg.:510 Location:MDL 80-SWG Zone:

DD0021 DLA/DDOO-XMS CLAYTON LASHLEY 94821
Bldg.:416 Location: Zone:

DD0022 DLA/DDOO-XMS CLAYTON LASHLEY 94821
Bldg.:506 Location: Zone:

Org.ID	Organization	Monitor/POC	Phone
DD0023	DLA/DDOO-XMS	CLAYTON LASHLEY	94821
Bldg.:10	Location:	Zone:	
DD0024	DLA/DDOO-XMS	CLAYTON LASHLEY	94821
Bldg.:18	Location:	Zone:	
DD0027	DLA/DDOO	HERNANDEZ/DOOLEY	97248
Bldg.:506	Location:SPILL TRLR	Zone:	
DD0029	DLA/DDOO-TPB	M. BLETHEN/D. BARNEY	97768
Bldg.:1022	Location:S.E. CORNR	Zone:	
DD0030	DLA/DD00-XMA	HASKELL GREENROYD	94112
Bldg.:1	Location:DOOR 65	Zone:	
DP0001	DON/DPS/L-5	MCMOORE	42177
Bldg.:1	Location:POST 1R-19	Zone:	
DP0002	OCALC/DPMQA	SGT GRUBIS	92038
Bldg.:460	Location:	Zone:	
DP0003	72 SPTG/DPC	NANCY LEE/JUDY MILLER	97687
Bldg.:3001	Location:1AE187E	Zone:	
DR0001	DRMO	DANNY BLOTT	92204
Bldg.:3726	Location:	Zone:	
DR0002	DRMO-UIAP	WILSON/NIEMCZYK	94228
Bldg.:801	Location:AND 802	Zone:	
EG0001	38 EIG	BOBBY MEADOWS	49366
Bldg.:4078	Location:CENTER	Zone:	
EM0001	OCALC/EMC-LAB	BILL REED/JANE KUEHNERT	65871
Bldg.:3001	Location:POST 26-79	Zone:	
EM0002	OCALC/EMC	ANITA DODD	43278
Bldg.:3125	Location:NORTH ROOM	Zone:	
EM0003	OCALC/EMR	BUEHLER	44574
Bldg.:62511	Location:PLANT	Zone:	
EM0004	OCALC/EMC	D. STUBBS	43546
Bldg.:3125	Location:OUTSIDE	Zone:	
EM0005	OCALC/EMCS	ROGER FELTMAN	44566
Bldg.:1	Location:	Zone:	

EM0007 OCALC/EMR DAN HUNT/JOSEPH CERCLE 43058
Bldg.:TANKS Location: Zone:

EM0008 OCALC/EMV STEVE POTES 47071
Bldg.:1 Location: Zone:

EM0010 OCALC/EMC DELENE STUBBS/S. RAGSDALE 43546
Bldg.:809 Location: Zone:

Org.ID Organization Monitor/POC Phone
EM0011 OCALC/EMC ROGER WARD 44571
Bldg.:1 Location:DOCK Zone:

FL0001 10FLTS/DOL MSGT CARLSON/SMSGT MOSLEY 42455
Bldg.:3102 Location:NW CORNER Zone:

FM0001 OCALC/FMF GERALD HARDEN
Bldg.:1 Location:DR. 6 Zone:

FM0002 OCALC/FMH PHILLIP HORNE 46052
Bldg.:3001 Location:1AI81A Zone:

LA0001 OCALC/LAPATS CAROLYN MARSH/P. HOWARD 62765
Bldg.:240 Location:CENTER Zone:

LA0002 OCALC/LAPATS WAYNE SMITH/PEARL HOWARD 62765
Bldg.:3001 Location:POST Y-26 Zone:

LA0003 OCALC/LAPATS RON GREEN/PEARL HOWARD 62362
Bldg.:3102 Location:F-5 Zone:

LA0004 OCALC/LAPBBA GENE BEACH 63361
Bldg.:2122 Location:NORTH DOCK Zone:

LA0005 OCALC/LAPATS RICK CHRONIC/PEARL HOWARD 65423
Bldg.:3001 Location:POST Y-97 Zone:

LA0006 OCALC/LAPBBA JAY PACHUCKI/LARRY SPLITT 62888
Bldg.:3705 Location:POST A-3 Zone:

LA0008 OCALC/LAPCCS PHILIP ARNOLD/L. ANDREWS 63800
Bldg.:2122 Location:W.& C.DOCK Zone:IAP

LA0009 OCALC/LAPBBA CHRIS COPELAND/RON ORTIZ 64106
Bldg.:2122 Location:F-4O CHEMR Zone:IAP

LA0010 OCALC/LAPCCS RANDY WYATT/DAN KING 63800
Bldg.:3225 Location:VARIOUS Zone:

LA0011 OCALC/LAPCCS NORMA JONES/W. GIBSON 63800
Bldg.:2121 Location:PAINT ROOM Zone:IAP

LA0012 OCALC/LAPCCS NORMA JONES/W. GIBSON 67983
Bldg.:2280 Location:R118/N-S D Zone:IAP

LA0013 OCALC/LAPCCD BILLIE FOREST/J. WAGGONER 65283
Bldg.:2122 Location:TNK 2111 Zone:

LA0014 OCALC/LALM JOE KING/WILLIE HUGHES 95521
Bldg.:1083 Location:R117,NE/NW Zone:

LA0015 OCALC/LAPCEA PHYLLIS WOOD/FRANK FELIX 65393
Bldg.:2136 Location:POST E-9 Zone:

LA0016 OCALC/LASM J. MAGUINNIS/DON ALLEN 67046
Bldg.:3220 Location:RM - 206W Zone:

Org.ID Organization Monitor/POC Phone
LA0017 OCALC/LAPBBA CHRIS COPELAND/RON ORTIZ 64106
Bldg.:2122 Location:DOCK 1 & 2 Zone:

LA0018 OCALC/LAPBBA CHRIS COPELAND/RON ORTIZ 64106
Bldg.:2122 Location:DOCK 3 & 4 Zone:

LA0019 OCALC/LALM JOE KING/WILLIE HUGHES 95521
Bldg.:1083 Location:RM 109 Zone:

LA0020 OCALC/LAPBBA CHRIS COPELAND/RON ORTIZ 64106
Bldg.:2122 Location:C.N./DOCK5 Zone:

LA0021 OCALC/LALM JOE KING/WILLIE HUGHES 95521
Bldg.:1083 Location:R00M 108NW Zone:

LA0022 OCALC/LAPEQB FURNESSA HEATH/FLO MORGAN 44604
Bldg.:3705 Location:SW CORNER Zone:IAP

LA0023 OCALC/LAPCCS DAVE SANDERS/NORMA JONES 63800
Bldg.:2122 Location:S.E. DOCK Zone:

LA0024 OCALC/LAPBFA LEON LANGGUTH/G. MULLEN 63534
Bldg.:2121 Location:POST C-12 Zone:

LA0025 OCALC/LAPBFA DON JONES 65354

Bldg.:2121 Location:SOUTH DOCK Zone:

LA0026 OCALC/LAPEI G. STREETMAN/T. RICHARD 67046
Bldg.:2122 Location:B-49 Zone:

LA0027 OCALC/LASM J. MAGUINNIS/DON ALLEN 67046
Bldg.:3220 Location:RM 150 Zone:

LA0029 OCALC/LASM G. MAGUINNIS/DON ALLEN 67046
Bldg.:3220 Location:TANK Zone:

LA0030 OCALC/LA/J.A. JONES TODD COLSTON/FRED JENKINS 42279
Bldg.:2101 Location:NORTH/WEST Zone:

LA0031 OCALC/LAPBWP DOUG SKAGGS 65158
Bldg.:2121 Location: Zone:

LA0033 OCALC/LASM PAUL GANSCHOW 63335
Bldg.:210 Location: Zone:

LC0001 OCALC/LC SABRINA 67754
Bldg.:3001 Location: Zone:

LG0001 72 ABW/LGSC SSGT PATRICK NASH 92331
Bldg.:469 Location: Zone:

LG0002 72 ABW/LGSF HERB JONES 93105
Bldg.:250 Location:ROOM1 Zone:

LG0003 72 ABW/LGQF HERB JONES 92101
Bldg.:250 Location:NORTH SIDE Zone:

Org.ID Organization Monitor/POC Phone
LG0004 72 ABW/LGSWK SSGT SPEARMAN 95124
Bldg.:3812 Location: Zone:

LG0006 72 ABW/LGSME CHERYL BURNS 93444
Bldg.:469 Location: Zone:

LG0008 72 ABW/LGSAA WOOD 67898
Bldg.:3001 Location: Zone:

LG0009 72 ABW/LGSCK MSGT EASTLING 95124
Bldg.:3812 Location:OFFICE Zone:

LG0010 72 ABW/LGTRA SSGT ROBERTSON 92437
Bldg.:260 Location:ROOM 112 Zone:

LG0011 72 ABW/LGTRM CHARLES SHANNON 45225
Bldg.:224 Location:ROOM 1 Zone:

LG0012 72 ABW/LGSPP JAKE CONRAD 95719
Bldg.:469 Location:ROOM 5 Zone:

LG0013 SAN ANTONIO LIGHTHOUSE JOHN BRYANT 94933
Bldg.:469 Location:DOOR 4 Zone:

LH0001 OCALC/LHRM JOHN WOOLSLAIR 64446
Bldg.:620 Location: Zone:

LH0002 OCALC/LHMA LUKE BURKE/RONALD SKINNER 65545
Bldg.:667 Location:STATICDSPL Zone:IAP

LI0001 OCALC/LIPPAA TOM MERCHANT/STEVE FOX 67007
Bldg.:210 Location:H-1 Zone:

LI0002 OCALC/LIPPAA RON JOHNSON/PIERCE 65056
Bldg.:210 Location:D-4/L-1&14 Zone:SAP

LI0003 OCALC/LIPPAE J. WILLIAMS/S. HAMILTON 67483
Bldg.:214 Location:N./S. BAY Zone:SAP

LI0004 OCALC/LIPPMG HAROLD GILKEY/JAN CULWELL 63590
Bldg.:229 Location:E. SIDE Zone:SAP

LI0005 OCALC/LIPPAF MIKE GREEN/JIMMY NORTON 65932
Bldg.:1055 Location:POST B-8 Zone:SAP

LI0006 OCALC/LIPPAE PAT LYNCH/MARK CLENEVEY 67837
Bldg.:210 Location: Zone:

LI0008 OCALC/LIPPBC STEWART WILLIAM/B. WATROL 62971
Bldg.:2211 Location:VARIOUS Zone:SAP

LI0009 OCALC/LIPPCH JOE NORMANDIN/DOUG BROCEU 67348
Bldg.:2210 Location:POST A-3 Zone:SAP

LI0010 OCALC/LIPPCH RAY BUSSELL/J. WILLIAMS 65317
Bldg.:2210 Location:VARIOUS Zone:SAP

Org.ID Organization Monitor/POC Phone
LI0011 OCALC/LIPPAA GARY GILLEY/TROY GREEN 62744
Bldg.:210 Location:A-11/6 Zone:SAP

LI0012 OCALC/LIPPAA GARY GILLEY/R. TARP 65888
Bldg.:210 Location:N-16/H-7 Zone:SAP

LI0013 OCALC/LIPPCH IMAEL RAMON/J. WILLIAMS 67029
Bldg.:2210 Location:C-2 Zone:

LI0014 OCALC/LIPPBS B. BUCHARD/B. SINGLETARY 63860
Bldg.:2121 Location:POST 2E-16 Zone:SAP

LI0015 OCALC/LIPPAE GUINDA MONROE/J. GURNEY 65506
Bldg.:210 Location:POST H-1 Zone:

LI0016 OCALC/LIPPCC VERNON BRUMLEY/M. HENSCH 62165
Bldg.:3123 Location: Zone:SAP

LI0017 OCALC/LIPPCC VERNON BRUMLEY/J. BOWEN 65720
Bldg.:3001 Location:Q-43/T-43 Zone:SAP

LI0018 OCALC/LIPPCC R. RODRIGUEZ/JOHN WHITE 64189
Bldg.:3001 Location:S-39/V-39 Zone:SAP

LI0019 OCALC/LIPPCD LARRY BROWN/MIKE VANMETER 63796
Bldg.:3001 Location:R-39/R-37 Zone:SAP

LI0020 OCALC/LIPPCD LARRY KNOX/BEVERLY GUINN 65420
Bldg.:3001 Location:W-45/PR-46 Zone:SAP

LI0021 OCALC/LIPPCT DIANE COTHRANE/RON HALL 62471
Bldg.:3108 Location:A-26/G-32 Zone:SAP

LI0022 OCALC/LIPPCA ROY ATCHISON/TOM BARNES 62085
Bldg.:3001 Location:BEARING SH Zone:SAP

LI0023 OCALC/LIPPCA CHRIS SULLINS/R. MORRISON 62070
Bldg.:3001 Location:O-47-W-53 Zone:SAP

LI0024 OCALC/LIPPCT EMILIO VELA/DAVID MILLS 67150
Bldg.:3902 Location:RM017/C122 Zone:

LI0025 OCALC/LIPPFE JOE HUIZAR/JUSTIN BOREN 46085
Bldg.:3001G Location:ROOM 102 Zone:

LI0026 OCALC/LIPPME LARRY BEALS/JAMES BROWN 63893
Bldg.:230 Location:T-12/Z-10 Zone:SAP

LI0027 OCALC/LIPPMM J. COOK/G. WRIGHT 67861
Bldg.:3001 Location:P-57/R-41 Zone:

LI0028 OCALC/LIPPFE C. BLACKWELL/K. AUSTIN 65558
Bldg.:3707 Location:RM 102 Zone:SAP

LI0029 OCALC/LIPPMA JOE BALTHROP/GARY MARTIN 62323
Bldg.:3001 Location:TANK&COOLR Zone:SAP

Org.ID	Organization	Monitor/POC	Phone
LI0030	OCALC/LIPPBA	DAVID MCGOWEN/JOY PYLE	63668
Bldg.:3001	Location:M-36/Q-37	Zone:SAP	
LI0031	OCALC/LIPPMN	ALAN CASEY/B. BRADFORD	67053
Bldg.:3001	Location:V-101	Zone:	
LI0032	OCALC/LIPPMA	MIKE MOWLES/CLIFF KEITH	63379
Bldg.:3001	Location:Q-49--W-53	Zone:	
LI0033	OCALC/LIPPMM	ISAAC KIMBRO/L. RUTLEDGE	63016
Bldg.:3001	Location:Q-63/P-65	Zone:	
LI0034	OCALC/LIPPMM	DANNY TORNELLO	67931
Bldg.:3001	Location:POST N-65	Zone:SAP	
LI0035	OCALC/LIPPMA	WILLIAM COTTON/DOUG JONES	67091
Bldg.:3001	Location:U-65/V-41	Zone:	
LI0036	OCALC/LIPPBE	RONNIE BAGGOTT/CINDY CUFF	63595
Bldg.:2101	Location:E-13	Zone:SAP	
LI0037	OCALC/LIPPFT	WALTER MURROW/MIKE BUCK	63291
Bldg.:3708	Location:ROOM 160	Zone:SAP	
LI0038	OCALC/LIPPMA	MIKE MOWLES/CLIFF KEITH	63379
Bldg.:3001	Location:Q-49/P-49	Zone:SAP	
LI0039	OCALC/LIPPMW	CHARLES DOSTAL/L. WEEKLEY	67075
Bldg.:3001	Location:L-73/L-71	Zone:IAP	
LI0040	OCALC/LIPE	MICKIE KELLY	65120
Bldg.:3001	Location:M-36	Zone:	
LI0041	OCALC/LIPPFE	S. HARRIS/E. BOLDIEN	62249
Bldg.:230	Location:POST C-22	Zone:	
LI0042	OCALC/LIPPBA	J. JOHNSON/SANDRA ROBERTS	65900
Bldg.:3001	Location:T-33	Zone:	
LI0044	OCALC/LIPEB	JACK LANE	67246
Bldg.:3708	Location:	Zone:	
LI0045	OCALC/LID	DEBORAH SMITH	44610
Bldg.:3001	Location:1AE199A	Zone:	
LI0046	OCALC/LIR	JUDI ANDERSON	67494
Bldg.:3001	Location:1AC494B	Zone:	

LI0047 OCALC/LIPS PHYLLIS DUNHAM 62406
Bldg.:3001 Location:3W-69 Zone:

LI0048 OCALC/LIPW JOHN LIBEL 63748
Bldg.:3001 Location:3W-69 Zone:

LI0049 OCALC/LIQ RON COLEY 44721
Bldg.:3001 Location:LEANTO 3 Zone:

Org.ID Organization Monitor/POC Phone
LI0050 OCALC/LIPEC DAN CROWE 64264
Bldg.:3001 Location:W-49 Zone:

LI0051 OCALC/LIPPML RUSSELL ENNIS 63524
Bldg.:229 Location:EAST SIDE Zone:

LK0001 E-4B SIL/LKRB DAVID ZENTZ/KEVIN HALE 65228
Bldg.:1017 Location:2ND FLOOR Zone:IAP

LK0002 OCALC/LKPR SHIRLEY LAVALAIS 67375
Bldg.:3001 Location:1AC1 105AE Zone:

LK0003 OCALC/LKPR CHARLES THORNTON 65023
Bldg.:1017 Location:UTILITY RM Zone:

LP0001 OCALC/LPPPALD SHARON GIBSON 67567
Bldg.:3001 Location:Q-89 Zone:IAP

LP0002 OCALC/LPPPALA ANGIE BOHANAN/C. GATLIN 64567
Bldg.:3001 Location:N77/79,L75 Zone:

LP0004 OCALC/LPPPALC C. JOHNSON/G. BARKER 63078
Bldg.:3001 Location:Q-81 Zone:

LP0005 OCALC/LPPPALB JOE STARY/M. COMPONATION 64417
Bldg.:3001 Location:U-89 Zone:

LP0006 OCALC/LPPPBAD STEVE TURNER/LAUREN CROSS 64220
Bldg.:3221 Location:K-13 Zone:

LP0007 OCALC/LPPPALE LYNDA FULLINGIM/H. MONROE 63616
Bldg.:3001 Location:N-89 Zone:IAP

LP0008 OCALC/LPPPAD TONY HAMLIN/CHRISTY BOYD 67400
Bldg.:3001 Location:X-61 Zone:

LP0009 OCALC/LPPPBDA P. OBREGON/BURL ESTES 63132
Bldg.:3221 Location:A-3/C-4 Zone:

LP0011 OCALC/LPPPBDD-1 L. GLOVER/LADELL LACKEY 62962
Bldg.:3221 Location:POST G-21 Zone:

LP0012 OCALC/LPPPBDB LINDA CASPER 64229
Bldg.:3221 Location:G-11 Zone:

LP0013 OCALC/LPPPCAA VINCE VANBEBBER/S. LACER 62752
Bldg.:3001 Location:D103/G101 Zone:

LP0015 OCALC/LPPPCAC J. PHILLIPS/B. HAMPTON 63568
Bldg.:3001 Location:S107/Q109 Zone:

LP0016 OCALC/LPPPCNA WILLIE POBLETE 62355
Bldg.:3001 Location:R-99 Zone:

LP0018 OCALC/LPPPCHC C. SMALLWOOD/M. CANIZALES 65280
Bldg.:3001 Location:P-61/L-99 Zone:

Org.ID Organization Monitor/POC Phone
LP0019 OCALC/LPPPKC DEAN MUELLER/E. COLUNGA 94695
Bldg.:3001 Location:W-70 Zone:

LP0020 OCALC/LPPEE NATALIE THOMAS 62289
Bldg.:3001 Location:2B93 Zone:

LP0035 OCALC/LPPPGHD-1 TERESA LAKIN 65435
Bldg.:3001 Location:NW ANNEX Zone:

LP0037 OCALC/LPPPCJB WESLEY TISON/ANTHONY PHEA 67840
Bldg.:3001 Location:F-79 Zone:SAP

LP0038 OCALC/LPPPCJA JERRY FIELDS/C. COOPER 62949
Bldg.:3001 Location:H-73/F-73 Zone:

LP0039 OCALC/LPPPCJC DONNIE PEOPLES/L. WEEKLEY 63967
Bldg.:3001 Location:L-75;L-79 Zone:

LP0040 OCALC/LPPPGEA TERRY MAYFIELD/M. JONES 64024
Bldg.:3001 Location:G107/K111 Zone:

LP0041 OCALC/LPPPKB DAVIS BEATTY/BENNY LEAL 65607
Bldg.:3001 Location:X-72 Zone:

LP0042 OCALC/LPPPMVC CHUCK MELOT/STEVEN CREEK 67040

Bldg.:3001 Location:POST S-97 Zone:

LP0043 OCALC/LPPPGHB RANDY MYERS/R. KRAUTLAGER 65709
Bldg.:3001 Location:X-78 Zone:

LP0044 OCALC/LPPPGHC R. KRAUTLARGER/R. MYERS 65709
Bldg.:3001 Location:H-99 Zone:

LP0045 OCALC/LPPPAV TOM KANALY 67847
Bldg.:3001 Location:O-95 Zone:

LP0046 OCALC/LPPPAAA RAYMOND HEINKEN/B. ROBIE 46096
Bldg.:3001 Location:Y-61 Zone:IAP

LP0047 OCALC/LPPPGHE TERESA LAKIN 67587
Bldg.:3001 Location:POST 0-109 Zone:

LP0048 OCALC/LPPPGAB DAVID RUPE/JAY SIGMAN 63408
Bldg.:3001 Location:X-82 Zone:

LP0049 OCALC/LPPPGAA K. WAHPEPAH/S. KIDDIE 65712
Bldg.:3001 Location:Y-87 Zone:

LP0050 OCALC/LPPPTBC ROBERT HARRELL 65793
Bldg.:3705 Location:NE CORNER Zone:

LP0051 OCALC/LPPPGAC DALTON DULEN 63408
Bldg.:3001 Location:X-91 Zone:

LP0053 OCALC/LPPPGHD-2 TERESA LAKIN/DWIGHT SIMS 65435
Bldg.:3001 Location:N. ANNEX Zone:

Org.ID Organization Monitor/POC Phone
LP0054 OCALC/LPPPWEA-2 JOHN KELLY 63419
Bldg.:3001 Location:B-95 Zone:

LP0055 OCALC/LPPPWHB TOM CRISMON 63098
Bldg.:3001 Location:K-91 Zone:

LP0056 OCALC/LPPPMKA TIM MASCHO/A. RAMIREZ 65563
Bldg.:3001 Location:J-93/K-93 Zone:

LP0057 OCALC/LPPPMAB JOHN WALKER 67047
Bldg.:3001 Location:U83 Zone:

LP0059 OCALC/LPPPWHC DAVE SANDERS 63989
Bldg.:3001 Location:H-77 Zone:

LP0060 OCALC/LPPPMHB RICHARD THIELEN 65697
Bldg.:3001 Location:G-81 Zone:

LP0061 OCALC/LPPPBAC EMILY LOWE/TIM TERHUME 65438
Bldg.:3221 Location:J-1 Zone:

LP0062 OCALC/LPPPMVA V. UNSELL/C. MASKELL 67040
Bldg.:3001 Location:V-93/W-91 Zone:

LP0063 OCALC/LPPPTAA LARRY GROVE 62292
Bldg.:3703 Location:TEST SU #1 Zone:

LP0065 OCALC/LPPPTAB TERI BAUMAN 65454
Bldg.:3234 Location:N. END Zone:

LP0067 OCALC/LPPPTBA M. MCKNIGHT/ALLEN DODD 65448
Bldg.:3703 Location:ENG. PREP. Zone:

LP0069 OCALC/LPPPMHC RANDY NEWMAN 67945
Bldg.:3001 Location:N-87 Zone:IAP

LP0071 OCALC/LPPPWBA JACK MCSWAIN 63279
Bldg.:3001 Location:J-84 Zone:

LP0072 OCALC/LPPPWEB GLENN BRESHEARS 63865
Bldg.:3001 Location:POST J-81 Zone:

LP0073 OCALC/LPPPWHA JAMES JACOBS 67036
Bldg.:3001 Location:B-83 Zone:

LP0074 OCALC/LPPPWWB GLENN BRESHEARS 63063
Bldg.:3001 Location:G-83 Zone:

LP0075 OCALC/LPPPMKB BRIAN FRAZIER/I. LINDGREN 63190
Bldg.:3001 Location:F-91 Zone:

LP0077 OCALC/LPPPCNC V. MORGAN/T. NACHBOR 62391
Bldg.:3001 Location:D-95 Zone:

LP0078 OCALC/LPPPCNB TONY HOWETH 65472
Bldg.:3001 Location:S-95 Zone:

Org.ID Organization Monitor/POC Phone
MS0001 OCALC/MSG/SN CHRIS GRUBER 95694
Bldg.:3001G Location:ROOM 208 Zone:

NA0001 NAVY F LAFOLLETTE/AE2 MCDANELD 93591
Bldg.:817 Location:HGB/4 Zone:

NA0002 NAVY FRANELL LAFOLLETTE 93591
Bldg.:847 Location: Zone:

NA0003 NAVY FRANELL LAFOLLETTE 93591
Bldg.:5930 Location: Zone:

OC0001 OCALC/LGS/LGN B. ASHWORTH/M. HOLDER 46842
Bldg.:3705 Location:DOOR 4 Zone:

OC0002 OCALC/LGM T. HARRINGTON/K. JOHNSON 63931
Bldg.:3001 Location:2AC496A Zone:

OC0003 OCALC/LGA WESLEY OSBURN 97564
Bldg.:3001 Location:2AF71A Zone:

QL0001 OCALC/QL MIKE BURDICK/D. CHESHER 46202
Bldg.:201 Location:SW FOYER Zone:

SC0001 72 CS/SCMC GENE DUKES 44444
Bldg.:416 Location: Zone:

SC0002 72 CS/SCMP TSGT JOHNSON/AMN POWELL 45205
Bldg.:3001G Location:NE WALL Zone:IAP

SC0003 72 CS/SCXP TSGT SMITH/SSGT REGESTER 45184
Bldg.:3001G Location:ANNEX 4 Zone:

SC0004 72 CS/SCMM A1C PIEKARSKI 45630
Bldg.:1100 Location: Zone:

SG0001 772D MDSS/SGSL CAESAR JACKSON 42647
Bldg.:5801 Location:RM 104-A Zone:

SG0002 654 MED GP/SGB DON RIDDLE 47844
Bldg.:201 Location: Zone:

SP0001 72 SF/SFTC D. CROSS/SSGT MCCLELLAND 45654
Bldg.:1023 Location:NW/SHED Zone:

SP0002 72 SF/SFTC DANNY CROSS 45654
Bldg.:101 Location: Zone:

SV0001 72 SPTG/SVRS KEITH BERRY 45616
Bldg.:6002 Location:AUTO SHOP Zone:SAP

TF0001 507 MS/LGMI VANDORP/DEWEY BOENE 45919
Bldg.:1030 Location:WEST END Zone:IAP

TF0002 507 AGS/LGGS LISA ORTIZ/HART/DAUGHERTY 47250
Bldg.:1067 Location:S.W. SIDE Zone:IAP

Org.ID	Organization	Monitor/POC	Phone
TF0004	507 MS/LGMFC	GARY PAULDEN OR RAY HAHN	45306
Bldg.:1068	Location:NW SIDE	Zone:IAP	
TF0005	507 MS/LGMPI	UNRUH/GORDON	42326
Bldg.:1070	Location:SOUTH SIDE	Zone:IAP	
TF0007	507 MS/LGMFN	MARTHA SMITH	44211
Bldg.:1030	Location:RM109	Zone:	
TF0008	507 MS/LGMAP	SMITH/WHEELER	43617
Bldg.:1041	Location:OUTSIDE	Zone:IAP	
TF0009	507 MS/LGMG	T. RAHLF OR GARY BERRY	47848
Bldg.:1070	Location:NORTH END	Zone:IAP	
TF0010	507 MS/LGMAE	RYAN/WILLIAMS	45013
Bldg.:1030	Location:ROOM 116	Zone:	
TF0011	465 ARS/DOL	RICK SKELTON/TRACY HOUSE	45649
Bldg.:1048	Location:WEST SIDE	Zone:	
TF0012	507 CES/CEO	VINCENT MOLZAHN	45249
Bldg.:1030	Location:NE CORNER	Zone:	
TF0013	507 MS/LGMAF	ALVIN MILLER/JERRY LLOYD	42114
Bldg.:1082	Location:WEST SIDE	Zone:	
TI0001	OCALC/TIELA	P. MERIDITH/D. PONDER	62135
Bldg.:3001	Location:I-63	Zone:IAP	
TI0002	OCALC/TIPIM	M WHITEMAN/E. STRAW	63711
Bldg.:3215	Location:IRL STG YD	Zone:IAP	
TI0003	OCALC/TIPIS	L.STILES/G. JONES	65225
Bldg.:2101	Location:POST A-4	Zone:	
TI0004	OCALC/TIPLP	B. MARITT/RON EAGER	62100
Bldg.:3113	Location:IRL	Zone:	
TI0005	OCALC/TIPRM	D. GRAHAM/T. HACKNEY	63688
Bldg.:3001	Location:POST S-81	Zone:	
TI0006	OCALC/TIPRS	JOE LAKE	67694
Bldg.:2280	Location:	Zone:	
TI0007	OCALC/TIPRP		65994
Bldg.:3001	Location:	Zone:	

TI0008 OCALC/TIPPC C. DANIELS/JIMMY HINES 67514
Bldg.:3108 Location:SW ROOMS Zone:

TI0009 OCALC/TIPRM W. WINDOM/E. OWINGS 65621
Bldg.:3118 Location:S OF 3001 Zone:

TI0010 OCALC/TIPPA F. SEWELL/G. NICHOLS 63887
Bldg.:210 Location:COMP. RM Zone:IAP

Org.ID Organization Monitor/POC Phone
TI0011 OCALC/TIPPB M. WALKER/B. SWAIN 62766
Bldg.:3705 Location:POST E-6/7 Zone:

TI0013 OCALC/TIESM A. WESTON/L. NGUYEN 65008
Bldg.:3220 Location:RM 101/4/9 Zone:

TI0014 OCALC/TIPPA F. SEWELL/G. NICHOLS 63887
Bldg.:1055 Location:VAC ROOM Zone:IAP

TI0016 OCALC/TIESM ALVIN WESTON/L. NGUYEN 65008
Bldg.:3220 Location:ROOM 109 Zone:

TI0017 OCALC/TIPPC K. CARPENTER/R. HOLWELL 67150
Bldg.:3902 Location:MAINT.ROOM Zone:

TI0018 OCALC/TIPLMS RON ARMSTRONG/C. WALKER 65819
Bldg.:3703 Location: Zone:

TI0019 OCALC/TIPRM TERRY PALMER 63688
Bldg.:3772 Location: Zone:

TI0022 OCALC/TIPRS JOYCE MORRISON/MEL RICKS 65485
Bldg.:3125 Location:S BAY Zone:

TI0023 OCALC/TIPPCE DAN SNOW/TERRY SANDERS 64193
Bldg.:3001 Location:T-79 Zone:

TI0024 OCALC/TIELA D.HARRIS-MAYER/S. CONKLE 65115
Bldg.:2211 Location:SE CORNER Zone:

TI0025 OC-ALC/TIELM M. BUELL/ROBERT WILLIAMS 62615
Bldg.:3001 Location:I-63 Zone:

TI0026 OC-ALC/TIELQ J. CUMMINGS/JAMES JOHNSON 67331
Bldg.:3001 Location:POST J69 Zone:

TI0027 OC-ALC/TILDO MARY WILLS/NANCY TILLEY 94414
Bldg.:3001 Location:1AB86C/X88 Zone:

TI0028 OC-ALC/TILOC R. HARTLEY/M. IACOVELLI 63891
Bldg.:3 Location:RM 121 Zone:

TI0029 OC-ALC/TILP R. HAIR/RICK MASTERS 64107
Bldg.:3001 Location:1AE1-101A Zone:

TI0030 OCALC/TIET J. LEE/LT. WES ROBERTSON 63197
Bldg.:3001 Location:X AISLE Zone:

TI0031 OC-ALC/TILC TERESSA VINER 67625
Bldg.:2101 Location:S.CTR AISL Zone:

TI0032 OCALC/TICL ORENTHA HUDSON 62776
Bldg.:3001 Location:O-74 Zone:

TI0033 OCALC/TIQ STEPHEN COX, DICK NG 93445
Bldg.:3001 Location:O-75 Zone:

Org.ID Organization Monitor/POC Phone
TI0034 OC-ALC/TICLM FOY COX 62986
Bldg.:3001 Location:1AG1/X102D Zone:

TP0001 72 ABW/LGTVO VICKIE HOPPES 42941
Bldg.:260 Location:U-2 Zone:

TP0002 72 ABW/LGTVO VICKIE HOPPES 42941
Bldg.:1130 Location:AREA C Zone:

TP0003 72 ABW/LGTVO VICKIE HOPPES 42941
Bldg.:1130 Location:LUBE BAY C Zone:

TP0004 72 ABW/LGTVO VICKIE HOPPES 42941
Bldg.:1130 Location:AREA B Zone:

TP0005 72 ABW/LGTVO VICKIE HOPPES 42941
Bldg.:1130 Location:PAINTBOOTH Zone:

TP0006 72 ABW/LGTVO VICKIE HOPPES 42941
Bldg.:1130 Location:W. OF BLDG Zone:

TP0007 72 ABW/LGTVO VICKIE HOPPES 42941
Bldg.:2110 Location:BAY 4 Zone:

TP0008 72 ABW/LGTVO VICKIE HOPPES 42941

Bldg.:2143 Location:S. OF 2101 Zone:

TP0009 72 ABW/LGTVO VICKIE HOPPES 42941
Bldg.:515 Location: Zone:

XP0001 OCALC/XPP JOHN CAUFFIEL 95921
Bldg.:460 Location:RM 109 NWC Zone:

XP0002 OCALC/XPP ANN BALLARD 92909
Bldg.:3001 Location:1AF-71A Zone:

ZZ0001 OCALC/LPAMS STEVE GASTINEAU 63013
Bldg.:3001 Location:2AD2102 Zone:

ZZ0002 OCALC/QL MIKE VERDICK 92253
Bldg.:201 Location:SW CORNER Zone:

ZZ0003 72 OSS/OS3 PETE HOWSE 42417
Bldg.:240 Location:238 Zone:

ZZ0004 72 OSS/OSW SRA CLARK/SSGT HOUGHTON 43540
Bldg.:240 Location: Zone:

ZZ0006 SSG 0L-B/SDTO SSGT HENRIKSEN 42722
Bldg.:201 Location:WEST Zone:

ZZ0007 OCALC/OLTK L30 MSGT MARK WEBIE 43340
Bldg.:260 Location:POST B-7 Zone:

ZZ0008 72 SFS/SFTM SGT CLEMMONS 45300
Bldg.:101 Location:DOOR 8 Zone:

Org.ID Organization Monitor/POC Phone
ZZ0009 72 OSS/OSAM DON LOTT 42191
Bldg.:240 Location: Zone:

ZZ0010 DISA/WE413 ROBT COLEMAN/BUDDY RAWLS 93024
Bldg.:3900 Location:SOUTH END Zone:

ZZ0011 AFAA CHRIS HAKE 48170
Bldg.:510 Location:2 FLOOR/S. Zone:

ZZ0012 OCALC/LGSCBB JIMMIE GREEN 67059
Bldg.:3123 Location: Zone:

ZZ0013 OCALC/LGSAA MARK BASS 63511
Bldg.:3001 Location:L-43 Zone:

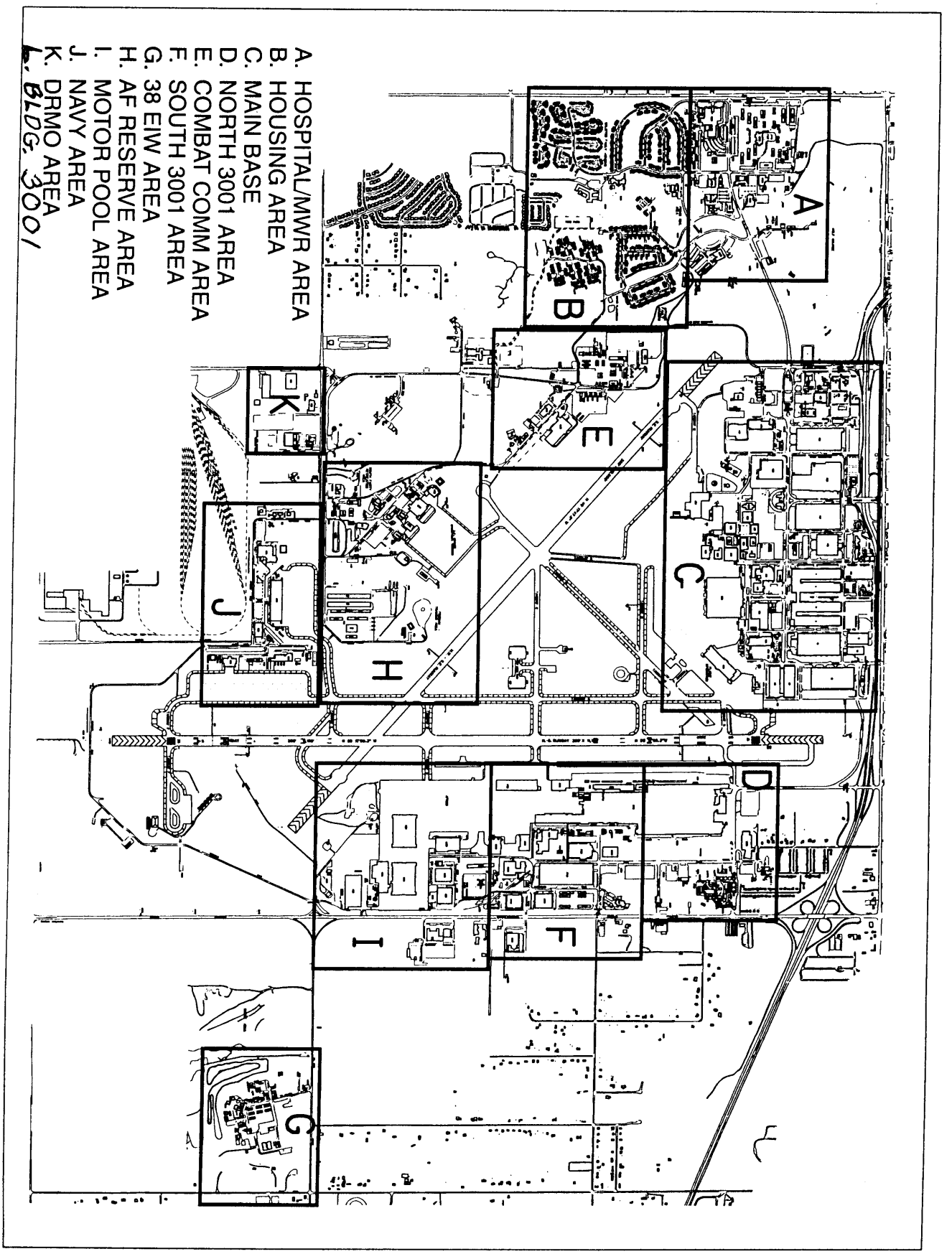
ZZ0014 72 MSS/DPE RICKIE L. GRAY 95471
Bldg.:201E Location:RM 11B Zone:

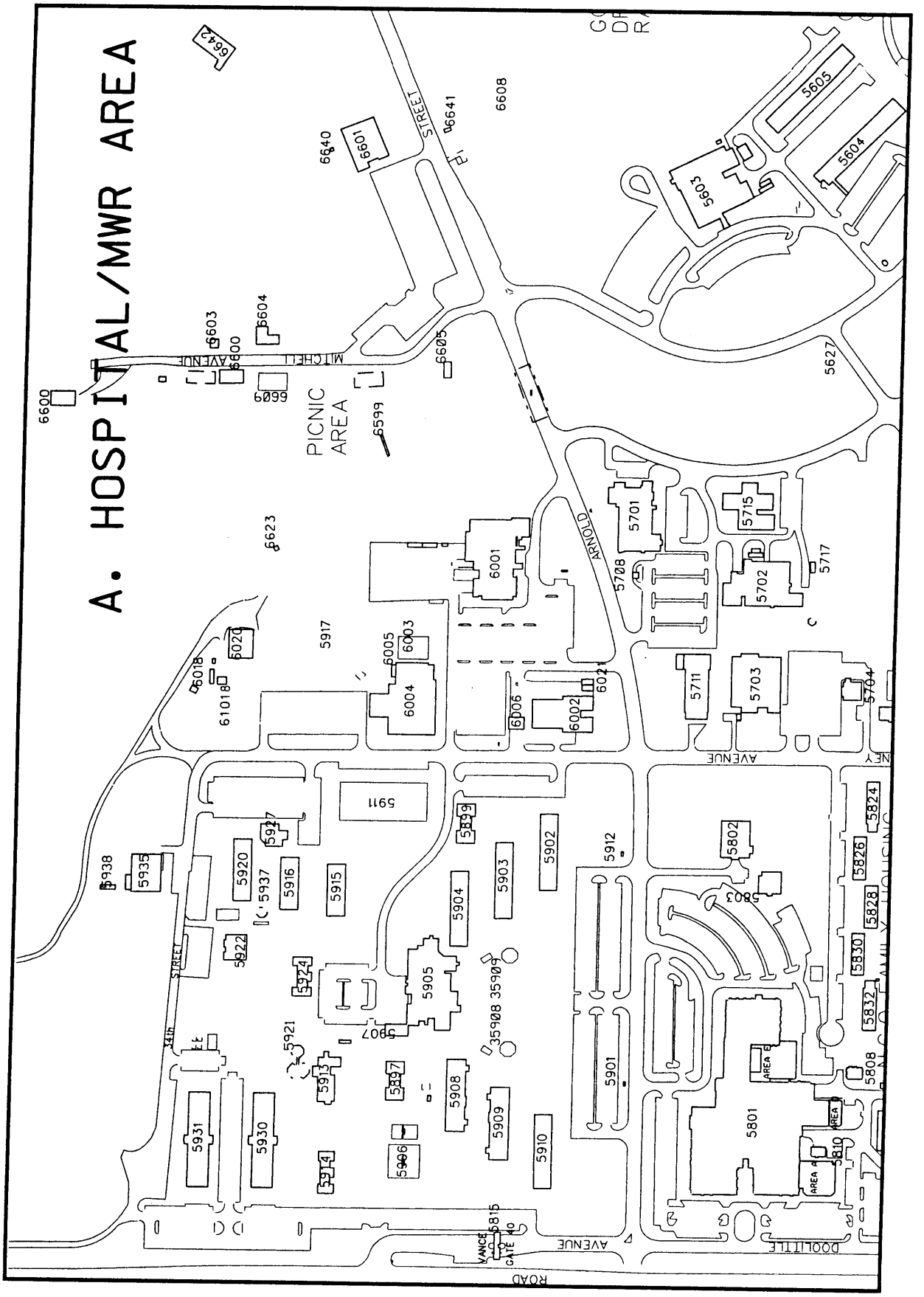
ZZ0015 AFFSA DET 1 SSGT RICARDO CARRIZOSA 9541924
Bldg.:FAA Location:WILL ROGER Zone:

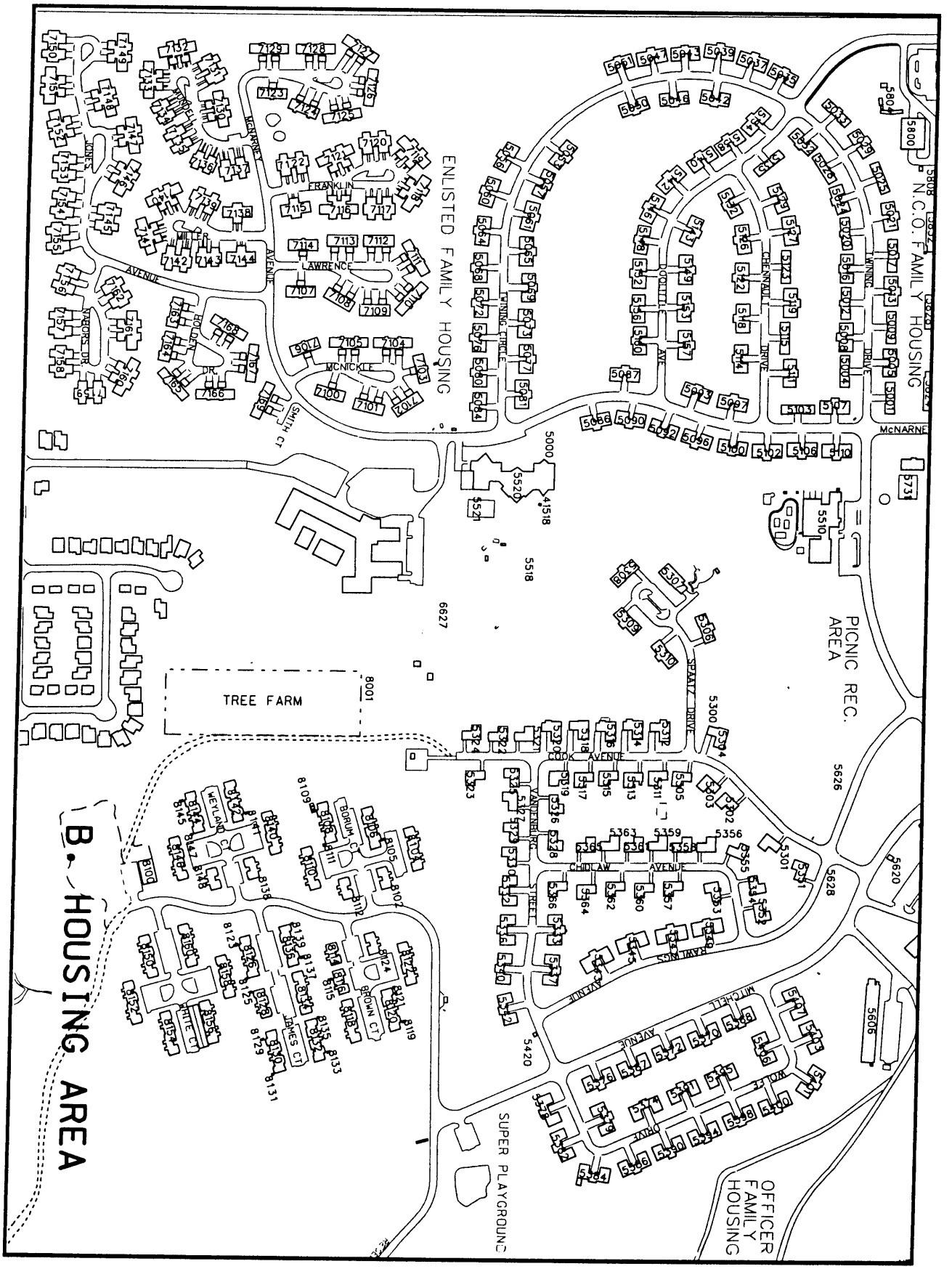
ZZ0016 7S MSS/DPMR MSGT LLOYD-PATTON 94955
Bldg.:460 Location:R133,FOYER Zone:

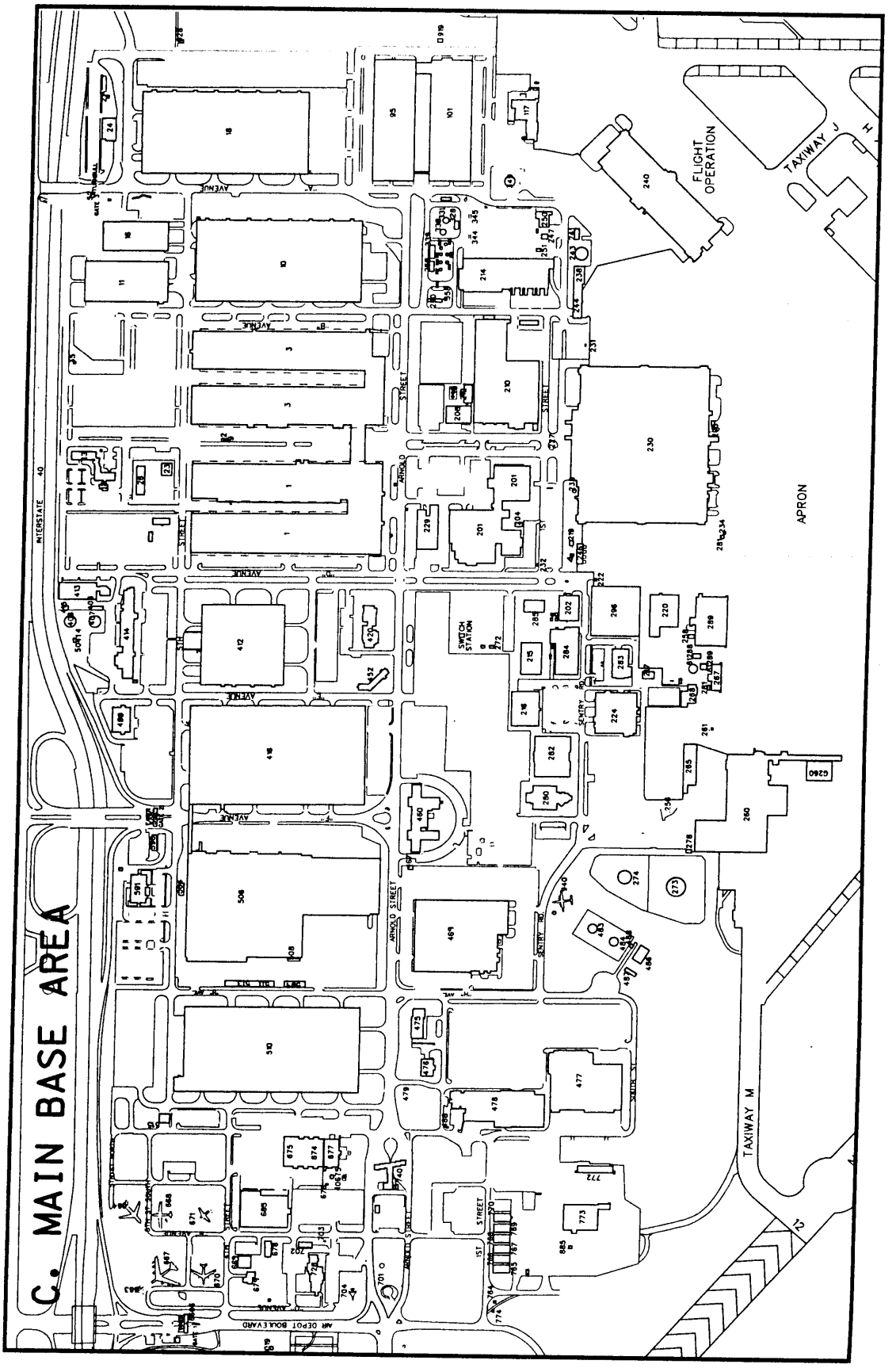
Records printed: 349

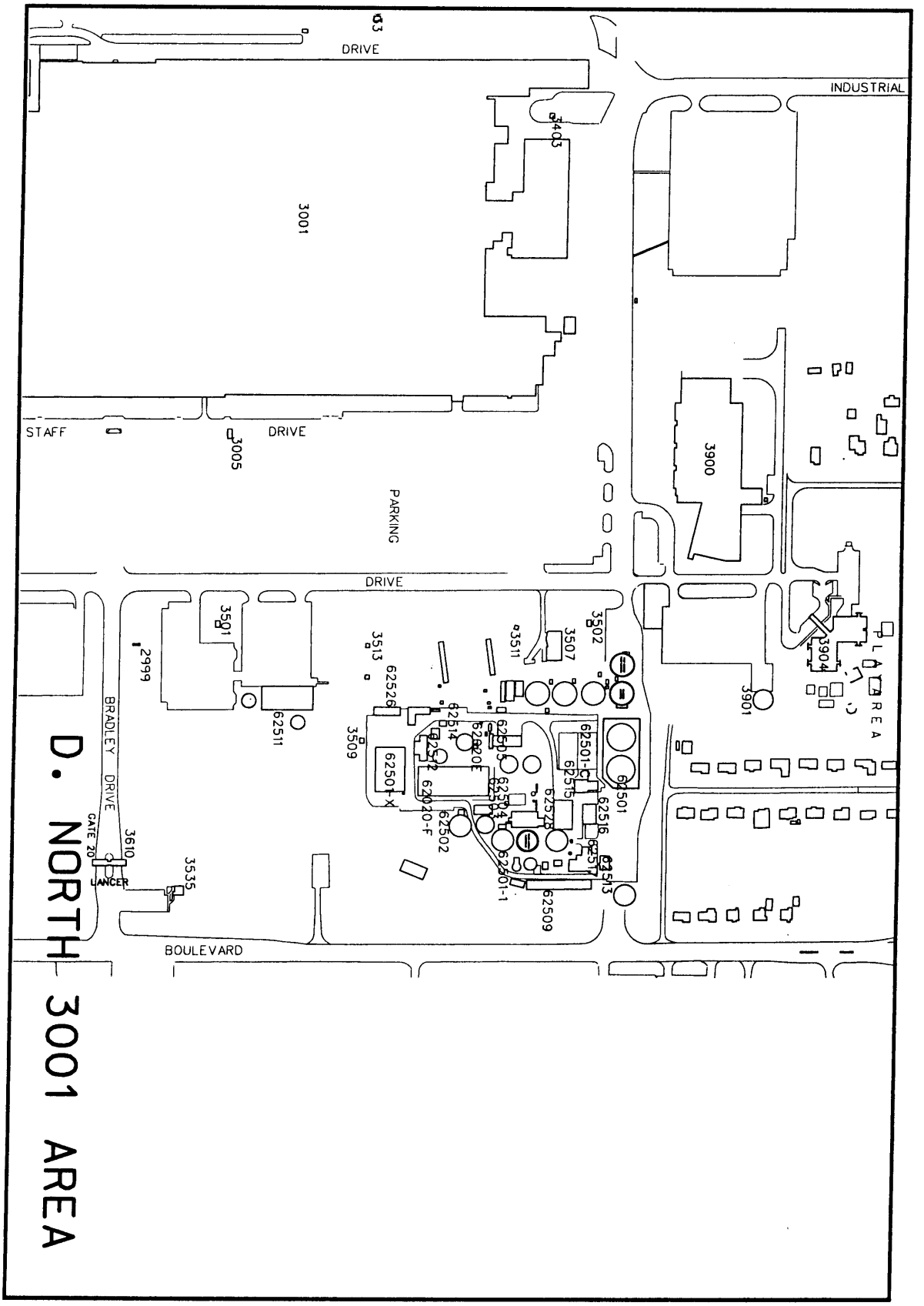
POCKET 4. MAP OF TINKER AFB

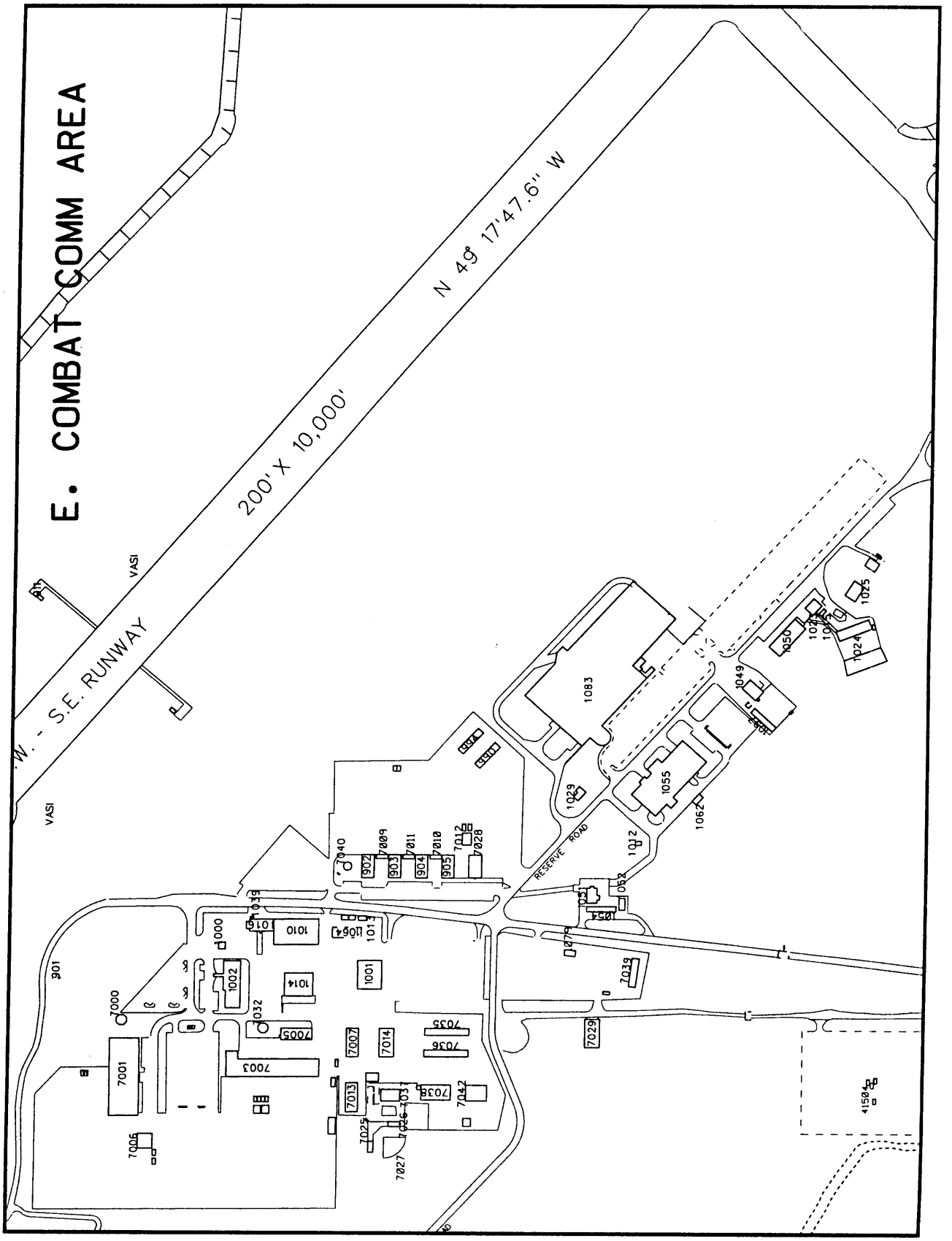



A. HOSPITAL/MWR AREA
PICNIC AREA
MITCHELL AVENUE
ARNOLD STREET
DOOLITTLE AVENUE
ROAD
34th STREET
6642
6640
6601
6641
6608
6603
6604
6600
6605
6609
6599
6623
6001
6020
6018
61018
5917
6005
6003
6004
6006
6002
6021
5711
5703
5704
5701
5708
5715
5702
5717
5605
5604
5603
5627
5911
5927
5938
5935
5920
5937
5916
5915
5922
5924
5921
5913
5907
5897
5908
5909
5910
5906
5914
5931
5930
5905
5904
5903
5902
5912
5901
5802
5803
5801
5824
5826
5828
5830
5832
5808
5810
5815
35908
35909
AREA A
AREA B
AREA C
AREA D
AREA E
VANCE
GATE 40


ENLISTED FAMILY HOUSING
N.C.O. FAMILY HOUSING
OFFICER FAMILY HOUSING
B. HOUSING AREA
PICNIC REC. AREA
SUPER PLAYGROUND
TREE FARM
McNARNE
COOK AVENUE
CHIDLAW AVENUE
SPAATZ DRIVE
FRANKLIN
LAWRENCE
MCNICKLE
MILLER
SMITH CT
WEYLAND CT
BORUM CT
BROWN CT
JAMES CT
WHITE CT
TWINING CIRCLE
DOOLITTLE AVE
CHENNAULT DRIVE
TWINING DRIVE
MITCHELL AVENUE
WOLFE DRIVE
RAWLINGS AVENUE
VANDENBURG STREET


C. MAIN BASE AREA
FLIGHT OPERATION
TAXIWAY J
APRON
TAXIWAY M
SWITCH STATION
ARNOLD STREET
INTERSTATE 40
AR DEPOT BOULEVARD


DRIVE
INDUSTRIAL
3403
3001
STAFF
DRIVE
3005
PARKING
3900
DRIVE
3501
2999
3513
62526
3511
3507
3502
3904
3901
PLAY AREA
BRADLEY DRIVE
62511
3509
62501-X
62501-C
62501
62516
62502
62509
GATE 20
3610
LANCER
3535
BOULEVARD
D. NORTH 3001 AREA


E. COMBAT COMM AREA
200' X 10,000'
N 49° 17'47.6" W
W. - S.E. RUNWAY
VASI
VASI
RESERVE ROAD
1083
1055
1049
1050
1025
1024
1029
1062
1012
902
903
904
905
7040
7009
7011
7010
7012
7028
1010
1014
1001
1002
7000
7001
7003
7005
7007
7014
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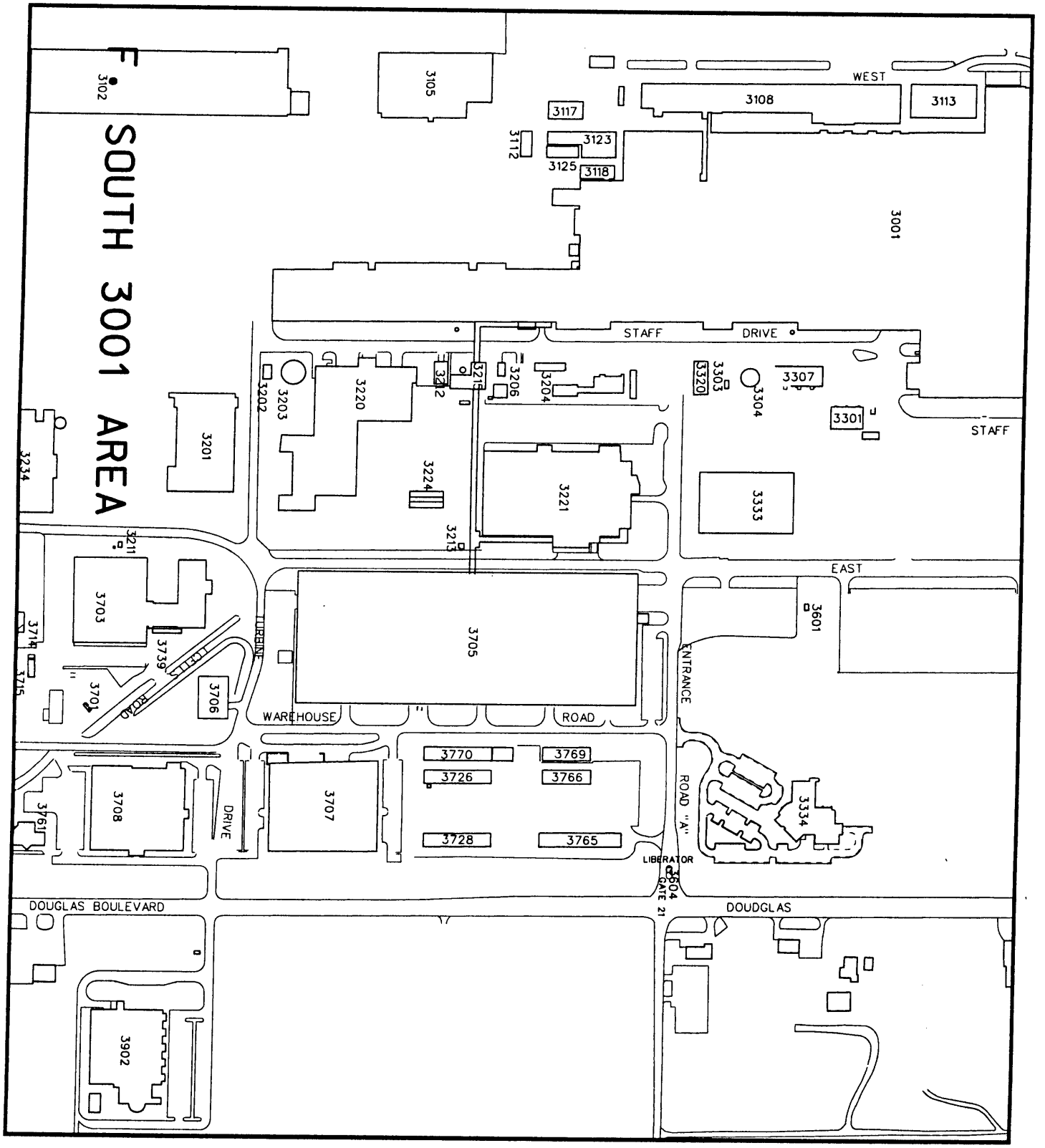
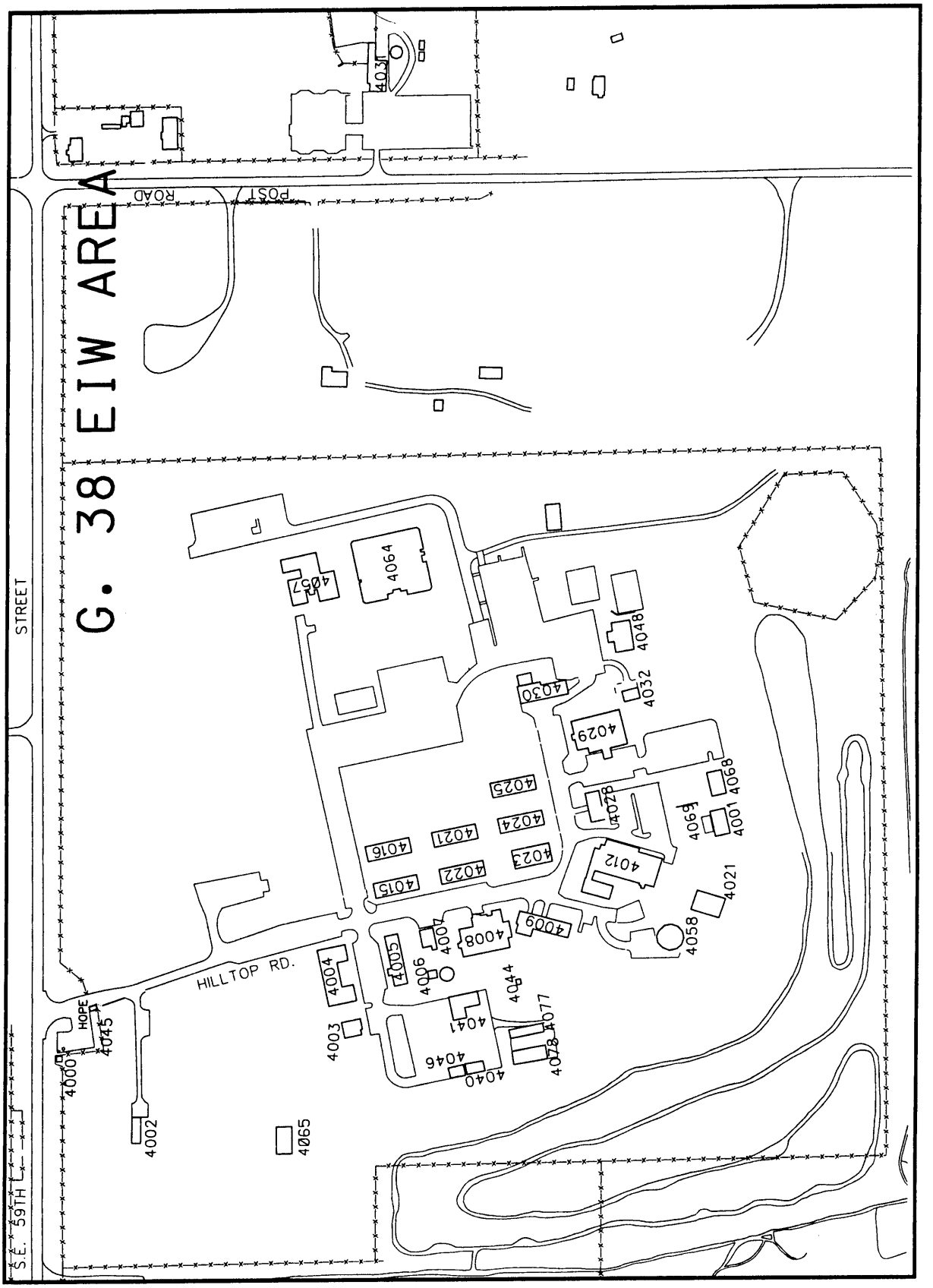
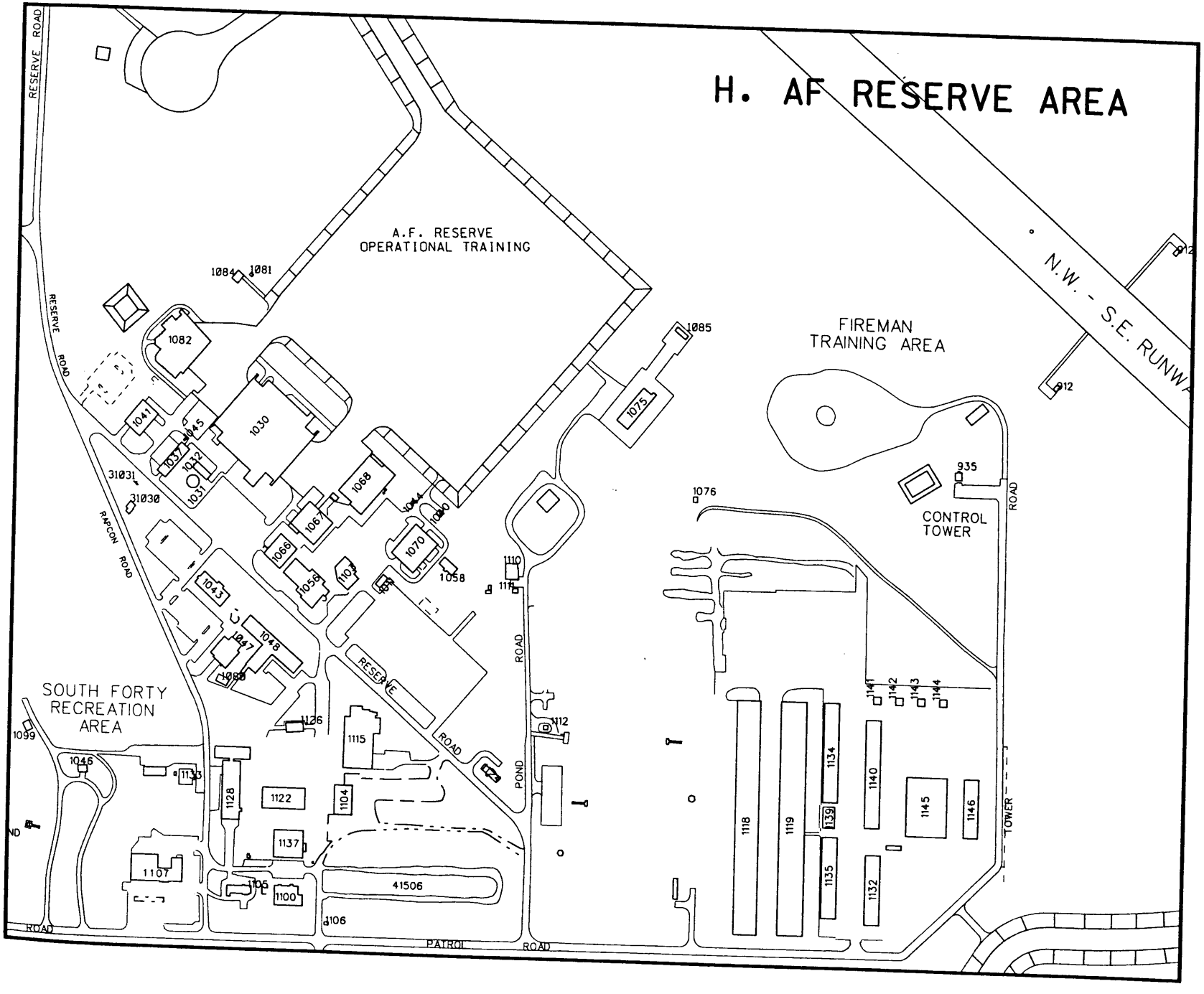
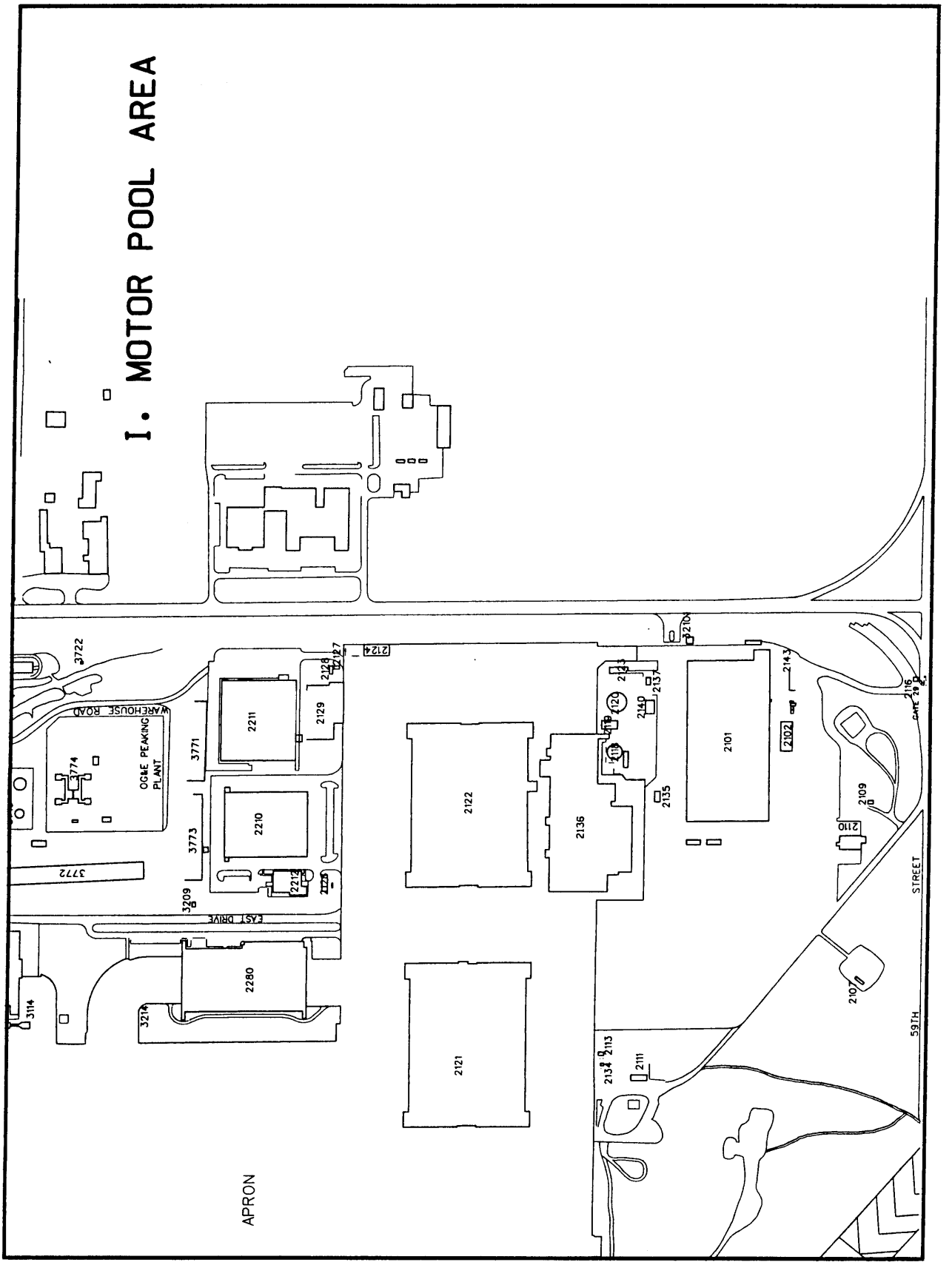
7006
7029
7039
901
1000
1032
41504


F SOUTH 3001 AREA
3102
3105
3108
3113
WEST
3117
3112
3123
3125
3118
3001
STAFF
DRIVE
3202
3203
3220
3212
3215
3206
3204
3320
3303
3304
3307
3301
STAFF
3234
3201
3224
3221
3333
3213
3211
3703
3714
3715
3739
3701
3706
TURBINE
ROAD
3705
WAREHOUSE
ROAD
EAST
3601
ENTRANCE
3770
3769
3726
3766
3728
3765
3708
3761
DRIVE
3707
ROAD "A"
3334
LIBERATOR
3604
GATE 21
DOUGLAS BOULEVARD
DOUDGLAS
3902


G. 38 EIW AREA
POST ROAD
S.E. 59TH STREET
HILLTOP RD.
HOPE
4000
4001
4002
4003
4004
4005
4006
4007
4008
4009
4012
4015
4016
4021
4022
4023
4024
4025
4029
4030
4032
4040
4041
4044
4045
4046
4048
4057
4058
4064
4065
4068
4069
4077
4078

H. AF RESERVE AREA




I. MOTOR POOL AREA
WAREHOUSE ROAD
OG&E PEAKING PLANT
EAST DRIVE
APRON
59TH STREET
2101
2102
2107
2109
2110
2111
2113
2121
2122
2124
2126
2127
2128
2129
2210
2211
2212
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2137
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2143
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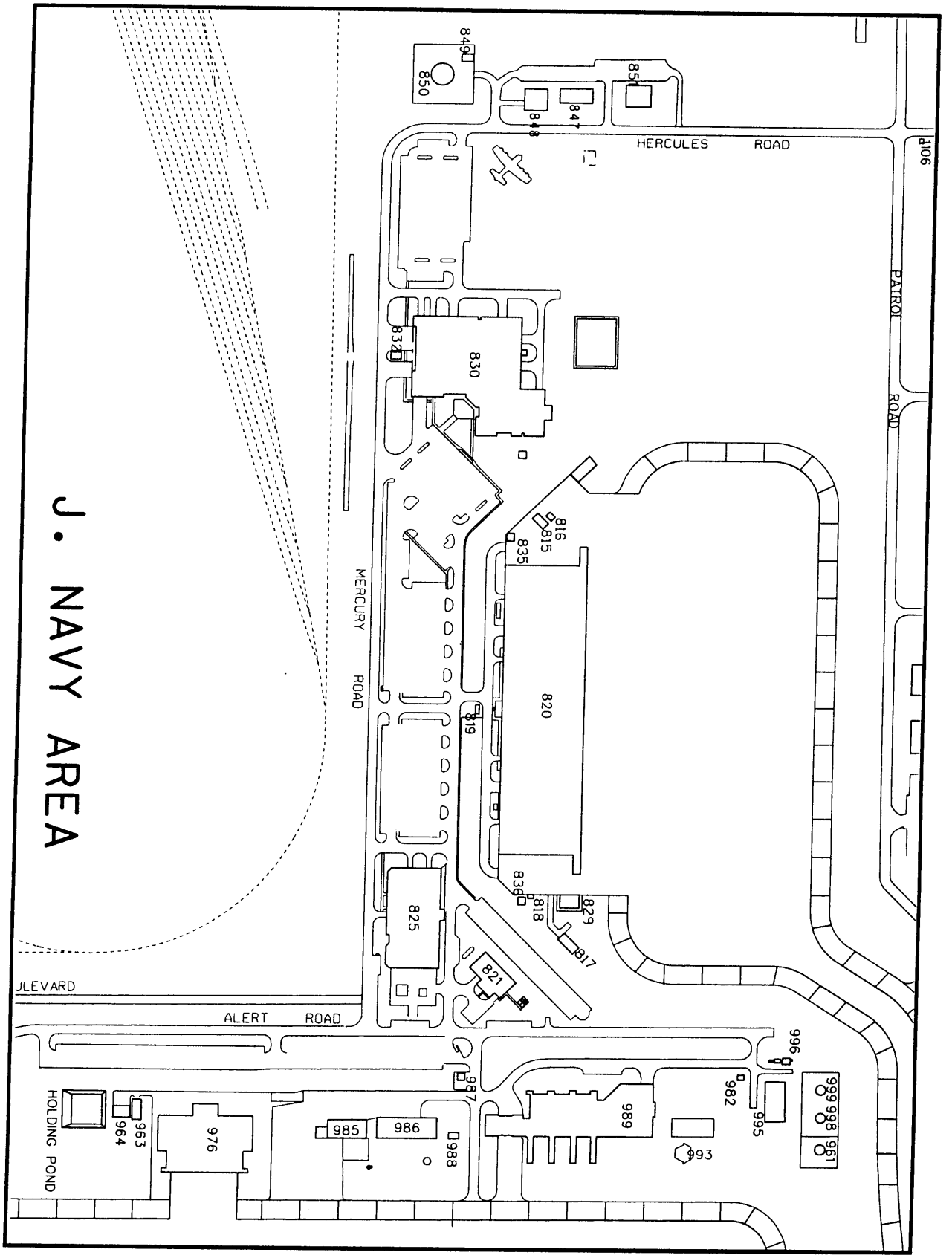
3774
3209
3114
3214


J. NAVY AREA
HERCULES ROAD
PATROL ROAD
MERCURY ROAD
ALERT ROAD
HOLDING POND
849
850
851
848
847
1106
832
830
816
815
835
820
819
836
818
829
817
825
821
996
987
982
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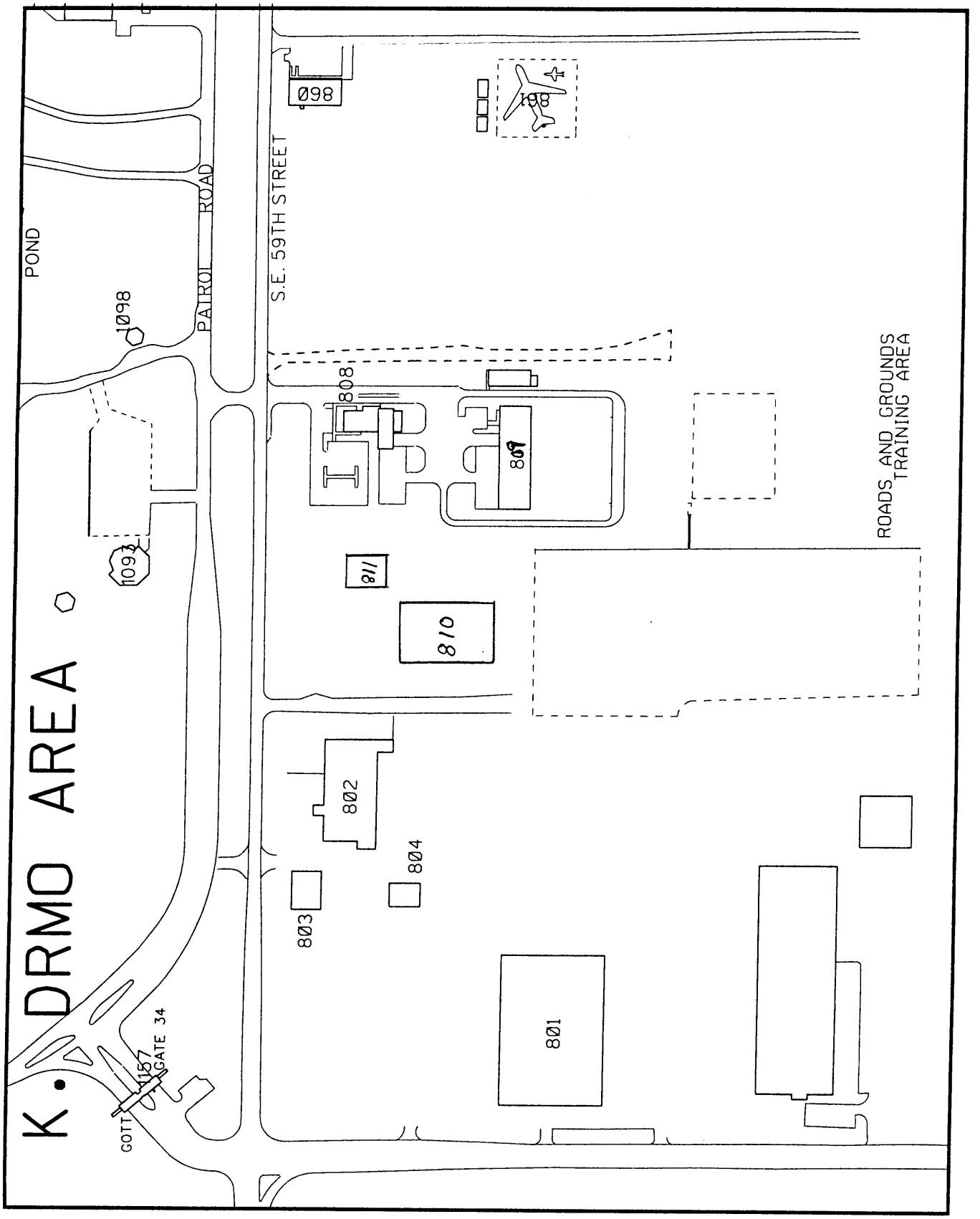
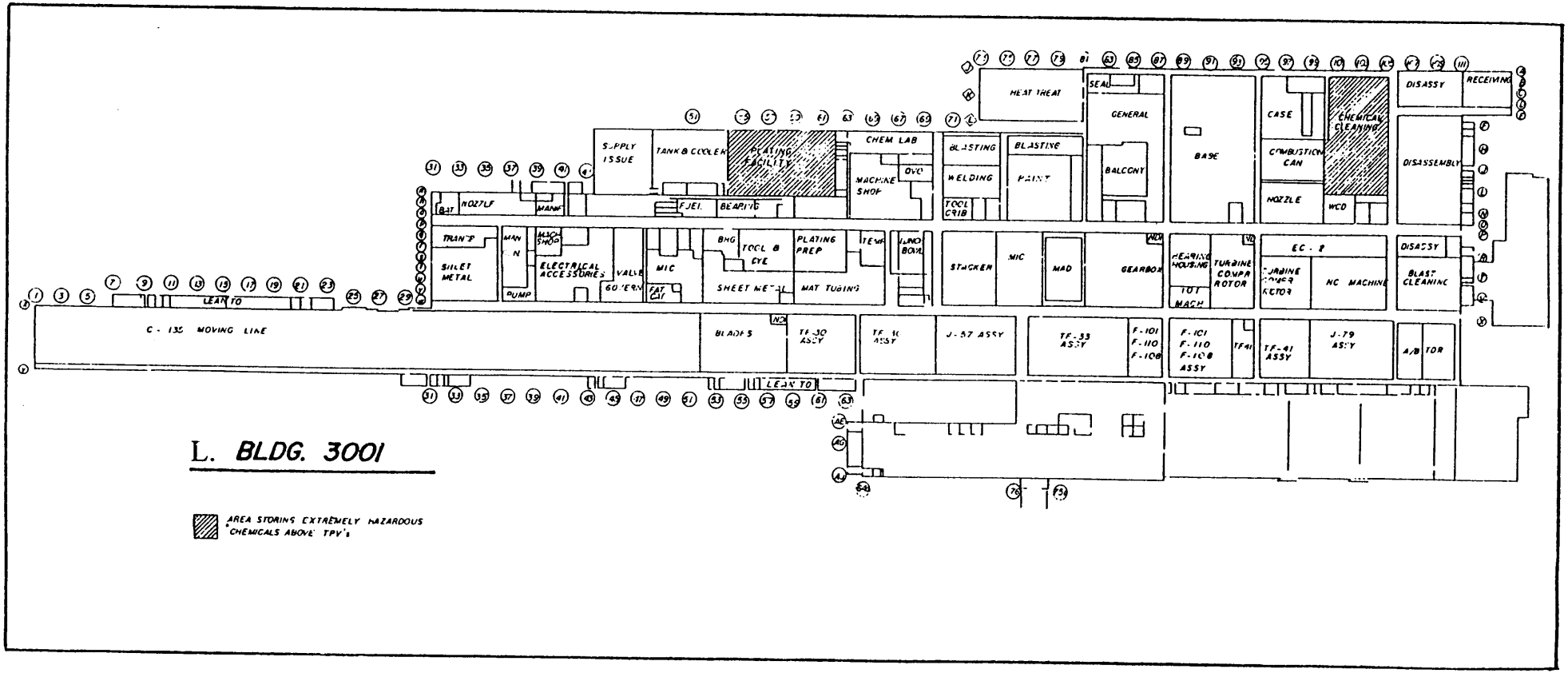
995
999
998
961
993
985
986
988
976
963
964


K. DRMO AREA
POND
PATROL ROAD
S.E. 59TH STREET
ROADS AND GROUNDS TRAINING AREA
GOTT
GATE 34
1098
1093
1157
098
198
808
809
811
810
802
803
804
801



L. BLDG. 3001

AREA STORING EXTREMELY HAZARDOUS CHEMICALS ABOVE TPV's

POCKET 4

MAP OF TINKER AFB

NOTE: *Unit Environmental Coordinators (UEC) shall inform their organizations when information in this Pocket changes as advised by EMC.*

POCKET 5

TINKER AIR FORCE BASE WASTE STREAM INVENTORY

NOTE: *Unit Environmental Coordinators (UEC) shall inform their organizations when information in this Pocket changes as advised by EMC.*

WASTE STREAM INVENTORY

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Org. ID	Waste Stream	Material		Haz Class	Process Code	Type Gen.Pt
AA0001	0509	SOLVENT, SAFETY KLEEN			CL03	5C
AA0001	0801	OIL, USED AUTOMOBILE	DO NOT ISSUE DRUMS		PM03	03
AA0001	1501	RAGS WITH OIL	DO NOT ISSUE DRUMS		PM03	03
AA0001	2006	FILTER, OIL	DO NOT ISSUE DRUMS		PM03	03
AA0002	9919	UNIVERSAL WASTE LAMPS		9	FA02	L4
AW0001	0617	WASH WATER FROM JET WASHER			CL02	02
AW0001	0807	HYDRAULIC FLUID	"USED OIL"		FL02	02
AW0001	1503	RAGS WITH SOLVENTS AND ALCOHOL	(10 GAL)	4	CL01	03
AW0001	1514	RAGS WITH HYDRAULIC FLUID			CL01	02
AW0001	2403	BATTERY, LEAD ACID			BA01	5C
AW0001	9912	EXCESS MATERIAL			EX01	5C
AW0002	1002	PAINT IN CONTAINERS (PENS)	10 GALLON CONTAINER	3	PA04	03
AW0002	1014	PAINT STRIPPER			ST02	02
AW0002	1018	THINNERS AND SOLVENTS		3	PA04	02
AW0002	1029	PAINT SLUDGE		3	PA01	02
AW0002	1108	PAINT CONTAMINATED PAPER		9	PA01	5C
AW0002	1709	RAGS WITH ALODINE		9	MT04	03
AW0002	1713	RAGS AND DEBRIS WITH PAINT, SOLVENTS,	AND STRIPPER	4	ST02	02
AW0002	2034	FILTER, PAINT BOOTH		9	PA01	5C
AW0002	2146	TRENCH SLUDGE WITH DIRT, OIL, SANDING	MATERIAL, SOAP, JP-8 AND WATER		EN02	5C
AW0002	2303	BLAST MEDIA, ALUMINUM OXIDE, WITH PAINT	CHIPS AND VACUUM SANDING DEBRIS	9	AB03	03
AW0002	9912	EXCESS MATERIAL			EX01	5C
AW0003	0703	FUEL, JP-8		3	PM02	02
AW0003	0817	OIL, USED 30 WT.			PM02	02
AW0003	0930	OIL, USED 7808 AND 5606			PM02	02
AW0003	0945	OIL, USED FUEL, HYDRAULIC FLUID, AND	ETHYLENE GLYCOL		PM02	02
AW0003	1002	PAINT IN CONTAINERS (PENS)	(10 GAL)	3	PA04	03
AW0003	1804	ABSORBENT WITH HYDRAULIC FLUID, OIL,	FUEL, AND ETHYLENE GLYCOL		SP01	5C
AW0003	2006	FILTER, OIL, HYDRAULIC FLUID, AND	ETHYLENE GLYCOL		PM02	03
AW0003	2015	FILTER, FUEL		4	PM02	02
AW0003	2204	ANTIFREEZE: ETHYLENE GLYCOL AND	PROPYLENE GLYCOL		PM02	02
AW0003	2403	BATTERY, LEAD ACID			BA01	5C
AW0003	2407	BATTERY, NICKEL CADMIUM		8	BA01	5C
AW0003	9912	EXCESS MATERIAL			EX01	5C
AW0004	1503	RAGS WITH SOLVENTS AND ALCOHOL	(10 GAL)	4	CL01	02
AW0004	2406	BATTERY, MERCURY			BA01	5C

AW0004 9912 EXCESS MATERIAL EX01 5C
AW0005 0219 SEALANT TUBES AND SEALANT 4 SE01 02
AW0005 0807 HYDRAULIC FLUID "USED OIL" FL02 02
AW0005 0814 OIL, USED FL02 02
AW0005 1503 RAGS WITH SOLVENTS AND ALCOHOL 4 CL01 03
AW0005 1804 ABSORBENT WITH HYDRAULIC FLUID, OIL, FUEL, AND ETHYLENE GLYCOL SP01 02
AW0005 2015 FILTER, FUEL 4 FL02 02
AW0005 2030 FILTER, OIL FL02 02
AW0005 2146 TRENCH SLUDGE WITH DIRT, SOAP, AND TRACE OIL AND HYDRAULIC FLUID EN02 5C
AW0005 9912 EXCESS MATERIAL EX01 5C
AW0006 1003 PAINT FROM AEROSOL 3 PA04 02
AW0006 9912 EXCESS MATERIAL EX01 5C
AW0007 1503 RAGS WITH SOLVENTS AND ALCOHOL (10 GAL) 4 CL01 02
AW0007 9912 EXCESS MATERIAL EX01 5C
AW0008 1814 ABSORBENT W/FUEL, HYDRAULIC FLUID, OIL, AND/OR ETHYLENE GLYCOL (SPILL TRAILER) SP01 02
AW0009 0938 OIL, USED AND HYDRAULIC FLUID FL02 02
AW0009 1839 ABSORBENT WITH OIL, FUEL, HYDRAULIC FLUID AND STHYLENE GLYCOL SP01 02
AW0009 2032 FILTER, OIL/HYDRAULIC FLUID PM01 01

Org. ID	Waste Stream	Material	Process Code	Type Gen.Pt
AW0010	0206	ADHESIVES AND SEALANTS IN CONTAINERS (10 GAL OPENTOP)	4 SE01	03
AW0010	0703	FUEL, JP-8	PM02	02
AW0010	0938	OIL, USED 7808 AND HYDRAULIC FLUID	FL02	02
AW0010	1503	RAGS WITH SOLVENTS AND ALCOHOL	4 CL01	03
AW0010	1840	ABSORBENT WITH FUEL, HYDRAULIC FLUID, OIL, AND/OR ETHYLENE GLYCOL	SP01	02
AW0010	2015	FILTER, FUEL	4 PM02	03
AW0010	2032	FILTER, OIL, HYDRAULIC FLUID, AND ETHYLENE GLYCOL	PM01	01
AW0010	2204	ANTIFREEZE: ETHYLENE GLYCOL AND OR PROPYLENE GLYCOL	PM02	02
AW0010	2403	BATTERY, LEAD-ACID	BA01	5C
AW0010	2404	BATTERY, LITHIUM	9 BA01	5C
AW0010	2406	BATTERY, MERCURY	8 BA01	5C
AW0010	2407	BATTERY, NICKEL-CADMIUM	8 BA01	5C
AW0010	2408	BATTERY, SILVER	BA01	5C
AW0010	9912	EXCESS MATERIAL	EX01	5C
AW0010	9919	UNIVERSAL WASTE LAMPS	9 FA02	4L
AW0011	1029	SLUDGE, PAINT	3 PA07	02
AW0011	1401	PCB CONTAMINATED LIGHT BALLASTS	FA05	5C
AW0011	1712	RAGS WITH PAINT	4 PA07	02
AW0011	9912	EXCESS MATERIAL	EX01	5C

AW0012 9912 EXCESS MATERIAL EX01 5C
AW0012 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
AW0013 1840 ABSORBENT W/FUEL, HYDRAULIC FLUID, OIL, AND/OR ETHYLENE GLYCOL (SPILL TRAILER) SP01 02
AW0013 2201 DEICING FLUID (PROPYLENE GLYCOL) FL01 5C
AW0013 9912 EXCESS MATERIAL EX01 5C
AW0013 9913 EXPEDITED REMOVAL 5C
AW0014 0613 SLUDGE, OIL WATER SEPARATOR EN01 5C
AW0014 0703 FUEL, JP-8 3 PM02 02
AW0014 0807 HYDRAULIC FLUID "USED OIL" PM02 02
AW0014 0817 OIL, USED 30 WT. PM02 02
AW0014 0818 OIL, USED 7808 PM02 02
AW0014 0917 OIL, USED HYDRAULIC FLUID, FUEL, AND ETHYLENE GLYCOL PM02 02
AW0014 1839 ABSORBENT WITH OIL, HYDRAULIC FLUID, FUEL, AND ETHYLENE GLYCOL SP01 02
AW0014 2015 FILTER, FUEL 4 PM02 02
AW0014 2032 FILTER, OIL AND HYDRAULIC FLUID PM02 02
AW0014 2204 ANTIFREEZE: ETHYLENE GLYCOL AND PROPYLENE GLYCOL PM02 02
AW0014 2404 BATTERY, LITHIUM BA01 5C
AW0014 9912 EXCESS MATERIAL EX01 5C
AW0014 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
AW0015 2018 FILTER, M17 GAS MASK WITH CHROME 9 MI01 5C
AW0016 2018 FILTER, M17 GAS MASK WITH CHROME 9 MI01 02
AW0016 2406 BATTERY, MERCURY 8 BA01 5C
AW0017 1839 ABSORBENT W/FUEL, HYDRAULIC FLUID, OIL, AND/OR ETHYLENE GLYCOL (SPILL TRAILER) SP01 02
AW0018 2404 BATTERY, LITHIUM 9 BA01 5C
AW0018 2407 BATTERY, NICKEL-CADMIUM 8 BA01 5C
AW0019 0801 OIL, USED FL02 03
AW0019 1503 RAGS WITH SOLVENTS AND ALCOHOL 4 CL01 03
AW0019 2407 BATTERY, NICKEL-CADMIUM 8 BA01 5C
AW0020 1007 PAINT, THINNERS, AND METHYL ETHYL KETONE 3 PA02 03
AW0020 1025 THINNERS, METHYL ETHYL KETONE, AND CITRA SOL 3 PA02 03
AW0020 1123 RAGS WITH PAINT, THINNERS, METHYL ETHYL KETONE, SOLVENTS, AND OIL 4 PA02 03
AW0020 1306 AREOSOL CANS WITH PAINT, ADHESIVES, AND LUBRICANT 2.1 PA02 03
AW0020 2037 FILTER, PAINT BOOTH AND PAINT 9 PM01 5C
AW0020 2302 BLAST MEDIA WITH PAINT CHIPS AB03 03
AW0020 9912 EXCESS MATERIAL EX01 5C
AW0021 9912 EXCESS MATERIAL EX01 5C
AW0022 1503 RAGS WITH ALCOHOL CL01 02

Waste
Org. ID Stream Material Process Type
Code Gen.Pt
AW0022 2406 BATTERY, MERCURY BA01 5C

AW0023 9905 DECONTAMINATION KIT M258A1 4 EX01 5C
AW0023 9912 EXCESS MATERIAL EX01 5C
AW0024 2404 BATTERY LITHIUM BA01 5C
AW0025 0801 OIL, USED LATHE PM01 5C
AW0025 9912 EXCESS MATERIAL EX01 5C
AW0026 9912 EXCESS MATERIAL EX01 5C
AW0027 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
AW0028 9912 EXCESS MATERIAL EX01 5C
AW0029 9912 EXCESS MATERIAL EX01 5C
AW0030 9912 EXCESS MATERIAL EX01 5C
AW0031 2403 BATTERY, LEAD ACID BA01 5C
AW0031 2406 BATTERY, MERCURY BA01 5C
AW0031 9912 EXCESS MATERIAL EX01 5C
AW0032 2404 BATTERY, LITHIUM 9 BA01 5C
AW0032 2407 BATTERY, NICKLE CADMIUM 8 BA01 5C
AW0033 2404 BATTERY LITHIUM 9 BA01 5C
AW0034 2407 BATTERY, NICKEL CADMIUM 8 BA01 5C
BO0002 0814 OIL, USED FL02 5C
BO0002 0911 HYDRAULIC FLUID, SKYDROL "USED OIL" FL01 5C
BO0002 1503 RAGS WITH SOLVENTS AND ALCOHOL 4 CL01 02
BO0002 1522 RAGS WITH OIL FL02 5C
BO0002 1709 RAGS WITH ALODINE 9 MT04 5C
BO0002 1821 ABSORBENT WITH HYDRAULIC FLUID, OIL, AND FUEL SP01 5C
BO0002 2305 BLAST MEDIA AB01 5C
BO0003 0807 HYDRAULIC FLUID "USED OIL" FL02 5C
BO0003 1816 ABSORBENT WITH HYDRAULIC FLUID (PEAT SORB) SP01 5C
BO0003 2403 BATTERY, LEAD ACID BA01 5C
CA0001 2407 BATTERY, NICKEL CADMIUM BA01 5C
CE0001 0826 OIL, USED MOTOR PM02 03
CE0001 0954 OIL, USED, DIESEL FUEL, AND HYDRAULIC FLUID PM02 03
CE0001 1522 RAGS WITH OIL PM02 03
CE0001 2015 FILTER, FUEL 4 PM02 03
CE0001 2030 FILTER, OIL PM02 03
CE0001 2202 ANTIFREEZE (ETHYLENE GLYCOL) PM02 03
CE0001 2403 BATTERY, LEAD ACID BA01 5C
CE0001 2407 BATTERY, NICKEL CADMIUM BA01 5C
CE0001 9912 EXCESS MATERIAL EX01 5C
CE0002 1401 PCB CONTAMINATED LIGHT BALLASTS FA05 5C
CE0002 9912 EXCESS MATERIAL EX01 5C
CE0003 1405 PCB CONTAMINATED FILTERS PM01 5C
CE0004 0607 INDUSTRIAL WASTE TREATMENT SLUDGE, DRY 9 EN01 4G
CE0004 0608 DIGESTER SLUDGE 9 EN01 5C
CE0004 0609 INDUSTRIAL WASTE TREATMENT SLUDGE, LIQUID 9 EN01 4G
CE0004 0614 OIL WATER SEPARATOR BOTTOMS 9 EN02 4T
CE0004 0704 FUEL, JET 3 MI01 4T
CE0004 2012 FILTER, IWTP MEDIA PM01 5C
CE0004 2115 SLUDGE WITH OIL AND FUEL (FRAK TANK CLEAN-OUT) 4 EN02 5C
CE0004 2202 DE-ICING FLUID, ETHYLENE GLYCOL FL03 5C
CE0004 9912 EXCESS MATERIAL EX01 5C
CE0005 0203 ADHESIVE, EPOXY RESINS, THINNERS, PRIMER AND PAINT IN CONTAINERS 3 EX01 5C
CE0005 0801 OIL, USED (30 AND 40 WT.) PM03 03
CE0005 0827 OIL, USED REFRIGERANT RE02 03
CE0005 1224 MERCURY CONTAMINATED INSTRUMENTS 8 FA05 02
CE0005 1401 PCB CONTAMINATED LIGHT BALLASTS FA05 5C

CE0005 1402 PCB CONTAMINATED CAPACITORS FA05 5C

Org. ID	Waste Stream	Material		Process Code	Type Gen.Pt
CE0005	1407	PCB CONTAMINATED TRANSFORMER		FA05	03
CE0005	1501	RAGS WITH OIL		RE04	03
CE0005	2202	ANTIFREEZE		PM03	03
CE0005	2403	BATTERY, LEAD ACID		BA01	03
CE0005	2404	BATTERY, LITHIUM		BA01	5C
CE0005	2407	BATTERY, NICKEL-CADMIUM		8 BA01	03
CE0005	9912	EXCESS MATERIAL		EX01	5C
CE0006	0613	SLUDGE, TRENCH FROM OIL/WATER SEPARATOR		EN02	5C
CE0006	0701	DIESEL FUEL	"USED OIL"	PM03	03
CE0006	0709	MOGAS		3 PM03	03
CE0006	0807	HYDRAULIC FLUID	"USED OIL"	PM03	03
CE0006	1207	CONTAINERS WITH RESIDUAL MATERIAL		FA04	03
CE0006	1307	AEROSOLS, EMPTY		2.1 PA07	03
CE0006	1501	RAGS WITH OIL		PM03	03
CE0006	1810	ABSORBENT WITH OIL		SP01	03
CE0006	2031	FILTER, OIL AND FUEL		4 PM03	03
CE0006	2202	ANTIFREEZE		PM03	03
CE0006	2403	BATTERY, LEAD-ACID		BA01	5C
CE0006	9912	EXCESS MATERIAL		EX01	5C
CE0007	1602	RAGS AND ABSORBENT WITH OIL		PM01	03
CE0007	1721	RAGS AND DEBRIS WITH PAINT AND THINNERS		4 PA07	03
CE0008	0807	HYDRAULIC FLUID	"USED OIL"	PM01	5C
CE0008	1234	DEBRIS, RUNWAY		9 FA05	5C
CE0008	2201	DEICING FLUID (PROPYLENE GLYCOL)		FL01	5C
CE0008	9909	PESTICIDE: FENTHION SOLUTION	D001	3 FA03	5C
CE0009	0603	INDUSTRIAL WASTE TREATMENT ODOR	SUPRESSENT MATERIAL	EN01	5C
CE0009	0608	INDUSTRIAL WASTE TREATMENT SLUDGE	FROM IWTP LINE REPLACEMENT	9 EN01	5C
CE0009	0618	SLUDGE, INDUSTRIAL FROM THE OKLAHOMA	CITY WASTE LINES	EN01	5C
CE0009	1002	PAINT, HARDENED IN CONTAINERS		4 EX01	5C
CE0009	1604	ABSORBENTS AND RAGS WITH OIL		SP01	02
CE0009	2129	SLUDGE, OIL		EN02	4G
CE0009	2403	BATTERY, LEAD ACID		BA01	5C
CE0009	9902	GAS CYLINDER	CHLORINE	EX01	5C
CE0009	9912	EXCESS MATERIAL		EX01	5C
CE0009	9913	EXPEDITED REMOVAL		5C	
CE0009	9914	GAS CYLINDER VAULT RETURN		EX01	5C
CE0009	9920	LAB PACK		EX01	5C
CE0009	9926	POLYMER	(PLASTIC DRUMS)	EN01	5C
CE0009	9938	SPILL RESIDUE (SOIL CONTAMINATED WITH	INDUSTRIAL WASTE TREATMENT WATER)	9 SP01	5C
CE0009	9941	UNKNOWN MATERIAL		MI02	5C

CE0009	9945	FERROUS SULFATE		EN01	5C	
CE0010	0820	OIL, USED COMPRESSOR		PM01	03	
CE0010	1602	RAGS AND ABSORBENT WITH OIL		PM01	03	
CE0010	2129	SLUDGE, OIL		PM01	03	
CE0010	2202	ETHYLENE GLYCOL (ANTIFREEZE)		PM01	03	
CE0010	9920	LAB PACK		EX01	5C	
CE0011	1604	ABSORBENT AND RAGS WITH OIL		PM01	02	
CE0012	0411	PETROLIUM DISTILLATE (CLEANING SOLVENT) (30 GALLON)				CL01 5C
CE0012	0823	OIL, USED LUBRICATING		PM01	03	
CE0012	1522	RAGS WITH OIL		PM01	03	
CE0012	9912	EXCESS MATERIAL		EX01	5C	
CE0012	9913	EXPEDITED REMOVAL			5C	
CE0012	9941	UNKNOWN MATERIAL		MI02	5C	
CE0013	1307	AEROSOL PAINT CANS, EMPTY	2.1	PA02	5C	
CE0013	1524	ABSORBENT AND RAGS WITH OIL AND FUEL	4	PM01	03	
CE0013	2025	FILTER, JP-5/8 FUEL	4	FL02	5C	

Org. ID	Waste Stream	Material	Process Code	Type Gen.Pt	
CE0013	2039	FILTER, JP-8/10 AND PF-1 FUEL, DIESEL, AND MOGAS	4	PM01	03
CE0013	2146	TRENCH SLUDGE WITH DIRT, JP-5, AND WATER		PM01	5C
CE0013	9912	EXCESS MATERIAL		EX01	5C
CE0014	1522	RAGS WITH OIL AND GREASE		RE04	02
CE0014	2104	SLUDGE, COOLING TOWER W/ALGICIDE		FA05	5C
CE0014	2403	BATTERY, LEAD ACID		BA01	5C
CE0015	0814	OIL, USED		PM01	03
CE0015	0939	OIL, USED AND REFRIGERANT		RE04	03
CE0015	1010	PAINT AND THINNERS	3	PA07	03
CE0015	1207	DESSICANT FROM BLDG 3221 AIR SYSTEM		PM01	5C
CE0015	1401	PCB CONTAMINATED LIGHT BALLASTS		FA05	03
CE0015	1402	PCB CONTAMINATED CAPACITORS		FA05	03
CE0015	1809	ABSORBENT MATERIAL WITH REFRIGERANT OIL		RE04	03
CE0015	2202	ETHYLENE GLYCOL (ANTIFREEZE)		RE04	03
CE0015	2403	BATTERY, LEAD ACID		BA01	5C
CE0015	9912	EXCESS MATERIAL		EX01	5C
CE0016	0801	OIL, USED REFRIGERANT		FA05	03
CE0016	1401	PCB CONTAMINATED LIGHT BALLASTS		FA05	5C
CE0016	1601	RAGS AND ABSORBENT WITH OIL		FA05	03
CE0016	2403	BATTERY, LEAD ACID		BA01	5C
CE0018	1401	PCB CONTAMINATED LIGHT BALLASTS		FA05	5C
CE0018	1402	PCB CONTAMINATED CAPACITORS		FA05	5C
CE0018	2403	BATTERY, LEAD ACID		BA01	5C
CE0018	2407	BATTERY, NICKEL-CADMIUM		BA01	5C
CE0019	1210	EMPTY CONTAINERS WITH AFFF FOAM RESIDUE		FS01	5C
CE0019	1601	RAGS AND ABSORBENT WITH CUTTING OIL		PM01	02
CE0019	1901	ABSORBENT WITH AFFF		SP01	02
CE0019	2403	BATTERY, LEAD ACID		BA01	5C

CE0019	9901	AFFF FOAM		FS03	5T		
CE0020	1601	RAGS AND ABSORBENTS WITH OIL		SP01	02		
CE0020	9925	MERCURY	9	SP01	5C		
CE0021	0701	DIESEL FUEL		PM03	03		
CE0021	0709	MOGAS	3	PM03	03		
CE0021	2404	BATTERY, LITHIUM	9	BA01	5C		
CE0021	9912	EXCESS MATERIAL		EX01	5C		
CE0022	0618	TRENCH SLUDGE		PM01	5C		
CE0022	1118	PPE USED IN SPILL CLEANUP AND DECONTAMINATED				SP01	5C
CE0022	1207	EMPTY CONTAINERS WITH AFFF FOAM RESIDUE				FS01	5C
CE0022	1522	RAGS WITH OIL		SP01	02		
CE0022	1845	ABSORBENT WITH:_____					
_____				SP01	02		
CE0022	2403	BATTER, LEAD ACID		BA01	5C		
CE0022	9901	AFFF FOAM		FS01	5C		
CE0022	9913	EXPEDITED REMOVAL					
CE0023	9912	EXCESS MATERIAL		EX01	5C		
CE0026	0814	OIL, USED		PM01	03		
CE0026	1602	RAGS AND ABSORBENT PADS WITH OIL				PM01	03
CE0026	9919	UNIVERSAL WASTE LAMPS	9	FA02	4L		
CE0027	1307	AEROSOL CANS, EMPTY	2.1	PA02	5C		
CE0027	1602	RAGS AND ABSORBENT WITH OIL				PM01	02
CE0027	9912	EXCESS MATERIAL		EX01	5C		
CE0028	1010	PAINT AND THINNERS	3	PA02	02		
CE0028	9912	EXCESS MATERIAL		EX01	5C		
CE0029	0807	OIL, USED WITH PCB		PM01	5C		
CE0029	0825	OIL, USED MINERAL TRANSFORMER				PM01	5C
CE0029	1407	TRANSFORMER WITH PCB CONTAMINATED OIL				PM01	5C
CE0029	9919	UNIVERSAL WASTE LAMPS	9	FA02	4L		

Org. ID	Waste Stream	Material	Process Code	Type Gen.Pt			
CE0032	1401	PCB CONTAMINATED LIGHT BALLASTS				FA05	5C
CE0032	2403	BATTER, LEAD ACID		BA01	5C		
CE0032	2407	BATTERY, NICKEL CADMIUM	8	BA01	5C		
CE0032	9919	UNIVERSAL WASTE LAMPS		FA02	4L		
CE0032	9927	BALLASTS, NON PCB LIGHT		FA02	5C		
CL0001	2018	FILTER, GAS MASK	9	EX01	5C		
CL0001	9912	EXCESS MATERIAL		EX01	5C		
CL0002	1113	PAINT, HARDENED IN CONTAINERS	4	PA07	5C		
CL0002	1601	RAGS AND ABSORBENT WITH HYDRAULIC FLUID				FL02	02
CL0002	9912	EXCESS MATERIAL		EX01	5C		
CL0003	9912	EXCESS MATERIAL		EX01	5C		
CL0004	9919	UNIVERSAL WASTE LAMPS	9	FA02	4L		
CS0001	2407	BATTERY, NICKEL CADMIUM	8	BA01	5C		
CY0001	0701	DIESEL FUEL		PM02	03		
CY0001	0709	MOGAS	3	PM02	03		
CY0001	0826	OIL, USED MOTOR		PM02	03		

CY0001	0921	OIL, USED MOTOR, TRANSMISSION FLUID, AND ETHYLENE GLYCOL		PM02	03	
CY0001	1029	PAINT SLUDGE	3	PM02	03	
CY0001	1113	PAINT, HARDENED IN CONTAINERS	4	PA07	03	
CY0001	1509	RAGS WITH FUEL, OIL, AND ANTIFREEZE	4	PM02	03	
CY0001	1842	ABSORBENT WITH OIL, MOGAS, DIESEL, AND/ OR ANTIFREEZE	4	SP01	03	
CY0001	2012	FILTER, DIESEL AND OIL		PM02	03	
CY0001	2202	ANTIFREEZE		PM02	03	
CY0001	2403	BATTERY, LEAD ACID		BA01	5C	
CY0001	9912	EXCESS MATERIAL		EX01	5C	
CY0002	2018	FILTER, GAS MASK, M17 OR M13 WITH CHROME	9	EX01	5C	
CY0002	9905	DECONTAMINATION KIT	3	EX01	5C	
CY0003	9912	EXCESS MATERIAL		EX01	5C	
CY0004	9912	EXCESS MATERIAL		EX01	5C	
CY0006	2403	BATTERY, LEAD ACID		BA01	5C	
CY0006	2404	BATTERY, LITHIUM	9	BA01	5C	
CY0006	2407	BATTERY, NICKEL CADMIUM	8	BA01	03	
CY0006	9919	UNIVERSAL WASTE LAMPS	9	FA02	4L	
CY0008	9912	EXCESS MATERIAL		EX01	5C	
CY0009	0213	SEALANT IN TUBES AND PLASTIC CONTAINERS	4	SE01	02	
CY0009	0701	DIESEL FUEL "USED OIL" (30 GALLON)		PM01	02	
CY0009	0814	OIL, "USED"		PM01	02	
CY0009	1605	RAGS AND ABSORBENT WITH OIL, PD-680, AND ANTIFREEZE		PM01	02	
CY0009	2202	ANTIFREEZE		PM01	02	
CY0009	9919	UNIVERSAL WASTE LAMP	9	FA02	4L	
CY0010	9912	EXCESS MATERIAL		EX01	5C	
CY0012	0612	OIL WATER SEPARATOR SLUDGE		EN02	5C	
DD0001	2407	BATTERY, NICKEL CADMIUM	8	BA01	5C	
DD0001	9912	EXCESS MATERIAL		EX01	5C	
DD0002	0814	OIL, USED		EX01	5C	
DD0002	2018	FILTER, GAS MASK		EX01	5C	
DD0002	2403	BATTERY, LEAD ACID		BA01	5C	
DD0002	2404	BATTERY, LITHIUM	9	BA01	5C	
DD0002	2406	BATTERY, MERCURY	8	BA01	5C	
DD0002	2407	BATTERY, NICKEL CADMIUM	8	BA01	5C	
DD0002	2408	BATTERY, SILVER OXIDE	8	BA01	5C	
DD0002	9912	EXCESS MATERIAL		EX01	5C	
DD0003	2407	BATTERY, NICKEL CADMIUM	8	BA01	5C	
DD0003	9912	EXCESS MATERIAL		EX01	5C	
DD0004	2403	BATTERY, LEAD ACID		BA01	5C	
DD0004	9912	EXCESS MATERIAL		EX01	5C	

Org. ID	Waste Stream	Material	Process Code	Type Gen.Pt	
DD0005	2402	BATTERY, ALKALINE, WET	8	BA01	5C
DD0005	2403	BATTERY, LEAD ACID		BA01	5C

DD0005	2404	BATTERY, LITHIUM		9 BA01 5C
DD0005	2405	BATTERY, MAGNESIUM		8 BA01 5C
DD0005	2406	BATTERY, MERCURY		8 BA01 5C
DD0005	2407	BATTERY, NICKEL-CADMIUM		9 BA01 5C
DD0005	9902	GAS CYLINDER		EX01 5C
DD0005	9912	EXCESS MATERIAL		EX01 5C
DD0006	2404	BATTERY, LITHIUM		9 BA01 5C
DD0006	2406	BATTERY, MERCURY		8 BA01 5C
DD0006	9912	EXCESS MATERIAL		EX01 5C
DD0007	2407	BATTERY, NICKEL-CADMIUM		8 BA01 5C
DD0007	9912	EXCESS MATERIAL		EX01 5C
DD0008	2404	BATTERY, LITHIUM		BA01 5C
DD0008	2406	BATTERY, MERCURY		BA01 5C
DD0008	9912	EXCESS MATERIAL		EX01 5C
DD0009	0814	OIL, USED		EX01 5C
DD0009	9912	EXCESS MATERIAL		EX01 5C
DD0010	1004	PAINT, THINNER, AND PD-680		3 PA02 02
DD0010	9912	EXCESS MATERIAL		EX01 5C
DD0013	9912	EXCESS MATERIAL		EX01 5C
DD0014	9912	EXCESS MATERIAL		EX01 5C
DD0015	1802	ABSORBENT WITH OIL AND WATER BASED PAINT		SP01 02
DD0015	2403	BATTERY, LEAD-ACID		BA01 5C
DD0015	9912	EXCESS MATERIAL		EX01 5C
DD0016	0509	SOLVENT, SAFETY-KLEEN		3 CL01 5C
DD0016	0807	HYDRAULIC FLUID	"USED OIL"	FA05 02
DD0016	1525	RAGS WITH OIL AND GREASE		FA05 03
DD0016	2208	COOLANT AND OIL		FA05 5C
DD0016	2302	BLAST MEDIA WITH PAINT CHIPS		AB03 03
DD0016	9912	EXCESS MATERIAL		EX01 5C
DD0017	2407	BATTERY, NICKEL CADMIUM		8 BA01 5C
DD0018	1401	PCB CONATAMINATED LIGHT BALLASTS		FA05 02
DD0018	1404	PCB CONTAMINATED RAGS AND DEBRIS		FA05 5C
DD0018	2403	BATTERY, LEAD ACID		BA01 5C
DD0018	2403	BATTERY, LEAD ACID		BA01 5C
DD0018	2407	BATTERY, NICKEL-CADMIUM		8 BA01 5C
DD0019	1206	DESICCANT WITH GEAR OIL		PM03 02
DD0020	0509	SOLVENT, SAFETY-KLEEN		3 CL01 5C
DD0021	0509	SOLVENT, SAFETY-KLEEN		3 CL01 5C
DD0022	0509	SOLVENT, SAFETY-KLEEN		3 CL01 5C
DD0023	0509	SOLVENT, SAFETY-KLEEN		3 CL01 5C
DD0024	0509	SOLVENT, SAFETY-KLEEN		3 CL01 5C
DD0027	1844	ABSORBENT WITH:_____		_____(SPILL TRAILER)
SP01	02			
DD0027	9912	EXCESS MATERIAL		EX01 5C
DD0029	0801	TRANSMISSION FLUID	"USED OIL"	PM01 02
DD0030	9919	UNIVERSAL WASTE LAMPS		9 FA02 4l
DP0001	0303	PERCHLOROETHYLENE, NAPHTHA, ISOPROPANOL		9 CL01 03
DP0001	1520	RAGS WITH OIL		SV02 03
DP0001	9909	DEVELOPER AND FIX		SV02 03
DP0001	9912	EXCESS MATERIAL		EX01 5C
DP0001	9940	TONER		SV02 03
DP0002	2026	FILTER, M13A2		9 EX01 5C
DP0003	9919	UNIVERSAL WASTE LAMPS		9 FA02 4L
DR0001	1844	ABSORBENT WITH SPILL RESIDUE:_____		

_____ SP01 5C

DR0001 2403 BATTERY, LEAD ACID BA01 5C

Waste Org. ID	Stream	Material	Process Code	Type Gen.Pt
DR0001	2407	BATTERY, NICKEL CADMIUM	8 BA01	5C
DR0001	9912	EXCESS MATERIAL	EX01	5C
DR0001	9919	UNIVERSAL WASTE LAMPS	9 FA02	4L
DR0002	1401	PCB BALLASTS	FA05	5C
DR0002	1402	PCB CAPACITORS	FA05	5C
DR0002	1844	SPILL RESIDUE:_____ _____	SP01	01
DR0002	9919	UNIVERSAL WASTE LAMPS	9 FA02	4L
EG0001	9919	UNIVERSAL WASTE LAMPS	9 FA02	4L
EM0001	0602	OUTFALL	MT02	5C
EM0001	0913	PCB CONTAMINATED POLS	PM01	03
EM0001	1404	PCB CONTAMINATED RAGS, DEBRIS, AND LAB MATERIALS	LA01	03
EM0001	9904	SILVER RECOVERY FROM PHOTOGRAPHIC PROCESS	PM01	5C
EM0001	9912	EXCESS MATERIAL	EX01	5C
EM0001	9915	LAB WASTE F001 F002 F003 F005 D001 D006 D007 D008 D039	4 LA01	02
EM0001	9941	UNKNOWN MATERIAL (ABANDONED)	EX01	5C
EM0002	0916	OIL, ETHYLENE GLYCOL, FUEL, AND SOLVENTS	3 LA01	03
EM0002	1029	PAINT SLUDGE	3 PA07	03
EM0002	1110	PAINT, BRUSHES, ADHESIVES	4 PA07	03
EM0002	1301	AEROSOL CANS	2.1 PA07	03
EM0002	2145	TRENCH SLUDGE	9 EN02	5C
EM0002	2403	BATTERY, LEAD ACID	BA01	5C
EM0002	2407	BATTERY, NICKEL CADMIUM	8 BA01	5C
EM0002	9939	TRIPLE RINSED DRUMS		
EM0003	0511	SOLVENTS, RECOVERED FROM GROUND WATER TREATMENT	9 EN03	03
EM0003	0606	INDUSTRIAL SLUDGE	EN03	03
EM0003	1230	PPE CONTAMINATED WITH SOLVENTS AND CHROMIUM	9 EN03	03
EM0003	2403	BATTERY, LEAD ACID	BA01	5C
EM0003	9926	POLYMER	EX01	5C
EM0004	0612	SLUDGE FROM VACUUM TRUCK CLEANOUT	EN02	5C
EM0004	2305	BLAST MEDIA	9 AB03	4G
EM0004	9919	UNIVERSAL WASTE LAMPS	9 FA02	4L
EM0004	9939	EMPTY DRUMS NOT TRIPLE RINSED		5C
EM0005	1014	PPE, BRUSHES, PLASTIC CLOTH WITH PAINT STRIPPER AND LEAD BASE PAINT	9 PM01	02
EM0005	1105	LEAD ABATEMENT MATERIAL	9 FA05	5C
EM0005	1107	PAINT CHIPS AND DEBRIS	9 ST01	5C
EM0005	1401	PCB CONTAMINATED LIGHT BALLASTS	FA05	5C
EM0005	2002	FILTERS, RAGS, PPE WITH CADMIUM FROM BLDG. 2121	9 PM01	03
EM0005	2305	BLAST MEDIA WITH PAINT CHIPS	9 AB03	5C
EM0006	1844	ABSORBENT WITH:_____ _____(SPILL RESIDUE)		

SP01 5C
EM0007 0510 SOLVENTS, MIXED 9 EN03 5C
EM0007 0602 INDUSTRIAL WASTE TREATMENT LINES 9 EN03 5C
EM0007 0615 PAINT CHIPS FROM LIFT STATION 6 B2122 9 EN03 4T
EM0007 0923 OIL, USED #2 HEATING WITH WATER EN03 4T
EM0007 1136 SOIL, CONTAMINATED WITH SOVENTS SP01 5C
EM0007 1208 DRILL CUTTINGS 9 EN03 5C
EM0007 1230 PPE WITH MIXED SOLVENTS 9 EN03 5C
EM0007 1238 SOIL AND DEBRIS CONTAMINATED WITH HEAVY METALS 9 EN03 5C
EM0007 2112 SLUDGE WITH SOLVENTS 9 EN03 5C
EM0007 9917 LIMESTONE WITH HEAVY METALS 9 EN01 5C
EM0008 0406 CALIBRATION FLUID, MEK, WATER 3 MI02 5C
EM0008 0802 CALIBRATION FLUID, PD-680, AND WATER 3 MI02 5C
EM0009 1731 RAGS AND PPE WITH INDUSTRIAL WASTE WATER 9 EN01 02
EM0010 1514 RAGS AND PPE WITH POLS, FUELS, AND SOLVENTS 4 LA01 02
EM0010 2007 FILTER WITH MERCURY 9 FA05 02
EM0010 9912 EXCESS MATERIAL EX01 5C
EM0010 9917 FLUORESCENT LAMPS, CRUSHED FA02 4L

Waste Process Type
Org. ID Stream Material Code Gen.Pt
EM0010 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
EM0011 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
FL0001 2404 BATTERY LITHIUM BA01 5C
FL0001 2406 BATTERY, MERCURY 8 BA01 5C
FL0001 9912 EXCESS MATERIAL EX01 5C
FM0001 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
FM0002 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
LA0001 0213 SEALANT TUBES AND CONTAINERS WITH RUBBER AND ADHESIVE CONTAINING SILVER 4 SE01 03
LA0001 0903 HYDRAULIC FLUID WITH METYL ETHYL PROPYLENE 3 FL02 03
LA0001 1103 PAINT IN CONTAINERS AND ACCESSORIES 4 PA01 03
LA0001 1542 RAGS AND HOSE WITH HYDRAULIC FLUID, EPOXY, AND METHYL PROPYL KETONE(MPK) 4 FL02 03
LA0001 1709 RAGS WITH ALODINE 9 MT04 03
LA0001 1724 RAGS WITH SODIUM NITRATE (ACTIVATOR 8) 5.1 MT04 03
LA0001 1849 ABSORBENT WITH OIL AND METHYL PROPYL KETONE (MPK) 4 SP01 03
LA0001 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
LA0002 0213 SEALANT TUBES AND CONTAINERS WITH RUBBER AND ADHESIVE CONTAINING SILVER 4 SE01 03
LA0002 0910 HYDRAULIC FLUID, PD-680, METHYL PROPYL KETONE (MPK), AND JP-8 FUEL 3 FL02 03
LA0002 1103 PAINT, HARDENED IN CONTAINERS AND ACCESSORIES 4 PA01 03
LA0002 1543 RAGS, HOSE & PPE W/FUEL, HYDRAULIC FLUID METHYL PROPYL KETONE(MPK), AND SEALANT 4 FL02 03
LA0002 1709 RAGS WITH ALODINE 9 MT04 03

LA0002 1724 RAGS WITH SODIUM NITRATE (ACTIVATOR 8) 5.1 MT04 03
LA0002 1825 ABSORBENT WITH FUEL 4 SP01 5C
LA0002 1937 ABSORBENT WITH SEALANT, FUEL, HYDRAULIC FLUID, AND METHYL PROPYL KETONE (MPK) 9 SP01 03
LA0002 2015 FILTER, FUEL 4 FL02 5C
LA0002 9912 EXCESS MATERIAL EX01 5C
LA0002 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
LA0003 0213 SEALANT TUBES AND CONTAINERS WITH RUBBER AND ADHESIVE CONTAINING SILVER 4 SE01 03
LA0003 0910 HYDRAULIC FLUID, METHYL PROPYL KETONE, AND JP-8 FUEL 3 FL02 03
LA0003 1501 RAGS/HOSE/FILTERS WITH HYDRAULIC FLUID, JP-8 FUEL, & METHYL PROPYL KETONE 4 FL02 03
LA0003 1941 ABSORBENT WITH HYDRAULIC FLUID, JP-5, AND METHYL PROPYL KETONE (MPK) SP01 03
LA0003 1941 ABSORBENT WITH AFFF FOAM SP01 5C
LA0003 2403 BATTERY, LEAD ACID BA01 5C
LA0003 9912 EXCESS MATERIAL EX01 5C
LA0003 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
LA0004 1532 RAGS WITH OIL, PD-680 AND FUEL FL02 03
LA0004 1729 RAGS, PPE, AND STYROFOAM WITH SEALANT 4 SE01 03
LA0005 0213 SEALANT TUBES AND CONTAINERS WITH RUBBER AND ADHESIVE CONTAINING SILVER 4 SE01 03
LA0005 0908 HYDRAULIC FLUID, METHYL PROPYL KETONE, AND PD-680 3 FL02 03
LA0005 1111 PAINT, HARDENED IN CONTAINERS 4 PA01 03
LA0005 1301 AEROSOL CANS, EMPTY 2.1 PA01 03
LA0005 1534 RAGS AND HOSES WITH OIL, PRIMER, AND METHYL PROPYL KETONE (MPK) 4 FL02 03
LA0005 1709 RAGS WITH ALODINE 9 MT04 03
LA0005 1724 RAGS WITH SODIUM NITRATE (ACTIVATOR 8) 5.1 MT04 03
LA0005 1820 ABSORBENT WITH HYDRAULIC FLUID, PD-680, AND JP-5 FUEL SP01 03
LA0005 2403 BATTERY, LEAD ACID BA01 5C
LA0005 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
LA0006 0801 HYDRAULIC FLUID "USED OIL" FL02 03
LA0006 1501 RAGS WITH HYDRAULIC FLUID, GREASE, AND PD-680 CL01 03
LA0006 1802 ABSORBENT WITH HYDRAULIC FLUID SP01 03
LA0008 0615 PAINT CHIPS IN WATER (TRENCH CLEANING) F002 D006 D007 D008 9 ST02 5C
LA0008 0801 HYDRAULIC FLUID "USED OIL" PM01 5C
LA0008 1015 PAINT STRIPPER (POLYSULFIDE, SR-145/125) ST02 5C
LA0008 1104 PAINT CHIPS FROM 2-PART STRIPPING 9 ST01 5C
LA0008 1142 STRONTIUM CHROMATE, METHYLENE CHLORIDE, AND PHENOL CONTAMINATED PPE AND RAGS 9 ST02 03
LA0008 1503 RAGS WITH METHYL PROPYL KETONE (MPK) 4 CL01 03
LA0008 1723 RAGS & DEBRIS WITH PAINT STRIPPER, CARBON REMOVER, & STRONTIUM CHROMATE 9 ST02 03

Org. ID	Waste Stream	Material	Process Code	Type Gen.Pt
LA0008	2008	FILTER, AIR (FROM GLASS BEAD BARN)	PM01	5C
LA0008	2009	FILTER, ACS WATER STRIPPER	9 PM01	5C
LA0008	2034	FILTER, AIR FROM WASH RACK	9 PA07	5C
LA0008	2137	SLUDGE, MINERAL DEPOSIT IN WATER TANKS	PM01	5C
LA0008	2301	BLAST MEDIA, ACRYLIC OR PLASTIC	AB03	03
LA0008	2308	BLAST MEDIA, GLASS AND STEEL SHOT WITH PAINT CHIPS	AB03	5C
LA0008	2309	BLAST MEDIA, GLASS (SEARCH PEENING PROCESS)	AB01	02
LA0008	9912	EXCESS MATERIAL	EX01	5C
LA0008	9919	UNIVERSAL WASTE LAMPS	9 FA02	4L
LA0009	0217	SEALANT TUBES AND CONTAINERS	4 SE01	03
LA0009	1111	PAINT, HARDENED IN CONTAINERS	4 PA01	03
LA0009	1514	RAGS WITH HYDRAULIC FLUID	FL02	03
LA0009	1606	RAGS & ABSORBENT WITH HYDRAULIC FLUID, FUEL, PD-680, MPK, OIL, AND PRIMER	4 FL02	03
LA0009	2407	BATTERY, NICKEL CADMIUM	8 BA01	5C
LA0009	9912	EXCESS MATERIAL	EX01	5C
LA0009	9919	UNIVERSAL WASTE LAMPS	9 FA02	4L
LA0010	0219	SEALANT TUBES AND PAINT CONTAMINATED ACCESSORIES	4 SE01	03
LA0010	1026	THINNERS	3 PA01	03
LA0010	1029	PAINT SLUDGE	3 PA01	03
LA0010	1114	PAINT, HARDENDED IN CONTAINERS	4 PA01	02
LA0010	1712	RAGS AND ACCESSORIES WITH PAINT AND THINNERS	4 PA01	03
LA0010	1721	PPE AND DEBRIS WITH PAINT, THINNERS AND STRONTIUM CHROMATE	4 PA01	03
LA0010	1728	RAGS, PPE, AND LINERS WITH ALODINE	9 MT04	02
LA0010	2010	FILTER, AIR WITH PAINT DUST	9 PM01	5C
LA0010	9919	UNIVERSAL WASTE LAMPS	9 FA02	4L
LA0011	1029	PAINT SLUDGE	3 PA01	03
LA0011	1733	RAGS, PPE & MATERIALS WITH PAINT, THINNERS, AND STRONTIUM CHROMATE	4 PA01	03
LA0011	2034	FILTER, PAINT BOOTH	9 PM01	5C
LA0012	0219	SEALANT TUBES AND PAINT CONTAMINATED ACCESSORIES	4 SE01	03
LA0012	0615	PAINT CHIPS IN WATER (TRENCH CLEANING) F002 D006 D007 D008	9 ST02	5C
LA0012	1026	THINNERS	3 PA01	03
LA0012	1029	PAINT SLUDGE	3 PA01	03
LA0012	1104	PAINT CHIPS FROM 2-PART STRIPPING	9 ST01	5C
LA0012	1105	PAINT CHIPS WITH COAL BLAST MEDIA (AIR TUNNEL STRIPPING)	AB03	5C
LA0012	1114	PAINT, HARDENED IN CONTAINERS	4 PA01	03
LA0012	1716	PPE AND PAINT LINER WITH PAINT, STRIPPER AND STRONTIUM CHROMATE	9 PA01	03
LA0012	1728	RAGS, PPE, AND LINERS WITH ALODINE	9 MT04	03
LA0012	1734	RAGS AND ACCESSORIES WITH PAINT/CHIPS, THINNERS, METHYLENE CHLORIDE AND PHENOL	4 PA06	03
LA0012	2010	FILTER, AIR WITH PAINT DUST	9 PM01	5C
LA0012	2407	BATTERY, NICKEL CADMIUM	8 BA01	5C
LA0012	9912	EXCESS MATERIAL	EX01	5C
LA0012	9913	EXPEDITED REMOVAL		

LA0012	9919	UNIVERSAL WASTE LAMPS		9	FA02	4L	
LA0013	0706	FUEL, JP4/5/8		3	FL02	5T	
LA0013	1823	ABSORBENT WITH JP-5 AND HYDRAULIC FLUID			SP01	5C	
LA0013	2407	BATTERY, NICKEL CADMIUM		8	BA01	5C	
LA0014	0801	HYDRAULIC FLUID AND COOLANT OIL	"USED OIL"		PM04	03	
LA0014	1607	RAGS, ABSORBENT AND FILTERS WITH	HYDRAULIC FLUID AND COOLANT		PM04	03	
LA0014	9912	EXCESS MATERIAL			EX01	5C	
LA0015	0207	ADHESIVES, SEALANTS, AND PRIMER COATING IN CONTAINERS		4	SE01	03	
LA0015	0909	HYDRAULIC FLUID, METHYL PROPYL KETONE, AND FUEL		3	FL02	02	
LA0015	1535	RAGS WITH OIL, SEALANT, PRIMER, SOLVENTS AND ADHESIVES		4	SE01	03	
LA0015	1703	RAGS AND DEBRIS WITH ALODINE		9	MT04	03	
LA0015	1837	ABSORBENT WITH OIL, FUEL, ADHESIVES, AND HYDRAULIC FLUID			SP01	03	
LA0015	2145	SLUDGE, TRENCH			EN02	5C	
LA0015	9912	EXCESS MATERIAL			EX01	5C	

Org. ID	Waste Stream	Material		Process Code	Type Gen.Pt	
LA0015	9919	UNIVERSAL WASTE LAMPS		9	FA02	4L
LA0016	9912	EXCESS MATERIAL			EX01	5C
LA0017	0801	HYDRAULIC FLUID	"USED OIL"		FL02	03
LA0017	1137	STRONTIUM CHROMATE DUST		9	ST01	03
LA0017	1801	ABSORBENT WITH HYDRAULIC FLUID, PD-680, AND COOLANT FLUID			SP01	03
LA0018	0801	HYDRAULIC FLUID	"USED OIL"		FL02	03
LA0018	1801	ABSORBENT WITH HYDRAULIC FLUID, PD-680, AND COOLANT			SP01	03
LA0018	2205	COOLANT			PM01	03
LA0018	9912	EXCESS MATERIAL			EX01	5C
LA0019	1607	RAGS, ABSORBENT AND FILTERS WITH	HYDRAULIC FLUID AND COOLANT		PM04	02
LA0020	0904	HYDRAULIC FLUID, OIL, AND WATER			PM01	03
LA0020	1816	ABSORBENT WITH HYDRAULIC FLUID			SP01	03
LA0020	1931	ABSORBENT WITH ANTIFREEZE			SP01	05
LA0020	2202	ANTIFREEZE			FL02	03
LA0021	0801	HYDRAULIC FLUID AND COOLANT OIL	"USED OIL"		PM04	03
LA0021	1003	PAINT		3	PA07	5C
LA0021	1607	RAGS, ABSORBENT AND FILTERS WITH	HYDRAULIC FLUID AND COOLANT		PM04	03
LA0021	2203	COOLANT (ETHYLENE GLYCOL) AND WATER			PM04	03
LA0021	2403	BATTERY, LEAD ACID			BA01	5C
LA0021	2407	BATTERY, NICKEL CADMIUM		8	BA01	5C
LA0021	9912	EXCESS MATERIAL			EX01	5C
LA0021	9919	UNIVERSAL WASTE LAMPS		9	FA02	4L

LA0022 0408 PD-680 CL02 02
LA0022 1512 RAGS WITH GREASE PM02 02
LA0023 0219 SEALANT TUBES AND PAINT CONTAMINATED ACCESSORIES 4 SE01 03
LA0023 0615 PAINT CHIPS IN WATER (TRENCH CLEANING) F002 D006 D007 D008 D027 9 ST02 5C
LA0023 1010 PAINT SLUDGE AND THINNERS 3 PA01 03
LA0023 1734 RAGS AND ACCESSORIES WITH PAINT/CHIPS, THINNERS, METHYLENE CHLORIDE & PHENOL 4 PA06 03
LA0024 0219 SEALANT TUBES AND SEALANT 4 SE01 03
LA0024 0222 SEALANT, PRIMER AND ADHESIVES IN CONTAINERS 4 SE01 03
LA0024 0406 METHYL PROPYL KETONE (MPK) 3 CL01 03
LA0024 0957 OIL, USED, HYDDRAULIC FLUID, PD-680, AND JP-5 FUEL FL02 03
LA0024 1301 AEROSOL CANS, EMPTY 2.1 PA01 03
LA0024 1701 RAGS & BRUSHES WITH JP-5 FUEL, PAINT, OIL, THINNER, MPK, & GREASE 4 PA01 03
LA0024 1709 RAGS AND PPE WITH ALODINE 9 MT04 03
LA0024 1834 ABSORBENT WITH OIL, HYDRAULIC FLUID, FUEL, METHYL PROPYL KETONE, AND PD-680 SP01 03
LA0024 2030 FILTER, HYDRAULIC FLUID PM02 5C
LA0024 2407 BATTERY, NICKEL-CADMIUM 8 BA01 5C
LA0024 9912 EXCESS MATERIAL EX01 5C
LA0024 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
LA0025 0408 PD-680 CL01 5C
LA0026 1220 LEAD SCREENS 9 TS04 03
LA0026 1309 AEROSOLS, EMPTY 2.1 PA01 03
LA0026 1706 RAGS AND PPE WITH ULTRASONIC COUPLANT, ZYGLO PENETRANT, AND MAGNETIC PARTICLE TS04 03
LA0026 2407 BATTERY, NICKEL CADMIUM 8 BA01 5C
LA0026 9912 EXCESS MATERIAL EX01 5C
LA0026 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
LA0027 9912 EXCESS MATERIAL EX01 5C
LA0028 2407 BATTERY, NICKEL CADMIUM 8 BA01 5C
LA0028 9912 EXCESS MATERIAL EX01 5C
LA0029 2207 WASTE COOLANT OIL PM01 02
LA0030 0309 CARBON REMOVER (CHEM-DIP SOLVENT) 9 CL03 5C
LA0030 0605 OIL WATER SEPARATOR SLUDGE FROM CAR WASH EN02 5C
LA0030 0702 FUELS, MIXED 3 PM02 03
LA0030 0801 OIL, USED 7808, MOTOR, AND HYDRAULIC FLUID PM02 03
LA0030 0812 NAPHTHA: STODDARD SOLVENT 3 PM02 03

Org. ID	Waste Stream	Material	Process Code	Type Gen.Pt
LA0030	1010	PAINT AND THINNERS	PA04	03
LA0030	1024	THINNERS AND METHYL PROPYL KETONE	3 PA04	03
LA0030	1103	PAINT, HARDENED IN CONTAINERS AND ACCESSORIES	4 PA04	03
LA0030	1104	PAINT CHIPS	ST02	03
LA0030	1124	RAGS, PAPER, AND RELATED MATERIAL WITH PAINT AND THINNERS		

PA04 03

LA0030 1301 AEROSOL CANS 2.1 PA04 03

LA0030 1840 ABSORBENT WITH OIL, HYDRAULIC FLUID, FUEL, AND ANTIFREEZE SP01 02

LA0030 2005 FILTER, STRIPPING SOLUTION 9 PM01 03

LA0030 2015 FILTER, FUEL 4 PM02 03

LA0030 2030 FILTER, OIL PM02 03

LA0030 2202 ANTIFREEZE PM02 03

LA0030 2203 COOLANT, REFRIGERANT GLYCOL RE04 5C

LA0030 2211 COOLANT OIL PM02 03

LA0030 2301 BLAST MEDIA, ACRYLIC 9 AB01 03

LA0030 2403 BATTERY, LEAD ACID BA01 5C

LA0030 2407 BATTERY, NICKEL CADMIUM 8 BA01 5C

LA0030 9912 EXCESS MATERIALS EX01 5C

LA0031 2406 BATTERY, NICKEL CADMIUM 8 BA01 5C

LA0031 2407 BATTERY, NICKEL CADMIUM 8 BA01 5C

LA0032 2403 BATTERY, LEAD ACID BA01 5C

LA0033 2403 BATTERY, LEAD ACID BA01 5C

LC0001 2403 BATTERY, LEAD ACID BA01 5C

LG0001 2403 BATTERY, LEAD ACID BA01 5C

LG0001 9905 DECONTAMINATION KIT, PERSONAL, M258A1, DECON 1 3 EX01 5C

LG0001 9912 EXCESS MATERIAL EX01 5C

LG0002 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L

LG0003 0605 SLUDGE FROM CAR WASH EN02 5C

LG0003 1813 ABSORBENT WITH FUEL, JP-8, MOGAS, AND DIESEL SP01 02

LG0003 1931 ABSORBENT WITH DEICING FLUID SP01 02

LG0004 2018 FILTER, M-17 GAS MASK 9 EX01 5C

LG0006 9905 DECONTAMINATION KIT, PERSONAL, M258A1 3 EX01 5C

LG0008 2403 BATTERY, LEAD ACID BA01 5C

LG0009 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L

LG0010 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L

LG0011 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L

LG0012 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L

LG0013 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L

LI0001 0007 CHROMIC ACID 8 MT04 5C

LI0001 0823 OIL, USED LUBRICATING PM01 02

LI0001 1502 RAGS AND FILTERS WITH 7808 OIL PM01 02

LI0001 1602 RAGS AND ABSORBENT WITH FUEL, JP-8 PM01 02

LI0002 0005 ALODINE SOLUTION 8 MT04 5C

LI0002 0007 CHROMIC ACID 8 MT04 5C

LI0002 0107 ALKALINE RUST AND SCALE REMOVER 8 CL03 5C

LI0002 0224 SEALANTS, ADHESIVES, AND GLUES IN CONTAINERS 4 SE01 02

LI0002 0408 PD-680 PM01 02

LI0002 0507 CLEANING SOLVENT, HURRISAFE 9065 CL03 03

LI0002 0802 CALIBRATION FLUID TS01 5C

LI0002 0807 HYDRAULIC FLUID "USED OIL" PM01 02

LI0002 0818 OIL, USED 7808 TS01 5C

LI0002 0821 OIL, USED INSULATING PM01 02

LI0002 1503 RAGS WITH SOLVENT AND ALCOHOL 4 CL01 02

LI0002 1833 ABSORBENT WITH OIL AND PCB SP01 5C

LI0002 1841 ABSORBENT WITH OIL, HYDRAULIC FLUID, AND GREASE SP01 02

LI0002 2305 BLAST MEDIA AB01 02

LI0002 9912 EXCESS MATERIAL EX01 5C

Org. ID	Waste Stream	Material	Process Code	Type Gen.Pt
LI0002	9919	UNIVERSAL WASTE LAMPS	9 FA02	4L
LI0002	9933	RUST INHIBITOR (MX-15U)	MT04	5C
LI0003	0113	CAUSTIC SOAP	8 CL03	02
LI0003	0408	PD-680	PM03	02
LI0003	0507	CLEANING SOLVENT, HURRISAFE 9065	CL03	02
LI0003	0914	OIL, 7808 WITH JP-10 FUEL	3 FL02	02
LI0003	1524	RAGS WITH OIL,FUEL,PENETRANT, AND DEVELOPER	FL02	02
LI0003	2403	BATTERY, LEAD ACID	BA01	5C
LI0003	9908	DEVELOPER	TS04	02
LI0003	9912	EXCESS MATERIAL	EX01	5C
LI0003	9919	UNIVERSAL WASTE LAMPS	9 FA02	4L
LI0003	9922	PENETRANT	TS04	5C
LI0003	9933	RUST INHIBITOR	MT04	5C
LI0004	0402	ALCOHOL, DENATURED, PHENOPHTHALEIN, AND WATER	3 CL01	03
LI0004	0506	CLEANING COMPOUND, AIRCRAFT SURFACE	CL03	5C
LI0004	1018	PAINT SLUDGE, THINNERS, ADHESIVES, AND CEMENTS	3 PA02	03
LI0004	1301	AEROSOL CANS	2.1 PA02	03
LI0004	1536	RAGS WITH PD-680 AND OIL	CL01	03
LI0004	1709	RAGS WITH ALODINE	9 MT04	03
LI0004	1711	RAGS WITH AMMONIA	CL01	03
LI0004	1719	RAGS WITH METHYL ETHYL KETONE	4 PA06	03
LI0004	2404	BATTERY LITHIUM	BA01	5C
LI0004	2406	BATTERY, MERCURY	BA01	5C
LI0004	9912	EXCESS MATERIAL	EX01	5C
LI0005	1021	PAINT, THINNERS, XYLENE AND ALCOHOL	3 PA02	02
LI0005	1028	PAINT SLUDGE AND DEBRIS FROM PAINT BOOTH CLEAN OUT	PM01	5C
LI0005	1736	RAGS, ABSORBENT, BARRIER PAPER, ROLLERS, AND BRUSHES WITH PAINT AND THINNERS	4 PA02	02
LI0005	2034	FILTER, PAINT BOOTH	9 PM01	5C
LI0005	9912	EXCESS MATERIAL	EX01	5C
LI0006	0107	ALKALINE RUST AND SCALE REMOVER	8 CL03	5C
LI0006	0807	HYDRAULIC FLUID "USED OIL"	PM01	5C
LI0006	2205	COOLANT	PM01	5C
LI0006	2207	ANTIFREEZE: ETHANOL GLYCOL	PM01	5C
LI0007	1010	PAINT AND THINNERS	3 PA02	02
LI0007	1735	RAGS, BARRIER PAPER, BRUSHERS, ROLLERS, AND PPE WITH PAINT AND THINNERS	4 PA02	5C
LI0008	0202	ADHESIVE FILMS, GRAPHITE, AND FM300	SE01	02
LI0008	0203	ADHESIVE, EPOXY RESINS, THINNERS, RUBBER COMPOUNDS AND PRIMER IN CONTAINERS	4 SE01	02
LI0008	0405	METHYL ETHYL KETONE	3 ST02	5C
LI0008	0503	CLEANING COMPOUND, SOLVENT (SKYKLEEN 1000)	CL03	02
LI0008	0938	OIL, USED AND HYDRAULIC FLUID	PM01	02
LI0008	1012	PAINT BOOTH RESIDUE	PM01	02
LI0008	1030	PAINT, PRIMER, THINNERS, AND OIL	3 PA02	02

LI0008 1138 STRONTIUM CHROMATE CONTANMINATED PPE AND DUST 9 ST01 02
LI0008 1231 PRE-IMPREGNATED CLOTH SE01 5C
LI0008 1503 RAGS (DROP CLOTH) WITH SOLVENTS (SKYKLEEN 1000) ST01 02
LI0008 1703 RAGS AND DEBRIS WITH ALODINE AND METAL CLEANER & CONTAINERS WITH METAL CLEANER9 ST01 03
LI0008 1704 RAGS AND BARRIER PAPER WITH SEALANTS, PAINT, MEK, ALCOHOL, OIL, & THINNERS 4 SE01 02
LI0008 1801 ABSORBENT WITH OIL AND METAL DUST SP01 02
LI0008 2021 FILTER, SANDING BOOTH 9 PM01 5C
LI0008 2034 FILTER, PAINT BOOTH 9 PM01 5C
LI0008 2203 ANTIFREEZE AND WATER RE04 5C
LI0008 2303 BLAST MEDIA, GROUND SEED AB01 02
LI0008 2403 BATTERY, LEAD ACID BA01 5C
LI0008 9912 EXCESS MATERIAL EX01 5C
LI0008 9913 EXPEDITED REMOVAL 5c
LI0008 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L

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Org. ID	Waste Stream	Material	Process Code	Type Gen.Pt
LI0009	0116	SODIUM HYDROXIDE SOLUTION	8 CL03	5C
LI0009	0807	HYDRAULIC FLUID "USED OIL"	PM01	02
LI0009	0948	OIL, USED LUBRICATING, LAPPING, AND WAY	PM01	02
LI0009	1603	RAGS AND ABSORBENT WITH 7808 OIL, PD-680 CUTTING FLUID, AND LAPPING COMPOUND	CL01	02
LI0009	2208	COOLANT AND OIL	PM01	5C
LI0009	9908	DEVELOPER	TS04	5C
LI0009	9911	EMULSIFIER	TS04	5C
LI0009	9912	EXCESS MATERIAL	EX01	5C
LI0009	9919	UNIVERSAL WASTE LAMPS	9 FA02	4L
LI0009	9922	PENETRANT	TS04	5C
LI0009	9935	ALKALINE DEGREASER	CL03	5C
LI0010	0116	SODIUM HYDROXIDE SOLUTION	8 CL03	5C
LI0010	0807	HYDRAULIC FLUID "USED OIL"	PM01	02
LI0010	0818	OIL, USED 7808	PM01	02
LI0010	1010	PAINT AND THINNERS	3 PA02	02
LI0010	1028	PAINT SLUDGE AND DEBRIS FROM PAINT BOOTH CLEAN OUT	PM01	5C
LI0010	1113	PAINT, HARDENED IN CANS	4 PA02	5C
LI0010	1125	RAGS, ABSORBENT, PPE, ROLLERS, BRUSHES,& BARRIER PAPER W/PAINT, THINNERS, OIL	4 PA02	02
LI0010	1609	RAGS AND ABSORBENT WITH OIL, 7808 AND PD-680	CL01	02
LI0010	2034	FILTER, PAINT BOOTH	9 PM01	5C
LI0010	2035	FILTER, USED (7808 OIL)	PM01	02
LI0011	0802	CALIBRATION FLUID	3 PM01	02
LI0011	0947	OIL, USED LUBRICATING, HYDRAULIC FLUID, AND 7808 OIL	PM01	02
LI0011	1224	MERCURY CONTAMINATED INSTRUMENTS, RAGS, FILTERS, AND DEBRIS	9 PM01	02

LI0011 1601 RAGS, ABSORBENT, AND DEBRIS WITH OIL, HYDRAULIC FLUID, AND GREASE TS01 02
LI0011 9925 MERCURY 8 SP01 5C
LI0012 1010 PAINT AND THINNERS 3 PA02 02
LI0012 1028 PAINT SLUDGE AND DEBRIS FROM PAINT BOOTH CLEAN OUT PM01 5C
LI0012 1612 RAGS AND ABSORBENT WITH OIL, GREASE, AND HYDRAULIC FLUID MT08 02
LI0012 1736 RAGS, ABSORBENT, BARRIER PAPER, BRUSHES, AND ROLLERS WITH PAINT AND THINNERS 4 PA02 02
LI0012 2034 FILTER, PAINT BOOTH 9 PM01 5C
LI0012 2403 BATTERY, LEAD ACID BA01 5C
LI0012 9918 MAGNETIC PARTICLE FLUID TS04 5C
LI0014 1141 STRONTIUM CHROMATE CONTAMINATED PPE 9 ST01 02
LI0014 2021 FILTER, DOWN DRAFT TABLE 9 PM01 5C
LI0014 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
LI0015 1608 RAGS, ABSORBENT, DEBRIS & CONTAINERS W/ POLS, SOLVENTS, AND SEALANT 4 PM01 02
LI0016 2403 BATTERY, LEAD-ACID 8 BA01 5C
LI0016 2407 BATTERY, NICKEL-CADMIUM 8 BA01 5C
LI0017 0116 SODIUM HYDROXIDE SOLUTION 8 CL03 5C
LI0017 0225 SEALANTS, ADHESIVE, AND GREASE IN CONTAINERS 4 SE01 02
LI0017 0811 NAPHTHA:SONAR COMPENSATION FLUID CL03 02
LI0017 0823 OIL, USED LUBRICATING PM01 02
LI0017 1703 RAGS & PPE W/SOLVENTS, GREASE, OIL, DYKE DICH.GLYSTAL, ALCOHOL, SOLDER FLUX... 4 CL01 02
LI0017 9912 EXCESS MATERIAL 5c
LI0018 1510 RAGS WITH FUEL, OIL, DYE, ALCOHOL, AND ADHESIVES 4 CL01 02
LI0018 2309 BLAST MEDIA WITH PAINT CHIPS 9 AB01 02
LI0019 0104 ALKALINE PERMANGANATE 8 & 5.1 CL03 5C
LI0019 0107 SODIUM HYDROXIDE SLUDGE (ALKALINE RUST AND SCALE REMOVER) 8 CL03 02
LI0019 0110 ALKALINE RUST AND SCALE REMOVER (SODIUM HYDROXIDE SOLUTION) 8 CL03 5C
LI0019 0408 PD-680 CL03 5C
LI0019 0503 CLEANER, BEYOND 2005 (DIPROPYLENE GLYCOL METHYL ETHER) CL03 03
LI0019 0932 OIL, USED 7808 AND JP-4/5 FUEL 3 FL02 03
LI0019 1610 RAGS AND ABSORBENT WITH OIL, FUEL, PD-680, AND GREASE 4 CL01 03
LI0019 1902 ABSORBENT WITH BEYOND 2005 SP01 5C
LI0019 9912 EXCESS MATERIAL EX01 5C

Waste
Org. ID Stream Material Process Type
Code Gen.Pt
LI0019 9913 EXPEDITED REMOVAL EX01 5C
LI0020 0107 SODIUM HYDROXIDE SOLUTION (ALKALINE RUST AND SCALE REMOVER) 8 CL03 5C

LI0020 0408 PD-680 CL03 5C
LI0020 0801 OIL, USED 7808, 2108, AND 1010 TS01 5C
LI0020 0806 DAMPING FLUID AND HYDRAULIC FLUID "USED OIL" PM01 02
LI0020 1611 RAGS AND ABSORBENT WITH OIL, FUEL, ALCOHOL, GREASE, AND PD-680 4 CL01 02
LI0020 2006 FILTER, 7808 OIL AND 1010 OIL PM01 02
LI0020 2132 SLUDGE FROM WATER RINSE TANKS PM01 5C
LI0020 9919 UNIVERSAL WASTE LAMPS 9 FA02 4l
LI0020 9944 COLD CARBON REMOVER 9 CL03 5C
LI0021 0802 CALIBRATION FLUID 3 TS01 5T
LI0021 0955 OIL, USED, HYDRAULIC FLUID AND WATER TS01 5C
LI0021 1503 RAGS AND MATERIAL WITH CALIBRATION FLUID FUEL, AND OIL 4 TS01 02
LI0021 2029 FILTER, METAL, & HOSES WITH FUEL, OIL, AND CALIBRATION FLUID 4 PM01 02
LI0021 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
LI0022 0410 PD-680, TYPE III CL01 5C
LI0022 0810 NAPHTHA: FINGER PRINT REMOVER 3 CL03 5C
LI0022 0816 OIL, USED 22851 TS01 5C
LI0022 0958 OIL, USED, WITH PD-680 AND ALCOHOL 3 PM01 02
LI0022 1017 PAINT STRIPPER AND CARBON REMOVER CEE BEE J-84L 8 ST02 5C
LI0022 1613 RAGS AND ABSORBENT WITH PD-680 SP01 02
LI0022 1619 RAGS AND ABSORBENT WITH ALKALINE RUST AND SCALE REMOVER SP01 02
LI0023 0408 PD-680, CALIBRATION FLUID, FUEL, AND ALCOHOL 3 CL03 02
LI0023 1511 RAGS WITH FUEL, OIL, DYKEM, PD-680, AND ALCOHOL 4 CL01 02
LI0023 1716 RAGS WITH HURRISAFE DEGREASING SOLVENT 03
LI0023 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
LI0024 0802 CALIBRATION FLUID 3 TS01 5T
LI0024 1503 RAGS AND MATERIAL WITH CALIBRATION FLUID FUEL, AND OIL 4 TS01 02
LI0024 1718 RAGS AND DEBRIS WITH PAINT, THINNERS, & SEALANTS IN CONTAINERS 4 PA07 5C
LI0024 2112 CALIBRATION SLUDGE FROM RECOVERY SYSTEM TS01 02
LI0024 2403 BATTERY, LEAD ACID BA01 5C
LI0024 9919 UNIVERSAL WASTE LAMP 9 FA02 4L
LI0025 0801 DAMPING FLUID AND JP-8 FUEL "USED OIL" TS02 03
LI0025 1606 RAGS, ABSORBENTS AND DEBRIS WITH OIL, FUEL AND SOLVENTS TS02 03
LI0025 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
LI0026 0410 PD-680 CL03 02
LI0026 0949 OIL, USED SKIMMED AND GREASE PM01 02
LI0026 1613 RAGS AND ABSORBENT WITH PD-680 CL01 02
LI0026 1618 RAGS, ABSORBENT, AND CONTAINERS WITH METHYL ETHYL KETONE 4 PM01 02
LI0026 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
LI0026 9929 POTTING COMPOUND IN CONTAINERS SE01 02
LI0027 0504 CLEANER, WATER MIX MACHINE CL02 5C
LI0027 0942 OIL, USED CUTTING, WAY, HYDRAULIC FLUID, AND COOLANT PM01 5C
LI0027 1606 RAGS AND ABSORBENT WITH OIL AND COOLANT SP01 02
LI0027 2212 COOLANT AND SLUDGE PM01 02
LI0027 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
LI0028 1010 PAINT AND THINNERS 3 PA02 02
LI0028 1028 PAINT SLUDGE AND DEBRIS FROM PAINT BOOTH CLEAN OUT PM01

5C

LI0028 1113 PAINT, HARDENED IN CONTAINERS 4 PA01 5C
LI0028 1402 PCB CONTAMINATED CAPACITORS FA05 5C
LI0028 1737 RAGS, PAPER, ROLLERS, BRUSHES WITH OIL, ALCOHOL, PAINT & THINNER 4
PA02 02
LI0028 2034 FILTER, PAINT BOOTH 9 PM01 5C
LI0028 2309 BLAST MEDIA, GLASS BEADS AB01 02
LI0028 9912 EXCESS MATERIAL EX01 5C
LI0028 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
LI0029 0109 STRIPPER, ORGANIC CL03 5C

Waste
Org. ID Stream Material Process Type
Code Gen.Pt
LI0029 0209 EPOXY RESIN, SILICONE, AND RUBBER IN CONTAINERS 4 SE01 02
LI0029 0304 PERCHLOROETHYLENE 6.1 CL03 5C
LI0029 0309 CARBON REMOVER WITH METHYLENE CHLORIDE 9 CL03 5C
LI0029 0410 PD-680 CL03 5T
LI0029 0503 CLEANER, BEYOND 2005 (DIPROPYLENE GLYCOL METHYL ETHER) CL03
03
LI0029 0801 OIL, USED 7808, HYDRAULIC FLUID, AND COOLER OIL TS01 02
LI0029 0802 CALIBRATION FLUID 3 TS01 5C
LI0029 1010 PAINT AND THINNERS 3 PA01 02
LI0029 1028 PAINT SLUDGE AND DEBRIS FROM PAINT BOOTH CLEAN OUT PM01
5C
LI0029 1104 PAINT CHIPS 9 ST01 02
LI0029 1606 RAGS AND ABSORBENT W/PERCHLOROETHYLENE 9 SP01 5C
LI0029 1739 RAGS, PPE, AND ABSORBENT WITH PAINTS, THINNERS, CALIBRATION FLUID & EPOXY
4 PA02 02
LI0029 2015 FILTER, JP-10 FUEL 4 FL02 03
LI0029 2034 FILTER, PAINT BOOTH 9 PM01 5C
LI0029 2111 SLUDGE, ORGANIC STRIPPER CL03 5C
LI0029 2309 BLAST MEDIA, GLASS BEADS 9 AB01 02
LI0029 9912 EXCESS MATERIAL EX01 5C
LI0029 9913 EXPEDITED REMOVAL
LI0029 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
LI0030 0408 PD-680 CL03 02
LI0030 0801 HYDRAULIC FLUID "USED OIL" PM02 02
LI0030 1608 RAGS, ABSORBENT, DEBRIS, & CONTAINERS W/ POLS, SOLVENTS, PAINTS, & SEALANTS
4 SE01 02
LI0030 1704 RAGS, ABSORBENT, DEBRIS, & CONTAINERS W/ ALODINE 9 MT04 02
LI0030 9923 SODIUM METASILICATE, PENTA SOLUTION CL02 02
LI0031 0504 CLEANER, WATER MIX MACHINE PM01 03
LI0031 0814 OIL, USED PM01 02
LI0031 0913 OIL WITH PCB PM01 5C
LI0031 1523 RAGS WITH OIL AND COOLANT PM01 02
LI0031 1830 ABSORBENT WITH OIL AND COOLANT PM01 02
LI0031 1833 ABSORBENT WITH OIL & PCB SP01 5C
LI0031 2202 ANTIFREEZE PM01 5C

LI0031 2208 COOLANT AND OIL PM01 02
LI0032 0410 PD-680 CL03 5C
LI0032 0938 OIL, USED LUBE AND HYDRAULIC FLUID PM01 5C
LI0032 1010 PAINT AND THINNERS 3 PA02 02
LI0032 1028 PAINT SLUDGE AND DEBRIS FROM PAINT BOOTH CLEAN OUT PM01 5C
LI0032 1113 PAINT, HARDENED IN CANS 4 PA02 5C
LI0032 1208 DUST AND DEBRIS FROM VACUUM FILTRATION SYSTEM 9 PM01 5C
LI0032 1735 RAGS, BARRIER PAPER, BRUSHES, ROLLERS, AND PPE WITH PAINT AND THINNERS 4 PA02 02
LI0032 1847 ABSORBENT, RAGS, AND PPE WITH PD-680, OIL, HYDRAULIC FLUID, AND ZYGLO SP01 02
LI0032 2034 FILTER, PAINT BOOTH 9 PM01 5C
LI0032 2040 FILTER, AIR FROM FOUNDRY SHOP 9 PM01 5C
LI0032 9908 DEVELOPER TS04 5C
LI0032 9911 EMULSIFIER TS04 5C
LI0032 9912 EXCESS MATERIAL EX01 5C
LI0032 9918 MAGNETIC INSPECTION FLUID TS04 5C
LI0032 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
LI0032 9922 FLUORESCENT PENETRANT TS04 5C
LI0033 0504 CLEANER, WATER MIX MACHINE PM01 5C
LI0033 0801 OIL, USED CUTTING, WAY, HYDRAULIC FLUID, AND COOLANT PM01 02
LI0033 1606 RAGS AND ABSORBENT WITH OIL AND COOLANT SP01 02
LI0033 2006 FILTER, OIL MIST PM01 5C
LI0033 2212 COOLANT SLUDGE PM01 02
LI0033 9912 EXCESS MATERIAL EX01 5C
LI0034 0504 CLEANER, WATER MIX MACHINE PM01 5C
LI0034 0801 OIL, USED CUTTING, WAY, HYDRAULIC FLUID, AND COOLANT PM01 02

Waste Process Type
Org. ID Stream Material Code Gen.Pt
LI0034 1616 RAGS, ABSORBENT, FILTERS, AND DEBRIS WITH OIL AND COOLANT PM01 02
LI0034 1701 RAGS AND DEBRIS WITH SEALANT (10 GALLON) 4 SE01 03
LI0034 2212 COOLANT SLUDGE PM01 5C
LI0034 9912 EXCESS MATERIAL EX01 5C
LI0034 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
LI0035 0801 OIL, USED MACHINE PM01 5C
LI0035 1607 RAGS AND ABSORBENT WITH OIL AND CUTTING FLUID CL01 02
LI0035 2305 BLAST MEDIA AB01 02
LI0036 0003 CLEANER, METAL WITH NITRIC, PHOSPHORIC & HYDROFLUOROSILICIC ACID (PASA-JELL) 8 CL01 5C
LI0036 0205 SEALANT TUBES, CONTAINERS WITH PRIMER, AND CONTAMINATED DEBRIS 4 SE01 02
LI0036 0807 HYDRAULIC FLUID "USED OIL" PM01 5C

LI0036 1029 PAINT SLUDGE 3 PA02 5C
LI0036 1140 STRONTIUM CHROMATE DUST FROM CENTRAL VACUUM SYSTEM, PPE AND FILTERS 9 PM01 02
LI0036 1522 RAGS WITH OIL MT08 02
LI0036 1710 RAGS WITH ALODINE 1001, METAL CLEANER, AND CONDITIONER 9 MT04 03
LI0036 1722 RAGS WITH METHYL ETHYL KETONE, PRIMER, AND SEALANT TAPE 4 MT08 03
LI0037 0803 DAMPING FLUID "USED OIL" PM01 02
LI0037 1010 PAINT AND THINNERS 3 PA02 02
LI0037 1511 RAGS, DEBRIS, AND CONTAINERS WITH SOLVENTS, ALCOHOL AND SEALANTS 4 PM01 5C
LI0037 1605 RAGS, ABSORBENT, & PPE WITH OIL AND DAMPING FLUID PM01 02
LI0037 2034 FILTER, PAINT BOOTH 9 PM01 5C
LI0037 2406 BATTERY, MERCURY 8 BA01 5C
LI0037 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
LI0038 2034 FILTER, PAINT BOOTH 9 PA01 5C
LI0039 0824 OIL, USED MACHINE PM01 02
LI0039 1602 RAGS AND ABSORBANT WITH MACHINE OIL PM01 02
LI0039 1614 RAGS AND ABSORBENT WITH ZYGLO, ALCOHOL NAPHTHA PETROLEUM BASED CLEANER 4 TS04 02
LI0039 1711 RAGS AND PPE WITH GRINDING DUST MT09 02
LI0039 2019 FILTER, GRINDING DUST 9 MT09 5C
LI0039 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
LI0041 0408 PD-680 TS02 5C
LI0041 0707 FUEL, JP-4/8 3 TS02 5C
LI0041 1618 RAGS, ABSORBENT, AND CONTAINERS WITH: POLS, SOLVENTS, SEALANTS AND ADHESIVES 4 SE01 02
LI0042 1615 RAGS, ABSORBENT, DEBRIS, & CONTAINERS W/ SEALANTS, PAINTS, THINNERS, & POLS 4 SE01 02
LI0042 1715 RAGS WITH CHROMIC ACID, ALODINE, NITRIC ACID, AND HYDROFLUOSILIC ACID 9 CL01 03
LI0044 1224 MERCURY CONTAMINATED INSTRUMENTS 8 PM01 5C
LI0044 9912 EXCESS MATERIAL EX01 5C
LI0045 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
LI0046 9919 UNIVERSAL WASTE LAMP 9 FA02 4L
LI0047 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
LI0048 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
LI0049 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
LI0050 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
LI0051 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
LK0001 0404 ALCOHOL, ISOPROPYL WITH SOLVENTS (5 GAL) 3 CL01 02
LK0001 2407 BATTERY, NICKEL CADMIUM DRY CELL 8 BA01 02
LK0001 9912 EXCESS MATERIAL EX01 5C
LK0001 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
LK0002 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
LK0003 9919 UNIVERSAL WASTE LAMPS
LP0001 0218 SEALANT TUBES AND RAGS WITH SEALANT, SOLVENTS AND ALCOHOL 4 SE01 03
LP0001 0410 PD-680, TYPE III CL03 5C
LP0001 0801 OIL, USED 7808 FL02 03
LP0001 1507 RAGS WITH OIL, 7808 FL02 03
LP0001 1801 ABSORBENT WITH OIL, 7808 SP01 03
LP0001 9912 EXCESS MATERIAL EX01 5C

Org. ID	Waste Stream	Material	Process Code	Type Gen.Pt
LP0002	0212	SEALANT IN CONTAINERS, WITH CONTAMINATED RAGS AND PAPER	4 SE01	03
LP0002	1028	PAINT SLUDGE AND DEBRIS FROM PAINT BOOTH CLEAN OUT	PM01	5C
LP0002	1138	STRONTIUM CHROMATE CONTAMINATED DUST AND PPE	9 ST01	03
LP0002	1301	AEROSOLS, NON SPENT	2.1 PA03	03
LP0002	1740	RAGS, PAPER, PPE WITH PAINT, SOLVENTS, AND ALCOHOL	4 PA03	03
LP0002	2021	FILTER, GRINDING BOOTH	PM01	5C
LP0002	2034	FILTER, PAINT BOOTH	9 PM01	5C
LP0002	2041	FILTER, AIR WITH STRONTIUM CHROMATE DUST	9 PM01	5C
LP0002	9912	EXCESS MATERIAL	EX01	5C
LP0004	0206	SEALANT IN CONTAINERS AND RAGS WITH SEALANT, SOLVENTS, AND ALCOHOL	4 SE01	03
LP0004	2102	SLUDGE WITH PAINT CHIPS AND OIL	CL02	03
LP0004	9912	EXCESS MATERIAL	EX01	5C
LP0004	9919	UNIVERSAL WASTE LAMPS	9 FA02	4L
LP0005	0215	SEALANT RESIDUE (DRIED) AND RAGS WITH SOLVENTS AND ALCOHOL	4 SE01	03
LP0005	1139	STRONTIUM CHROMATE CONTAMINATED MATERIAL	9 ST01	03
LP0005	1705	RAGS AND PPE WITH ZYGLO, DEVELOPER, AND CLEANER	TS04	03
LP0005	2007	FILTER, AIR	PM01	5C
LP0005	2139	SLUDGE, PAINT CHIP AND OIL	PM01	03
LP0005	2202	ANTIFREEZE	FL02	03
LP0005	2407	BATTERY, NICKEL-CADMIUM	8 BA01	5C
LP0006	0504	CLEANER, WATER MIX MACHINE	PM01	5C
LP0006	0801	OIL, USED BP DIELECTRIC (EDM FLUID)	MT09	02
LP0006	0805	HYDRAULIC FLUID "USED OIL"	PM01	5C
LP0006	1810	ABSORBENT AND FILTERS WITH EDM FLUID AND 7808 OIL	PM01	03
LP0006	2021	FILTER, GRINDING DUST AND VACUUM BAGS ECG WITH SODIUM NITRATE/NITRITE	9 PM01	03
LP0006	2022	FILTER, GRINDING DUST AND VACUUM BAGS NIAGRA CREEP GRINDERS (TRIETHANOLAMINE)	9 PM01	02
LP0006	2023	FILTER, GRINDING DUST FROM DOWN DRAFT TABLES	9 PM01	5C
LP0006	2215	COOLANT, OIL, AND WATER	PM01	03
LP0006	9912	EXCESS MATERIAL	EX01	5C
LP0006	9913	EXPEDITED REMOVAL		
LP0006	9936	SODIUM NITRATE, NITRITE, GLUCONATE	9 MT09	02
LP0007	1522	RAGS WITH HYDRAULIC FLUID, ALCOHOL AND OIL	PM01	03
LP0007	2022	FILTER, HYDRAULIC FLUID AND OIL	PM01	03
LP0008	0801	OIL, USED WITH JP-8 FUEL AND HYDRAULIC FLUID	FL02	03
LP0008	1505	RAGS WITH OIL, HYDRAULIC FLUID, FUEL, AND ALCOHOL	4 FL02	03
LP0008	1804	ABSORBENT WITH OIL, FUEL, AND HYDRAULIC FLUID	FL02	03
LP0008	2025	FILTER, OIL AND JP-8 FUEL	4 FL02	03
LP0009	1010	PAINTS, SOLVENTS AND SOLID FILM LUBRICANTS	3 PA03	02
LP0009	1031	SERMETEL PAINT SLUDGE AND WATER	9 MT04	03

LP0009	1134	RAGS AND PPE WITH SERMETEL	9	MT04	03	
LP0009	1725	RAGS AND PPE WITH SOLID FILM LUBE		PA03	03	
LP0009	2033	FILTER, SERMETEL PAINT BOOTH		PM01	5C	
LP0009	2034	FILTER, PAINT BOOTH (DRY FILM LUBE)		PM01	5C	
LP0009	2403	BATTERY, LEAD ACID		BA01	5C	
LP0009	9903	RINSE WATER FROM FREON DEGREASER		PM01	5C	
LP0009	9912	EXCESS MATERIAL		EX01	5C	
LP0011	0003	ACID SCALE CONDITIONER SLUDGE	8	CL03	5C	
LP0011	0004	ACID, SODIUM BISULFATE, PHOSPHORIC, AND/ OR OXALIC	8	CL03	5T	
LP0011	0012	CHROMIC PHOSPHORIC SLUDGE	8	CL03	5C	
LP0011	0013	STEAM COILS CONTAMINATED WITH CHROMIC/ PHOSPHORIC ACID	9	PM01	5C	
LP0011	0104	ALKALINE PERMANAGANATE	8 & 5.1	CL03	5T	
LP0011	0106	ALKALINE PRECLEANER SLUDGE	8	CL03	5C	
LP0011	0108	ALKALINE RUST AND SCALE REMOVER SLUDGE	8	CL03	5C	
LP0011	0117	STEAM COILS CONTAMINATED WITH ALKALINE PERMANGANATE	8	PM01	5C	
LP0011	1201	CERAMIC ROCK		CL02	5C	
LP0011	1801	ABSORBENT WITH OIL		SP01	02	

Org. ID	Waste Stream	Material	Process Code	Type Gen.Pt	
LP0011	2148	VIBRATORY SLUDGE	CL02	5C	
LP0011	2403	BATTERY, LEAD ACID	BA01	5C	
LP0011	9903	RINSE WATER	PM01	5C	
LP0011	9904	RESIDUE, HARD WATER	PM01	5C	
LP0011	9913	EXPEDITED REMOVAL			
LP0011	9942	VERSENE 220 AND WETTING AGENT	CL03	5C	
LP0012	1619	RAGS, ABSORBENT, AND PPE WITH PENETRANT, MAGNUFLUX AND NAPHTHA	SP01	03	
LP0012	9912	EXCESS MATERIAL	EX01	5C	
LP0012	9923	PENETRANT AND WATER	TS04	03	
LP0013	0002	ACID SCALE CONDITIONER	8	CL03	5C
LP0013	0003	ACID SCALE CONDITIONER SLUDGE	8	CL03	5C
LP0013	0008	CHROMIC/PHOSPHORIC ACID	8	CL03	5C
LP0013	0011	PHOSPHORIC ACID	8	CL03	5C
LP0013	0101	ALKALINE CLEANER	8	CL03	5C
LP0013	0104	ALKALINE PERMANGANATE	8 & 5.1	CL03	5C
LP0013	0105	ALKALINE PERMANGANATE SLUDGE AND FILTERS	5.1	CL03	5C
LP0013	0106	ALKALINE PRECLEANER SLUDGE	8	CL03	5C
LP0013	0107	ALKALINE RUST AND SCALE REMOVER	8	CL03	5C
LP0013	0109	ALKALINE RUST AND SCALE REMOVER SLUDGE AND FILTERS	8	CL03	5C
LP0013	0501	3-D SUPREME	CL03	5C	
LP0013	0512	COSMOLENE	CL03	03	
LP0013	1204	CHROMIC/PHOSPHORIC ACID PVC LINER	9	PM01	5C
LP0013	1223	SILICONE RUBBER	9	CL02	02
LP0013	1233	PVC PIPE CONTAMINATED WITH CHEMICALS	9	PM01	5C

LP0013	1243	FUME SCRUBBER MEDIA		9	PM01	5C
LP0013	1801	ABSORBENT WITH OIL			SP01	5C
LP0013	1933	ABSORBENT WITH CHROMIC TRIOXIDE FROM FUME SCRUBBER		9	SP01	5C
LP0013	2002	FILTER, STRIPPING SOLUTION			PM01	5C
LP0013	2103	CHROMIC ACID SLUDGE		8	CL03	5C
LP0013	2105	COLD CARBON REMOVER SLUDGE		8	CL03	5C
LP0013	2109	RESIDUE FROM AIR DUCT		9	PM01	5C
LP0013	2114	MOLTEN SALT SLUDGE			CL03	02
LP0013	2125	PHOSPHORIC ACID SLUDGE		8	CL04	5C
LP0013	2130	SLUDGE AND OIL FROM SPRAY WASHER			CL02	02
LP0013	2132	SLUDGE FROM RINSE TANKS		9	CL03	5C
LP0013	2133	SLUDGE FROM TRENCHES		9	CL03	5C
LP0013	2141	SLUDGE, PAINT STRIPPER			ST02	5C
LP0013	9912	EXCESS MATERIAL			EX01	5C
LP0013	9913	EXPEDITED REMOVAL				
LP0013	9944	COLD CARBON REMOVER		8	CL03	5C
LP0015	2003	FILTER, PLASMA SPRAY POWDER, RUBBER			PM01	02
LP0015	2042	FILTER, BLAST MEDIA			PM01	02
LP0016	1503	RAGS WTIH SOLVENTS AND ALCOHOL		4	CL01	02
LP0018	0001	ACID AND CHROME SLUDGE		8	MT01	5C
LP0018	0002	ACID SCALE CONDITIONER		8	CL03	5C
LP0018	0010	NITRIC ACID STRIP SOLUTION	(SILVER STRIP)	8	MT01	5C
LP0018	0013	ACID SUMP SOLUTION			MT01	5C
LP0018	0116	SODIUM HYDROXIDE SOLUTION		8	MT01	5C
LP0018	0302	CARBON PACK WITH PERCHLOROETHYLENE		9	PM01	5C
LP0018	0304	PERCHLOROETHYLENE		6.1	CL03	5C
LP0018	0305	PERCHLOROETHYLENE AND OIL		6.1	CL03	03
LP0018	0306	PERCHLOROETHYLENE AND WAX		6.1	CL03	5C
LP0018	0309	AEROSOL CANS		2.1	PA03	03
LP0018	0414	ORGANISOL WAX AND TOLUENE		4	MT01	03
LP0018	0504	MOD ORANGE SOLVENT	(5 GALLON)	3	CL01	03
LP0018	0601	WASTE WATER TREATMENT EFFLUENT		9	MT01	5C

Org. ID	Waste Stream	Material		Process Code	Type Gen.Pt	
LP0018	0604	SLUDGE, WASTE WATER TREATMENT INFLUENT		SUMP	EN01	02
LP0018	0610	PRETREATMENT SLUDGE	F006	9	MT01	03
LP0018	1202	RESIN WITH WATER SOFTENER			PM01	5C
LP0018	1221	LEAD TAPE RESIDUE FROM DEWAX		9	MT01	03
LP0018	1229	PLATING EQUIPMENT, RECYLE			FA05	5C
LP0018	1240	TANK LINER WITH ACID		9	PM01	5C
LP0018	1244	PLATING DEBRIS			FA04	5C
LP0018	1245	TANK LINER WITH ALKALINE RESIDUE		9	PM01	03
LP0018	1503	RAGS WITH SOLVENTS AND ALCOHOL		4	CL01	03
LP0018	1709	RAGS WITH ALODINE		9	MT04	03
LP0018	1714	RAGS WITH CADMIUM BRUSH PLATING SOLUTION		9	MT01	03
LP0018	1845	ABSORBENT WITH _____	(SPILL CLEAN UP)		SP01	

5C

LP0018 1935 ABSORBENT WITH PERCHLOROETHYLENE 9 SP01 5C
LP0018 2001 FILTER AND/OR CARBON PACK, NICKEL PM01 5C
LP0018 2004 FILTER, SILVER AND CARBON PACK 9 PM01 5C
LP0018 2102 SLUDGE, BLACK OXIDE (SODIUM HYDROXIDE & SODIUM NITRATE)
MT01 5C
LP0018 2104 SLUDGE AND WAX FROM SPRAY WASHER (SMALL CONTAINER) (PROTOTYPE)
CL02 02
LP0018 2106 SLUDGE, ENSTRIP STRIPPING SOLUTION 8 ST01 5C
LP0018 2107 SLUDGE, NICKEL SULFAMATE PM01 5C
LP0018 2129 SLUDGE, OIL MT11 5C
LP0018 2144 SLUDGE, SODIUM HYDROXIDE 8 MT01 5C
LP0018 2202 ANTIFREEZE (ETHYLENE GLYCOL) PM01 5C
LP0018 2205 COOLANT PM01 02
LP0018 2305 BLAST MEDIA AB01 5C
LP0018 2309 BLAST MEDIA, GLASS BEADS AB01 5C
LP0018 2501 COPPER CYANIDE 6 MT01 5C
LP0018 2502 SILVER CYANIDE SOLUTION (SILVER RECOVERY) 6.1 MT01 5C
LP0018 2503 SILVER CYANIDE STRIP SLUDGE 6.1 MT01 5C
LP0018 2504 ALKALINE CYANIDE SUMP 6.1 MT01 5C
LP0018 9909 WAX FROM WAX AND DEWAX PROCESS MT01 5C
LP0018 9912 EXCESS MATERIAL EX01 5C
LP0018 9913 EXPEDITED REMOVAL
LP0018 9922 PENETRANT TS04 5C
LP0018 9932 ROLL-OFF FOR PLATING DEBRIS' 9 FA04
LP0019 0801 OIL, USED AND FUEL FL02 03
LP0019 1503 RAGS WITH SOLVENTS AND ALCOHOL 4 CL01 03
LP0019 9912 EXCESS MATERIAL EX01 5C
LP0020 9912 EXCESS MATERIAL EX01 5C
LP0035 1503 RAGS WITH SOLVENTS 4 CL01 03
LP0035 1801 ABSORBENT AND DESICCANT WITH OIL SP01 03
LP0035 2407 BATTERY, NICKEL CADMIUM 8 BA01 5C
LP0037 0801 OIL, USED MECHANICAL PUMP PM01 02
LP0037 0805 OIL, USED QUENCHING PM01 5C
LP0037 1205 DESICCANT PM01 5C
LP0037 1801 ABSORBENT WITH OIL, MECHANICAL PUMP SP01 03
LP0037 2302 BLAST MEDIA, ALUMINUM OXIDE AND GLASS BEADS AB01 5C
LP0037 9912 EXCESS MATERIAL EX01 5C
LP0038 1228 PLASMA SPRAY DUST 9 MT02 5C
LP0038 1503 RAGS WITH SOLVENTS AND ALCOHOL 4 CL01 03
LP0038 1938 ABSORBENT WITH SODIUM HYDROXIDE 9 SP01 03
LP0038 2003 FILTER, PLASMA SPRAY PM01 5C
LP0038 2103 SLUDGE WITH PLASMA SPRAY RESIDUE 9 FA05 5C
LP0038 2302 BLAST MEDIA, ALUMINUM OXIDE AND GLASS BEADS 9 AB01 02
LP0038 2305 BLAST MEDIA (AIR FILTERING SYSTEM) 9 AB01 5C
LP0038 9912 EXCESS MATERIAL EX01 5C
LP0039 1029 PAINT SLUDGE AND ACETONE 3 PA03 03

Org. ID	Waste Stream	Material	Process Code	Type Gen.Pt
LP0039	1031	SERMETEL PAINT SLUDGE AND WATER	9 MT04	03
LP0039	1113	PAINT HARDENED IN CONTAINERS AND SOLID FILM LUBRICANTS IN CANS	4 PA03	03
LP0039	1131	RAGS, PPE. AND PAPER WITH PAINT, ACETONE SOLVENTS AND ALCOHOL	4 PA03	03
LP0039	1135	RAGS, PPE, AND CARDBOARD WITH SERMETEL	9 MT04	03
LP0039	1242	DUST COLLECTION SYSTEMS WITH METALS	9 PM01	4G
LP0039	1243	DEMOLITION OF EQUIPMENT	PM01	5C
LP0039	2033	FILTER, SERMETEL PAINT BOOTH	PM01	5C
LP0039	2034	FILTER, PAINT BOOTH	9 PM01	5C
LP0039	2118	SLUDGE, ANTI-SEIZE COMPOUND & DRY FILM LUBRICANT	PM01	03
LP0039	2302	BLAST MEDIA, ALUMINUM OXIDE AND GLASS BEADS	9 AB01	02
LP0039	2403	BATTERY, LEAD ACID	BA01	5C
LP0039	9912	EXCESS MATERIAL	EX01	5C
LP0040	0801	OIL, USED 7808 WITH JP-8 FUEL	FL02	03
LP0040	0801	OIL, USED HYDRAULIC FLUID	PM01	5C
LP0040	1540	RAGS, PPE, AND CONTAINERS WITH RTV, OIL, GP460, DYKEM, LOCITE, AND ALCOHOL	4 CL01	03
LP0040	1602	RAGS AND ABSORBENT WITH OIL	FL02	03
LP0040	1804	ABSORBENT WITH OIL, 7808 AND JP-8 FUEL	FL02	03
LP0040	2113	SLUDGE AND GRINDING DUST	PM01	5C
LP0040	9912	EXCESS MATERIAL	EX01	5C
LP0041	0801	OIL, USED 7808 WITH JP-8 FUEL	FL02	03
LP0041	1301	AEROSOLS, NON SPENT	2.1 PA03	03
LP0041	1503	RAGS WITH SOLVENTS AND ALCOHOL	4 CL01	03
LP0041	1801	ABSORBENT WITH OIL	FL02	03
LP0042	0801	OIL, USED WAY AND HYDRAULIC FLUID	PM01	5C
LP0042	1215	GRINDING DUST WITH HEAVY METALS	9 MT09	03
LP0042	1801	ABSORBENT WITH OIL	SP01	03
LP0042	2208	COOLANT AND OIL	PM01	03
LP0042	9912	EXCESS MATERIAL	EX01	5C
LP0043	0801	OIL, USED 7808 WITH JP-8 FUEL	FL02	03
LP0043	1503	RAGS WITH SOLVENTS AND ALCOHOL	4 CL01	03
LP0043	1604	ABSORBENT AND PAPER TOWELS WITH 7808 OIL AND JP-8 FUEL	SP01	03
LP0043	9912	EXCESS MATERIAL	EX01	5C
LP0044	0801	OIL, USED 7808	PM01	03
LP0044	1606	RAGS AND ABSORBENT WITH OIL AND ALCOHOL	SP01	03
LP0044	9912	EXCESS MATERIAL	EX01	5C
LP0045	0801	7808 OIL, USED	PM01	03
LP0045	1606	RAGS, PPE, ABSORBENT AND DEBRIS WITH OIL AND ALCOHOL	FL02	03
LP0045	9912	EXCESS MATERIAL	EX01	5C
LP0046	0801	OIL, USED 7808, HYDRAULIC FLUID AND JP-8 FUEL	FL02	03
LP0046	1526	RAGS WITH OIL, JP-8 FUEL, SOLVENTS, AND ALCOHOL	4 FL02	03
LP0046	1804	ABSORBENT WITH 7808 OIL, JP-8 FUEL AND HYDRAULIC FLUID	SP01	03
LP0046	9912	EXCESS MATERIAL	EX01	5C
LP0047	0801	OIL, USED 7808 WITH JP-8 FUEL	FL02	03
LP0047	1506	RAGS AND PPE WITH OIL AND FUEL	FL02	03
LP0047	1804	ABSORBENT WITH OIL, 7808 AND FUEL	SP01	03
LP0047	2407	BATTERY, NICKEL CADMIUM	BA01	5C

LP0047 9912 EXCESS MATERIAL EX01 5C
LP0048 0801 OIL, USED 7808 WITH JP-4/JP-8 FUEL 3 FL02 03
LP0049 0801 OIL, USED 7808 WITH JP-8 FUEL FL02 03
LP0049 1606 RAGS AND ABSORBENT WITH OIL, 7808, FUEL, JP-8, SOLVENTS, AND ALCOHOL SP01 03
LP0050 0801 OIL, USED AND MIXED FUELS FL02 03
LP0050 1601 RAGS, PPE, AND ABSORBENT WITH OIL AND FUEL 4 FL02 03
LP0050 9912 EXCESS MATERIAL EX01 5C
LP0051 0801 OIL, USED 7808 WITH JP-4/JP-8 FL02 03
LP0051 1801 ABSORBENT WITH OIL, 7808 SP01 03
LP0051 2026 FILTERS AND RAGS WITH OIL AND JP-8 FUEL 4 FL02 03

Org. ID	Waste Stream	Material	Process Code	Type Gen.Pt
LP0051	9912	EXCESS MATERIAL	EX01	5C
LP0053	0801	OIL, USED AND FUEL	FL02	03
LP0053	1604	RAGS AND ABSORBENT WITH OIL, FUEL, AND ALCOHOL	SP01	03
LP0053	9912	EXCESS MATERIAL	EX01	5C
LP0053	9930	PURGING FLUID	TS03	03
LP0054	0913	OIL WITH PCB	PM01	5C
LP0054	1522	RAGS WITH OIL	MT09	02
LP0054	2208	COOLANT AND OIL	PM01	5C
LP0054	2403	BATTERY, LEAD ACID	BA01	5C
LP0054	9912	EXCESS MATERIAL	EX01	5C
LP0055	0218	SEALANT TUBES AND RAGS WITH SEALANT	4 SE01	03
LP0055	1503	RAGS WITH SOLVENTS AND ALCOHOL	4 CL01	03
LP0055	2019	FILTER, GRINDING BOOTH	MT09	5C
LP0055	9912	EXCESS MATERIAL	EX01	5C
LP0056	0503	CLEANER, MACHINE WITH OIL (WATER MIX)	PM01	5C
LP0056	1503	RAGS WITH SOLVENTS AND ALCOHOL	4 CL01	03
LP0056	1604	ABSORBENT AND RAGS WITH HYDRAULIC FLUID, OIL, AND PURGING FLUID	SP01	03
LP0056	2019	FILTER, GRINDING BOOTH	MT09	5C
LP0056	2208	COOLANT AND OIL	PM01	03
LP0056	9912	EXCESS MATERIAL	EX01	5C
LP0057	0409	PD-680 TYPE 11	CL03	5C
LP0057	0801	OIL, USED 7808	MT09	03
LP0057	1512	RAGS AND PPE WITH SOLVENTS, ALCOHOL, SEALANTS, AND EPOXIES	4 CL01	03
LP0057	1602	RAGS AND ABSORBENT WITH OIL AND WAX	SP01	03
LP0057	1717	RAGS WITH GRINDING DUST	MT09	03
LP0057	2019	FILTER, GEARBOX GRINDING BOOTH	MT09	5C
LP0057	2208	COOLANT AND OIL	PM01	5C
LP0057	9912	EXCESS MATERIAL	EX01	5C
LP0058	1217	GRINDING DUST WITH NICKEL AND COBALT	MT09	02
LP0059	1217	GRINDING DUST WITH NICKEL, COBALT & PPE	MT09	03
LP0059	1503	RAGS WITH SOLVENTS AND ALCOHOL	4 CL01	03
LP0059	2019	FILTER, GRINDING BOOTH WITH METALS	MT09	5C

LP0060 0801 HYDRAULIC FLUID AND EDM FLUID "USED OIL" PM01 02
LP0060 1810 ABSORBENT WITH OIL, 7808 SP01 02
LP0061 1212 PLASMA SPRAY SLUDGE WITH TAPE PM04 5C
LP0061 1503 RAGS WITH SOLVENTS AND ALCOHOL 4 CL01 03
LP0061 2202 ETHYLENE GLYCOL AND WATER (CORROSION INHIBITOR) PM01 5C
LP0061 2303 BLAST MEDIA, ALUMINUM OXIDE AB01 03
LP0061 9912 EXCESS MATERIAL EX01 5C
LP0062 1503 RAGS WITH SOLVENTS AND ALCOHOL 4 CL01 03
LP0062 1843 ABSORBENT WITH OIL SP01 03
LP0062 2203 COOLANT AND WATER PM01 5C
LP0062 2403 BATTERY, LEAD ACID BA01 5C
LP0063 0801 OIL, USED 7808 WITH JP-8 FUEL TS03 03
LP0063 1838 ABSORBENT AND FILTERS WITH OIL, FUEL, AND RAGS WITH SOLVENT AND ALCOHOL 4 FL02 02
LP0063 2043 FILTERS AND RAGS WITH OIL AND JP-8 FUEL 4 FL02 03
LP0065 0801 OIL, USED 7808 AND 23699 TS03 03
LP0065 0801 HYDRAULIC FLUID "USED OIL" FL02 03
LP0065 1616 RAGS, ABSORBENT AND FILTERS WITH POLS, FUEL, SOLVENTS AND ALCOHOL 4 FL02 03
LP0065 9912 EXCESS MATERIAL EX01 5C
LP0067 0801 OIL, USED 7808 WITH JP-8 FUEL FL02 03
LP0067 1301 AEROSOL CANS, EMPTY 2.1 PA03 03
LP0067 1506 RAGS WITH OIL, SOLVENTS AND ALCOHOL 4 CL01 03
LP0067 1803 ABSORBENT AND FILTERS WITH OIL, 7808 SP01 03
LP0067 1838 ABSORBENT & FILTERS WITH OIL & FUEL AND RAGS W/OIL, FUEL, SOLVENT & ALCOHOL 4 FL02 03
LP0067 9912 EXCESS MATERIAL EX01 5C

Org. ID	Waste Stream	Material	Process Code	Type Gen.Pt
LP0069	0801	OIL, USED AND WATER	PM01	5C
LP0069	0819	EDM DIELECTRICT FLUID "USED OIL"	MT09	5C
LP0069	0902	HYDRAULIC FLUID AND COOLANT "USED OIL"	MT09	03
LP0069	1503	RAGS WITH SOLVENTS AND ALCOHOL	4 CL01	03
LP0069	1804	ABSORBENT AND FILTERS WITH EDM FLUID AND OIL, 7808	SP01	03
LP0069	2108	GRINDING SLUDGE	MT09	03
LP0069	2208	COOLANT AND OIL	MT09	03
LP0069	9912	EXCESS MATERIAL	EX01	5C
LP0071	1503	RAGS WITH ALCOHOL AND FPI MATERIAL	4 TS04	02
LP0072	0206	SEALANT IN CONTAINERS AND RAGS WITH SEALANTS, PRIMER AND SOLVENTS	4 SE01	03
LP0072	1225	BRAZE TAPE RESIDUE	MT02	03
LP0072	2019	FILTER, GRINDING BOOTH	PM01	5C
LP0072	9912	EXCESS MATERIAL	EX01	5C
LP0073	0504	CLEANER, WATER MIX MACHINE	PM01	5C
LP0073	0801	OIL, USED LAPPING	MT09	03
LP0073	1503	RAGS AND PPE WITH SOLVENTS AND ALCOHOL	4 CL01	03

LP0073 1810 ABSORBENT WITH OIL, 7808 SP01 03
LP0073 2103 SLUDGE AND GRIT WITH LAPPING OIL PM01 5C
LP0073 2208 COOLANT AND OIL MT09 02
LP0073 9912 EXCESS MATERIAL EX01 5C
LP0074 1215 GRINDING DUST AND VACCUM BAGS WITH HEAVY METALS 9 MT09 02
LP0074 1503 RAGS WITH SOLVENTS AND ALCOHOL 4 CL01 03
LP0074 2019 FILTER, GRINDING BOOTH 9 PM01 5C
LP0074 9912 EXCESS MATERIAL EX01 5C
LP0075 0505 CLEANER, WATER MIX MACHINE AND OIL PM01 5C
LP0075 0801 HYDRAULIC FLUID "USED OIL" MT09 02
LP0075 1224 CARBON PELLETS WITH TRICHLOROTRIFLUOROETHANE 9 PM01 5C
LP0075 1503 RAGS WITH SOLVENTS, SEALANTS AND ALCOHOL 4 CL01 03
LP0075 1810 ABSORBANT WITH OIL, 7808 SP01 03
LP0075 2113 SLUDGE, MACHINE WITH COOLANT, OIL AND GRINDING MATERIAL MT09 5C
LP0075 2208 COOLANT AND OIL MT09 5C
LP0075 9912 EXCESS MATERIAL EX01 5C
LP0075 9943 WIRE SPRAY WITH NICKEL, CHROME, AND ALUMINUM MT02 03
LP0076 0304 PERCHLOROETHYLENE 9 CL03 5C
LP0077 1220 LEAD SCREENS FROM X-RAY FILM 9 TS04 03
LP0077 1503 RAGS WITH SOLVENTS AND ALCOHOL 4 CL01 03
LP0077 2014 FILTER, FLUORESCENT PENETRANT PM01 03
LP0077 9912 EXCESS MATERIAL EX01 5C
LP0077 9924 PENETRANT RESIDUE TS04 5C
LP0078 1936 ABSORBENT WITH RUST INHIBITOR (SODIUM NITRATE) TS04 5C
LP0078 2014 FILTER, AIR FROM DEVELOPER BOOTH 9 PM01 5C
LP0078 9908 DEVELOPER RESIDUE TS04 5c
LP0078 9911 EMULSIFIER AND WATER PM01 5C
LP0078 9913 EXPEDITED REMOVAL 5C
LP0078 9924 PENETRANT RESIDUE TS04 5C
LP0079 1503 RAGS WITH SOLVENTS AND ALCOHOL 4 CL03 02
LP0080 9912 EXCESS MATERIAL EX01 5C
MS0001 9919 WASTE UNIVERSAL LAMPS 9 FA02 4L
NA0001 0205 SEALANT IN CONTAINERS 4 SE01 03
NA0001 0408 PD-680 PM01 5C
NA0001 0710 FUEL, JP-8, ALCOHOL, AND WATER 3 FL01 03
NA0001 0801 OIL, USED ENGINE WITH FUEL AND ALCOHOL 3 PM04 5C
NA0001 0803 OIL, USED ENGINE, HYDRAULIC FLUID, AND PD-680 PM01 03
NA0001 1001 PAINT AND THINNERS 3 PA01 03
NA0001 1224 MERCURY CONTAMINATED INSTRUMENT 9 ST02 03
NA0001 1516 RAGS WITH ALCOHOL, FUEL, DIESEL, AND MOGAS 4 PA08 03

Waste Process Type
Org. ID Stream Material Code Gen.Pt
NA0001 1601 RAGS & ABSORBENT WITH OIL, HYDRAULIC FLUID, PD-680, GREASE, AND ANTIFREEZE PM01 03

NA0001 1608 RAGS/PPE/ABSORBENT/CONTAINERS W/PAINT/SR CHROMATE/THINNER/SEALANT/FUEL/ALCOHOL 4 PA01 03
NA0001 1609 RAGS, ABSORBENT, GASKETS, AND FILTERS WITH BERYLLIUM MT04 03
NA0001 1703 RAGS AND ABSORBENT WITH ALODINE 9 MY04 03
NA0001 2006 FILTER, HYDRAULIC FLUID AND OIL PM01 03
NA0001 2015 FILTER, FUEL 4 PM01 03
NA0001 2042 FILTER, BLAST MEDIA PM01 5C
NA0001 2202 ETHYLENE GLYCOL AND WATER PM01 03
NA0001 2308 BLAST MEDIA, GLASS AND PLASTIC BEADS WITH PAINT DEBRIS ST01 03
NA0001 2403 BATTERY, LEAD-ACID BA01 5C
NA0001 2404 BATTERY, LITHIUM 9 BA01 5C
NA0001 2406 BATTERY, MERCURY 8 BA01 5C
NA0001 2407 BATTERY, NICKEL-CADMIUM 8 BA01 5C
NA0001 9912 EXCESS MATERIAL EX01 5C
NA0001 9913 EXPEDITED REMOVAL EX01 5C
NA0001 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
NA0001 9935 SOAP SOLUTION CL02 5C
NA0002 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
NA0003 9919 UNIVERSAL WASTE LAMPS 9 FA02 4l
OC0001 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
OC0002 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
OC0003 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
QL0001 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
SC0001 2403 BATTERY, LEAD ACID BA01 5C
SC0001 9921 BATTERY REMOVAL SV03 5C
SC0002 0823 OIL, USED LUBRICATING ENGINE CO02 03
SC0002 1114 PAINT, IN CONTAINERS AND PAINT ACCESSORIES 4 PA07 5C
SC0002 1935 ABSORBENT WITH SULFURIC ACID (BATTERY ACID) SP01 5C
SC0002 2038 FILTER, OIL, DIESEL WITH RAGS AND ABSORBENT CO02 03
SC0002 2202 ANTIFREEZE CO02 03
SC0002 2403 BATTERY, LEAD ACID BA01 5C
SC0002 2407 BATTERY, NICKEL CADMIUM BA01 5C
SC0002 9912 EXCESS MATERIAL EX01 5C
SC0002 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
SC0003 9905 DECONTAMINATION KIT M258A1 3 EX01 5C
SC0004 1402 PCB CONTAMINATED CAPACITORS PM01 5C
SC0004 2403 BATTERY, LEAD ACID BA01 5C
SC0004 2404 BATTERY, LITHIUM 9 BA01 5C
SC0004 2406 BATTERY, MERCURY 8 BA01 5C
SC0004 2407 BATTERY, NICKEL-CADMIUM BA01 5C
SC0004 9912 EXCESS MATERIAL EX01 5C
SG0001 0115 SODA LIME MD01 5C
SG0001 1225 MERCURY THERMOMETERS MD01 5C
SG0001 2403 BATTERY, LEAD ACID BA01 5C
SG0001 2404 BATTERY, LITHIUM BA01 5C
SG0001 2406 BATTERY, MERCURY 8 BA01 5C
SG0001 2407 BATTERY, NICKEL-CADMIUM BA01 5C
SG0001 9906 DENTAL AMALGUM 9 MD01 03
SG0001 9907 DENTAL X-RAY FILM 9 MD01 03
SG0001 9912 EXCESS MATERIAL EX01 5C
SG0001 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
SG0002 9941 UNKNOWN MATERIAL
SP0001 0409 PD-680 II CL02 5C

SP0001	1215	SOIL CONTAMINATED WITH LEAD		9	FA05	02
SP0001	1242	LEAD DUST FROM BULLET TRAP		9	FA05	03
SP0001	1537	RAGS WITH PD-680 II, OIL, AND RIFLE	BORE CLEANER		CL01	02

Org. ID	Waste Stream	Material		Process Code	Type Gen.Pt	
SP0001	2020	FILTER WITH LEAD DUST		9	PM01	5C
SP0001	2403	BATTERY, LEAD ACID			BA01	5C
SP0001	2404	BATTERY, LITHIUM		9	BA01	5C
SP0001	2407	BATTERY, NICKEL-CADMIUM		8	BA01	5C
SP0002	9919	UNIVERSAL WASTE LAMPS		9	FA02	4L
SV0001	0801	BRAKE FLUID	"USED OIL"		PM03	03
SV0001	0919	OIL, USED AUTO ENGINE AND TRANSMISSION	FLUID		PM03	03
SV0001	1010	PAINT SLUDGE		3	PA05	02
SV0001	1301	AEROSOL CANS		2.1	PA05	02
SV0001	1522	RAGS WITH OIL			PM03	03
SV0001	1810	ABSORBENT WITH P0L			PM03	02
SV0001	2030	FILTER, OIL			PM03	03
SV0001	2146	TRENCH SLUDGE WITH OIL AND DIRT			EN02	5C
SV0001	2202	ANTIFREEZE			PM03	03
SV0001	2309	GLASS BEAD, BLASTING MEDIA			AB01	02
SV0001	9912	EXCESS MATERIAL			EX01	5C
SV0001	9919	UNIVERSAL WASTE LAMPS		9	FA02	4L
TF0001	0938	OIL, USED MOTOR AND HYDRAULIC FLUID			PM03	03
TF0001	1123	RAGS WITH MEK		4	PM01	02
TF0001	1528	RAGS WITH OIL, GREASE, HYDRAULIC FLUID,	AND JP-8 FUEL (TRACE)		FL01	02
TF0001	1831	ABSORBENT WITH OIL, AND HYDRAULIC FLUID			SP01	5C
TF0001	2407	BATTERY, NICKEL-CADMIUM		8	BA01	5C
TF0001	9912	EXCESS MATERIAL			EX01	5C
TF0002	0938	OIL, USED AND HYDRAULIC FLUID			FL02	03
TF0002	1519	RAGS WITH JP-8 FUEL, HYDRAULIC FLUID,	AND GREASE	4	FL02	03
TF0002	1826	ABSORBENT WITH JP-8 FUEL, OIL, GREASE,	AND HYDRAULIC FLUID		SP01	03
TF0002	9919	UNIVERSAL WASTE LAMPS		9	FA02	4L
TF0004	0206	SEALANT TUBES AND CONTAINERS WITH	CONTAMINATED RAGS AND DEBRIS	4	SE01	02
TF0004	1007	PAINT, THINNERS, AND METHYL ETHYL KETONE		3	PA01	03
TF0004	1108	PAINT CONTAMINATED PAPER		9	PA04	5C
TF0004	1717	RAGS AND DEBRIS WITH METHYL ETHYL KETONE AND PAINT		4	PA01	03
TF0004	2034	FILTER, PAINT BOOTH		9	PM01	5C
TF0004	2042	FILTER, BLAST MEDIA	LOCATED IN B1030		PM01	5C
TF0004	2304	BLAST MEDIA, PLASTIC WITH PAINT CHIPS	LOCATED IN B1030	9	AB03	02
TF0004	2306	BLAST MEDIA, GLASS AND PLASTIC			AB03	02
TF0004	9912	EXCESS MATERIAL			EX01	5C
TF0007	1231	PPE, RAGS, ABSORBENT WITH PENETRANT AND	EMULSIFIER		TS04	

5c

TF0007	9911	EMULSIFIER	TS04	5C		
TF0007	9922	PENETRANT	TS04	5C		
TF0008	0408	PD-680	PM04	03		
TF0008	0807	HYDRAULIC FLUID "USED"	PM01	03		
TF0008	1601	RAGS AND ABSORBENT WITH POLS	PM04	03		
TF0008	2042	FILTER, BLAST MEDIA	PM01	5C		
TF0008	2306	BLAST MEDIA, GLASS AND PLASTIC	9	AB01	02	
TF0009	0408	PD-680	PM04	03		
TF0009	0703	FUEL, JP-8, DIESEL, MOGAS, AND WATER	3	PM04	03	
TF0009	0807	HYDRAULIC FLUID "USED OIL"	PM04	03		
TF0009	0950	OIL, USED SYNTHETIC & ENGINE	PM04	03		
TF0009	1519	RAGS WITH OIL, FUEL, GREASE AND HYDRAULIC FLUID	PM04	03		
TF0009	1826	ABSORBENT WITH OIL, HYDRUALIC FLUID, FUEL, AND GREASE	PM04			
03						
TF0009	2033	FILTER, OIL, TRANSMISSION FLUID & FUEL	PM04	03		
TF0009	2202	ANTIFREEZE	PM04	03		
TF0009	2403	BATTERY, LEAD ACID	BA02	5C		
TF0009	2407	BATTERY, NICKEL CADMIUM	8	BA01	5C	
TF0010	2018	FILTER, GAS MASK WITH CHROME	9	MI01	5C	
TF0010	2401	BATTERY, ALKALINE	8	BA01	5C	

Waste Org. ID	Stream	Material	Process Code	Type Gen.Pt		
TF0010	2403	BATTERY, LEAD ACID	BA01	5C		
TF0010	2404	BATTERY, LITHIUM	9	BA01	5C	
TF0010	2406	BATTERY, MERCURY	8	BA01	5C	
TF0010	2407	BATTERY, NICKEL CADMIUM	8	BA01	5C	
TF0010	9912	EXCESS MATERIAL	EX01	5C		
TF0011	1718	RAGS WITH ALCOHOL	4	PM01	02	
TF0012	2028	FILTER, MCU-2A/P PROTECTIVE MASK WITH CHROME	9	MI01	5C	
TF0013	1606	RAGS WITH FUEL, JP-8, AND METHYL PROPYL KETONE(MPK)	4	FL01		
03						
TI0001	0802	POLS, FUELS, AND SOLVENTS	3	LA01	03	
TI0001	9912	EXCESS MATERIALS	EX01	5C		
TI0001	9915	LAB WASTE INCLUDING RAGS & DEBRIS WITH: POLS, FUELS, AND SOLVENTS	4			
LA01	03					
TI0001	9920	LAB PACK	EX01	5C		
TI0002	0205	ADHESIVE, PAINT, SEALANTS, AND GREASE IN CONTAINERS	3	SE01		
03						
TI0002	0807	HYDRAULIC FLUID "USED OIL"	PM01	03		
TI0002	0822	OIL, USED LAPPING	PM01	03		
TI0002	0829	OIL, USED WAY	PM01	03		
TI0002	0904	HYDRAULIC FLUID, COOLANT, AND WATER "USED OIL"	PM01	5C		
TI0002	1404	PCB CONTAMINATED RAGS AND DEBRIS	FA05	5C		
TI0002	1501	RAGS AND PPE WITH OIL	PM01	03		
TI0002	2203	ANTIFREEZE AND WATER	PM01	03		
TI0002	9919	UNIVERSAL WASTE LAMPS	9	FA02	4L	

TI0003	1010	PAINT AND THINNERS	3	PA07	03
TI0003	1743	RAGS, ROLLERS, BRUSHES, AND MASKING TAPE WITH PAINT	4	PA07	03
TI0003	2034	FILTER, PAINT BOOTH AND PAINT SLUDGE		PM01	03
TI0003	2309	BLAST MEDIA, GLASS BEADS	9	AB03	03
TI0004	1605	RAGS AND ABSORBENT WITH MERCURY	9	SP01	5C
TI0004	2403	BATTERY, LEAD ACID RECYCLABLE		BA01	5C
TI0004	2404	BATTERY, LITHIUM	9	BA01	5C
TI0004	2406	BATTERY, MERCURY	8	BA01	5C
TI0004	9925	MERCURY	8	SPO1	5C
TI0004	9934	CESIUM ELECTRONIC TUBES	4.3	TS02	5C
TI0005	0924	OIL, USED LUBRICATING, MOTOR, WAY AND HYDRAULIC FLUID		PM01	03
TI0005	1529	RAGS WITH OIL, HYDRAULIC FLUID, AND GREASE		PM01	03
TI0005	2024	FILTER, HYDRAULIC FLUID, OIL, FUEL, AND AIR		PM01	03
TI0005	2403	BATTERY, LEAD ACID		BA01	5C
TI0005	9912	EXCESS MATERIAL		EX01	5C
TI0006	2116	PAINT DUST/SLUDGE FROM B2280 TUNNELS	9	FA05	5C
TI0007	2403	BATTERY, LEAD ACID		BA01	5C
TI0008	0801	OIL, USED MIXED		PM01	03
TI0008	2036	FILTER, AIR, OIL AND FUEL WITH RAGS AND DEBRIS	4	PM01	03
TI0008	9912	EXCESS MATERIAL		EX01	5C
TI0009	1401	PCB CONTAMINATED LIGHT BALLASTS		FA05	5C
TI0009	2133	SLUDGE FROM TRENCHES		EN02	5C
TI0009	2205	COOLANT		PM01	5C
TI0009	9919	UNIVERSAL WASTE LAMPS	9	FA02	4L
TI0010	0801	OIL, USED		PM01	03
TI0010	1205	DESSICANT		PM01	5C
TI0010	1501	RAGS WITH OIL		PM01	03
TI0010	1601	ABSORBENT WITH OIL		PM01	03
TI0010	2006	FILTER WITH OIL		PM01	03
TI0010	9919	UNIVERSAL WASTE LAMPS	9	FA02	4L
TI0011	0904	HYDRAULIC FLUID, OIL, AND WATER "USED OIL"		PM01	03
TI0011	1502	RAGS AND FILTERS WITH OIL		PM01	03
TI0011	1932	ABSORBENT W/ANTIFREEZE AND OIL		PM01	03
TI0011	2202	ANTIFREEZE		PM01	03
TI0011	2205	COOLANT		PM01	03

Org. ID	Waste Stream	Material	Process Code	Type Gen.Pt
TI0011	2403	BATTERY, LEAD ACID	BA01	5C
TI0012	9910	RESIN, COOLANT RECYCLING	PM01	5C
TI0013	0801	OIL, USED MINERAL AND WATER WITH METAL SHAVINGS	PM01	5C
TI0013	1522	RAGS WITH OIL	PM01	02
TI0014	0901	HYDRAULIC FLUID, TRANSMISSION FLUID, AND DEXTRON 2 "USED OIL"	PM01	03
TI0014	1816	ABSORBENT WITH HYDRAULIC FLUID	PM01	03

TI0016 0408 PD-680 PM01 03
TI0016 0801 OIL, USED MOBILE DTE 25 PM01 03
TI0016 1505 RAGS AND PPE WITH OIL, HYDRAULIC FLUID, COOLANT. PM01 02
TI0016 2403 BATTERY, LEAD ACID BA01 5C
TI0016 2404 BATTERY, LITHIUM 9 BA01 5C
TI0016 9911 EMULSIFIER TS04 5C
TI0016 9912 EXCESS MATERIAL EX01 5C
TI0016 9922 PENETRANT, MAGNAFLUX TS04 5C
TI0017 2036 FILTER, AIR, OIL AND FUEL WITH RAGS AND DEBRIS PM01 02
TI0018 2407 BATTERY, NICKEL CADMIUM 8 BA01 5C
TI0019 2403 BATTERY, LEAD ACID BA01 5C
TI0019 9912 EXCESS MATERIAL EX01 5C
TI0022 0504 CLEANER, WATER MIX MACHINE PM01 03
TI0022 0801 OIL, USED TRAMP WITH COOLANT PM02 03
TI0022 1501 RAGS WITH OIL AND COOLANT 0M01 03
TI0022 2113 SLUDGE, COOLANT PM01 03
TI0022 2201 COOLANT PM01 03
TI0022 9912 EXCESS MATERIAL EX01 5C
TI0023 2403 BATTERY, LEAD ACID BA02 5C
TI0023 9912 EXCESS MATERIAL EX01 5C
TI0024 0206 SEALANTS AND SOLVENTS IN CONTAINERS W/ CONTAMINATED RAGS, PPE, AND DEBRIS 4 LA01 02
TI0024 9912 EXCESS MATERIAL EX01 5C
TI0025 2113 SLUDGE WITH CUTTING OIL AND GRINDING MATERIAL (20 GALLON OPEN TOP) TS03 02
TI0026 9912 EXCESS MATERIAL EX01 5C
TI0026 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
TI0027 2407 BATTERY, NICKEL CADMIUM 8 BA01 5C
TI0027 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
TI0028 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
TI0029 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
TI0030 9919 UNIVERSAL WASTE LAMP 9 FA02 4L
TI0031 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
TI0032 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
TI0033 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
TI0034 9919 UNIVERSAL WASTE LAMPS 9 FA02 4L
TP0001 0801 OIL, USED AND HYDRAULIC FLUID PM03 03
TP0001 1501 RAGS WITH MOTOR OIL AND HYDRAULIC FLUID PM03 03
TP0001 1801 ABSORBENT WITH OIL AND HYDRAULIC FLUID PM03 03
TP0001 2015 FILTER, FUEL 4 PM03 03
TP0001 2030 FILTER, OIL PM03 03
TP0001 2202 ANTIFREEZE PM03 03
TP0001 9912 EXCESS MATERIAL EX01 5C
TP0002 1113 PAINT, HARDENED IN CONTAINERS AND DEBRIS 4 PA05 03
TP0002 9902 ENGINE STARTER FLUID (CARTRIDGES) 2.1 EX01 03
TP0002 9912 EXCESS MATERIAL EX01 5C
TP0003 0013 BATTERY ACID 8 BA01 5C
TP0003 0801 TRANSMISSION FLUID, DEXRON 11 AND HYDRAULIC FLUID "USED OIL" PM03 03
TP0003 2015 FILTER, FUEL 4 PM03 03
TP0003 2038 FILTER, OIL AND ABSORBENT WITH OIL PM03 03
TP0003 2202 ANTIFREEZE PM03 02
TP0004 0411 PETROLEUM DISTILLATE (STODDARD SOLVENT) PM03 03

Org. ID	Waste Stream	Material		Process Code	Type Gen.Pt
TP0004	0702	FUEL, DIESEL AND MOGAS			3 PM03 03
TP0004	2202	ANTIFREEZE			PM03 02
TP0005	2034	FILTER, PAINT BOOTH			9 PM01 03
TP0005	9919	UNIVERSAL WASTE LAMPS			9 FA02 4L
TP0006	1010	PAINT AND THINNERS			3 PA05 02
TP0007	2030	FILTER, OIL			PM03 03
TP0007	2044	FILTER, GASOLINE, JP-8, DIESEL			4 PM03 03
TP0007	2202	ANTIFREEZE			PM03 03
TP0007	9919	UNIVERSAL WASTE LAMPS			9 FA02 4L
TP0008	0605	SLUDGE FROM CAR WASH RACK			EN02 5C
TP0009	0605	SLUDGE FROM CAR WASH RACK			EN02 5C
XP0001	9919	UNIVERSAL WASTE LAMPS			9 FA02 4L
XP0001	9919	UNIVERSAL WASTE LAMPS			9 FA02 4L
XP0002	9919	UNIVERSAL WASTE LAMPS			9 FA02 4L
ZZ0001	9912	EXCESS MATERIAL			EX01 5C
ZZ0002	9919	UNIVERSAL WASTE LAMPS			9 FA02 4L
ZZ0003	0807	HYDRAULIC FLUID	"USED OIL"		PM02 03
ZZ0003	0925	OIL, USED 7808 AND MOTOR			PM02 03
ZZ0003	1522	RAGS WITH OIL			PM02 03
ZZ0003	1829	ABSORBENT WITH OIL AND FUEL			SP01 03
ZZ0003	2031	FILTER, OIL AND FUEL			PM02 03
ZZ0003	2202	ANTIFREEZE			PM02 03
ZZ0003	9912	EXCESS MATERIAL			EX01 5C
ZZ0004	2018	FILTER, GAS MASK M13			9 EX01 5C
ZZ0004	2404	BATTERY, LITHIUM			9 BA01 5C
ZZ0006	1402	PCB CONTAMINATED CAPACITORS			PM01 5C
ZZ0006	2403	BATTERY, LEAD ACID			BA01 5C
ZZ0006	2404	BATTERY, LITHIUM			9 BA01 5C
ZZ0007	0408	PD-680			PM04 03
ZZ0007	0410	PD-680, TYPE III			PM04 03
ZZ0007	0802	CALIBRATION FLUID			3 TS02 03
ZZ0007	0818	OIL, USED 7808			PM04 03
ZZ0007	0927	OIL, USED 1010 WITH JP-8 FUEL			PM04 03
ZZ0007	1524	RAGS WITH OIL AND FUEL			PM04 03
ZZ0007	1829	ABSORBENT WITH OIL AND FUEL			SP01 03
ZZ0007	2031	FILTER WITH OIL AND FUEL			PM04 03
ZZ0007	2308	BLAST MEDIA, GLASS WITH PAINT CHIPS			AB01 03
ZZ0008	9912	EXCESS MATERIAL			EX01 5C
ZZ0009	2407	BATTERY, NICKEL CADMIUM			8 BA01 5C
ZZ0010	9919	WASTE UNIVERSAL LAMPS			9 FA02 4L
ZZ0011	9919	UNIVERSAL WASTE LAMPS			9 FA02 4L
ZZ0012	2403	BATTERY, LEAD ACID			BA02 5C
ZZ0013	2403	BATTERY, LEAD ACID			BA01 5C
ZZ0013	2403	BATTERY, LEAD ACID			BA01 5C
ZZ0014	9919	UNIVERSAL WASTE LAMPS			9 FA02 4L
ZZ0015	9912	EXCESS MATERIAL			EX01 5C
ZZ0016	9919	UNIVERSAL WASTE LAMPS			9 FA02 4L

Pocket 5

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