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HAZARDOUS MATERIAL/HAZARDOUS WASTE MANAGEMENT PLAN
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA
VOLUME 2

prepared by
Environmental and Safety Designs, Inc.
Memphis, Tennessee

prepared for
Atlantic Division
Naval Facilities Engineering Command
Norfolk, Virginia
Contract No.: N62470-85-B-7979

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HAZARDOUS WASTE MANAGEMENT PLAN
MCB CAMP LEJEUNE

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1.0 INTRODUCTION

1.1 Applicability

The Resource Conservation and Recovery Act (RCRA) authorized the Environmental Protection Agency (EPA) to implement regulations for the control of hazardous wastes from the point of generation through final disposal to assure that hazardous wastes do not pose a threat to human health or the environment. Under authority granted by EPA, the State of North Carolina has also developed hazardous waste regulations. The EPA and North Carolina regulations contain specific requirements for identification, packaging, labeling, storing, and shipping of hazardous wastes. These regulations are applicable to the Marine Corps Base (MCB) Camp Lejeune.

1.2 Purpose and Scope

The purpose of this plan is to create a functional waste management system to ensure the identification of all waste generated and the proper management of those wastes. The plan assigns responsibilities and establishes procedures for the management of hazardous wastes generated at MCB Camp Lejeune.

1.3 Authority

This plan is prepared in accordance with Marine Corps instructions. This instruction requires shore activities to develop hazardous waste management plans in compliance with all applicable federal, state, and local regulations.

1.4 Definitions

The plan adopts definitions for regulated items that are consistent with state and federal regulations.

1.5 Status of Federal Waste Regulations in North Carolina

The federal regulations for hazardous waste management promulgated in May, 1980 and subsequently revised through February 13, 1986, form the basis for the hazardous waste regulations on which this plan is based. The State of North Carolina has also written hazardous waste management regulations. North Carolina has full authorization from EPA to administer a hazardous waste program in lieu of EPA's program. Therefore, at this time, MCB Camp Lejeune is regulated by the State of North Carolina.

1.6 North Carolina Hazardous Waste Regulations

The rulemaking and enforcement agency in North Carolina for hazardous waste management is:

Department of Human Resources
Environmental Health Section
Solid and Hazardous Waste Management Branch
Post Office Box 2091
Raleigh, North Carolina 27602

The North Carolina rules are essentially the same as the federal rules, and in fact, reference the federal regulations in many cases.

1.7 Local Regulations

Local governmental bodies have passed no ordinances related to hazardous waste facilities that will affect MCB Camp Lejeune.

2.0 SUMMARY OF THE HAZARDOUS WASTE MANAGEMENT PLAN

2.1 Overview

The overall management of waste at Marine Corps Base (MCB) Camp Lejeune is the responsibility of Assistant Chief of Staff, Facilities. The Director of Natural Resources and Environmental Affairs Division is responsible for coordinating the day-to-day implementation of the HM/HW management program and will provide support to all departments, commands, and tenants. Some specific responsibilities are assigned to the generators of the waste and to DRMO which operates the permitted hazardous waste container storage facility. Generators, for the purpose of this plan, are defined as each major command (Marine Corps Base, 2nd Division, 2nd FSSG, Naval Regional Medical Center, and MCAS) which produces a waste. The individual groups within each major command are defined as generating work centers. A Hazardous Material Disposal Coordinator (HMDC) will be designated by each generator to act as liaison between the generators and the Assistant Chief of Staff, Facilities for waste management activities. Each regiment, MAG, or separate battalion or company will designate a Hazardous Material Disposal Officer (HMDO) to coordinate HM/HW activities for all generating work centers within his cognizance. The following section outlines the specific responsibilities for the personnel and management organizations involved in the management of hazardous wastes.

2.2 Specific Responsibilities

NREAD - this office shall:

a. Monitor all HM/HW activities at MCB Camp Lejeune and Marine Corps Air Station (MCAS), New River;

b. Provide laboratory support, if needed, for HW identification;

c. Train the HMDC's and HMDO's in state and federal HW regulations and HW management procedures;

d. Serve as command point of contact with the State and Federal agencies on matters pertaining to HW management;

e. Provide guidance on HM/HW spill prevention, control, clean-up, and related HW disposal; and

f. Prepare and submit reports to regulatory agencies.

DRMO - this office shall:

a. Operate the hazardous waste permitted container storage facility and update the permit as necessary;

b. Administer hazardous waste disposal contracts for all wastes which DRMO accepts accountability;

c. Obtain necessary operating equipment such as containers, labels, personal protective equipment, and emergency response equipment;

d. Maintain the Facility Operating Log and Facility Inspection Records in accordance with Section 8.0 of this Plan.

TMO - this office shall:

a. Receive turn-in documents and written requests to arrange for transportation from DRMO;

b. Determine if generating work centers can safely and legally transport HW;

c. Arrange delivery time with DRMO and HMDO;

d. Advise DRMO of any special conditions and procedures for the shipment;

e. Make arrangements for certification by Preservation, Packaging, and Packing if required; and

f. Maintain HW manifest for shipments from MCAS to the HW permitted storage facility.

GENERATING WORK CENTERS (3) Each generating work center shall:

a. Contact HMDO as soon as a waste is generated to initiate WID procedure;

b. Provide HMDO with complete and accurate information on the waste stream (e.g., NSN, process generating waste, quantity generated);

c. Segregate, containerize, and label HW in accordance with the procedures specified by the HMDO and outlined on the WID; and

d. Maintain emergency response equipment as specified by the HMDO.

HMDO's - Each HMDO shall:

a. Identify all hazardous waste generated at each generating work center within his cognizance and complete and submit a WID for each waste stream to the appropriate HMDC;

b. Complete and submit a WCR to NREAD if a waste can not be adequately identified;

c. Receive and submit to DRMO turn-in documents for hazardous wastes to be treated or disposed off-site;

d. Ensure that no hazardous wastes are accumulated at the temporary collection area for longer than 90 days;

e. Maintain compliance documentation at the work center (HW generation summary, inspection logs, TCA storage logs, personnel training records); and

f. Ensure that the proper personal protective equipment is available, in good condition, and is properly used by workers involved in handling waste material.

HMDC's - Each HMDC shall:

a. Act as liaison between the Assistant Chief of Staff, Facilities and the generators;

b. Coordinate the identification and funding of HW related personnel training requirements of organizations within the HMDC's command in cooperation with the office of the Assistant Chief of Staff, Manpower;

c. Receive and process WID's from the HMDO's within his cognizance;

d. Determine the appropriate handling method for each waste stream identified on a WID including the appropriate storage container, required labels, special handling procedures, and appropriate method of storage, treatment, or disposal;

e. Send copies of the completed WID's to the appropriate HMDO and to DRMO; and

f. Approve the mixing of hazardous wastes which are not identified in Section 3.2.1 of this Plan for each generating work center.

2.3 How To Use the Plan

The HM/HW Management Plan is divided into sections that are applicable to generating work centers, HMDO's, HMDC's, DRMO, TMO, and NREAD. The sections and their applicability are shown below.

Section 1 - All
Section 2 - All
Section 3 - Generating work centers, HMDO's, HMDC's
Section 4 - HMDO's, HMDC's, NREAD
Section 5 - DRMO, NREAD
Section 6 - TMO, DRMO
Section 7 - All
Section 8 - DRMO, NREAD
Section 9 - All

3.0 REQUIREMENTS FOR GENERATORS

(3)

In order to ensure the proper management of all hazardous wastes generated by Marine Corps Base (MCB) Camp Lejeune, the following requirements will apply to all generators of hazardous waste. These requirements are a compilation of the waste management requirements established by the State of North Carolina and the U.S. Environmental Protection Agency.

Because these requirements are derived from regulations that are specific and detailed, discretion should be limited. The success of the MCB Camp Lejeune HM/HW Management Plan is substantially dependent upon each generator identifying all hazardous wastes generated, determining the appropriate handling method as described in this Section, and following the procedures outlined in this Plan. A generator is defined as each major command (Marine Corps Base, 2nd Division, 2nd FSSG, Naval Regional Medical Center, MCAS) which produces a hazardous waste. Each generator is responsible for the waste management activities of all individual groups (generating work centers) within the major command. Due to the importance of the coordination of waste activities between the generators and the Assistant Chief of Staff, Facilities, a Hazardous Material Disposal Coordinator (HMDC) will be designated by each generator to act as liaison for waste management activities. Each regiment, MAG, or separate battalion or company within each major command will designate a Hazardous Material Disposal Officer (HMDO) to coordinate HM/HW management activities for all generating work centers within his particular regiment, MAG, or separate battalion or company. Natural Resources and Environmental Affairs Division (NREAD) will provide training for the HMDO's and the HMDC's and assist in the establishment of site-specific waste management protocols for each generator.

3.1 Waste Identification Procedures

The HMDO's will have the responsibility for submitting to the appropriate HMDC a Waste Information Document (WID) for each type of material/waste to be discarded. A single WID may apply

to many containers of material/waste, generated over an extended period, so long as the character of that material/waste is constant. Materials to be discarded include a material which has served its intended purpose, has exceeded its shelf life, or is no longer needed at the facility and also includes sludges, process wastes, etc. The WID form and instruction sheet are shown in Figure 3-1. It is important that the WID be completed as thoroughly and accurately as possible and that any other pertinent information which will assist in the determination of the appropriate handling method be attached.

If the generator can not identify the material/waste, a Waste Characterization Request (WCR) form must be submitted to NREAD by the appropriate HMDO. The WCR form is shown in Figure 3-2. The WCR should include any information regarding the waste which would assist NREAD in performing a literature search to determine the chemical composition and associated hazards of the waste, determining the appropriate sampling method and the analyses to be performed, and/or supplying an adequate data base to evaluate the appropriate handling method of the waste. NREAD has the responsibility for providing the necessary laboratory tests to identify the wastes, if needed. A copy of the laboratory analysis, if applicable, will then be forwarded to the HMDO. After NREAD has identified the material/waste and submitted the information to the HMDO, the HMDO must submit a WID to the HMDC. It is important for the HMDO to indicate on the WID the dates waste characterization was requested and completed.

The HMDO's are responsible for maintaining accurate WID information on file with the HMDC's. If there is a significant change in a waste stream (e.g., waste mixture, physical form), the HMDO must file an amended WID with the HMDC. The amended WID must contain the WID number of the waste and the nature of the changes in the waste. The HMDC will re-evaluate the waste stream and return a copy of the completed WID to the HMDO.

FIGURE 3-1
WASTE INFORMATION DOCUMENT (WID)

DATE _____

WID # _____

1. GENERATING WORK CENTER INFORMATION

Shop	Contact	Code	Command	Building	Phone Ext.

2. WASTE IDENTIFICATION

A. WASTE CHARACTERIZATION: Date Requested _____ Date Completed _____

B. WASTE NAME: Common _____ Chemical(s) _____

C. PHYSICAL FORM: (CHECK) ___ Liquid ___ Solid ___ Sludge ___ Other (Specify) ___

D. MANUFACTURER: _____ E. NATIONAL STOCK NUMBER: _____

F. CONTAINER: (TYPE AND SIZE) _____

G. GENERATION RATE: (e.g., gal/day, lbs/day) _____

H. FREQUENCY OF GENERATION _____

I. EXPECTED ANNUAL GENERATION: (GALS, LBS) _____

J. DESCRIBE WASTE GENERATION PROCESS: _____

K. HAS WASTE BEEN MIXED WITH ANY OTHER MATERIAL? ___ Yes ___ No If yes, specify

3. REASON FOR DISPOSAL: (CHECK)

___ Exceeded shelf life ___ Served intended purpose ___ Unused ___ Other (specify)

4. CERTIFICATION: I certify that the above named materials are the only compounds in the waste containers listed above and have not been mixed with any other materials.

HMDO Signature	Code	Date

See note 1 page 3-4

TO BE COMPLETED BY THE HMDC AND COPIES SENT TO THE HMDO AND DRMO

5. WASTE CLASSIFICATION: ___ Hazardous ___ Nonhazardous

6. EPA WASTE NUMBER(S): _____

7. REASON FOR HAZARD CLASSIFICATION: _____

_____

8. HANDLING INSTRUCTIONS: _____

_____

_____

_____

_____

9. DTID 1348-1 REQUIRED: ___ Yes ___ No

10. CONTAINER AND LABELING REQUIREMENTS:

A. DOT/DOD CONTAINER TYPE: _____

B. DOT PROPER SHIPPING NAME: _____

C. DOT HAZARD CLASS: _____

D. UN/NA NUMBER: _____

E. ADDITIONAL REQUIREMENTS: (FOR DRMO) _____

_____

_____

_____

11. SPECIAL PRECAUTIONS AND/OR INSTRUCTIONS: _____

_____

_____

_____

_____

12. _____

HMDC Signature Code Date

Note 1

Insert T between 5 & 6

Waste Characterization

Request per Florence

3-4

between Dr. Speakman

& D Sharpe

06/09/86

WID INSTRUCTIONS FOR HMDO'S

GENERAL INSTRUCTIONS

Indicate the date on which the form is completed. The WID # will be assigned by the HMDC's. Items 1-4 must be completed by the HMDO. Where information is unknown or not applicable indicate accordingly.

1. GENERATING WORK CENTER INFORMATION: self-explanatory

2. WASTE IDENTIFICATION:
   - A. Waste Characterization - If a Waste Characterization Request was submitted to NREAD, indicate the date requested and the date completed.
   - B. Waste Name - Give common or brand name and chemical composition if known
   - C. Physical Form - self-explanatory
   - D. Manufacturer - As shown on label
   - E. National Stock Number - self-explanatory
   - F. Container - Indicate type and size container in which waste is presently stored (i.e., 55-gallon drum, plastic container, fiberboard box)
   - G. Generation Rate - Indicate the most frequent rate of generation (quantity per day, week, month, year)
   - H. Frequency of Generation - How often and length of time generated (i.e., 8 hrs/day, 7 days/week; 1 day/month; sporadic; one time only)
   - I. Expected Annual Generation - self-explanatory
   - J. Describe Waste Generation Process - Explain the process which results in waste generation in sufficient detail to assist in waste identification
   - K. Waste Mixture - self-explanatory

3. REASON FOR DISPOSAL: self-explanatory

4. CERTIFICATION: WID must be signed by the HMDO

5. WASTE CLASSIFICATION: Refer to Section 4.1 (Waste Analysis Plan) of the HM/HW Management Plan

6. EPA WASTE NUMBER(S): e.g., D001, F005; refer to Table 4-1 (Waste Analysis Plan) of the HM/HW Management Plan

7. REASON FOR HAZARD CLASSIFICATION: e.g., ignitable, reactive; refer to Table 4-7 (Waste Analysis Plan) of the HM/HW Management Plan

8. HANDLING INSTRUCTIONS: e.g., store in generating work center TCA, contact TMO for transport to HW storage facility; acceptable for disposal in dumpster

9. DTID 1348-1 REQUIRED: self-explanatory

10. CONTAINER AND LABELING REQUIREMENTS: Refer to Section 6.0 (Shipping and Transportation) of the HM/HW Management Plan

11. SPECIAL PRECAUTIONS AND/OR INSTRUCTIONS: e.g., waste(s) and/or material(s) which are incompatible with waste; special safety equipment required for the waste; emergency response procedures

delete

FIGURE 3-2
WASTE CHARACTERIZATION REQUEST

DATE _____

1. GENERATING WORK CENTER INFORMATION

_____

Shop Contact Code Command Building Phone Ext.

2. WASTE INFORMATION:

A. NAME: Common _____ Chemical(s) _____

_____

_____

B. PHYSICAL FORM: (CHECK) ___ Liquid ___ Solid ___ Sludge

___ Other (Specify) _____

C. NATIONAL STOCK NUMBER: _____

D. QUANTITY ON HAND: _____

E. WASTE SOURCE: (DESCRIBE PROCESS IF KNOWN) _____

_____

_____

_____

_____

3. ADDITIONAL INFORMATION: _____

_____

_____

_____

_____

_____

_____

HMDO Code
Signature

3.2 Requirements for Accumulation of Wastes in Containers

A container is any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled. The containers used to accumulate and store wastes at MCB Camp Lejeune will include 55-gallon steel drums, fiber drums, cardboard boxes, and wooden crates depending upon the chemical and physical properties of the waste, the generation rate, and the proposed storage, treatment and/or disposal method. The HMDC's will determine the appropriate container for each waste stream, specify the container on the appropriate WID, and assist the HMDO in obtaining the required container. In addition, each container of waste must be marked with a container identification number. This number should consist of the following: generating work center activity account code (i.e., M93058, V09167)-the WID number (the unique number assigned each waste stream by the HMDC)-generating work center container number (a sequential number assigned by the HMDO). An example of an identification number is M93058-BASE10-3 which means that Base Maintenance generated the waste identified on WID#BASE10 and that the waste was placed in the third container used to store hazardous waste at Base Maintenance.

Hazardous wastes must be collected in the containers specified by the HMDC's immediately after they are generated. Some wastes may be generated in small quantities (a few gallons per day) and may be mixed with other compatible wastes. In this event, the following segregation scheme should be followed.

All containers storing hazardous waste must be kept closed except when necessary to add or remove waste. The containers must be in good condition, having no dents or corrosion and tight fitting closure rings on drums. The containers must be opened, closed, and handled in a manner to prevent rupture or leakage of the container.

The generating work centers will prepare and submit a Form DD 1348-1 (see Appendix 3-1) for each HW container within 45 days of

the accumulation start date to the appropriate HMDO. The HMDO will inspect the container and make a determination of the accuracy of the information on the Form DD 1348-1 and the suitability of the container. The HMDO will initiate action to correct problems encountered and will request Preservation, Packaging and Packing (PP&P) support if required. The HMDO or his designee will hand carry the Form DD 1348-1 to DRMO at Building 906. If DRMO determines that DRMO can accept accountability for the waste, DRMO will inspect the item and sign the Form DD 1348-1 accepting accountability. DRMO will forward the form to the Traffic Management Officer (TMO) along with a written request for TMO to arrange transportation of the item to the permitted container storage facility. TMO will determine if the generating unit can legally and safely transport the item to the permitted storage facility. If TMO determines that the command can transport the item, TMO will arrange a satisfactory delivery time with DRMO and the appropriate HMDO.

3.2.1 Segregation of Small Quantities of Waste

Small quantities of waste may be mixed in a single container by categories. The segregation of small quantities of waste by category will ensure that incompatible chemicals are not mixed. Each category of mixed wastes has been assigned a color code to simplify its use. Color coding may be accomplished by painting the entire drum, a portion of the drum, or use of colored labels. If mixtures of hazardous wastes are being created at the generating work centers, each component of the mixture and an estimate of quantity must be entered on the Hazardous Waste Generation Summary Log (see Figure 3-3) at the work center and identified on a WID submitted to the HMDC.

Categories of mixed waste created by this plan are:

1. Specification used oil fuel: Color Code Yellow
   a. petroleum based lubricating oils (uncontaminated)
   b. petroleum based hydraulic and automatic transmission fluids (not contaminated with freon)

FIGURE 3-3

HAZARDOUS WASTE GENERATION

WORK CENTER:_____ SUMMARY LOG ACTIVITY ACCOUNT CODE:_____

WID # - CONTAINER NUMBER	ACCUMULATION START DATE	WASTE(S) ADDED				DATE OUT	DESTINATION
		WASTE NAME	QUANTITY	DATE ADDED	INITIALS		

c. diesel and kerosene fuels (uncontaminated)
d. certain other petroleum products (low metal content, low halogen content, moderate flash point, see exclusions in Appendix G of Used Oil Management Plan)

2. Off specification used oil: Color Code Yellow and Black
   a. chemical or synthetic based lubricating oil, hydraulic or transmission fluid
   b. contaminated petroleum based lubricating oil, hydraulic or transmission fluid (includes dirt and water sludges as well as halogenated and metal and low flash contaminants).
   c. jet fuels, gasoline and other low flash petroleum
   d. skimmings from oil/water separators.

3. Solvents - nonhalogenated: Color Code Red
   a. PD-680 Type I (or Type II if flash point is 140 F or less)
   b. toluene
   c. methyl ethyl ketone (MEK)
   d. naphtha
   e. xylene
   f. paint thinners (containing no paint wastes)
   g. mineral spirits
   h. other nonhalogenated solvents

Nonhalogenated solvents are those which do not contain chlorides, fluorides, or bromides. If unknown, check with the HMDC.

4. Solvents - halogenated: Color Code White
   a. methylene chloride
   b. trichloroethane
   c. trichloroethylene
   d. freon
   e. carbon tetrachloride
   f. other halogenated solvents

Some products contain both halogenated and nonhalogenated solvents. These should be placed in the "solvents-halogenated" category. Never place caustic materials in this category as toxic fumes may result.

5. Mixed Paint Wastes: Color Code Blue
   a. paint sludges
   b. paint scrapings
   c. paint strippers (nonhalogenated)
   d. contaminated paint thinners

6. Battery Acid: Color Code Pink

Battery acid shall be drained from cracked or leaking vehicle batteries only. **Acid shall not be drained from intact batteries.**

The management of used oils, both specification and off specification, is included in a separate document entitled Used Oil Management Plan (UOMP). Management procedures for the other categories of waste are summarized below.

If the above segregation plan is implemented, all other wastes should be placed in individual containers without mixing. If additional or different mixtures are desired, approval for mixing must be obtained from the HMDC.

A Hazardous Waste Generation Summary Log (see Figure 3-3) must be maintained by each generating work center. Entries on that record will include the container identification number, the accumulation start date, the name of the waste material, the quantity of waste added to the drum, date additional waste was added to the container (small quantity mixtures), the initials of the person adding the waste, the date the container is transferred out of the work station, and its destination (e.g., TCA, HW storage, off-site TSD).

3.2.2 Container Labeling Requirements

Each container must be clearly labeled with the words "Hazardous Waste" and clearly marked with the accumulation start date, the date on which waste was first placed in the container. Preprinted hazardous waste warning labels are available from NREAD. An example label is shown in Figure 3-4. Additional information required on the label including the proper DOT shipping name, UN/NA#, and EPA waste number will be specified on the WID. All entries on the label must be made using an indelible marker. DRMO will add the manifest document number to all containers which are manifested off-site for treatment or disposal.

3.2.3 Temporary Collection Area (TCA) Requirements

Once a container of waste from a generating work center has been transferred to a TCA, the HMDO or his designee must enter the waste on the Temporary Collection Area Storage Record which is shown in Figure 3-5. Entries on that record include the waste name, container identification number, accumulation start date, quantity, date received at the TCA, date transferred out of the TCA, and the destination of the waste (HW storage facility or off-site). The HMDO will ensure that each container of hazardous waste is, at all times, positioned so that the hazardous waste label with accumulation start date is clearly visible for inspection.

Wastes stored in TCA's must be segregated in a fashion that will prevent incompatible wastes mixing in the event of a spill or leak. Containers of ignitable or reactive wastes must be located at all times at least 50 feet from the MCB Camp Lejeune property line. Sufficient aisle space must be maintained around all hazardous waste containers to allow unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area where hazardous waste is located. Signs reading "Danger--Unauthorized Personnel Keep Out" must be posted on the entrances to the TCA's in a size legible from a distance of 25 feet. In addition "No Smoking or

FIGURE 3-4

SAMPLE HAZARDOUS WASTE LABEL

HAZARDOUS WASTE

FEDERAL LAW PROHIBITS IMPROPER DISPOSAL

IF FOUND, CONTACT THE NEAREST POLICE, OR
PUBLIC SAFETY AUTHORITY, OR THE
U.S. ENVIRONMENTAL PROTECTION AGENCY

PROPER D O T
SHIPPING NAME SEE NOTE 2 UN OR NA# _____

GENERATOR INFORMATION

NAME SEE NOTE 3

ADDRESS SEE NOTE 4

CITY _____ STATE _____ ZIP _____

EPA
ID NO. SEE NOTE 5

EPA
WASTE NO. SEE NOTE 2

ACCUMULATION
START DATE SEE NOTE 6

MANIFEST
DOCUMENT NO. SEE NOTE 7

HANDLE WITH CARE!

CONTAINS HAZARDOUS OR TOXIC WASTES

STYLE WM-6

SEE NOTE 1

NOTE 1: Damaged labels will be immediately replaced, using same information as on original label. If original label illegible, contact your Hazardous Material Disposal Coordinator for guidance.

NOTE 2: Obtain this information from your HW Standard Operating Procedure.

NOTE 3: Enter the name of the organization having physical custody of the HW at the time the label is placed on the container, unless replacing a damaged label. See Note 1 above.

NOTE 4: Enter either "MCAS, New River, Jacksonville" for HW generated aboard or by organizations stationed aboard the Marine Corps Air Station, New River. Enter "Marine Corps Base, Camp Lejeune" for all other HW.

NOTE 5: Enter NC8170022570 for all waste generated aboard or by organizations stationed aboard MCAS, New River. Enter NC6170022580 for all other HW generated within the Camp Lejeune complex.

NOTE 6: Enter the date that HW is first placed in the container unless the facility has written authorization from CG, MCB, Camp Lejeune to operate as a HW satellite accumulation area. In which case, follow instructions provided within the written authorization.

NOTE 7: Leave blank, will be completed by the Traffic Management Officer, Camp Lejeune.

FIGURE 3-5

TEMPORARY COLLECTION AREA STORAGE RECORD

GENERATING WORK CENTER: _____

WASTE NAME	CONTAINER IDENTIFICATION NUMBER	ACCUMU-LATION START DATE	QUANTITY	DATE IN	DATE OUT	DESTINATION

Open Flame" signs must also be posted in the TCA. All means of access to each TCA must be kept locked except to add or remove containers. The HMDO or his designee will maintain keys to that area.

The HMDO or his designee will inspect the TCA's weekly looking for leaks, container condition, compatibility/segregation of wastes, required labels, aisle space and the 90-day accumulation period compliance. An example of a Hazardous Waste Weekly Inspection Record is shown in Figure 3-6. This record should identify the items to be inspected (items may vary with each generating work center), and provide space for the date and time of the inspection, the name of the inspector, observations made, and the date and nature of any corrective actions taken as a result of the inspection.

SAFETY MEASURES FOR TEMPORARY COLLECTION AREAS

a. The area must be equipped with an internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel.
b. A device, such as a telephone or hand-held two-way radio, which is capable of summoning emergency assistance from security, fire department, and emergency response teams must be immediately available at the scene of operations.
c. The area must have portable fire extinguishers if ignitable waste is stored.
d. Fire control equipment, spill control equipment, and decontamination equipment as needed for emergency response for the types of wastes stored must be maintained at each area.
e. Adequate aisle space must be maintained.
f. The area must be addressed in a Contingency Plan.
g. All personnel who use the area must have been trained in hazardous waste management.
h. Storage areas must be designed so that any leak will be contained on-site.
i. Storage areas must be covered to prevent standing water.

FIGURE 3-6
HAZARDOUS WASTE
WEEKLY INSPECTION RECORD

ITEM	DATE	TIME	INSPECTOR	OBSERVATIONS	DATE AND CORRECTIVE ACTIONS
CONTAINERS:					
Construction					
Compatibility					
Segregation					
Leaks/Closure					
Labels					
Ignitable Waste					
Aisle Space					
Accumulation Date					
DRUM DOLLY					
DRUM WRENCH					
FIRE EXTINGUISHER					
GATE LOCKED					
FENCE OK					
RESPIRATOR					
GLOVES					
ABSORBENT					

j. Personal protective equipment which is adequate for the types of wastes stored must be available, in good condition, and properly used.

k. All spills or leaks of a hazardous material or a hazardous waste must be promptly cleaned up and reported by generating work centers to the Emergency Coordinator.

l. Each generating work center must make arrangements to familiarize on-base security, fire departments, and emergency response teams with the location of their TCA and the types of wastes to be stored in the TCA.

3.2.4 SUMMARY OF REQUIREMENTS

The following checklist summarizes the hazardous waste compliance requirements for generating work centers accumulating hazardous wastes in containers.

1. Collect and containerize hazardous waste daily in the container specified by the HMDC on the WID.
2. Ensure that the container is marked and labeled according to the WID.
3. Maintain a Waste Generation Summary Report which identifies the container number, wastes generated, the accumulation start date, the date transferred out of the work center, and the destination.
4. Maintain a weekly inspection log identifying all items to be inspected, the date and time of the inspection, the inspector, observations, and date and time of any corrective action taken as a result of the inspection.
5. Ensure that all safety and emergency equipment is available and in good condition.
6. Ensure that all personnel handling hazardous waste are trained in the safety and emergency response procedures associated with each specific waste generated and/or stored at the TCA.
7. Contact the appropriate HMDO when a container is full or when it has been in storage for 45 days, whichever comes first. Hazardous wastes cannot be stored at the TCA for more than 90 days from the accumulation start date.

3.3 Satellite HW Accumulation Areas

A satellite HW accumulation area is an area in which a generating work center may accumulate as much as 55 gallons of hazardous waste (HW) or one quart of acutely HW [listed in 40 CFR 261.33(e)] in containers at or near the point of generation without regard to the 90 day storage limitation. Satellite accumulation areas are also not required to comply with full generator standards. The generating work centers which would benefit from utilizing this type of accumulation area are those who generate less than 55 gallons of HW from a particular process in less than 90 days. The rules allow a generating work center to have more than one satellite accumulation area provided the wastes are from different processes. If the generating process generates more than one waste stream, the waste streams may be segregated and still qualify as a satellite accumulation area as long as the total quantity accumulated is less than 55 gallons of hazardous waste or less than one quart of acutely hazardous waste.

In order to operate a satellite HW accumulation area at MCB Camp Lejeune, the generating work center must have written authorization from the Commanding General.

3.3.1 Requirements for Satellite Accumulation Areas

In order to be exempt from the 90 day storage limitation the following requirements must be met by the generating work center.

- the container holding the HW must be in good contition or if it begins to leak, the waste must be transferred to a container that is in good condition;
- the container must be made of or lined with materials which are compatible with the waste;
- the container must be kept closed except when it is necessary to add or remove waste; and
- the container must be marked with the words "Hazardous Waste" or with the words that identify the contents of the container.

Once the generating work center accumulates waste in excess of 55 gallons of hazardous waste or one quart of acutely hazardous waste, the work center must transfer the excess waste to a TCA or

comply with the requirements for TCA's within three days of the date the excess waste began accumulating.

3.4 Handling of Empty Containers

Each generating work center will make every reasonable effort to fully use the contents of containers to ensure that any residue left within the container is less than one inch. To the extent practicable, drums that contained hazardous materials will be reused to dispose of that material when it becomes a hazardous waste. Containers that previously contained a hazardous waste listed in 40 CFR 261.33(e) ("P" listed) or containers with one inch or more of residue of hazardous waste, are themselves a hazardous waste. They must be triple rinsed to be cleaned and purged of the residue.

Triple rinsing requires the use of a solvent capable of removing the residue from the container. A quantity of solvent equal to ten percent of the container capacity must be used for each of the three rinses. After rinsing, the solvent must be containerized for disposal as hazardous waste.

A container with less than one inch of residue of waste other than one listed in 40 CFR 261.33(e) may be disposed as nonhazardous waste, if disposal is necessary.

A container that has held a hazardous waste in the form of a compressed gas is empty when pressure in the container approaches atmospheric pressure.

Empty containers will be turned in to DRMO using a DD Form 1348-1 prepared according to Appendix 3-1.

3.5 Wastes Treated at the Generation Site

Most wastes generated at MCB Camp Lejeune will be treated or disposed at a commercial hazardous waste treatment or disposal facility. However, it will be more efficient to treat photo-

graphic wastes containing silver at the shop or location where generated.

The Department of Defense (DOD) Directive 4160.22 established the Precious Metals Recovery Program (PMRP). The directive requires all DOD components to participate in the PMRP to the maximum extent possible. Within the Marine Corps, the precious metals recovery and reutilization program is established by Marine Corps Order 4555.3c.

Prior to disposal or treatment, a WID must be submitted to the HMDC for all photographic wastes. The HMDC will determine which wastes require silver recovery and will so inform the generating work centers.

Since the silver will be contained in photographic wastes, it can be recovered by ion-exchange cartridges attached to the sinks at the generating work centers. Spent cartridges will be removed and turned in directly to supply for processing. Recordkeeping will be in accordance with the standing operating procedures required by PMRP.

APPENDIX 3-1
FORM DD 1348-1

EXAMPLE OF DD FORM 1348-1

DISPOSAL TURN-IN DOCUMENT (DTID)

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80

DOC. IDENT | RI FROM | M & S | STOCK NUMBER: FSC, NIIN, ADD | UNIT OF ISSUE | QUANTITY | DOCUMENT NUMBER: SERV, REQUISITIONER, DATE, SERIAL | SUFFIX | SERV | SUPPLEMENTARY ADDRESS | SIGNAL | FUND | DISTRIBUTION | PROJECT | PRIORITY | REQ'D DEL DATE | ADVICE | RI | UNIT PRICE: DOLLARS, CTS.

SHIPPED FROM A | SHIP TO B | MARK FOR C | PROJECT D | TOTAL PRICE: DOLLARS, CTS. E

WAREHOUSE LOCATION F | TYPE OF CARGO G | UNIT PACK H | UNIT WEIGHT I | UNIT CUBE J | UFC K | NMFC L | FREIGHT RATE M | N | DOCUMENT DATE O | MAT COND P | QUANTITY Q | R | S

SUBSTITUTE DATA (ITEM ORIGINALLY REQUESTED) T | FREIGHT CLASSIFICATION NOMENCLATURE U | V

W | ITEM NOMENCLATURE X | Y

SHIPPERS USE:
SELECTED BY AND DATE 1 | TYPE OF CONTAINER(S) 2 | TOTAL WEIGHT 3
PACKED BY AND DATE 4 | NO. OF CONTAINER(S) 5 | TOTAL CUBE 6

RECEIVERS USE:
RECEIVED BY AND DATE 7 | INSPECTED BY AND DATE 8
WAREHOUSED BY AND DATE 9 | WAREHOUSE LOCATION 10

REMARKS: AA | BB | CC | DD | EE

FIRST DESTINATION ADDRESS 11 | DATE SHIPPED 12 | FF | GG

13 TRANSPORTATION CHARGEABLE TO | 14 B/LADING, AWB, OR RECEIVER'S SIGNATURE (AND DATE) | 15 RECEIVER'S DOCUMENT NUMBER

DD FORM 1348-1 1 MAR 74 | EDITION OF 1 JAN 64 MAY BE USED UNTIL EXHAUSTED | DOD SINGLE LINE ITEM RELEASE/RECEIPT DOCUMENT
S/N 0102-LF-013-1050

1

PREPARATION INSTRUCTIONS

DD FORM 1348-1, DISPOSAL TURN-IN DOCUMENT (DTID)

1. Standard procedures for preparation of a DTID are found at paragraph 5-5 of DOD 4160.17M, MILSTRIP.

2. Unopened, unused hazardous materials will be turned into Supply using a DTID prepared according to standard procedures except that the letters "HM" will be entered in Block C - "Mark For" on DD Form 1348-1. (See example form on last page.)

3. Containers that previously contained a nonhazardous material will be turned in to Supply using a DTID prepared according to standard procedures and the following:

- Card Columns 4-6:	Activity Routing Identifier
- Card Columns 8-22:	Enter NSN/LSN/FSC of the material previously contained
- Card Columns 23-24:	Unit of Issue (lb for HW, Dr for drums)
- Card Columns 25-29:	Quantity
- Card Columns 30-43:	Document Number
- Card Columns 45-50:	Leave blank unless material is to be shipped to DPDO. Insert code for DPDO (obtain from Supply)
- Card Columns 64-65:	Insert disposal authority codes and demil code from MILSTRIP INSTRUCTIONS
- Card Column 71:	Insert condition code (obtain from Supply)
- Block A:	Department/tenant address
- Block B:	Insert DPDO address if to be shiupped to DPDO
- Block 1:	Handwritten signature
- Block 11:	Insert address of holding area (Public Works/Supply)
- Block C - Mark For:	Enter "NON-HZ"
- Block X - Nomenclature:	Enter "Empty Container" and a description of container (e.g., 55 gallon metal drum)

4. Containers that previously contained a hazardous material or a material that is a listed waste (except for materials on the 261.33(e) Table) which contain less than one inch of residue will be turned in to Supply on a DTID prepared according to standard procedures and the following:

- Card Columns 4-6:	Activity Routing Identifier
- Card Columns 8-22:	Enter NSN/LSN/FSC of the material previously contained
- Card Columns 23-24:	Unit of Issue (lb for HW, Dr for drums)
- Card Columns 25-29:	Quantity
- Card Columns 30-43:	Document Number

- Card Columns 45-50: Leave blank unless material is to be shipped to DPDO. Insert code for DPDO (obtain from Supply)
- Card Columns 64-65: Insert disposal authority codes and demil code from MILSTRIP INSTRUCTIONS
- Card Column 71: Insert condition code (obtain from Supply)
- Block A: Department/tenant address
- Block B: Insert DPDO address if to be shipped to DPDO
- Block 1: Handwritten signature
- Block 11: Insert address of holding area (public Works/Supply)
- Block C - Mark For: Enter "HM"
- Blocks W and X: Enter "Empty Container" and a description of container followed by NSN/LSN/FSC and generic name of the previously contained material (e.g., Empty Container, 55 gallon metal drum, 6850-00-264-9037, Previously Contained Dry-Cleaning Solvent.

5. Containers that previously contained an acutely hazardous material (see 261.33(e) Table) or contain one inch or more of residue of a hazardous material or hazardous waste must be triple-rinsed with an appropriate solvent or cleaned by an equivalent method before they are turned in to Supply. When empty, these containers will be turned in to Supply on a DTID prepared according to standard procedures and the following:
   - Card Columns 8-22: Enter NSN/LSN/FSC of the material previously contained
   - Block C - Mark For: Enter "NON-HZ/TRIPLE RINSE"
   - Blocks W and X: Enter "Empty Container" and a description of the container.

6. Containers of hazardous waste will be turned in to Public Works on a DTID prepared according to standard procedures and the following:
   - Block A - Shipped From: Add telephone number and EPA identification number
   - Block B - Ship To: Add telephone number and EPA identification number
   - Block C - Mark For: Enter "HW"
   - Block U - Freight Classification Nomenclature: Enter applicable UN/NA identification number
   - Block Y: Use this Block (in lieu of Blocks AA through EE) for the deposit account number. Note: This is not an entry required on behalf of hazardous material/waste documentation but a movement of data prescribed to permit use of

the previously identified blocks for other purposes.

- Blocks AA and BB: (Public Works will enter the transporter's name and EPA identification number).
- Block CC: [Public Works will have transporter (identified in Blocks AA and BB) sign and date for shipment received]
- Blocks DD, EE, FF, and GG: Enter the following statement in these blocks: "This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation accoring to the applicable regulations of DOT and EPA". The turn-in activity will sign under the certification statement.

  All containers of hazardous waste must have the name of the waste stenciled on outside and NSN Number if it is a pure product.

4.0 WASTE ANALYSIS PLAN

The following plan provides guidance for determining the physical and chemical characteristics of hazardous wastes. The characteristics of each waste must be determined prior to initiating storage, treatment, or disposal procedures. While the Plan requires that these characteristics be determined, it will not often be necessary to conduct actual laboratory analyses if maximum use is made of existing data on materials used at Marine Corps Base (MCB) Camp Lejeune. The following plan is intended for Natural Resources and Environmental Affairs Division (NREAD) and the Hazardous Material Disposal Coordinators (HMDC's). It details suggested steps to be taken to characterize wastes in order to provide labeling/handling information to the Hazardous Material Disposal Officers (HMDO's) and to determine the appropriate handling/disposal method for the waste. The Plan also addresses the steps to be taken to characterize wastes that have not been identified by the HMDO's.

It is vitally important that wastes be properly characterized. Inaccurate information on the chemistry of the waste could lead to violations of state/federal rules and safety problems for workers handling the wastes.

A Waste Information Document (WID) is used to transfer data about a waste from the HMDO's to the HMDC's. A copy of this form and instructions for completing it are contained in Appendix 4-1. The first page of the WID is completed by the generating work center's HMDO and is submitted to the appropriate HMDC. The HMDC reviews the information, completes the second page of the WID, and sends copies of the completed WID to the HMDO and the Defense Reutilization and Marketing Officer (DRMO).

If the waste can not be adequately identified by the HMDO, a Waste Characterization Request (WCR) must be submitted to NREAD. The WCR form is shown in Appendix 4-2. The WCR should include any information regarding the waste which would assist NREAD in performing a literature search to determine the chemical composi-

tion and associated hazards of the waste, determining the appropriate sampling method and the analyses to be performed, and/or supplying an adequate data base to evaluate the appropriate handling method of the waste. NREAD has the responsibility for providing the necessary laboratory tests to identify the wastes, if needed. A copy of the laboratory analysis, if applicable, will then be forwarded to the HMDO. After NREAD has identified the material/waste and submitted the information to the HMDO, the HMDO must submit a WID to the HMDC.

4.1 Implementation of the Waste Analysis Plan

The Waste Analysis Plan will be implemented when either a WID is received from the HMDO or a WCR is received by NREAD from an HMDO. (NREAD may also wish to perform periodic quality assurance audits on the generator supplied waste information as well.)

The following information must be obtained to ensure proper management of hazardous wastes. In most cases, the data necessary for development of this information will be derived by implementation of the waste analysis plan.

(I) Is the waste a regulated hazardous waste?
   a) What EPA waste code(s) apply?
   b) What are the hazards of the waste?

(II) How should the waste be disposed?
   a) If off-site disposal, what are the DOT shipping requirements?
   b) If non-hazardous, can a sanitary landfill be used?
   c) Does the waste qualify for elementary neutralization?

(III) Are there special handling requirements which generating work centers should know, especially incompatibility problems?

(IV) Can the waste be recycled? On-site? Off-site?

Table 4-1 contains EPA waste codes and hazards for wastes routinely generated at MCB Camp Lejeune as well as those hazardous materials used at MCB Camp Lejeune which may become a waste as off-specification products, spill residue, etc.

Table 4-1
HAZARDOUS WASTE
MCB CAMP LEJEUNE

NOTE: The following items include routinely generated hazardous waste and hazardous materials which may be generated as off-specification products, spill residue, etc.

WASTE WASTE	WASTE NUMBER	CODE
Acetic acid	D002	C
Acetone	F003/U002	I
Activated charcoal	D002	C
Adhesive	D001	I
Adhesive (8040001658614)	F005/D001	I, T
Adhesive (8040002629011)	F005/D001	I, T
Adhesive (8040002708150)	F005/D001	I, T
Adhesive (8040002738717)	F003/F005/D001	I, T
Adhesive (8040005988065)	F005/D001	I, T
Adhesive primer	D001	I
Ammonium hydroxide	D002	C
n-amyl acetate	D001	I
Antiseize compound	D008	T
Asphalt adhesive	D001	I
Battery acid (sulfuric acid)	D002/D008	C, T
Benzene	U019	T
Benzoin tincture	D001	I
Bituminous coating compound	D001	I
Blankarola	F001/D001	I, T
Blanket wash	F001	T
Break-free, CLP	D001	I
Brush plating solution (6850001799740)	D002	C
Brush plating solution, gold	None	None[1]
Calcium hydroxide	D002	C
Calcium hypochlorite	D001	I
Carbon removing compound	D002	C
Caustic soda	D002	C
Cement solvent	D001	I
Charcoal lighter	D001	I

Chlorination kit, water	D001	I
Chloroform	U044	T
Chromic acid	D002/D007	C, T
Cleaning compound	D002	C
Cleaning compound, aluminum surface	F005/D001/D002	I, T, C
Cleaning solvent	F002	T
Cleaning solvent, Genetron 113	F001	T
Coating compound	D001/D002/D007	I, C, T
Coating compound (8030006647042)	D001	I
Contact adhesive	F003/F005/D001	I, T
Contact cement	F003/F005/D001	I, T
Corrosion preventative	D001/D007	I, T
Corrosion removing compound	D002	C
Corrosion resistant	D002/D007	I, T
Creosote	U051	T
Cutback asphalt	D001	I
Decontaminating agent (DS-2)	D002	C
Decontaminating agent (STB)	D003	R
Deglazing solvent	F002	T
Deicing-defrosting	D001	I
Denatured alcohol	D001	I
Dent filler	D001	I
Dental amalgam	D009/D011	T
Dental resin	D001	I
Deodorant	U165	T
Dichloromethane	U080	T
Dichromate cleaner	D002/D007	C, T
Diethylenetriamine	D002	C
Disinfectant (6840009269117)	Unknown	Unknown [2]
Disinfectant	D001/D002	I, C
Drain cleaner	D002	C
Dry cleaning solvent	D001	I
Duplicating fluid	D001	I
Dursban	D001	I
Electrolite kit	D002	C
Engine primer fuel	D001	I
Engine starter cylinder	U117	T, I

Flight deck compound	F005/D001	I, T
Formaldehyde	U122	T
Freon-11	U121	T
Freon-12	U075	T
Fuel inhibitor	D001	I
Genetron-11	U121	T
Glacial acetic acid	D002	C
Gum process	D002	C
Hydrazine	D003	R
Hydrochloric acid	D002	C
Hydrogen peroxide	D001	I
Indicator solution	D001	I
Insect repellent	D001	I
Inspection penetrant	D001	I
Insulating compound	F003/D001	I
Iso-octane	D001	I
Isopropyl alcohol	D001	I
Kerosene	D001	I
Layout dye	D001	I
Lead nitrate	D001/D008	I
Lead/acid battery	D002/D008	I, T
Leak detection dye, red	F003/D001	I, T
Lindane	U041	T
Lindane shampoo	U041	T
Liquid cement	D001	I
Liquid paint	D001/D007/D008	I, T
Lithium battery	D003	R
Lithium nitrate	D001	I
Lithographic blanket	F001	T
Marking stencil ink	D001	I
Mercury	U151	T
Mercury battery	D009	T
Methanol	F003	I
Methyl ethyl ketone	F005	I, T
Methyl isobutyl ketone	F003	I
Methylene chloride	F001	T
Muriatic acid	D002	C

Naphtha	D001	I
Nickel cadmium battery	D003	R
Nitric acid	D002	C
Optical cleaning compound	D001	I
Oven cleaning compound	D002	C
Paint remover	F002	T
Paint wastes	D001/D007/D008	I, T
Paint thinners and solvents (xylene, toluene)	F003/F005/D001	I, T
PD-680	D001	I
Pentane	D001	I
Photo bleach	D002	C
Photo chemical kit (6750010186285)	D002	C
Photo chemical kit (6750010577994)	U122	T
Photo cleaner (6750006913822)	D002/D007	C, T
Photo cleaner (6750010186285)	D001/F001	I, T
Photo developer (silver containing)	D011	T
Photographic film (silver containing)	D011	T
Plastic polish	D001	I
Porcelain cleaning solution	D002	C
Potassium hydroxide	D002	C
Preservative coating	D001	I
Primer coating	D001	I
Protective coating	F005/D001	I, T
Pyrethrum insecticide	D001	I
Repair kit, tentage	F003/F005/D001	I, T
Rifle cleaning compound	D001	I
Rubber cement	D001	I
Rust arresting coating	D001/D008	I, T
Rust removing compound	D002	C
Scale removing compound	D002	C
Sealing compound	D001/F005	I, T
Silver battery	----	---[1]
Silver nitrate	D001/D011	I, T
Soda lime	D002	C
Sodium hypochlorite	D002	I, C
Solvent cement	F003/F005/D001	I, T

Stop bath, photo	D002	C
Sulfuric acid	D002	C
Sunscreen	D001	I
Surface sealer	D001	I
Toluene	F005	I, T
Toner	D001	I
Toner and dispersant	D001	I0
1,1,1-trichloroethane	F001	T
Trichloroethylene	F001	T
Turpentine	D001	I
Type cleaner	F002	T
Varnish	D001	I
Walkway compound	D001	I
Windshield cleaning compound	F003/D001	I
Wood filler	F003/F005/D001	I, T
Xylene	F003	I

NOTES:

1 Regulated as hazardous waste if recovered (40 CFR 266)

2 May be 'P' listed waste, proprietery product

4.1.1 Response to receipt of a WID

Under routine conditions, the HMDO will provide the common and chemical names of the waste and its constituents and a National Stock Number (NSN) when available. Upon receipt of a WID containing a NSN, the Hazardous Material Information System (HMIS) microfiche cards should be consulted for further information about the material. The HMIS contains specific information on the material. This information and its uses are summarized below.

DATA FROM HMIS	USE OF DATA
Hazardous Components	Compare the names of hazardous components with the lists of hazardous wastes to determine whether a listed waste is present. Also note whether any components contain lead, cadmium, or other "regulated" chemicals which may cause the waste to be considered hazardous.
Flash point	If flash point is <140^{o}F, waste is hazardous (D001).
pH	If pH is <2.0 or >12.5, the waste is hazardous (D002).
DOT Requirements	The HMIS will specify the DOT shipping name, hazard class, and approved container(s).
Storage & Handling Data	Note any special precautions shown such as, handling precautions, special protective equipment required, incompatibles, etc.

Note that the HMIS may also contain additional information such as fire fighting procedures, appearance, odor, shipping quantity, solubility, explosive limits, etc. which may be useful.

The data from the HMIS should then be transferred to the back of the WID to provide the HMDO and the generating work center with information needed to properly handle and temporarily store the waste. The data given to the HMDO must include, at a minimum, that information needed to safely and legally accumulate the waste and includes: all applicable EPA Hazardous Waste Numbers; specific handling instructions, if any; the type container in which the waste is to be collected; hazard class; UN/NA number; DOT proper shipping name; and ultimate disposition of the waste. The EPA waste numbers must be determined by reference to the lists and characteristics of hazardous waste. The ultimate disposition will be determined by the HMDC's in conjunction with NREAD and DRMO. All other information may be derived from the HMIS.

4.1.2 Receipt of an incomplete WID

In some cases the WID will not contain an NSN particularly for process wastes such as sludges, mixtures, and locally purchased items. It is also possible that the HMIS will omit some information. Additional sources of information must be consulted in these cases. The additional sources include:

--Material Safety Data Sheets prepared by the manufacturer for the material(s) in the waste.

--Fire Protection Manual on Hazardous Materials (NFPA). Includes data on many products by brand name and has an incompatibility section which is extremely helpful.

--Dangerous Properties of Industrial Materials (Sax). Provides extensive toxicological data and is cross-indexed by known synonyms. Also contains incompatibility data, flash point data, and may contain DOT hazard information.

--the Hazardous Materials Shipping Table found at 49 CFR 172 contains lists of materials recognized as hazardous by DOT and associated hazard class and packaging requirements.

--Appendix 6-1 of the HM/HW Management Plan for MCB Camp Lejeune contains may waste streams and associated hazard data.

--Lists of Hazardous Wastes published by EPA at 40 CFR 261 should also be consulted.

If these reference materials do not contain the needed information, laboratory testing of the waste will be necessary. A representative sample of the waste should be collected and the analysis protocol described below for unknown wastes should be followed. The protocol can be reduced based on the information that is available. For instance, a water based waste need not be tested for flashpoint, a paint sludge need not be tested for pesticides, etc. Therefore, testing may be reduced based upon a reasonable knowledge that one or more parameters are not relevant to the waste stream.

4.1.3 Characterization of an unknown waste

Occasionally there may be drums of unidentified waste at MCB Camp Lejeune. The material may be unidentified due to the loss of container markings or to other causes. The following procedure will be followed to determine whether the material is a hazardous waste. This procedure can also be used to determine if an unwashed empty container should be treated as hazardous waste. Use extreme caution when handling unknown waste. It is generally expedient to assume unknowns are hazardous until proven otherwise.

This procedure will also be followed when an HMDO submits a WCR form (see Appendix 4-2) to NREAD. This request form is designed to allow the HMDO to provide as much information as is known about the waste in order to reduce testing requirements.

1. Record all marks on the drum; particularly an NSN, product name, or chemical name.
2. If an NSN is found, locate the NSN in the HMIS microfiche. The microfiche record will detail specific information (color, appearance, pH, specific gravity)

which should be compared to the unknown material. This may eliminate the need for expensive testing. For instance, if the microfiche record indicates the material should have a pH of 4.0 and a density of 1.3, a lab can inexpensively and quickly check these parameters. If they match, then the unknown is the same as the NSN on the drum. If no NSN is present, but a product name is located on the drum, use the same procedure checking the product cross-reference to the HMIS. If only a chemical name is present, information on chemicals can be found in Dangerous Properties of Industrial Materials, Irving Sax, editor (available from Van Nostrand Reinhold Co.) and the Fire Protection Guide to Hazardous Materials (available from the National Fire Protective Association, Boston, MA). Material Safety Data Sheets on file with the Base Safety Officer may also be used.

3. If in Step 2 the material has been determined to be the same as the drum markings, use the HMIS or other sources to determine the following (a yes answer to any one question means the material is hazardous waste):
   a. Is the pH less than 2.0?
   b. Is the pH greater than 12.5?
   c. Is the flash point less than 140 degrees F?
   d. Is the material an oxidizer?
   e. Does the material react violently with water?
   f. Does the material contain arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, endrin, lindane, methoxychlor, toxaphene, 2,4-D, or 2,4,5-TP Silvex? (laboratory test may be needed for EP Toxicity to determine whether waste is hazardous)
   g. Does the material contain any chemical listed in 40 CFR 261.31?
   h. Is the material a pure form of any chemical listed in 40 CFR 261.33(e) or 40 CFR 261.33(f)?

4. If the material does not match the container markings, it is necessary to test it to determine if the waste is a hazardous waste. A lab should be asked to run the "Characteristics of Hazardous Waste." If the material fails one or more of the characteristics tests, it is a hazardous waste. If the unknown passes these tests, ask the lab to then identify the material by either GC/MS or HPLC analysis. These tests are very expensive. The cost can be reduced by giving the lab as much information as possible about the material, including a list of probable materials.

For drums which contain less than one inch of residue, the analytical protocol will consist of two parts: (1) a GC/MS or HPLC test for chemicals listed in 40 CFR 261.33(e), and (2) a check for DOT hazardous material definitions (flammability, corrosivity, poison, etc.)

For drums which contain more than one inch of residue, the analytical protocol will have three parts: (1) a test for the four characteristics of hazardous waste (ignitability, corrosivity, reactivity, and EP Toxicity); (2) a GC/MS or HPLC test for chemicals listed in 40 CFR 261.33(a-f); and (3) a test for DOT hazardous materials definitions.

It is possible that additional tests may be required on some drums. For instance, a check for PCB's may be necessary on oily wastes prior to disposal.

All laboratory tests will be conducted using regulatory approved/required analytical protocols and certified by the analyst. Procedures to be followed include those in EPA Publication SW-846, Test Methods for Evaluating Solid Waste, and DOT methods referenced in 49 CFR 171.8.

Upon receipt of test results, the HMDO will complete the WID and submit it to the HMDC.

4.2 Waste Analysis Protocols

The waste analysis plan is designed to maximize the use of generator, manufacturer, and literature supplied data and minimize the need for analytical testing. However, analytical testing will be required periodically. When required this data must be obtained under procedures consistent with EPA regulations. The following section provides guidance on analytical sampling and testing.

4.2.1 Sampling Procedures

Many waste streams are heterogeneous; therefore, care will be taken to obtain a representative sample. In sampling wastes, consideration will be given to the uniformity of the waste in a container and to variations in production which may cause the waste to vary. Table 4-2 is a summary of the waste sampling methods for different types of wastes. Liquids and sludges are the most common forms of hazardous waste. However, occasionally, other forms shown on Table 4-2 may be encountered. Recommended sampling access points for different waste containers and soil are listed in Table 4-3. Recommended numbers of samples to be taken for different types of wastes and soil are given in Table 4-4.

For all hazardous wastes that are placed in containers ranging in capacity from 5 gallons to 85 gallons, the sampling method employed is a Coliwasa sampler. This device collects liquid throughout the depth of liquid in a drum, assuring a representative sample. Instructions for drum sampling are presented in Table 4-5. A single sample (top to bottom) will be taken from a container, unless the waste is heterogeneous and/or contains one or more layers. In these cases, multiple samples should be taken, one sample from each layer. Samples from multiple containers of the same waste will be composited for analysis (except for heterogeneous or layered wastes). Samples to be analyzed for volatile organics should be grab samples and should not be composited.

TABLE 4-2

SAMPLERS RECOMMENDED FOR VARIOUS TYPES OF WASTE

WASTE TYPE	RECOMMENDED SAMPLER (1)	LIMITATIONS
Liquids, sludges, and slurries in drums, vacuum trucks, barrels, and similar containers	Coliwasa	Not for containers 1.5 m (5 ft.) deep.
	a) Plastic	Not for wastes containing ketones, nitrobenzene, dimethylformamide, mesitly oxide, or tetrahydrofuran.
	b) Glass	Not for wastes containing hydrofluoric acid and concentrated alkali solutions.
Powdered or granular solids in bags, drums, barrels, and similar containers	a) Grain sampler	Limited application for sampling moist and sticky solids with a diameter 0.6 cm (= in.).
	b) Sampling trier	May incur difficulty in retaining core sample of very dry granular materials during sampling.
Dry sludges deeper thqn 8 cm (3 in.)	a) Soil auger	Does not collect undisturbed core sample.
	b) Veihmeyer sampler	Difficult to use on stony rocky, or very wet soil.
Wastes in storage tanks	Weighted bottle sampler	May be difficult to use on very viscous liquids.

(1) Glass sampler and sample container must be used when organics are to be determined.

TABLE 4-3

SAMPLING POINTS RECOMMENDED FOR MOST WASTE CONTAINERS

CONTAINER TYPE	SAMPLING POINT
Drum, bung on one end	Withdraw sample through the bung opening.
Drum, bung on side	Lay drum on side with bung up. Withdraw sample through the bung opening.
Barrel, fiber drum, buckets, sacks, bags	Withdraw samples through the top of barrels, fiber drums, buckets, and similar containers. Withdraw samples through fill openings of bags and sacks. Withdraw samples through the center of the containers and to different points diagonally opposite the point of entry.
Vacuum truck and similar containers	Withdraw sample through open hatch. Sample all other hatches.
Soil	Divide the surface area into an imaginary grid. (The number of grids is determined by the desired number of samples to be collected which, when combined, should give a representative sample of the wastes.) Sample each grid.

TABLE 4-4
NUMBER OF SAMPLES TO BE COLLECTED

CASE NO.	INFORMATION DESIRED	WASTE TYPE	CONTAINER TYPE	NUMBER OF SAMPLES TO BE COLLECTED
1	Average concentration	Liquid	Drum, vacuum truck, and similar	1 collected with Coliwasa
2	Average concentration	Solid (power or granular)	Bag, drum, bin, sack	1 composite sample of several samples collected at different sampling areas
3	Average concentration	Soil	----------	1 composite sample of several samples collected at different sampling areas
4	Concentration range	Liquid	Drum, vacuum truck, storage tank	3 to 10 separate samples, each from a different depth of the liquid
5	Concentration range	Solid (powder or granular)	Bag, drum, bin	3 to 5 samples from different sampling points
6	Concentration range	Soil	----------	3 to 20 separate samples from different sampling areas
7	Average concentration for legal evidence	All types	All containers	3 identical samples or 1 composite sample divided into 3 identical samples if homogeneous
8	Average concentration	Liquid	Storage Tank	Same as Case #2
9	Concentration range	Liquid	Storage Tank	Same as Case #4

TABLE 4-5
PROCEDURE FOR SAMPLING WASTE IN DRUMS

1. Choose the plastic or glass Coliwasa for the liquid waste to be sampled referring to Table 4-2.

2. Make sure that the sampler is clean.

3. Check to make sure the sampler is functioning properly. Adjust the locking mechanism if necessary to make sure the neoprene rubber stopper provides a tight closure.

4. Wear necessary protective clothing and gear and observe required sampling precautions.

5. Put the sampler in the open position by placing the stopper rod handle in the Tee-position and pushing the rod down until the handle sits against the sampler's locking block.

6. Slowly lower the sampler into the liquid waste. (Lower the sampler at a rate that permits the levels of the liquid inside and outside the sampler tube to remain about the same. If the level of the liquid in the sampler tube is lower than that outside the sampler, the sampling rate is too fast and will result in a nonrepresentative sample).

7. When the sampler stopper hits the bottom of the waste container, push the sampler tube downward against the stopper to close the sampler. Lock the sampler in the closed position by turning the Tee handle until it is upright and one end rests tightly on the locking block.

8. Slowly withdraw the sampler from the waste container with one hand while wiping the sampler tube with a disposable cloth or rag with the other hand.

9. Carefully discharge the sample into a suitable sample container by slowly opening the sampler. This is done by slowly pulling the lower end of the Tee handle away from the locking block while the lower end of the sampler is positioned in a sample container.

10. Cap the sample container; attach label and seal; record in field log book; and complete sample analysis request sheet.

11. Unscrew the Tee handle of the sampler and disengage the locking block. Clean sampler on site or store the contaminated parts of the sampler in a plastic storage tube for subsequent cleaning. Store used rags in plastic bags for subsequent disposal.

12. Deliver the sample to the laboratory for analysis.

To assure a uniform sample, drums will be agitated prior to sampling, if possible.

Strict chain of custody will be maintained for those samples taken for regulatory agencies. Each person who handles the sample will, upon receipt, sign and date the identification tag. When chain-of-custody procedures are followed, Section One of EPA Publication SW-846 must be followed to ensure adequate chain-of-custody. An example chain-of-custody form is shown as Figure 4-1.

The sample container must be compatible with the waste. Except for some solvents and oil, a plastic (1 quart) bottle is best. Corrosive samples must not be placed in metal containers.

Only all-cargo aircraft, trucks, UPS, or other nonpassenger vehicles will be used to ship hazardous waste samples to laboratories. EPA procedures (SW-846) for sample preservation must be followed and EPA and DOT regulations for transporting hazardous materials/wastes must be met. Laboratories must certify that their procedures are EPA-approved and, in that certification, reference either 40 CFR 261 or Test Methods Manual SW-846.

4.2.2 Analytical procedures

Analytical procedures used to test hazardous waste samples must be EPA approved procedures. These procedures are published in EPA Publication Number SW-846, "Test Methods for Evaluating Solid Waste," second edition, July, 1982. Methods for many common wastes are shown in Table 4-6. Analyses must be certified by the laboratory to be in accordance with this manual. Deviations from these procedures should be fully documented and explained.

Table 4-7 is a list of MCB Camp Lejeune hazardous wastes and the associated hazard parameter for each. The parameter shown for each waste must be known either from manufacturer data, literature data, or analytical test. The table should be used to determine which tests should be run on any waste. If the

FIGURE 4-1

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME

SAMPLERS: *(Signature)*

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS							REMARKS

Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
Relinquished by: *(Signature)*	Date / Time	Received for Laboratory by: *(Signature)*	Date / Time	Remarks	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

TABLE 4-6

TEST METHODS

PARAMETER	PROCEDURE	REFERENCE
Acetone	GC/FID	*Method 8015
Benzene	GC/FID	*Method 8020
Chloroform	GC/HSD	*Method 8010
Chromium	Atomic Absorption	*Method 7190 7191
Creosote	GC/MS	Method 624 (40 CFR 136)
Dichloromethane (methylene chloride)	GC/HSD	*Method 8010
Dichlorodifluoromethane	GC/HSD	*Method 8010
EP Toxicity	EP Toxicity leachate	*Method 1310
Flashpoint	Pensky-Martens closed cup test	ASTM D-93-80
Fluorotrichloromethane	GC/HSD	*Method 8010
Formaldehyde	GC/FID	*Method 8015
Hydrazine	GC/HSD	*Method 8010
Lead	Atomic Absorption	*Method 7420 7421
Lindane	GC	Method 608 (40 CFR 136)
Mercury	Atomic Absorption	*Method 7040 7041
Methanol	GC/HSD	*Method 8010
Methyl ethyl ketone	GC/FID	*Method 8015
Methyl isobutyl ketone	GC/FID	*Method 8015
Methylene chloride	GC/HSD	*Method 8010
Naphthalene	GC/FID	*Method 8015
pH	Electrometric	*Method 9040

Silver	Atomic Absorption	*Method 7760 7761
Tetrachloroethylene	GC/HSD	*Method 8010
Toluene	GC/FID	*Method 8020
1,1,1-trichloroethane	GC/HSD	*Method 8010
Trichloroethylene	GC/HSD	*Method 8010
Trichloromonofluoro-methane	GC/HSD	*Method 8010
Trichlorotrifluoro-ethane	GC/HSD	*Method 8010
Xylene	GC/FID	*Method 8020

* From SW-846.

Table 4-7
WASTE ANALYSIS PROTOCOL
MCB CAMP LEJEUNE

WASTE	PARAMETER(S)	COMMENT
Acetic acid	pH	pH is <2.0 and is corrosive
Acetone	flash point	listed waste(F003) for ignitability
Activated charcoal	pH	pH is <2.0 and is corrosive
Adhesive	flash point	flash point is <140°F
Adhesive (8040001658614)	flash point, toluene	flash point is <140°F; contains the listed waste toluene (F005)
Adhesive (8040002629011)	flash point, toluene, methyl ethyl ketone	flash point is <140°F; contains the listed wastes toluene and methyl ethyl ketone(F005)
Adhesive (8040002708150)	flash point, toluene, methyl ethyl ketone	flash point is <140°F; contains the listed wastes toluene and methyl ethyl ketone(F005)
Adhesive (8040002738717)	flash point, toluene, methyl ethyl ketone, acetone	flash point is <140°F; contains the listed wastes toluene and methyl ethyl ketone(F005) and acetone (F003)
Adhesive (8040005988065)	flash point, toluene	flash point is <140°F; contains the listed waste toluene (F005)
Adhesive primer	flash point	flash point is <140°F
Ammonium hydroxide	pH	pH is >12.5 and is corrosive
n-amyl acetate	flash point	flash point is <140° F

Antiseize compound	EP Toxicity (Pb)	contains leachable lead
Asphalt adhesive	flash point	flash point is <140°F
Battery acid(sulfuric acid)	pH, EP Toxicity (Pb)	pH is <2.0 and is corrosive and contains leachable lead
Benzene	benzene	listed waste(U019)
Benzoin tincture	flash point	flash point is <140°F
Bituminous coating compound	flash point	flash point is <140°F
Blankarola	flash point, tetrachloroethylene	flash point is <140°F; contains listed waste(F001)
Blanket wash	flash point, fluorotrichloro-methane	flash point is <140°F; contains listed waste(F001)
Break-free, CLP	flash point	flash point is <140°F
Brush plating solution (6850001799740)	pH	pH is >12.5 and is corrosive
Brush plating solution, gold	none	
Calcium hydroxide	pH	pH is >12.5 and is corrosive
Calcium hypochlorite	none	DOT oxidizer
Carbon removing compound	pH	pH is >12.5 and is corrosive
Caustic soda	pH	pH is >12.5 and is corrosive
Cement solvent	flash point	flash point is <140°F
Charcoal lighter	flash point	flash point is <140°F
Chlorination kit, water	none	DOT oxidizer
Chloroform	chloroform	listed waste(U044)

Chromic acid	pH, EP Toxicity (Cr)	pH is <2.0 and is corrosive;contains leachable chromium
Cleaning compound	pH	pH is >12.5 and is corrosive
Cleaning compound, aluminum surface	flash point, pH, methyl ethyl ketone	flash point is <140°F; pH is <2.0; contains listed waste methyl ethyl ketone (F005)
Cleaning solvent	methylene chloride	listed waste (F002)
Cleaning solvent, Genetron 113	trichlorotri-fluoroethane	contains listed waste (F001)
Coating compound	pH, EP Toxicity (Cr), flash point	pH is <2.0 and is corrosive; contains leachable chromium, flash point is <140°F
Coating compound (8030006647042)	flash point	flash point is <140°F
Contact adhesive	flash point, toluene, acetone	flash point is <140°F; contains listed wastes toluene (F005) and acetone (F003)
Contact cement	flash point, toluene, methyl, ethyl ketone, acetone	flash point is <140°F; contains listed wastes toluene and methyl ethyl ketone(F005) and acetone (F003)
Corrosion preventative	flash point, EP Toxicity (Cr)	flash point is <140°F; contains leachable chromium
Corrosion removing cmpd	pH	pH is <2.0 and is corrosive
Corrosion resistant	pH, EP Toxicity (Cr)	pH is <2.0 and is corrosive;contains leachable chromium
Creosote Cutback asphalt	creosote flash point	listed waste(U051) flash point is

		<140°F
Decontaminating agent(DS-2)	pH	pH is >12.5 and is corrosive
Decontaminating agent(STB)	none	item is reactive
Deglazing solvent	methylene chloride	contains listed waste methylene chloride (F002)
Deicing-defrosting	flash point	flash point is <140°F
Denatured alcohol	flash point	flash point is <140°F
Dent filler	flash point	flash point is <140°F
Dental amalgam	EP Toxicity (Ag, Hg)	contains leachable silver and mercury
Dental resin	flash point	flash point is <140°F
Deodorant	naphthalene	listed waste(U165)
Dichloromethane	dichloromethane	listed waste(U080)
Dichromate cleaner	pH, EP Toxicity (Cr)	pH is <2.0 and is corrosive;contains leachable chromium
Diethylenetriamine	pH	pH is >12.5 and is corrosive
Disinfectant(6840009269117)	unknown	
Disinfectant	pH, flash point	pH is >12.5 and is corrosive; flash point is <140°F
Drain cleaner	pH	pH is >12.5 and is corrosive
Dry cleaning solvent	flash point	flash point is <140°F
Duplicating fluid	flash point	flash point is <140°F
Dursban	flash point	flash point is <140°F
Electrolite kit	pH	pH is <2.0 and is corrosive

Engine primer fuel	flash point	flash point is <140°F
Engine starter cylinder	ethyl ether	listed waste(U117)
Flight deck compound	flash point, toluene	flash point is <140°F; contains listed waste toluene (F005)
Formaldehyde	formaldehyde	listed waste(U122)
Freon-11	trichloromono-fluoromethane	listed waste(U121)
Freon-12	dichlorodifluoro-methane	listed waste(U075)
Fuel inhibitor	flash point	flash point is <140°F
Genetron-11	trichloromono-fluoromethane	listed waste(U121)
Glacial acetic acid	pH	pH is <2.0 and is corrosive
Gum process .	pH	pH is <2.0 and is corrosive
Hydrazine	hydrazine	material is reactive
Hydrochloric acid	pH	pH is <2.0 and is corrosive
Hydrogen peroxide	none	DOT oxidizer
Indicator solution	flash point	flash point is <140°F
Insect repellent	flash point	flash point is <140°F
Inspection penetrant	flash point	flash point is <140°F
Insulating compound	flash point, xylene	flash point is <140°F; contains listed waste xylene (F003)
Iso-octane	flash point	flash point is <140°F

Isopropyl alcohol	flash point	flash point is <140°F
Kerosene	flash point	flash point is <140°F
Layout dye	flash point	flash point is <140°F
Lead nitrate	EP Toxicity (Pb)	contains leachable lead; DOT oxidizer
Lead/acid battery	pH, EP Toxicity (Pb)	pH is <2.0 and is corrosive;contains leachable lead
Leak detection dye, red	flash point, xylene	flash point is <140°F; contains listed waste xylene (F003)
Lindane	lindane	listed waste(U041)
Lindane shampoo	lindane	listed waste(U041)
Liquid cement	flash point	flash point is <140°F
Liquid paint	flash point, EP Toxicity (Pb, Cr)	flash point is <140°F; some paint contains leachable lead and chromium
Lithium battery	none	item is reactive
Lithium nitrate	none	DOT oxidizer
Lithographic blanket	tetrachloro-ethylene	contains listed waste tetrachloro-ethylene (F001)
Marking stencil ink	flash point	flash point is <140°F
Mercury	mercury	listed waste(U151)
Mercury battery	EP Toxicity (Hg)	contains leachable mercury
Methanol	methanol	listed waste(F003) for ignitability

Methyl ethyl ketone	methyl ethyl ketone	listed waste(F005) for ignitability toxicity
Methyl isobutyl ketone	methyl isobutyl ketone	listed waste(F003) for ignitability
Muriatic acid	pH	pH is <2.0 and is corrosive
Naphtha	flash point	flash point is <140°F
Nickel cadmium battery	none	item is reactive
Nitric acid	pH	pH is <2.0 and is corrosive
Optical cleaning compound	flash point	flash point is <140°F
Oven cleaning compound	pH	pH is >12.5 and is corrosive
Paint remover	methylene chloride	contains listed waste methylene chloride (F002)
Paint wastes.	flash point, EP Toxicity (Pb, Cr)	flash point is <140°F;may contain leachable lead and chromium
Paint thinners and solvents (xylene, toluene)	flash point, xylene, toluene	flash point is <140°F;may contain listed wastes xylene (F003) and toluene (F005)
PD-680	flash point	flash point ranges from 80°F to 145°F
Pentane	flash point	flash point is <140°F
Photo bleach	pH	pH is <2.0 and is corrosive
Photo chemical kit (6750010186285)	pH	pH is >12.5 and is corrosive
Photo chemical kit (6750010577994)	formaldehyde	listed waste(U122)

Photo cleaner (6750006913822)	pH, EP Toxicity (Cr)	pH is <2.0 and is corrosive;contains leachable chromium
Photo cleaner (6750010186285)	flash point, 1,1,1-trichloro-ethane	flash point is <140°F; contains listed waste 1,1,1-trichloro-ethane (F001)
Photo developer (silver containing)	EP Toxicity (Ag)	contains leachable silver
Photographic film (silver containing)	EP Toxicity (Ag)	contains leachable silver
Plastic polish	flash point	flash point is <140°F
Porcelain cleaning solution	pH	pH is <2.0 and is corrosive
Potassium hydroxide	pH	pH is >12.5 and is corrosive
Preservative coating	flash point,	flash point is <140°F;
Primer coating	flash point	flash point is <140°F
Protective coating	flash point, methyl ethyl ketone	flash point is <140°F;contains listed waste methyl ethyl ketone (F005)
Pyrethrum insecticide	flash point	flash point is <140°F
Repair kit, tentage	flash point, acetone, methyl ethyl ketone, toluene	flash point is <140°F;contains listed wastes acetone (F003), methyl ethyl ketone and toluene (F005)
Rifle cleaning compound	flash point	flash point is <140°F
Rubber cement	flash point	flash point is <140°F

Rust arresting coating	flash point, EP Toxicity (Cr)	flash point is <140°F; contains leachable chromium
Rust removing compound	pH	pH is <2.0 and is corrosive
Scale removing compound	pH	pH is <2.0 and is corrosive
Sealing compound	flash point, methyl ethyl ketone	flash point is <140°F; contains listed waste methyl ethyl ketone (F005)
Silver battery	none	
Silver nitrate	EP Toxicity (Ag)	contains leachable silver; DOT oxidizer
Soda lime	pH	pH is >12.5 and is corrosive
Sodium hypochlorite	pH	pH is >12.5 and is corrosive
Solvent cement	flash point, toluene, acetone	flash point is <140°F; contains listed wastes toluene(F005) and acetone (F003)
Stop bath, photo	pH	pH is <2.0 and is corrosive
Sulfuric acid	pH	pH is <2.0 and is corrosive
Sunscreen	flash point	flash point is <140°F
Surface sealer	flash point	flash point is <140°F
Toluene	toluene	listed waste(F005) for toxicity and ignitability
Toner	flash point	flash point is <140°F
Toner and dispersant	flash point	flash point is <140°F

1,1,1-trichloroethane	1,1,1-trichloro-ethane	listed waste(F001) for toxicity
Trichloroethylene	trichloroethylene	listed waste(F001) for toxicity
Turpentine	flash point	flash point is <140°F
Type cleaner	1,1,1-trichloro-ethane	contains listed waste 1,1,1-tri-chloroethane (F002)
Varnish	flash point	flash point is <140°F
Walkway compound	flash point	flash point is <140°F
Windshield cleaning cmpnd	flash point, methanol	flash point is <140°F; contains listed waste methanol (F003)
Wood filler	flash point, acetone, methyl ethyl ketone, toluene	flash point is <140°F; contains listed wastes acetone (F003), methyl ethyl ketone and toluene (F005)
Xylene	xylene	listed waste(F003) for ignitability

parameter shown for each waste is known, no laboratory testing is needed.

Adequate quality assurance procedures should be employed. The EPA procedures manual contains suggested quality assurance methods for each analytical procedure.

4.2.3 Frequency of analysis

As part of the instructions given to HMDO's on the WID, the HMDC's should ask the HMDO to submit a revised WID for any waste which undergoes a change after the original submittal. These changes can occur as a result of changes in raw materials, process variations, indiscriminate mixing, etc. At least once each year, the HMDC's should review all WID's, provide HMDO's with a list of their generating work centers' wastes and request updated information.

4.3 Additional Analytical Requirements for Incompatible Wastes

All incompatible wastes must be identified so that they may be segregated when stored in TCA's and the permitted storage facility. Identification of incompatible wastes should be made by the HMDC's during evaluation of the WID. The HMIS and cited reference books will provide this information. When returning the WID to the HMDO's, the HMDC's should specify incompatibility as a handling precaution. For instance, "waste trichloroethane must be segregated from caustic wastes." To further assist the HMDC's in determining incompatibilities, the following publication should be consulted: Hatayama, H.K., et. al., "A Method for Determining the Compatibility of Hazardous Waste," EPA Publication 600/2-80-076, April, 1980. This publication is also included as part of the Hazardous Waste Training Program.

APPENDIX 4-1

WASTE INFORMATION DOCUMENT

and

INSTRUCTIONS

WASTE INFORMATION DOCUMENT (WID)

DATE _____

WID # _____

1. GENERATING WORK CENTER INFORMATION

Shop	Contact	Code	Command	Building	Phone Ext.

2. WASTE IDENTIFICATION

A. WASTE CHARACTERIZATION: Date Requested _____ Date Completed _____

B. WASTE NAME: Common _____ Chemical(s) _____

C. PHYSICAL FORM: (CHECK) ___ Liquid ___ Solid ___ Sludge ___ Other (Specify) ___

D. MANUFACTURER: _____ E. NATIONAL STOCK NUMBER: _____

F. CONTAINER: (TYPE AND SIZE) _____

G. GENERATION RATE: (e.g., gal/day, lbs/day) _____

H. FREQUENCY OF GENERATION _____

I. EXPECTED ANNUAL GENERATION: (GALS, LBS) _____

J. DESCRIBE WASTE GENERATION PROCESS: _____

K. HAS WASTE BEEN MIXED WITH ANY OTHER MATERIAL? ___ Yes ___ No If yes, specify

3. REASON FOR DISPOSAL: (CHECK)

___ Exceeded shelf life ___ Served intended purpose ___ Unused ___ Other (specify)

4. CERTIFICATION: I certify that the above named materials are the only compounds in the waste containers listed above and have not been mixed with any other materials.

HMDO Signature	Code	Date

TO BE COMPLETED BY THE HMDC AND COPIES SENT TO THE HMDO AND DRMO

5. WASTE CLASSIFICATION: ___ Hazardous ___ Nonhazardous

6. EPA WASTE NUMBER(S): _____

7. REASON FOR HAZARD CLASSIFICATION: _____

_____

8. HANDLING INSTRUCTIONS: _____

_____

_____

_____

_____

9. DTID 1348-1 REQUIRED: ___ Yes ___ No

10. CONTAINER AND LABELING REQUIREMENTS:

A. DOT/DOD CONTAINER TYPE: _____

B. DOT PROPER SHIPPING NAME: _____

C. DOT HAZARD CLASS: _____

D. UN/NA NUMBER: _____

E. ADDITIONAL REQUIREMENTS: (FOR DRMO) _____

_____

_____

_____

11. SPECIAL PRECAUTIONS AND/OR INSTRUCTIONS: _____

_____

_____

_____

_____

12. _____

HMDC Signature Code Date

WID INSTRUCTIONS FOR HMDO'S

GENERAL INSTRUCTIONS

Indicate the date on which the form is completed. The WID # will be assigned by the HMDC's. Items 1-4 must be completed by the HMDO. Where information is unknown or not applicable indicate accordingly.

1. GENERATING WORK CENTER INFORMATION: self-explanatory

2. WASTE IDENTIFICATION:
   - A. Waste Characterization - If a Waste Characterization Request was submitted to NREAD, indicate the date requested and the date completed.
   - B. Waste Name - Give common or brand name and chemical composition if known
   - C. Physical Form - self-explanatory
   - D. Manufacturer - As shown on label
   - E. National Stock Number - self-explanatory
   - F. Container - Indicate type and size container in which waste is presently stored (i.e., 55-gallon drum, plastic container, fiberboard box)
   - G. Generation Rate - Indicate the most frequent rate of generation (quantity per day, week, month, year)
   - H. Frequency of Generation - How often and length of time generated (i.e., 8 hrs/day, 7 days/week; 1 day/month; sporadic; one time only)
   - I. Expected Annual Generation - self-explanatory
   - J. Describe Waste Generation Process - Explain the process which results in waste generation in sufficient detail to assist in waste identification
   - K. Waste Mixture - self-explanatory

3. REASON FOR DISPOSAL: self-explanatory

4. CERTIFICATION: WID must be signed by the HMDO

5. WASTE CLASSIFICATION: Refer to Section 4.1 (Waste Analysis Plan) of the HM/HW Management Plan

6. EPA WASTE NUMBER(S): e.g., D001, F005; refer to Table 4-1 (Waste Analysis Plan) of the HM/HW Management Plan

7. REASON FOR HAZARD CLASSIFICATION: e.g., ignitable, reactive; refer to Table 4-7 (Waste Analysis Plan) of the HM/HW Management Plan

8. HANDLING INSTRUCTIONS: e.g., store in generating work center TCA, contact TMO for transport to HW storage facility; acceptable for disposal in dumpster

9. DTID 1348-1 REQUIRED: self-explanatory

10. CONTAINER AND LABELING REQUIREMENTS: Refer to Section 6.0 (Shipping and Transportation) of the HM/HW Management Plan

11. SPECIAL PRECAUTIONS AND/OR INSTRUCTIONS: e.g., waste(s) and/or material(s) which are incompatible with waste; special safety equipment required for the waste; emergency response procedures

APPENDIX 4-2

WASTE CHARACTERIZATION REQUEST

WASTE CHARACTERIZATION REQUEST

DATE _____

1. GENERATING WORK CENTER INFORMATION

_____

Shop Contact Code Command Building Phone Ext.

2. WASTE INFORMATION:

A. NAME: Common _____ Chemical(s) _____

_____

_____

B. PHYSICAL FORM: (CHECK) ___ Liquid ___ Solid ___ Sludge

___ Other (Specify) _____

C. NATIONAL STOCK NUMBER: _____

D. QUANTITY ON HAND: _____

E. WASTE SOURCE: (DESCRIBE PROCESS IF KNOWN) _____

_____

_____

_____

_____

3. ADDITIONAL INFORMATION: _____

_____

_____

_____

_____

_____

_____

HMDO Code
Signature

5.0 REQUIREMENTS FOR PERMITTED STORAGE FACILITIES

The existing hazardous waste storage facility at Marine Corps Base (MCB) Camp Lejeune operates under a Part B Permit issued by the North Carolina Department of Human Resources (DHR). The facility consists of two 3,200 square foot metal buildings (TP-451 and TC-863) enclosed by a security fence. This facility serves MCB Camp Lejeune and Marine Corps Air Station (MCAS) New River. All materials that are used and/or are recyclable, are in excess of the user's needs, or have an expired shelf-life and are also defined as hazardous are received at TP-451 for processing by Defense Reutilization and Marketing Office (DRMO). These hazardous materials/wastes are inspected for proper packaging and corrosive wastes are segregated from other wastes in a curbed area. The maximum storage capacity of TP-451 is 224 55-gallon containers. After all attempts to resell, reutilize, transfer, or donate these materials are exhausted, these materials become classified as hazardous wastes and are transferred to TC-863 to await final disposal at a permitted TSD. Building TC-863 has six individual storage areas for segregating waste types. Secondary containment for each area is provided by sloped floors and concrete trenches. The maximum storage capacity of TC-863 is 504 55-gallon containers. This section addresses the requirements for container storage facilities operating under a Part B Permit.

Hazardous wastes may be accumulated at MCB Camp Lejeune and MCAS New River in one of two ways before being transferred to the permitted hazardous waste storage facility operated by DRMO. Satellite Accumulation Areas (see Section 3.3.1) may accumulate as much as 55 gallons of hazardous waste in one or more containers at the point of generation. The accumulated waste must then be transferred to a generating work center temporary collection area (TCA) or a permitted storage facility. Hazardous waste may also be accumulated in containers at generating work centers and/or TCA's for 90 days from the accumulation start date. The accumulated waste must then be transferred to a permitted storage facility. Temporary collection areas may be used continually

without receiving a permit provided the requirements specified in Section 3.2.3 are met. Legally wastes can be stored indefinitely in the permitted storage facility. However, because of the limited capacity of the building and limited life of a storage container, good management practices dictate that no container should remain in the building for more than six months.

5.1 General Requirements

5.1.1 Waste Analysis

Prior to receiving a waste at the permitted storage facility a detailed chemical and physical analysis must be obtained. At a minimum, the analysis must contain all the information necessary to treat, store, or dispose of the waste in accordance with federal regulations. This information may be obtained from the Waste Information Document (WID) for a particular waste. The WID contains information from the generating work center, laboratory analyses, and/or from existing published literature for that waste stream. The procedure for obtaining this information is included in the Waste Analysis Plan in Section 4.0.

5.1.2 Security

Facility operators must prevent the unknowing entry and minimize the unauthorized entry of persons or livestock into the permitted facility. The existing facility is completely enclosed by an 8 foot high, chain-link fence topped with 3 strands of barbed wire. All entrances are kept locked and entry is allowed only with permission of the DRMO. Warning signs which read "DANGER - UNAUTHORIZED PERSONNEL KEEP OUT", are posted at all entrances. Deliveries and shipments to and from the facility require DRMO personnel to be present to unlock the gates.

Fences and warning signs are routinely inspected and repairs or replacements are made as necessary.

5.1.3 Personnel Training

All personnel involved in hazardous waste management must complete a program of classroom instruction or on-the-job training as specified in Section 9.0.

5.1.4 Ignitable, Reactive, or Incompatible Wastes

All ignitable or reactive wastes must be separated and protected from sources of ignition or reaction. No smoking or any other source of open flame is allowed in these areas. Since the existing facility handles these types of waste, warning signs are placed in all areas containing such waste. "No Smoking Within 50 Feet" warning signs are posted at all angles of approach and "No Smoking or Open Flame" signs are posted in each building.

Separation of incompatible waste must also be maintained. In Building TP-451, separation is provided by a chain-link fence installed on an 8 inch concrete curb surrounding the holding areas on three sides. In Building TC-863, separation is provided by both the fence-curb system and an 18" by 24" trench drain with aluminum grating. The floor of each segregated storage area in Building TC-863 is sloped to the individual trench drains.

5.1.5 Preparedness and Prevention

All hazardous waste storage facilities must meet Federal regulations to be prepared for potentially dangerous situations which may occur. These requirements, and MCB Camp Lejeune's compliance procedures to meet these requirements, are as follows:

1. The facility must be equipped with an internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel. All HM/HW handling at the MCB Camp Lejeune facility must be performed under the supervision of the DRMO facility operator. Therefore, all personnel present at the facility will be within close proximity and emergency instruction can be given by voice or signal.

2. The facility must be equipped with a device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or emergency response teams. The MCB Camp Lejeune facility is equipped with an emergency telephone which provides immediate communication to the Base fire department, Base security, and other emergency personnel. A fire alarm which is directly connected to the Base fire department is also located at the permitted facility.
3. If there is ever just one employee on the premises while the facility is operating, he must have immediate access to a device, such as a telephone (immediately available at the scene of operation) or a hand-held two-way radio, capable of summoning external emergency assistance. When there is just one employee on the premises of the MCB Camp Lejeune facility, he will have immediate access to a two-way radio which is monitored by NREAD who will be responsible for summoning the appropriate emergency response personnel.
4. The facility must be equipped with portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment. The MCB Camp Lejeune facility is equipped with fire extinguishers and absorbents and overpack materials for spill control.
5. The facility must be equipped with water at an adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems. The MCB Camp Lejeune facility has water at an adequate volume and pressure to supply water hose streams.
6. All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency. All equipment at the MCB Camp Lejeune facility is tested and maintained as necessary to assure its proper operation in time of emergency.

7. Aisle space must be maintained to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency. At the MCB Camp Lejeune facility aisle space will be maintained at no less than 4 feet between double palleted rows of containers. A minimum distance of no less than one foot will be maintained between outside perimetric palleted rows and the walls of the storage buildings. A clear and unobstructed access area will be maintained at no less than a distance of 5 feet out from and along the front of all curbed and/or trenched containment areas at all times.
8. The facility operator must familiarize security, fire department, and emergency response teams with the layout of the facility, properties of hazardous wastes handled at the facility and the associated hazards, places where facility personnel would normally be working, entrances to the facility, and evacuation routes. DRMO has familiarized security, fire department, and emergency response teams on-base with the required items.
9. The facility operator must also familiarize local hospital(s) with the properties of hazardous wastes handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility. DRMO has familiarized the Naval Hospital at MCB Camp Lejeune with the hazardous wastes handled at the facility.

5.1.6 Contingency Plan

The facility must maintain a copy of the approved Contingency Plan which is contained in the Part B permit.

5.1.7 Manifest System, Recordkeeping, and Reporting

The manifest system is included in Section 6.0. Recordkeeping and reporting requirements are contained in Section 8.0.

5.1.8 Closure Plan

The facility must maintain a copy of the approved Closure Plan which is contained in the Part B permit at the facility until closure is completed and certified in accordance with the North Carolina hazardous waste management regulations.

5.2 Specific Requirements for Container Storage Facilities

5.2.1 Management Requirements

Upon receipt of a container of hazardous waste at the container storage facility, container information must be entered on the Facility Storage Record which is shown in Figure 5-1. This information must include the waste name, the container identification number, quantity, EPA waste number, and the date waste was transferred to the storage facility. The date the waste is transported off-site and the manifest number must also be entered on the Storage Record.

The WID for each container must be checked to ensure that the waste is placed in the container specified and that the label was completed accurately. Additional labeling and marking as specified on the WID must also be completed prior to offering the container for transport off-site. The WID will also identify any special precautions which must be taken to ensure the safe storage of the waste.

The containers of hazardous waste must be kept closed except when necessary to add or remove waste. If a container is not in good condition or begins to leak, the waste must be transferred to a container which is in good condition or repackaged into a DOT 17C or 17H recovery drum. If placed in a recovery drum, the drum must be marked and labeled as appropriate for the hazardous waste. The containers must be opened, handled, and stored to prevent rupture of the container.

FIGURE 5-1

HAZARDOUS WASTE FACILITY STORAGE RECORD

NOTE: DPDS FORM 1712 CAN BE USED TO SATISFY THE REQUIREMENTS OF THIS PLAN. A COPY OF THIS FORM WILL BE INCLUDED IN THE FINAL REPORT.

5.2.2 Inspections

The hazardous waste container storage facility, including all containers of hazardous waste, safety equipment, and spill control materials, must be inspected weekly. Inspections must be recorded on the Hazardous Waste Weekly Inspection Record. An example inspection record is shown in Figure 5-2. This record includes the items to be inspected which should be site-specific to the container storage facility, the date and time of the inspection, the inspector, observations made, and the date and corrective actions taken as a result of the inspection.

5.2.3 Facility Standards

The container storage facility must have a containment system which is designed and operated as follows:

- A base must underly the container which is free of cracks or gaps and which can sufficiently contain leaks, and spills;
- The system must have sufficient capacity to contain 10% of the volume of container which contain free liquids;
- The base must be designed to prevent the contact of containers with standing liquid or the containers must be sufficiently elevated on pallets to ensure that the containers will not come in contact with accumulated liquids;
- The storage building must be designed to prevent run-on unless the containment system has sufficient excess capacity;
- The containment system must be designed to allow for the prompt removal of all spilled or leaked waste and accumulated precipitation to prevent overflow of the system; and
- The storage facility must be designed to allow for adequate separation of incompatible materials which are to be stored in the facility.

Secondary containment in TC-863 is provided by concrete trenches 18" wide by 24" deep covered with aluminum gratings. Secondary containment at Building TP-451 consists of 8" by 8" curbs surrounding the individual storage areas. Containers in each storage building are stored on pallets to prevent the contact of

FIGURE 5-2
HAZARDOUS WASTE
WEEKLY INSPECTION RECORD

ITEM	DATE	TIME	INSPECTOR	OBSERVATIONS	DATE AND CORRECTIVE ACTIONS
CONTAINERS:					
Construction					
Compatibility					
Segregation					
Leaks/Closure					
Labels					
Ignitable Waste					
Aisle Space					
Accumulation Date					
DRUM DOLLY					
DRUM WRENCH					
FIRE EXTINGUISHER					
GATE LOCKED					
FENCE OK					
RESPIRATOR					
GLOVES					
ABSORBENT					

the containers with any accumulated liquids. The buildings are protected from run-on by the building structure and by the perimeter curbing. Spilled or leaked waste will be removed from the containment systems by means of portable pumps and/or the use of absorbent materials depending on the situation.

Incompatible materials are separated in Building TP-451 by a chain-link fence on top of an 8" by 8" concrete curb. In Building TC-863 incompatible materials are separated by both the fence-curb system and an 18" by 24" trench drain with aluminum grating.

5.2.4 Special Requirements for Ignitable or Reactive Waste

Containers holding ignitable or reactive waste must be located at least 50 feet from the facility's property line. The MCB Camp Lejeune container storage facility is located more than 50 feet from the MCB property line.

5.2.5 Special Requirements for Incompatible Wastes

Incompatible wastes, or incompatible wastes and materials must not be placed in the same container. Hazardous waste must not be placed in an unwashed container that previously held an incompatible waste or material.

6.0 SHIPPING AND TRANSPORTATION REQUIREMENTS

The on-site transportation of HW by generators and operators of permitted facilities is not regulated under the HW rules for transporters (40 CFR 263). On-site is defined in the rules as the same or geographically contiguous property which may be divided by public or private right-of-way, provided the entrance and exit between the properties is at a cross-roads intersection and access is by crossing as opposed to going along the right-of-way. The transportation of HW from some areas of Camp Lejeune to the permitted container storage facility will be considered off-site transportation and will be regulated. TMO is authorized by North Carolina DHR to transport HW and will provide transportation services to the MCB Camp Lejeune permitted storage facility. Transportation of HW to commercial permitted storage, treatment, or disposal facilities will be arranged through the Defense Reutilization and Marketing Officer (DRMO).

6.1 On-Site Transportation

Initiation for disposal of HM/HW is the responsibility of the generating work center (or organization with physical custody if different from generating work center). All HM/HW shall be placed in a properly labeled DOT approved container. The generating work center will then submit a Form DD 1348-1 (see Appendix 3-1 for DD 1348-1 instructions) to the cognizant Hazardous Material Disposal Officer (HMDO) who will in turn inspect the HM/HW. Upon inspection, the HMDO will determine the accuracy of the information on the Form DD 1348-1 as well as the suitability of the storage container. The HMDO will initiate corrective procedures as problems arise, soliciting aid from the Preservation, Packaging and Packing (PP&P) Section as needed. When all turn in requirements have been satisfied, the HMDO or his designee will hand carry the Form DD 1348-1 to DRMO for evaluation.

If DRMO determines that it is not responsible for disposal of the HM/HW, the matter will be turned over to the command Hazardous

Material Disposal Coordinator (HMDC) for evaluation. The HMDC will determine what actions must be taken for disposal of the HM/HW in accordance with DOD regulations. HMDC may solicit the help of Natural Resources and Environmental Affairs Division (NREAD) if needed.

If DRMO is responsible for disposal of the HM/HW, DRMO, in cooperation with HMDO, will determine if an on-site inspection by DRMO is needed prior to transportation. An inspection is required when dealing with HW. If no inspection is deemed necessary, the DRMO will accept (but not sign) the Form DD 1348-1 from the HMDO.

If required, DRMO will inspect the HM/HW making any corrections which may be necessary. Upon completion of the inspection, DRMO will sign the Form DD 1348-1 thus accepting responsibility for the HM/HW. DRMO will forward the Form DD 1348-1 to the Traffic Management Officer (TMO) along with a written request for the TMO to arrange for transportation of the HM/HW to a specified DRMO storage facility. The generating unit will store the HM/HW until DRMO arranges for transportation and will conduct all required inspections, notifying DRMO immediately of any discrepancies observed.

Upon receipt of the request from DRMO, TMO will determine if the generation command is capable of legally and safely transporting the HM/HW. If this is determined to be true, TMO will coordinate with DRMO and HMDO for transportation of the HM/HW to the storage facility, informing HMDO of any special conditions and/or procedures.

If it is determined that the generating command is not capable of legally and safely transporting the HM/HW, then TMO will provide a qualified carrier.

If certification by PP&P is required, TMO will make the necessary arrangements.

Upon arrival at the storage facility, DRMO will inspect the HM/HW prior to unloading. If no problems exist, the HM/HW will be unloaded and stored until final disposal is required.

If significant discrepancies are detected, DRMO will refuse to accept the HM/HW and will immediately notify the Director, NREAD and the cognizant HMDC. At this time, DRMO, HMDC and NREAD representatives will immediately decide on what corrective action must be taken. In lieu of this decision, the HM/HW will be returned to the generating work center unless notified otherwise.

6.2 Off-Site Transportation

Shipping and transportation of hazardous waste off-site requires use of personnel trained in the U.S. Department of Transportation (DOT) hazardous materials transportation regulations. Implementation of those regulations requires selection of the proper DOT shipping description; use of a DOT authorized container (or transport vehicle in the case of bulk shipments); use of specific container markings and labels, vehicle loading procedures, placards and manifests.

Appendix 6-1, entitled "Hazardous Waste Shipping Summary", provides shipping and transportation information for the hazardous waste currently generated at Marine Corps Base (MCB) Camp Lejeune as well as some hazardous materials purchased by MCB Camp Lejeune which might become waste as an off-specification product, spill residue, etc.

Similar information must be developed for all additional waste generated. The information needed to satisfy the DOT requirements will be recorded on the applicable Waste Information Document (WID).

6.2.1 Shipping Description

In some cases hazardous wastes must be reclassified or redescribed to satisfy the shipping and transportation require-

ments. For example, the characteristic of ignitability for liquid wastes includes liquids with a flash point less than 140 degrees F; liquids in that category span two DOT hazard classes: Flammable Liquid (flash point less than 100 degrees F) and Combustible Liquid (flash point at or above 100 degrees F but less than 200 degrees F). Similarly some listed wastes must be redescribed since DOT does not recognize all chemical names as proper shipping names.

When working with waste materials assigned an NSN, the Hazardous Materials Information Systems (HMIS) is often a valuable aid in determining the shipping and transportation requirements for a specific waste; in other cases, the DOD Hazardous Materials Information Center (HMIC) may be of assistance. In all cases, TMO must determine the appropriate DOT hazard class, proper shipping name, and UN/NA identification number for each hazardous waste.

When a hazardous waste is also a hazardous substance, TMO and/or DRMO must also determine whether a reportable quantity of the substance is contained within a single container.

6.2.2 DOT Authorized Container

As stated in Section 6.1, all HM/HW must be placed in a DOT approved container. However, prior to loading the HM/HW, an inspection must be conducted by TMO and/or DRMO to verify that the appropriate DOT container (one which is compatible with the waste material) has been used and that the container is in good condition and is not leaking. Also, TMO and/or DRMO must inspect each container to assure that the waste material is properly classified, described, packaged, marked and labeled.

6.2.3 Marking and Labeling of Containers

Each container of hazardous waste must be marked with the applicable proper shipping name, UN/UA identification number, name and address of the consignee/consignor and hazardous waste warning statement. These markings must be applied with an indelible

marker. In the case of DOT specification containers, the specification number, identification of the container manufacturer and, where applicable, identification of the container reconditioner must also be on the drum. Hazardous waste containers must be labeled with the applicable DOT hazardous warning labels. These labels should have been applied by the generating work center, but TMO and/or DRMO must inspect the drums to ensure that the correct label has been used.

6.2.4 Vehicle Loading Procedures

TMO and/or DRMO must ensure that, in cases where a container is being reused for transportation of HM/HW, the container has been held for a least 24 hours after filling and that the containers are transported only by highway.

As stated in Section 6.2.3, each container of HM/HW must be inspected for leakage, proper container usage, markings and labels before it is loaded onto a transport vehicle.

When DOT non-reusable containers (NRC) or single-trip containers (STC) are reused for shipment of hazardous wastes to treatment, storage, and disposal facilities (TSDs), TMO and/or DRMO must arrange for base personnel to load the transport vehicle unless the motor carrier is a contract or private carrier.

In addition to observing the DOT rules for incompatible materials, shipments must be loaded in such a manner to prevent longitudinal and lateral movement and be sufficiently blocked or braced to prevent damage of containers.

6.2.5 Placards

At the time that hazardous wastes are loaded onto a transport vehicle for off-site transportation, TMO must placard their vehicle and DRMO must placard or offer the appropriate placard to a contract or private motor carrier unless the vehicle already bears the appropriate placards. Placards are required for hazardous waste shipments of 1,000 pounds or more which carry any

DOT hazard class other than Other Regulated Material (ORM). The placards must be displayed on each end and each side of the transport vehicle.

6.2.6 Hazardous Waste Manifests

While North Carolina hazardous waste management regulations require the use of a manifest for all off-site shipments of hazardous waste, the blank manifest may be provided by the disposal firm. Generally in the Southeastern states a specific hazardous waste manifest format is not required except for shipments to Alabama. North Carolina now uses the national uniform manifest in lieu of a state-created manifest.

The manifest must contain all of the following information:

- A manifest document number;
- the generator's name, mailing address, telephone number, and EPA identification number;
- the name and EPA identification number of each transporter;
- the name, address, and EPA identification number of the designated facility and alternate facility;
- the name, address, and EPA identification number of a second alternate facility or instructions to return the hazardous waste back to the generator if neither the primary or first alternate facility are available;
- the DOT shipping description of the wastes; i.e., proper shipping name, hazard class, UN/NA number, and other required descriptive data (e.g., "RQ" to indicate a reportable quantity of a hazardous substance);
- the total quantity of each hazardous waste by weight or volume, and the type and number of containers loaded onto or into the transport vehicle;
- the following certification by the generator: "I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway

according to applicable international and national government regulations."

"Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) or RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment."

Figure 6-1 contains an example copy of a manifest which meets the above requirements.

6.2.7 Preparation of Manifest

Caution must be exercised in preparing the manifest to assure that all copies are legible. Entries on the manifest must either be typewritten or printed manually. The following discussion relates to specific entries to be made on the manifest.

Manifest Document Number

An appropriate manifest document number must appear on the hazardous waste manifest. The document number will vary depending on which state the waste will be shipped.

Note that the manifest number must be posted on the hazardous waste label on each container and on the Hazardous Waste Storage Record.

Identification

The EPA identification number, name, mailing address, and telephone number for the generator, each transporter, the primary designated facility, and the alternate facility must be entered on the manifest. In addition, a second alternate facility must

FIGURE 6-1

Please print or type. *(Form designed for use on elite (12-pitch) typewriter.)*

Form Approved. OMB No. 2000-0404. Expires 7-31-86

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Document No. | 2. Page 1 of | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address

4. Generator's Phone ( )

5. Transporter 1 Company Name | 6. US EPA ID Number

7. Transporter 2 Company Name | 8. US EPA ID Number

9. Designated Facility Name and Site Address | 10. US EPA ID Number

A. State Manifest Document Number

B. State Generator's ID

C. State Transporter's ID

D. Transporter's Phone

E. State Transporter's ID

F. Transporter's Phone

G. State Facility's ID

H. Facility's Phone

GENERATOR

11. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.	I. Waste No.
a.					
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.

Printed/Typed Name | Signature | Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Month Day Year

EPA Form 8700-22 (Rev. 4-86) Previous edition is obsolete.

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2000-0404 Expires 7-31-86

UNIFORM HAZARDOUS WASTE MANIFEST *(Continuation Sheet)*

21. Generator's US EPA ID No. | Manifest Document No.

22. Page | Information in the shaded areas is not required by Federal law.

23. Generator's Name

L. State Manifest Document Number

M. State Generator's ID

24. Transporter ____ Company Name | 25. US EPA ID Number

N. State Transporter's ID

O. Transporter's Phone

26. Transporter ____ Company Name | 27. US EPA ID Number

P. State Transporter's ID

Q. Transporter's Phone

28. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	29. Containers No.	Type	30. Total Quantity	31. Unit Wt/Vol	R. Waste No.
a.					
b.					
c.					
d.					
e.					
f.					
g.					
h.					

S. Additional Descriptions for Materials Listed Above

T. Handling Codes for Wastes Listed Above

32. Special Handling Instructions and Additional Information

GENERATOR

TRANSPORTER

33. Transporter ____ Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date (Month, Day, Year)

34. Transporter ____ Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date (Month, Day, Year)

FACILITY

35. Discrepancy Indication Space

EPA Form 8700-22A (3-84)

be named with the above required data provided or the instructions to return the hazardous waste to the generator in the event that the primary or first alternate facility can not receive the waste.

Number of Units and Container Type

Describe the number and type of containers; e.g., 7 drums.

DOT Shipping Name, Class I.D. Number

Enter the proper DOT shipping name, hazard classification, and the applicable UN/NA number for the waste (see Appendix 6-1). Except for "N.O.S.", abbreviations are not authorized.

Total Quantity

Enter the quantity in each container, e.g., 55 gallons.

Weight

Enter the total weight of containers. Note: The annual report must show quantity of waste shipped off-site by weight.

EPA Hazardous Waste Number

Enter the appropriate EPA hazardous waste number (see Appendix 6-1).

Emergency Information

Enter an emergency information telephone number for MCB Camp Lejeune (generator) and for the selected primary disposer and alternate disposer(s).

Generator's Signature

Signature must be handwritten.

Transporter's Signature

Obtain the handwritten signature of the designated transporter.

6.2.8 Manifest Copy Distribution

One copy of the manifest must be retained pending receipt of a signed copy of the manifest from the owner or operator of the designated TSD facility. A copy of the manifest containing the handwritten acceptance signature and date of acceptance by the designated TSD facility must be retained for three years by MCB Camp Lejeune.

6.2.9 Routing and Out-of-State Manifests

Many of the individual states require the use of a manifest issued by that particular state (e.g.,Alabama). This often results in a requirement for two or more manifests to be prepared for a single shipment of hazardous waste that is to transit two or more states. Careful attention to the various states' manifest requirements should be given in selecting the routes for hazardous waste shipments to minimize the paperwork and associated regulatory compliance burdens. Out-of-state hazardous waste shipments should be coordinated with North Carolina DHR and its counterpart in states to be transited to ensure compliance in each state. Manifest copy distribution requirements for specific states may be obtained from Atlantic Division NAVFACENGCOM.

6.2.10 Manifest Follow-Up Requirements

If a copy of the manifest with the handwritten acceptance signature of the owner or operator of the designated TSD facility is not returned within 35 days of the date the waste was shipped, TMO must promptly contact the transporter and/or the owner or operator of the designated facility to determine the status of the waste. Efforts to locate the waste and results of those efforts must be documented.

WRITTEN EXCEPTION REPORTS

If a signed copy of the manifest has not been received from the designated facility within 45 days of the date of acceptance by the transporter, a written exception report must be made. The exception report must include a cover letter explaining the efforts to locate the shipment of waste and the results of those

efforts. A legible copy of the manifest which does not have confirmation must also be included with the exception report. The exception report must be submitted to:

Department of Human Resources
Environmental Health Section
Solid and Hazardous Waste Management Branch
Post Office Box 2091
Raleigh, North Carolina 27602

Copies of all exception reports must be retained for three years.

OUT-OF-STATE SHIPMENTS

In the case of out-of-state shipments of hazardous waste for which a return copy of the manifest is not received within 45 days, NREAD must initiate notification of the appropriate regulatory agency of the state in which the designated facility is located and the appropriate regulatory agency of a state which the shipment may have been delivered. Those actions and the results of those actions are to be included in the written exception report to North Carolina DHR.

APPENDIX 6-1
HAZARDOUS WASTE SHIPPING
SUMMARY

APPENDIX 6-1
HAZARDOUS WASTE SHIPPING SUMMARY

The following table summarizes the information required for completing a hazardous waste manifest. Wastes shown in the table include those identified in the survey and additional wastes which may potentially be generated. A dashed drum is not required. Any strong container may be used. In addition, except for drums marked DOT-E-xxxx where xxxx is a four digit number, wastes may always be returned to the original shipping container for that material.

WASTE MATERIAL	EPA WASTE NUMBER	DOT SHIPPING NAME	HAZARD CLASS	UN/NA NUMBER	DOT LABELS/ MARKINGS	DRUM TYPE
Acetic acid	D002	Waste, Acetic Acid	Corrosive Material	UN2790	Corrosive	17C/E[1] or 34
Acetone	F003	Waste, Acetone	Flammable Liquid	UN1090	Flammable Liquid	17C/E
Activated charcoal	D002	Waste, Corrosive Liquid, n.o.s.	Corrosive Material	UN1760	Corrosive	17C/E[1] or 34
Adhesive	D001	Waste, Adhesive	Flammable Liquid	UN1133	Flammable Liquid	17C/E
Adhesive	D001/F005	Waste, Adhesive	Flammable Liquid	UN1133	Flammable Liquid	17C/E
Adhesive	D001/F003/ F005	Waste, Adhesive	Flammable Liquid	UN1133	Flammable Liquid	17C/E
Adhesive primer	D001	Waste, Flammable Liquid, n.o.s.	Flammable Liquid	UN1993	Flammable Liquid	17C/E
Ammonium hydroxide	D002	Waste, Ammonium Hydroxide	Corrosive Material	NA2672	Corrosive	17C/E[1] or 34
n-Amyl acetate	D001	Waste, Amyl Acetate	Flammable Liquid	UN1104	Flammable Liquid	17C/E
Antiseize compound	D008	Hazardous Waste, Liquid, n.o.s.	ORM-E	NA9189	ORM-E	----
Asphalt adhesive	D001	Waste, Adhesive	Combustible Liquid	UN1133	----	----
Battery acid	D002/D008	Waste, Battery Fluid, Acid	Corrosive Material	UN2796	Corrosive	34
Benzene	U019	Waste, Benzene	Flammable Liquid	UN1114	Flammable Liquid	17C
Benzoin tincture	D001	Waste, Ethyl Alcohol	Flammable Liquid	UN170	Flammable Liquid	17C
Bituminous coating compound	D001	Waste, Combustible Liquid, n.o.s.	Combustible Liquid	NA1993	----	----
Blankarola	D001/F001	Waste, Naphtha Mixture (contains Perchloroethylene)	Flammable Liquid	UN2553	Flammable Liquid	17C/E
Blanket wash	D001/F001	Waste, Flammable Liquid, n.o.s.	Flammable Liquid	UN1993	Flammable Liquid	17C/E
Break-free, CLP	D001	Waste, Combustible Liquid, n.o.s.	Combustible Liquid	NA1993	----	----
Brush plating solution	D002	Sodium Hydroxide, Solution	Corrosive Material	UN1824	Corrosive	17C/E[1] or 34
Calcium hypochlorite	D001	Waste, Calcium Hypochlorite mixture	Oxidizer	UN1748	Oxidizer	17E/H
Carbon removing compound	D002	Waste, Corrosive Liquid, n.o.s.	Corrosive Material	UN1760	Corrosive	17C/E[1] or 34

WASTE MATERIAL	EPA WASTE NUMBER	DOT SHIPPING NAME	HAZARD CLASS	UN/NA NUMBER	DOT LABELS/ MARKINGS	DRUM TYPE
Caustic soda	D002	Waste, Sodium Hydroxide, Dry Solid	Corrosive Material	UN1823	Corrosive	----[2]
Cement solvent	D001	Waste, Flammable Liquid, n.o.s.	Flammable Liquid	UN1993	Flammable Liquid	17C/E
Charcoal lighter	D001	Waste, Flammable Liquid, n.o.s.	Flammable Liquid	UN1993	Flammable Liquid	17C/E
Chlorination kit, water	D001	Waste, Calcium Hypochlorite Mixture	Oxidizer	UN1748	Oxidizer	17E/H
Chloroform	U044	Waste, Chloroform	ORM-A	UN1888	ORM-A	----
Chromic acid	D002/D007	Waste, Chromic Acid Solution	Corrosive Material	UN1755	Corrosive	17E[1] or 34
Cleaning compound	D002	Waste, Compound, Cleaning, Solution	Corrosive Material	NA1760	Corrosive	17E[1] or 34
Cleaning compound, aluminum surface	D001/D002/ D005	Waste, Flammable Liquid, Corrosive, n.o.s.	Flammable Liquid	UN2924	Flammable Liquid Corrosive	17C/E[1] or 34
Cleaning solvent	F002	Waste, Methylene Chloride	ORM-A	UN1593	ORM-A	----
Cleaning solvent, Gentron 113	F001	Waste, ORM-A, n.o.s. (contains trichlorotrifluoroethane)	ORM-A	NA1693	ORM-A	----
Coating compound (zinc chromate & phosphoric acid)	D001/D002/ D007	Waste, Flammable Liquid, Corrosive, n.o.s.	Flammable Liquid	NA2924	Flammable Liquid Corrosive	17C/E[1] or 34
Coating compound (8030006647042)	D001	Waste, Petroleum Distillate	Combustible Liquid	UN1268	----	----
Contact adhesive	D001/F003/ F005	Waste, Adhesive	Flammable Liquid	UN1133	Flammable Liquid	17C/E
Contact cement	D001/F003/ F005	Waste, Cement	Flammable Liquid	NA1133	Flammable Liquid	17C/E
Corrosion preventive	D001/D007	Waste, Combustible Liquid, n.o.s.	Combustible Liquid	NA1993	----	----
Corrosion removing compound	D002	Waste, Phosphoric Acid Solution	Corrosive Material	UN1805	Corrosive	17C/E[1] or 34
Corrosion resistant	D002/D007	Waste, Chromic Acid Solution	Corrosive Material	UN1755	Corrosive	17E[1] or 34
Creosote	U051	Waste, Combustible Liquid, n.o.s.	Combustible Liquid	NA1993	----	----
Cutback asphalt	D001	Waste, Asphalt Cut Back	Combustible Liquid	NA1999	----	----

WASTE MATERIAL	EPA WASTE NUMBER	DOT SHIPPING NAME	HAZARD CLASS	UN/NA NUMBER	DOT LABELS/ MARKINGS	DRUM TYPE
Decontaminating agent (DS-2)	D002	Waste, Corrosive Liquid, n.o.s.	Corrosive Material	UN1760	Corrosive	17C/E[1] or 34
Decontaminating agent (STB)	D002	Waste, Bleaching Powder	ORM-E	UN2208	ORM-E	----
Deglazing solvent	F002	Waste, Methylene Chloride	ORM-A	UN1593	ORM-A	----
Deicing-defrosting	D001	Waste, Flammable Liquid, n.o.s.	Flammable Liquid	UN1993	Flammable Liquid	17C/E
Denatured alcohol	D001	Waste, Denatured Alcohol	Flammable Liquid	NA1986	Flammable Liquid	17C/E
Dent filler (auto body filler) FP 98°F	D001	Waste, Flammable Liquid, n.o.s.	Flammable Liquid	UN1993	Flammable Liquid	17C/E
Dent filler (bondo) FP 100°F	D001	Waste, Combustible Liquid, n.o.s.	Combustible Liquid	NA1993	----	----
Dental amalgam	D009/D011	Hazardous Waste, Solid, n.o.s.	ORM-E	NA9189	ORM-E	----
Dental resin	D001	Waste, Methyl Methacrylate Monomer Inhibited	Flammable Liquid	UN1247	Flammable Liquid	17C/E
Deodorant	U165	Waste, Naphthalene	ORM-A	UN1334	ORM-A	----
Dichloromethane	U080	Waste, Dichloromethane	ORM-A	UN1593	ORM-A	----
Dichromate cleaner	D002/D007	Waste, Compound, Cleaning, Liquid	Corrosive Material	NA1760	Corrosive	17C/E[1] or 34
Diethylenetriamine	D002	Waste, Corrosive Liquid, n.o.s.	Corrosive Material	UN1760	Corrosive	17C/E[1] or 34
Disinfectant	D001/D002	Waste, Flammable Liquid, Corrosive, n.o.s.	Flammable Liquid	UN2924	Flammable Liquid Corrosive	17C/E[1] or 34
Drain cleaner	D002	Waste, Potassium Hydroxide, Dry Solid	Corrosive Material	UN1813	Corrosive	----[2]
Dry cleaning solvent	D001	Waste, Combustible Liquid, n.o.s.	Combustible Liquid	NA1993	----	----
Duplicating fluid	D001	Waste, Flammable Liquid, n.o.s.	Flammable Liquid	UN1993	Flammable Liquid	17C/E
Dursban	D001	Waste, Insecticide, n.o.s.	Flammable Liquid	NA1993	Flammable Liquid	17C/E
Electrolite kit	D002	Waste, Electrolyte (Acid) Battery Fluid	Corrosive Material	UN2796	Corrosive	34
Engine primer fuel	D001	Waste, Flammable Liquid, n.o.s.	Flammabel Liquid	UN1993	Flammable Liquid	17C/E

WASTE MATERIAL	EPA WASTE NUMBER	DOT SHIPPING NAME	HAZARD CLASS	UN/NA NUMBER	DOT LABELS/ MARKINGS	DRUM TYPE
Flight deck compound	D001/F005	Waste, Flammable Liquid, n.o.s. (contains xylene)	Flammable Liquid	UN1993	Flammable Liquid	17C/E
Freon 11	U121	Hazardous Waste, Liquid, n.o.s. (contains trichloromonofluoromethane)	ORM-E	NA9189	ORM-E	----
Fuel inhibitor	D001	Waste, Ethylene Glycol Monoethyl Ether	Combustible Liquid	UN1171	----	----
Genetron 11	U121	Hazardous Waste, Liquid, n.o.s. (contains trichloromonofluoromethane)	ORM-E	NA9189	ORM-E	----
Glacial acetic acid	D002	Waste, Acetic Acid, Glacial	Corrosive Material	UN2789	Corrosive	17C/E[1] or 34
Gum process	D002	Waste, Corrosive Liquid, n.o.s.	Corrosive Material	UN1760	Corrosive	17C/E[1] or 34
Hydrazine	D003	Waste, Hydrazine, Aqueous Solution	Corrosive Material	UN2030	Corrosive	34
Hydrochloric acid	D002	Waste, Hydrochloric Acid	Corrosive Material	UN1789	Corrosive	34
Hydrogen peroxide	D001	Waste, Hydrogen Peroxide Solution	Oxidizer	UN2014	Oxidizer	----[4]
Indicator solution	D001	Waste, Flammable Liquid, n.o.s.	Flammable Liquid	UN1993	Flammable Liquid	17C/E
Insect repellent	D001	Waste, Flammable Liquid, n.o.s.	Flammable Liquid	UN1993	Flammable Liquid	17C/E
Inspection penetrant	D001	Waste, Combustible Liquid, n.o.s.	Combustible Liquid	NA1993	----	----
Insulating compound	D001/F003	Waste, Flammable Liquid, n.o.s.	Flammable Liquid	UN1993	Flammable Liquid	17C/E
Iso-octane	D001	Waste, Isooctane	Flammable Liquid	UN1262	Flammable Liquid	17C/E
Isopropyl alcohol	D001	Waste, Isopropyl Alcohol	Flammable Liquid	UN1219	Flammable Liquid	17C/E
Kerosene	D001	Waste, Kerosene	Combustible Liquid	UN1223	----	----
Layout dye	D001	Waste, Flammable Liquid, n.o.s.	Flammable Liquid	UN1993	Flammable Liquid	17C/E
Lead nitrate	D001	Waste, Lead Nitrate	Oxidizer	UN1469	Oxidizer	----[4]
Lead acid battery	D001/D008	Waste, Battery, Wet, Filled With Acid	Corrosive Material	UN2794	Corrosive	----[5]
Leak detection dye, red	D001/F003	Waste, Flammable Liquid, n.o.s. (contains xylene)	Flammable Liquid	UN1993	Flammable Liquid	17C/E
Lindane	U041	Waste, Lindane	ORM-A	NA2761	ORM-A	----

WASTE MATERIAL	EPA WASTE NUMBER	DOT SHIPPING NAME	HAZARD CLASS	UN/NA NUMBER	DOT LABELS/ MARKINGS	DRUM TYPE
Lindane shampoo	U041	Waste, Lindane	ORM-A	NA2761	ORM-A	----
Liquid cement	D001	Waste, Cement	Flammable Liquid	NA1133	Flammable Liquid	17C/E
Liquid paint	D001	Waste, Paint	Flammable Liquid	UN1263	Flammable Liquid	17C/E
Lithium battery	D003	Waste, Lithium Batteries, For Disposal	ORM-E	----	ORM-E	----
Lithium nitrate	D001	Waste, Nitrate, n.o.s. (contains lithium nitrate)	Oxidizer	NA1477	Oxidizer	----[4]
Lithographic blanket	F001	Waste, Tetrachloroethylene	ORM-A	UN1897	ORM-A	----
Marking stencil ink	D001	Waste, Ink	Combustible Liquid	UN2867	----	----
Mercury	U151	Waste, Mercury, Metallic	ORM-B	NA2809	ORM-B	----
Mercury battery	D009	Hazardous Waste, Solid, n.o.s.	ORM-E	NA9189	ORM-E	----
Methanol	F003	Waste, Methanol	Flammable Liquid	UN1230	Flammable Liquid	17C/E
Methyl ethyl ketone	F005	Waste, Methyl Ethyl Ketone	Flammable Liquid	UN1193	Flammable Liquid	17C/E
Methyl isobutyl ketone	F003	Waste, Flammable Liquid, n.o.s. (contains methyl isobutyl ketone)	Flammable Liquid	UN1993	Flammable Liquid	17C/E
Methylene chloride	F001/F002	Waste, Methylene Chloride	ORM-A	UN1593	ORM-A	----
Muriatic acid	D002	Waste, Muriatic Acid	Corrosive Material	UN1789	Corrosive	34
Naphtha	D001	Waste, Naphtha	Flammable Liquid	UN2553	Flammable Liquid	17C/E
Nickel cadmium battery	D003					
Nitric acid	D002	Waste, Nitric Acid, 40% or less	Corrosive Material	NA1760	Corrosive	----[6]
Nitric acid >40%	D001/D002	Waste, Nitric Acid	Oxidizer	UN2031	Oxidizer	----[6]
Oven cleaner compound	D002	Waste, Compound, Cleaning, Liquid	Corrosive Material	NA1760	Corrosive	17C/E[1] or 34
Paint remover	D002	Waste, Corrosive Liquid, n.o.s.	Corrosive Material	NA1760	Corrosive	17C/E[1] or 34
Paint wastes	D001/D007/ D008	Waste, Paint	Flammable Liquid	UN1263	Flammable Liquid	17C/E; 37A/B/C

WASTE MATERIAL	EPA WASTE NUMBER	DOT SHIPPING NAME	HAZARD CLASS	UN/NA NUMBER	DOT LABELS/ MARKINGS	DRUM TYPE
Paint thinners and solvents (xylene, toluene)	D001/F003/ F005	Waste, Paint Related Material (contains toluene, xylene)	Flammable Liquid	NA1263	Flammable Liquid	17C/E; 37A/B/C
PD-680 6850002649038, 6850002811985 and 6850002858012	D001	Waste, Petroleum Distillates	Combustible Liquid	UN1268	----	----
Pentane	D001	Waste, Pentane	Flammable Liquid	UN1265	Flammable Liquid	17C/E
Photo bleach	D002	Waste, Acetic Acid	Corrosive Material	UN2790	Corrosive	17C/E[1] or 34
Photo chemical kit 6750010186285	D001/F002	Waste, Compound Cleaning, Liquid (contains trichlorotrifluoroethane)	Flammable Liquid	NA1993	Flammable Liquid	17C/E
Photo chemical kit	U122	Waste, Formaldehyde Solution	ORM-A	UN2209	ORM-A	----
Photo cleaner 6750006913822	D002/D007	Waste, Corrosive Liquid, n.o.s. (contains trichloroethane)	Corrosive Material	UN1760	Corrosive	17C/E[1] or 34
Photo cleaner 6750010186285	D001/F001	Waste, Flammable Liquid, n.o.s.	Flammable Liquid	UN1993	Flammable Liquid	17C/E
Photo developer	D011	Hazardous Waste Solid, n.o.s.	ORM-E	NA9189	ORM-E	----
Photo film	D011	Hazardous Waste Solid, n.o.s.	ORM-E	NA9189	ORM-E	----
Plastic polish	D001	Waste, Flammable Liquid, n.o.s.	Flammable Liquid	UN1993	Flammable Liquid	17C/E
Porcelain cleaning solution	D002	Waste, Compound, Cleaning, Liquid	Corrosive Material	NA1760	Corrosive	17C/E[1] or 34
Potassium hydroxide	D002	Waste, Potassium Hydroxide Liquid	Corrosive Material	UN1814	Corrosive	17C/E[1] Or 34
Preservative coating	D001	Waste, Combustible Liquid, n.o.s.	Combustible Liquid	NA1993	----	----
Primer coating	D001	Waste, Paint	Flammable Liquid	UN1263	Flammable Liquid	17C/E; 37A/B/C
Protective coating	D001/F005	Waste, Flammable Liquid, n.o.s. (contains methyl ethyl ketone)	Flammable Liquid	UN1993	Flammable Liquid	17C/E
Pyrethrum insecticide FP 100°-140°F	D001	Waste, Insecticide Liquid, n.o.s.	Combustible Liquid	NA1993	----	----
Repair kit, tentage	D001/F003/ F005	Waste, Flammable Liquid, n.o.s. (contains acetone, toluene, methyl ethyl ketone)	Flammable Liquid	UN1993	Flammable Liquid	17C/E

WASTE MATERIAL	EPA WASTE NUMBER	DOT SHIPPING NAME	HAZARD CLASS	UN/NA NUMBER	DOT LABELS/ MARKINGS	DRUM TYPE
Rifle cleaning compound	D001	Waste, Compound, Cleaning, Liquid	Combustible Liquid	NA1993	----	----
Rubber cement	D001	Waste, Cement, Rubber	Flammable Liquid	NA1133	Flammable Liquid	17C/E
Rust arresting compound	D001/D008	Waste, Paint	Combustible Liquid	UN1263	----	----
Rust removing compound	D002	Waste, Compound, Cleaning, Liquid (contains phosphoric acid)	Corrosive Material	NA1760	Corrosive	17C/E[1] or 34
Scale removing compound	D002	Waste, Compound, Cleaning, Liquid (contains phosphoric acid)	Corrosive Material	NA1760	Corrosive	17C/E[1] or 34
Sealing compound	D001/D005	Waste, Flammable Liquid, n.o.s. (contains methyl ethyl ketone)	Flammable Liquid	UN1993	Flammable Liquid	17C/E
Silver nitrate	D001/D011	Waste, Silver Nitrate	Oxidizer	UN1493	Oxidizer	----[3]
Soda lime	D002	Waste, Soda Lime, Solid	Corrosive Material	UN1907	Corrosive	----[2]
Sodium hypochlorite (not more than 7% available chlorine by weight)	D001	Waste, Hypochlorite Solution	ORM-B	NA1791	ORM-B	----
Solvent cement	D001/F003/ F005	Waste, Flammable Liquid, n.o.s. (contains acetone, toluene, naphtha cut)	Flammable Liquid	UN1993	Flammable Liquid	17C/E
Soap bath, photo	D002	Waste, Acetic Acid	Corrosive Material	UN2790	Corrosive	17C/E[1] or 34
Sulfuric acid	D002	Waste, Sulfuric Acid	Corrosive Material	UN1830	Corrosive	34
Sunscreen	D001	Waste, Flammable Liquid, n.o.s.	Flammable Liquid	UN1993	Flammable Liquid	17C/E
Surface sealer	D001	Waste, Paint	Flammable Liquid	UN1263	Flammable Liquid	17C/E; 37A/B/C
Toluene	F005	Waste, Toluene	Flammable Liquid	UN1294	Flammable Liquid	17C/E
Toner	D001	Waste, Combustible Liquid, n.o.s.	Combustible Liquid	NA1993	----	----
Toner & dispersant	D001	Waste, Combustible Liquid, n.o.s.	Combustible Liquid	NA1993	----	----
1,1,1-Trichloroethane	F002	Waste, 1,1,1-Trichloroethane	ORM-A	UN2831	ORM-A	----
Trichloroethylene	F002	Waste, Trichloroethylene	ORM-A	UN1710	ORM-A	----
Turpentine	D001	Waste, Turpentine	Flammable Liquid	UN1299	Flammable Liquid	17C/E

WASTE MATERIAL	EPA WASTE NUMBER	DOT SHIPPING NAME	HAZARD CLASS	UN/NA NUMBER	DOT LABELS/ MARKINGS	DRUM TYPE
Type cleaner	F002	Waste,1,1,1-Trichloroethane	ORM-A	UN2831	ORM-A	----
Varnish	D001	Waste, Paint	Flammable Liquid	UN1263	Flammable Liquid	17C/E; 37A/B/C
Walkway compound	D001	Waste, Paint	Flammable Liquid	UN1263	Flammable Liquid	17C/E; 37A/B/C
Windshield cleaning compound	D001/F003	Waste, Methanol	Flammable Liquid	UN1230	Flammable Liquid	17C/E
Wood filler	D001/F003/ F005	Waste, Flammable Liquid, n.o.s. (contains acetone, methyl ethyl ketone, toluene)	Flammable Liquid	UN1993	Flammable Liquid	17C/E
Xylene	F003	Waste, Xylene	Flammable Liquid	UN1307	Flammable Liquid	17C/E

[1] Use plastic liner
[2] Use metal drum with plastic liner
[3] See 49 CFR 173.244
[4] Use metal drum
[5] See 49 CFR 173.260(e)
[6] See 49 CFR 173.268

7.0 CONTINGENCY AND EMERGENCY PLANS

All Hazardous Material Disposal Officers (HMDO's) must maintain a copy of the most recent Hazardous Substance Spill Contingency Plan. **NOTE: The basewide Hazardous Substance Spill Contingency Plan is being prepared by EnSafe and will be submitted under separate cover.** In addition, the facility operator of the permitted container storage facility must maintain a copy of the approved contingency plan located in the Part B permit.

8.0 REQUIREMENTS FOR REPORTING AND RECORD KEEPING

The North Carolina/EPA Hazardous Waste Management Rules require that certain records be kept at Marine Corps Base (MCB) Camp Lejeune. These records and retention periods are described below. These records must be made available upon request to EPA or the North Carolina Department of Human Resources (DHR), Solid and Hazardous Waste Management Branch.

8.1 Manifests

A copy of each hazardous waste manifest that contains the acceptance signature of the owner or operator of the designated facility must be kept for at least three years. For all hazardous waste (HW) which will be transported off Base for final disposal, manifests will be kept by DRMO. For HW which will be transported from Marine Corps Air Station (MCAS), New River to the DRMO permitted facility, the completed manifest will be retained by the MCAS Safety Manager. In addition, all manifests accepted from MCAS by the permitted storage facility must be retained by DRMO for at least three years from the date of delivery.

8.2 Exception Reports

An Exception Report must be submitted to the North Carolina DHR if a copy of the manifest with the handwritten signature of the owner or operator of the designated facility is not received within 45 days of the date the waste was accepted by the initial transporter. The Exception Report must include:

(1) A legible copy of the manifest for which the generator does not have confirmation of delivery; and

(2) A cover letter signed by the generator or his authorized representative explaining the efforts taken to locate the hazardous waste and the results of those efforts.

8.3 Waste Analyses

Records of any test results, waste analyses, or other hazardous waste determinations made must be kept for at least three years

from the date that the waste was last sent to on-site or off-site treatment, storage, or disposal.

8.4 Operation Log

The permitted storage facility must maintain an operating log at the facility. The following information must be recorded, as it becomes available, and maintained in the operating record until closure of the facility:

(1) A description and the quantity of each hazardous waste received, and the method(s) and date(s) of its treatment, storage, or disposal at the facility;

(2) The location of each hazardous waste within the facility and the quantity at each location;

(3) Records and results of waste analyses performed in order to obtain all the information which must be known to treat, store, or dispose of the waste;

(4) Summary reports and details of all incidents that require implementing the contingency plan;

(5) Records and results of inspection (these records must only be retained for three years);

(6) A certification by the owner/operator no less often than annually, that the owner/operator has a program in place to reduce the volume and toxicity of HW that he generates to the degree determined by the owner/operator to be economically practicable; and that the proposed method of treatment, storage or disposal is that practicable method currently available to the owner/operator which minimizes the present and future threat to human health and the environment.

8.5 Biennial Reports

MCB

8.5.1 Generator Biennial Report

MCAS New River must prepare and submit a single copy of a biennial report EPA Form 8700-13A) to the North Carolina DHR by March 1 of each even numbered year. The report must cover generator activities during the previous calendar year, and must include the following information:

(1) The EPA identification number, name, and address of the generator;
(2) The calendar year covered by the report;
(3) The EPA identification number, name, and address for each off-site treatment, storage, or disposal facility to which waste was shipped during the year;
(4) The name and EPA identification number of each transporter used during the reporting year;
(5) A description, EPA hazardous waste number, DOT hazard class, and quantity of each hazardous waste shipped off-site. This information must be listed by EPA identification number of each off-site facility to which waste was shipped;
(6) A description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated;
(7) A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for years prior to 1984;
(8) The certification signed by the generator or authorized representative.

8.5.2 TSD Biennial Report

Generators who treat, store, or dispose of hazardous wastes on-site must submit a biennial report on EPA form 8700-13B to the North Carolina DHR by March 1 of each even numbered year. This report is applicable to MCB Camp Lejeune since MCB Camp Lejeune is a generator of hazardous waste and has a permit to store hazardous waste on site. The report must cover facility activities during the previous calendar year and must include:

(1) The EPA identification number, name, and address of the facility;
(2) The calendar year covered by the report;
(3) For off-site facilities, the EPA identification number of each hazardous waste generator from which the facility received a hazardous waste during the year;

(4) A description and the quantity of each hazardous waste the facility received during the year. For off-site facilities, this information must be listed by EPA identification number of each generator;

(5) The method of treatment, storage, or disposal for each hazardous waste; and

(6) The certification signed by the owner or operator of the facility or his authorized representative.

8.6 Navy Report

An annual report is required by Appendix F of OPNAVINST 5090.1. This report must be submitted by February 1 of each year.

8.7 Training Records

Training records must include the following information:

(1) The job title and a written job description for each position related to hazardous waste management and the name of the person filling the job;

(2) A written description of the type and amount of both initial and continuing training that will be given to each person filling a position listed in (1) above; and

(3) Documentation that the training or job experience required has been given to, and completed by, persons listed in (1) above.

Training records for current personnel must be kept as permanent records. Training records on former employees must be kept for at least five years from the date the employee last worked at MCB Camp Lejeune. Personnel training records may accompany personnel transferred within the Marine Corps.

Hazardous waste training records will be maintained on station for all hazardous waste activities, including records for generating work centers.

9.0 PERSONNEL TRAINING

Hazardous waste handling personnel at Marine Corps Base (MCB) Camp Lejeune must successfully complete a training program that teaches them to perform their duties in a way that ensures compliance with the HM/HW Management Plan. Personnel must be trained within six months after assignment to a position that includes duties involving hazardous waste and may not work unsupervised until they have completed the training. Additionally, personnel with duties that involve hazardous waste must take part in an annual review of the initial training.

Employees requiring training include:

* Hazardous Material Disposal Coordinators (HMDC's)
* Hazardous Material Disposal Officers (HMDO's)
* Hazardous Waste Handlers
* Defense Reutilization and Marketing Officer (DRMO)
* DRMO Facility Operator
* Deputy Traffic Management Officer
* Base Fire Chief
* Emergency Responders

9.1 Position Titles and Responsibilities

POSITION TITLE: Hazardous Material Disposal Coordinators

RESPONSIBILITIES:

* Serve as command point of contact on matters pertaining to implementation of the HM/HW Management Plan;
* Monitor the implementation of the HM/HW Management Plan and initiate corrective action relative to discrepancies within the HMDC's command;
* Coordinate the identification and funding of HW related personnel training requirements of organizations within the HMDC's command in cooperation with the cognizant section of the office of the Assistant Chief of Staff, Manpower, MCB Camp Lejeune;

* Identify all HW generating work centers and storage areas within the HMDC's cognizance; and
* Process Waste Information Documents (WID's) for all generating work centers within the HMDC's cognizance.

POSITION TITLE: Hazardous Material Disposal Officers

RESPONSIBILITIES:

* Receive and process HM/HW turn-in documents;
* Monitor adequacy of HW training and identify HW management training need which are beyond capability of the HMDO's command to provide;
* Promote the reduction of the volume and toxicity of HW produced by HW generating work centers within the HMDO's cognizance;
* Complete and submit WID's to the appropriate HMDC;
* Complete and submit Waste Characterization Requests (WCR's) to Natural Resources and Environmental Affairs Division (NREAD);
* Maintain inspection records at Temporary Collection Areas (TCA's);
* Maintain TCA's in conformance with the HM/HW Management Plan; and
* Maintain Hazardous Waste Generation Summary Records at the generating work centers.

POSITION TITLE: Hazardous Waste Handlers

RESPONSIBILITIES:

* Moves hazardous waste containers under supervision of the HMDO, HMDC, TMO, or DRMO Facility Operator
* Notifies Emergency Coordinator in the event of an emergency; and
* Accepts instruction of HMDO, HMDC, TMO, and/or DRMO Facility Operator.

POSITION TITLE: Defense Reutilization and Marketing Officer

RESPONSIBILITIES:

* Operate the permitted container storage facility in accordance with the North Carolina Part B permit;
* Provide HM and HW disposal services to organizations within the MCB Camp Lejeune and MCAS complex in accordance with DOD and related state and federal regulations;
* Receive and process HM/HW turn-in documents in a timely manner and provide prompt notification to HMDO's of any document not satisfying DRMO requirements or including HM or HW which DRMO is not accountable for storage and/or disposal;
* Maintain the records and reports in accordance with Section 8.0 of the plan; and
* Keep HMDC's, HMDO's, and other cognizant officers informed of DRMO policies and procedures which affect the implementation of the HM/HW program.

POSITION TITLE: DRMO Facility Operator

RESPONSIBILITIES:

* Operates HM/HW handling equipment;
* Reviews all incoming HM/HW for proper identification and labeling;
* Assigns each container to the proper storage location;
* Supervises handling of HM/HW within the permitted facility; and
* Notifies Base Fire Prevention Division in emergency situations.

POSITION TITLE: Deputy Traffic Management Officer

RESPONSIBILITIES:

* Monitor all HW transportation for compliance with the state and federal regulations; and

* Provide transportation services for MCAS to the permitted storage facility;
* Provide or monitor transportation from the generating work centers to the permitted storage facility; and
* Maintain Transportation related recordkeeping required for implementation of the HM/HW Management Plan.

POSITION TITLE: Base Fire Chief

RESPONSIBILITIES:

* Provide HM/HW spill and related emergency services; and
* Provide routine inspections of all areas where HM/HW are stored and handled, and initiate corrective action whenever discrepancies are identified.

POSITION TITLE: Emergency Responders

RESPONSIBILITIES:

Provide response to hazardous waste incidents requiring Contingency Plan implementation.

9.2 Training Content

9.2.1 HMDC's

Training for the HMDC's will be conducted by NREAD and will consist of classroom instruction. The basis for training will be the Hazardous Waste Facility Operators' course which is a four-day course developed by the U.S. Navy. The course syllabus is shown in Table 9-1. The course will be adapted to include site-specific information.

9.2.2 HMDO's

Training for the HMDO's will be conducted by NREAD and is a combination of discussion, site surveys, and hands-on demonstration. Table 9-2 presents the syllabus to be used for this training program.

TABLE 9-1

COURSE SYLLABUS
HAZARDOUS WASTE FACILITY OPERATORS' COURSE

INTRODUCTION
- A. Clean Water Act
- B. Clean Air Act
- C. Transportation Safety Act
- D. Occupational Safety and Health Act (OSHA)
- E. Toxic Substances Control Act (TSCA)
- F. Resource Conservation and Recovery Act (RCRA)
- G. Comprehensive Environmental Response, Compensation, and Liability Act (SUPERFUND)
- H. State Regulations
- I. Local Regulations

KEY ELEMENTS OF RCRA
- A. Definition of a Hazardous Waste
- B. Manifest System for Tracking Hazardous Waste from Cradle to Grave
- C. Standards for Generators and Transporters
- D. Permits for Treatment, Storage, and Disposal Facilities
- E. Requirements for State Programs
- F. Requirements for Waste Analysis, Facility Inspection, Personnel Training, Emergency and Contingency, and Closure Plans

NAVY DIRECTIVES AND POLICY
- A. OPNAVINST 5090.1

RESPONSIBILITIES
- A. Commanding Officer
- B. Supply Officer
- C. Supervisory Personnel
- D. Hazardous Material/Environmental Coordinator

HM/HW IDENTIFICATION, SOURCES
- A. Definitions
- B. Hazardous Waste Inventory
- C. HW Found in significant quantities
- D. Significantly Hazardous Substances
- E. Bulk Waste
- F. HMTA
- G. Overhaul and Decomissioning
- H. PCBs
- I. NRP
- J. Ordnance Waste
- K. Consolidated Hazardous Item List
- L. Hazardous Material Information Systems (HMIS)
- M. Hazardous Material Safety Data Sheets
- N. Chmical Hazardous Response Information System (CHRIS)
- O. OHMTADS
- P. CHEMTREC - (800-424-9300)

TABLE 9-1 (CONTINUED)

COURSE SYLLABUS
HAZARDOUS WASTE FACILITY OPERATORS' COURSE

COLLECTING, HANDLING, AND STORAGE PROCEDURES
- A. Introduction/General
- B. Proper Collection, Handling, Storing
- C. Waste Generation Locations
- D. Prevention of Spills
- E. Solvents (including organic solvents)
- F. Plastics (problems in case of fire)
- G. Metals
- H. Significantly Toxic Metals
- I. Asbestos
- J. Safety Practices and Protective Clothing
- K. Fire Classifications

LABELING AND CONTAINERIZATION
- A. Department of Transportation Labels
- B. Chil Label
- C. HW Labels
- D. Types of Containers

FACILITIES AND SERVICES DIVISION RESPONSIBILITY
- A. Types of Treatment Systems
- B. Disposal Systems
- C. Manifest Systems

SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC)

SPILL CONTINGENCY PLANNING
- A. Definition of SPCC/Spill Contingency Plan
- B. Responsibilities
- C. Objectives of Plan
- D. Spill Clean-up Materials (small scale)
- E. Spill Response Contacts
- F. Spill Response Actions (small and large scale)
- G. Knowledge of Spilled Material
- H. Booms, Skimmers, Pumps, Dredging
- I. Examples of Good vs Poor Response Actions
- J. U.S. Navy Discharge Restrictions
- K. Communications in an Emergency

ON-SITE TRAINING PROCEDURES

TABLE 9-2

HMDO TRAINING

INTRODUCTION

EPA/NORTH CAROLINA HAZARDOUS WASTE REGULATIONS

WASTE ANALYSIS PLAN

REQUIREMENTS FOR GENERATORS

TEMPORARY STORAGE REQUIREMENTS

SHIPPING AND TRANSPORTATION REQUIREMENTS

EMERGENCY PROCEDURES

RECORD KEEPING AND REPORTING

9.2.3 Hazardous Waste Handlers

The HMDO's will be responsible for providing on-the-job training for the hazardous waste handlers. Hazardous waste handlers must be familiar with the handling practices which will minimize the possibility of fires, explosions, and releases of hazardous wastes; labeling and identification of hazardous waste; inspection requirements; and in the use of safety and emergency response equipment.

9.2.4 DRMO and DRMO Facility Operator

Training for the DRMO and the DRMO Facility Operator will consist of the Hazardous Waste Facility Operators' Course Trainers Workshop conducted by NEESA.

9.2.6 Deputy Traffic Management Officer

The Deputy Traffic Management Officer will attend the Naval Energy and Environmental Support Activity (NEESA) training program for hazardous materials certifiers, or other appropriate course.

9.2.7 Base Fire Chief

All fire fighting personnel at MCB Camp Lejeune receive extensive fire fighting training equivalent to NFPA requirements and continuing training on a monthly basis.

9.2.8 Emergency Responders

The Base Fire Protection Division is primarily responsible for coordinating response to emergencies. He is responsible for instructing other personnel in response to emergencies. The instruction should include:

* Emergency communications and alarm systems;
* Procedures for response to liquid spills;
* Power failure response procedures;
* Evacuation routes and procedures;
* Response to fires and explosions;
* Decontamination procedures; and
* Procedures for removal and containerization of

released material, contaminated soil or surface water, or any other material that results from a release, fire, or explosion.