Silver Recovery Training

Environmental Management Department
Environmental Compliance Division
Marine Corps Base Camp Lejeune

Hazard Communication Standard Requirements

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HAZARD COMMUNICATION STANDARD REQUIREMENTS

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HAZARD COMMUNICATION STANDARD REQUIREMENTS

SECTION 1: OBJECTIVES

TERMINAL LEARNING OBJECTIVE. Demonstrate the knowledge and skills required to establish a compliant and functional Hazard Communication Program in accordance with Federal Occupational Safety and Health Act (OSHA), Department of Defense (DoD) and Marine Corps Base Camp Lejeune requirements.

ENABLING LEARNING OBJECTIVES (ELO). Given an open manual examination identify, describe, define, or otherwise explain the following:

1. Required local information prior to establishing the Hazard Communication Program.

2. The required information contained in the Hazardous Material Inventory List (HMIL).

3. How to acquire a missing MSDS.

4. Four requirements of the Hazard Communication Program.

5. The purpose of the MSDS.

6. Elements of the hazard information section of the employee information and training requirement.

7. Elements of the hazard training section of the employee information and training requirement.

HAZARD COMMUNICATION STANDARD REQUIREMENTS

SECTION 2:

1. **CHEMICALS IN THE WORKPLACE.** About 32 million workers are potentially exposed to one or more chemical hazards. There are an estimated 600,000 existing chemical products, and hundreds of new ones introduced annually. This poses a serious problem for exposed workers and their employers.

Chemical exposure may cause or contribute to many serious health effects such as heart ailments, kidney and lung damage, sterility, cancer, burns, and rashes. Some chemicals may also be safety hazards and have the potential to cause fires and explosions and other serious accidents.

Because of the seriousness of these safety and health problems, and because many employers and employees know little or nothing about them, the Occupational Safety and Health Administration (OSHA) issued a rule called *"Hazard Communication."* The basic goal of the standard is to be sure employers and employees know about work hazards and how to protect themselves; this should help to reduce the incidence of chemical source illness and injuries.

The hazard communication standard establishes uniform requirements to ensure that the hazards of all chemicals imported into, produced, or used in the United States workplaces are evaluated, and that this hazard information is transmitted to affected employers and exposed employees.

Chemical manufacturers and importers must convey the hazard information they learn from their evaluations to downstream employers by means of labels on containers and Material Safety Data Sheets (MSDS's). In addition, all covered employers must have a hazard communication program to get this information to their employees through labels on containers, MSDS's, and training.

This program ensures that all employers receive the information they need to inform and train their employees properly and to design and put in place employee protection programs. It also provides necessary hazard information to employees so they can participate in, and support, the protective measures in place at their workplaces.

The hazard communication standard is different from other OSHA health rules in that it covers all hazardous chemicals. The rule also incorporates a "downstream flow of information," which means that producers of chemicals have the primary responsibility for generating and disseminating information, whereas users of chemicals must obtain the information and transmit it to their employees. The hazard communication program flow is designed to work in the following manner:

HAZARD COMMUNICATION PROGRAM FLOW	
Chemical Manufacturers/ Importers	Determine the hazards of each product.
Chemical Manufacturers/ Importers/Distributors	Communicate the hazard information and associated protective measures downstream to customers through labels and MSDS's.
Employers	1. Identify and list hazardous chemicals in their workplaces. 2. Obtain MSDS's and labels for each hazardous chemical. 3. Develop and implement a written hazard communication program including labels, MSDS's and employee training on the list of chemicals in the workplace, MSDS, and label information. 4. Communicate hazard information to their employees through labels, MSDS's and formal training.

PREPARATION FOR ESTABLISHING THE HAZARD COMMUNICATION PROGRAM. ***Prior to a establishing a hazard communication program, a unit must have an accurate inventory (Hazardous Material Inventory List) of all the chemicals used and maintained in the workplace (ELO 1).*** Once the HMIL is established in accordance with this paragraph, the unit must ensure accurate MSDS's are maintained for every chemical in the workplace.

1. **ESTABLISHING THE HAZARDOUS MATERIAL INVENTORY LIST (HMIL)**

The HMIL will be comprehensive and must include **(ELO 2)**:

a. Complete name of hazardous chemical.
b. Name of manufacturer or distributor.
c. National Stock Number (NSN) or identification number.
d. Quantity Maintained on Hand.

2. **MATERIAL SAFETY DATA SHEET (MSDS) DETERMINATION.** The responsible individual should verify the list against the on-hand MSDS file. If any MSDS's are missing, a current MSDS should be acquired either by contacting the manufacturer directly, printing a copy from the Hazardous Material Information System (HMIS), or by accessing the exact chemical and manufacturer from a variety of search engines on the Internet® ***(ELO 3).***

http://siri.uvm.edu/msds/msds/

http://msds.pdc.cornell.edu/

REQUIREMENTS OF THE HAZARD COMMUNICATION PROGRAM. ***A compliant hazard communication program requires four essential components:*** labels and other forms of warning, MSDS'S, employee training and information, and the written hazard communication program ***(ELO 4).***

1. **LABELS AND OTHER FORMS OF WARNING.** Containers of hazardous materials in the workplace must be labeled, tagged, or marked with the following information:

a. **CHEMICAL IDENTITY** - trade name or synonym.
b. **PHYSICAL HAZARDS** - a brief statement of the hazardous effects of the chemical.
c. **MANUFACTURER'S NAME AND ADDRESS**.

The manufacturer, importer, or distributor is responsible for applying the required labels to the containers of hazardous material. **If the material is transferred from the original container into an approved container, the responsibility falls on the using unit to label that container with the requirements listed above**. Although those containers of hazardous material, which will be of immediate use, are subject to the portable container exemption, it is highly recommended that every container be properly labeled, as a common inspection violation at MCB Camp Lejeune is UNMARKED SECONDARY CHEMICAL CONTAINERS.

2. **MATERIAL SAFETY DATA SHEET (MSDS)**

a. **PURPOSE.** The purpose of the MSDS is to provide detailed information on each hazardous chemical, including its potential hazardous effects, its physical and chemical characteristics, and recommendations for appropriate protective measures ***(ELO 5).*** The manufacturer of hazardous chemicals is required to develop and provide an MSDS for each hazardous chemical produced at the time of initial shipment. The distributor is also responsible for ensuring that MSDS's are provided to the purchaser/user of those hazardous chemicals. Units must have an MSDS for every chemical used in the workplace as part of the hazard communication program.

b. **ACCESSIBILITY.** MSDS's must be readily acceptable to employees when they are in their work areas. Acceptable methods for retaining MSDS's in the workplace are the MSDS File and the HMIS.

(1) MSDS File. Generally, maintained in a common area in a highly visible protective casing.

(2) HMIS. The HMIS although legally acceptable is not the most user-friendly method of maintaining local MSDS's.

3. **EMPLOYEE INFORMATION AND TRAINING.** Employers must establish an information and training program for every employee who may be exposed to hazardous chemicals when working. Employees must be provided information and trained *prior* to initial assignment to work with a hazardous chemical, and whenever the hazards change. Information and training may be done either by individual chemical, or by categories of hazards. Record of training contents and personnel trained should be maintained by the unit Environmental Compliance Officer or Safety Officer.

a. **HAZARD INFORMATION.** At a minimum the hazard information portion of the unit's written HAZCOM Program will include ***(ELO 6):***

(1) The hazard communication standard and its requirements.
(2) The components of the hazard communication program in the employees' workplace.
(3) Operations in work areas where hazardous chemicals are present.
(4) Where the employer will keep the written communication program, lists of hazardous chemicals, and the required MSDS's.

b. **HAZARD TRAINING.** At a minimum the training portion of the unit's written HAZCOM Program will include ***(ELO 7):***

(1) How the hazard communication program is implemented in the workplace.
(2) How to read and interpret information on labels and the MSDS.
(3) How employees can obtain and use the available hazard information.
(4) Hazards of chemicals in the work area.
(5) Measures employees can take to protect themselves from the hazards (PPE).
(6) Specific procedures put into effect by the employer to provide protection such as engineered controls (exhaust hoods, climate control, etc.).
(7) Methods and observations workers can use to detect the presence of hazard chemicals to which they may be exposed.

4. **WRITTEN HAZARD COMMUNICATION PROGRAM.** Employers must develop, implement, and maintain at the workplace a written, comprehensive hazard communication program that includes provisions for container labeling, collection and availability of MSDS's, and an employee information and training program. The program must also contain list of chemicals in each work area, the means the employer will use to inform employees of the hazards of non-routine tasks, and the hazards associated with chemicals in unlabeled pipes. Hazardous chemical information must also be made available to non-organic personnel such as contractors conducting work at each site.

REQUIRED INFORMATION IN THE MATERIAL SAFETY DATA SHEET. The Material Safety Data Sheet is a manufacturer produced, chemical specific technical bulletin. The MSDS can prevent injury and harm to the handlers and to the environment. By law, MSDS' must be posted in an accessible place to all personnel that use or handle chemicals in the workplace. The MSDS provides specific, detailed information on the following information:

THE CHEMICAL AND COMMON NAME(S) OF all ingredients which have been determined to present a physical hazard when present in the mixture.

PHYSICAL AND CHEMICAL CHARACTERISTICS of the hazardous chemical (such as vapor pressure, flash point).

THE PHYSICAL HAZARDS of the hazardous chemical, including the potential for fire, explosion, and reactivity.

THE PRIMARY ROUTE(S) OF ENTRY. To include absorption, inhalation, ingestion, or injection.

a. **SKIN ABSORPTION/INJECTION.** The skin is the body's first line of defense against foreign materials. Foreign material may enter the body through the skin and eyes by either ***absorption*** or ***injection***. Some chemicals have characteristics against which the skin provides no barrier and can be directly absorbed. Sharp objects contaminated with harmful chemicals may pierce the skin, injecting the material through the skin into the bloodstream. Wearing protective clothing over exposed skin helps avoid skin exposure. If skin exposure does occur, the affected area should be washed with water, or addressed according to manufacturers material safety data sheet or medical guidance. Sometimes a detergent may be needed to dissolve a chemical that normally does not dissolve in water. Care should be taken in selecting detergent or soap if the skin has been injured since some cleaning compounds are abrasive or corrosive.

Toxic chemicals can also be absorbed through the eyes. Chemicals splashed or sprayed into the eyes can result in blindness. The blood vessels on the eye's surface will quickly carry these chemicals into the bloodstream. Splashing hazardous liquids into your eyes or rubbing your eyes after your hands have been contaminated can lead to eye absorption of hazardous chemicals. Eye protection should always be worn when working with hazardous materials.

b. **INHALATION.** Inhalation is the most efficient way of transporting hazardous material into the body. The surface area of the lungs averages 70 square meters on a human, all of which is exposed, compared to only about 2 square meters of skin surface area. Hazardous materials may be in the air in the form of particulates, vapors, or gases. Even in small concentrations there is ample opportunity for absorption. When inhaled, a hazardous chemical is transferred into the bloodstream similarly to oxygen. In a contaminated environment, the use of protective breathing equipment is the way to avoid inhalation of hazardous materials. Airborne contaminants result from many types of activities including cutting, sanding, cleaning, welding, painting, sweeping and soldering. Dust, fumes, vapors, mists, and gases represent the more common inhalation hazards.

c. **INGESTION.** Although less common in the workplace ingested chemicals enter the body through the mouth and are absorbed into the bloodstream through the lining of the digestive tract. If the food we eat or the liquids we drink are contaminated with hazardous chemicals, they may enter the bloodstream along with digested food. In a warehouse, the transfer of hazardous materials to food may occur by smoking or eating foods in areas where dusts of hazardous materials are in the air or by handling food with contaminated hands. Even licking your lips may allow exposure. Good housekeeping and personal hygiene is the best way to avoid exposure through ingestion.

OSHA PERMISSIBLE EXPOSURE LIMIT. ACGIH Threshold Limit Value, and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the material safety data sheet, where available.

POTENTIAL CARCINOGEN. Whether the hazardous chemical is listed in the National Toxicology Program (NTP) Annual Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest editions), or by OSHA.

SAFE HANDLING MEASURES. Any generally applicable precautions for safe handling and which are known to the chemical manufacturer, importer or employer preparing the material safety data sheet, including appropriate hygienic practices, protective measures during repair and maintenance of contaminated equipment, and procedures for clean-up of spills and leaks.

CONTROL MEASURES. Any generally applicable control measures which are known to the chemical manufacturer, importer or employer preparing the material safety data sheet, such as appropriate engineering controls, work practices, or personal protective equipment.

EMERGENCY AND FIRST AID PROCEDURES.

DATE OF PREPARATION of the material safety data sheet or the last change to it.

NAME, ADDRESS, AND TELEPHONE NUMBER of the chemical manufacturer, importer, employer or other responsible party preparing or distributing the material safety data sheet, who can provide additional information on the hazardous chemical and appropriate emergency procedures, if necessary.

UNDERSTANDING THE MATERIAL SAFETY DATA SHEET. Although 29 CFR 1910.1200 mandates the information above be included in every Material Safety Data Sheet. The regulation does not require the information to be presented in any specific order or format. Generally, the required information is divided into nine or more sections.

MATERIAL SAFETY DATA SHEET BREAKDOWN BY SECTION	
SECTION	**DESCRIPTION**
1	Product Identification.
2	Hazardous Ingredients.
3	Physical Data.
4	Fire and Explosion Data.
5	Health Hazard Information.
6	Reactivity Data.
7	Spill or Leak Procedures.
8	Special Protection Information.
9	Special Precautions{
10	Transportation Information{

1 Note: Often Sections 9 and 10 are similar in content, i.e. hazard classification information, transportation and storage, and handling and storage information can be located in either section.

2 See note 1.

CONCLUSION. The contents of this chapter allows for the effective management and maintenance of the unit's Hazard Communication Program. By following the requirements of this chapter work related chemical illnesses and injuries will be reduced.

HAZARD COMMUNICATION STANDARD REQUIREMENTS

[EXERPTED FROM BO 5100.20A]

EXAMPLE OF A WRITTEN HAZARD COMMUNICATION PROGRAM

1. GENERAL INFORMATION

To comply with 29 CFR 1910.1200 Hazard Communication, the following written Hazard Communication Program has been established for ___(WORK CENTER OR OPERATION)___.

The written program will be available in the_____(LOCATION)___.for review by any interested employee.

a. CONTAINER LABELING

The_____(PERSON/POSITION)_____ shall verify that all containers received for use will:

- † Be clearly labeled as to the identity of the hazardous chemical(s).
- † Note the appropriate hazard warning.
- † List the name and address of the manufacturer.

The _____(PERSON/POSITION)_____ in each section will ensure that all secondary containers are labeled with an extra copy of the manufacturers label or with a generic label which identifies the material, list the appropriate hazard warnings and identifies the target organs if appropriate. Labels for items with National Stock Numbers (NSNs) can be acquired from the Hazardous Material Information System (HMIS).

The _____(PERSON/POSITION)_____ will review the work place labeling system and update as required.

b. MATERIAL SAFETY DATA SHEETS (MSDS)

The_____(PERSON/POSITION)_____ will be responsible for obtaining and maintaining the data the data sheet system for the work center.

The _____(PERSON/POSITION)_____ will review incoming data sheets for new and significant health and safety information. The responsible individual will ensure that any new information is passed on to the affected employees.

Copies of MSDS's for all hazardous chemicals to which employees may be exposed will be kept in _____(LOCATION)___.

MSDSs will be available to all employees in their work area for review during each work shift. If MSDSs are not available or new chemicals in use do not have MSDSs, immediately contact: (PERSON/POSITION)_____ .

c. EMPLOYEE TRAINING AND INFORMATION

The _____(PERSON/POSITION)_____ is responsible for the employee training program, SNM will ensure that all elements specified below are carried out. Prior to starting work, each new employee will attend a health and safety orientation and will receive information and training on the following:

(1) An overview of the requirements contained in the Hazard Communication Standard. (29 CFR 1910.1200)

(2) Chemicals present in their workplace operations.

(3) Location and availability of unit's written Hazard Communication Program.

(4) Physical and health effects of the hazardous chemicals.

(5) Observation techniques used to determine the presence or release of hazardous chemicals in the workplace.

(6) Mitigating exposure through work practices and protective personal protective equipment.

(7) Emergency procedures in the event personnel are exposed to chemicals present in the workplace.

(8) Proper interpretation of the MSDS and hazard warning labels.

(9) Location of the MSDS file and Hazardous Material Inventory List (HMIL).

(~~OPTIONAL~~): After attending the training class, each employee will sign a form verifying their attendance as well as understood the policies set forth.

Prior to a new chemical being introduced to the workplace, every impacted employee will be given information as outlined above. The _____(PERSON/POSITION)_____ is responsible for ensuring that MSDSs for the new chemical(s) are available.

2. LIST OF HAZARDOUS CHEMICALS

A list of all known Hazardous Chemicals is located at _____(LOCATION)_____. Further information on each noted chemical can be obtained by reviewing the MSDS located at (LOCATION)___.

3. HAZARDOUS NON-ROUTINE TASKS

Periodically, employees are required to perform non-routine tasks. Prior to starting work on such projects, every employee will be given information by their supervisor about hazardous chemicals to which they may be exposed during such activity.

This information will include:

a. Specific chemical hazards.
b. Protective/safety measures the employee can take.
c. Measures the workplace has taken to lessen the hazards, to include ventilation, respirators, presence of another employee, and emergency procedures.

Examples of non-routine tasks performed in this workplace are:

Task	Hazardous Chemical(s)

4. UNLABELED PIPES

The below listed chemicals are stored or transited through unlabeled pipes in this workplace. In the event of rupture, leakage or fire, the following action by personnel will be taken:

5. INFORMING OUTSIDE EMPLOYEES/CONTRACTORS

It is the responsibility of _____(PERSON/POSITION)_____ to provide outside employees/ contractors the following information:

a. Hazardous chemicals to which they may be exposed while on the job site.
b. Precautions the contractors may take to lessen the possibility of exposure by usage of appropriate protective measures.

It is the responsibility of _____(PERSON/POSITION)_____ for contacting the contractor before work is started and to gather and disseminate information concerning chemical hazards that the contractor is bringing into the workplace.

EASTMAN KODAK -- 158 2352 KODAK EXTACOLOR RA BLEACH FIXER - RA-4; - BLEACH, PHOTOG
MATERIAL SAFETY DATA SHEET
NSN: 6750013765884
Manufacturer's CAGE: 19139
Part No. Indicator: B
Part Number/Trade Name: 158 2352 KODAK EXTACOLOR RA BLEACH FIXER / RA-4;
P/N = B

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General Information

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Item Name: BLEACH, PHOTOGRAPHIC
Company's Name: EASTMAN KODAK COMPANY
Company's Street: 343 STATE STREET
Company's City: ROCHESTER
Company's State: NY
Company's Country: US
Company's Zip Code: 14650
Company's Emerg Ph #: 716-722-5151
Company's Info Ph #: 716-477-3194 MSDS :800- 242-2424
Distributor/Vendor # 1: EASTMAN KODAK COMPANY, EASTERN REGIONAL
Distributor/Vendor # 1 Cage: 5K871
Record No. For Safety Entry: 002
Tot Safety Entries This Stk#: 003
Status: SE
Date MSDS Prepared: 05JUN97
Safety Data Review Date: 26FEB98
Supply Item Manager: CX
MSDS Serial Number: BWRZD
Hazard Characteristic Code: C3
Unit Of Issue: BT
Unit Of Issue Container Qty: MAKES 1 GAL
Type Of Container: UNKNOWN
Net Unit Weight: UNKNOWN

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Ingredients/Identity Information

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Proprietary: NO
Ingredient: WATER
Ingredient Sequence Number: 01
Percent: 75-80
NIOSH (RTECS) Number: ZC0110000
CAS Number: 7732-18-5
OSHA PEL: NOT ESTABLISHED
ACGIH TLV: NOT ESTABLISHED
Other Recommended Limit: NONE RECOMMENDED

Proprietary: NO
Ingredient: FERRIC AMMONIUM ETHYLENEDIAMINETETRAACETIC ACID
Ingredient Sequence Number: 02
Percent: 15-20
NIOSH (RTECS) Number: 1001409FA
CAS Number: 21265-50-9
OSHA PEL: NOT ESTABLISHED
ACGIH TLV: NOT ESTABLISHED
Other Recommended Limit: NONE RECOMMENDED

Proprietary: NO
Ingredient: ACETIC ACID (SARA III)
Ingredient Sequence Number: 03
Percent: 1-5
NIOSH (RTECS) Number: AF1225000
CAS Number: 64-19-7
OSHA PEL: 10 PPM

ACGIH TLV: 10 PPM/15 STEL; 9394
Other Recommended Limit: NONE RECOMMENDED

Physical/Chemical Characteristics

Appearance And Odor: BROWN LIQUID WITH A SLIGHT AMMONIA ODOR.
Boiling Point: >212F,>100C
Melting Point: NOT GIVEN
Vapor Pressure (MM Hg/70 F): 18
Vapor Density (Air=1): 0.6
Specific Gravity: 1.12
Decomposition Temperature: NOT GIVEN
Evaporation Rate And Ref: NOT GIVEN
Solubility In Water: COMPLETE
Percent Volatiles By Volume: 75-80
pH: 6.2
Corrosion Rate (IPY): UNKNOWN

Fire and Explosion Hazard Data

Flash Point: NONE
Lower Explosive Limit: NOT GIVEN
Upper Explosive Limit: NOT GIVEN
Extinguishing Media: WATER SPRAY, CARBON DIOXIDE, DRY CHEMICAL, ALCOHOL FOAM.
Special Fire Fighting Proc: WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING. FIRE OR EXCESSIVE HEAT MAY PRODUCE HAZARDOUS DECOMPOSITION PRODUCTS.
Unusual Fire And Expl Hazrds: NONE SPECIFIED BY MANUFACTURER.

Reactivity Data

Stability: YES
Cond To Avoid (Stability): NONE SPECIFIED BY MANUFACTURER.
Materials To Avoid: BASES, STRONG OXIDIZING AGENTS, SODIUM HYPOCHLORITE (BLEACH).
Hazardous Decomp Products: AMMONIA, CHLORAMINE
Hazardous Poly Occur: NO
Conditions To Avoid (Poly): NONE. WILL NOT OCCUR.

Health Hazard Data

LD50-LC50 Mixture: NONE SPECIFIED BY MANUFACTURER.
Route Of Entry - Inhalation: NO
Route Of Entry - Skin: NO
Route Of Entry - Ingestion: NO
Health Haz Acute And Chronic: INHALATION- LOW HAZARD FOR RECOMMENDED HANDLING. EYES- MAY CAUSE TRANSIENT IRRITATION. SKIN- LOW HAZARD FOR RECOMMENDED HANDLING. INGESTION- EXPECTED TO BE A LOW INGESTION HAZARD.
Carcinogenicity - NTP: NO
Carcinogenicity - IARC: NO
Carcinogenicity - OSHA: NO
Explanation Carcinogenicity: THIS COMPOUND CONTAINS NO INGREDIENTS AT CONCENTRATIONS OF 0.1% OR GREATER THAT ARE CARCINOGENS OR SUSPECT CARCINOGENS.
Signs/Symptoms Of Overexp: EYE IRRITATION.
Med Cond Aggravated By Exp: NONE SPECIFIED BY MANUFACTURER.
Emergency/First Aid Proc: INHALATION- IF SYMPTOMATIC, MOVE TO FRESH AIR. EYES- WASH OUT IMMEDIATELY WITH WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION. SKIN- WASH WITH SOAP AND WATER. GET MEDICAL ATTENTION IF SYMPTOMS OCCUR. INGESTION- DRINK 1-2 GLASSES OF WATER. CALL A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY.

Precautions for Safe Handling and Use

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Steps If Matl Released/Spill: DISCHARGE, TREATMENT, OR DISPOSAL MAY BE SUBJECT TO NATIONAL, STATE, OR LOCAL LAWS. FLUSH TO SEWER WITH LARGE AMOUNTS OF WATER. OTHERWISE, ABSORB SPILL WITH VERMICULITE OR OTHER INERT MATERIAL, THEN PLACE IN A CONTAINER FOR CHEMICAL WASTE.
Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.
Waste Disposal Method: DISCHARGE, TREATMENT, OR DISPOSAL MAY BE SUBJECT TO NATIONAL, STATE, OR LOCAL LAWS.
Precautions-Handling/Storing: KEEP CONTAINER TIGHTLY CLOSED. KEEP AWAY FORM INCOMPATIBLE SUBSTANCES.
Other Precautions: USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING THIS MATERIAL.
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Control Measures
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Respiratory Protection: NONE NORMALLY REQUIRED.
Ventilation: GOOD GENERAL VENTILATION SHOULD BE USED (TYPICALLY 10 AIR CHANGES PER HOUR). MATCH RATE TO CONDITIONS.
Protective Gloves: WEAR IMPERVIOUS GLOVES.
Eye Protection: WEAR SAFETY GLASSES WITH SIDE SHIELDS.
Other Protective Equipment: EYE BATH, WASHING FACILITIES, SAFETY SHOWER.
Work Hygienic Practices: WASH HANDS THOROUGHLY WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES.
Suppl. Safety & Health Data: KEY1:N1.
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Transportation Data
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Trans Data Review Date: 95109
DOT PSN Code: ZZZ
DOT Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION
IMO PSN Code: ZZZ
IMO Proper Shipping Name: NOT REGULATED FOR THIS MODE OF TRANSPORTATION
IATA PSN Code: ZZZ
IATA Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION
AFI PSN Code: ZZZ
AFI Prop. Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION
MMAC Code: NR
Additional Trans Data: PSN AS SPECIFIED BY KODAK BLDES CODE 0017.
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Disposal Data
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Label Data
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Label Required: YES
Technical Review Date: 20APR95
Label Status: F
Common Name: 158 2352 KODAK EXTACOLOR RA BLEACH FIXER / RA-4;
P/N = B
Chronic Hazard: NO
Signal Word: NONE
Acute Health Hazard-None: X
Contact Hazard-None: X
Fire Hazard-None: X
Reactivity Hazard-None: X
Special Hazard Precautions: INHALATION- LOW HAZARD FOR RECOMMENDED HANDLING. EYES- MAY CAUSE TRANSIENT IRRITATION. SKIN- LOW HAZARD FOR RECOMMENDED HANDLING. INGESTION- EXPECTED TO BE A LOW INGESTION HAZARD. KEEP CONTAINER TIGHTLY CLOSED. KEEP AWAY FORM INCOMPATIBLE SUBSTANCES.
FIRST AID: INHALATION- IF SYMPTOMATIC, MOVE TO FRESH AIR. EYES- WASH OUT IMMEDIATELY WITH WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION. SKIN- WASH WITH SOAP AND WATER. GET MEDICAL ATTENTION IF SYMPTOMS OCCUR. INGESTION- DRINK 1-2 GLASSES OF WATER. CALL A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY.

Protect Eye: Y
Label Name: EASTMAN KODAK COMPANY
Label Street: 343 STATE STREET
Label City: ROCHESTER
Label State: NY
Label Zip Code: 14650
Label Country: US
Label Emergency Number: 716-722-5151

Standard Operating Procedures

For

Silver Recovery Operations

STANDARD OPERATING PROCEDURES

ENSURING ENVIRONMENTAL COMPLIANCE AT
PRECIOUS METALS RECOVERY FACILITIES

Precious metals recovery systems recycle silver-bearing hypo-solutions generated from black-and-white/color photo processing, dental X-ray processing, and medical X-ray processing. These hypo-solutions are collected and processed through various ionic exchange cores/ cartridges, which remove and reduce silver concentrations at or below regulatory levels (i.e. < 5 ppm) before being discharged to the sanitary sewer. Precious metals recovery systems consist of ionic exchange cartridges (IEC's) and their associated influent sources. These systems primarily collect silver-bearing hypo-solutions from the aforementioned fixer and bleach fix processes.

Spent hypo-solution and recovered IEC's are exempt from hazardous waste requirements, and per DoD 4160.21-M are deemed as recyclable materials. If these chemicals and/or materials are mismanaged, all applicable restrictions for hazardous waste will apply. It is imperative that Commands ensure the operation and maintenance guidelines outlined in this enclosure are strictly adhered to. Without this oversight, silver-bearing hypo-solutions, cores, and cartridges will be subject to handling, storage, and disposal restrictions for hazardous waste and may result in the discharge of silver-bearing hazardous wastes to MCB, Camp Lejeune's multi-million dollar wastewater treatment plant which is in violation of the NPDES permit. Thus, it is important that operating personnel or persons having cognizance over facility usage implement the following best management practices to comply with environmental regulatory requirements and MCB directives.

Training. Unit commanders shall ensure that personnel are properly trained in the operation and maintenance of precious metals recovery systems. Personnel shall be educated on the environmental impact of hazardous material spills as well as the prevention of such incidents. This training may be accomplished by registering personnel in the Silver Recovery Training (EM104) Course offered by EMD.

Monitoring. Establish a schedule to inspect the precious metals recovery system at the close of each operational day. Unit personnel will ensure the following:

- effluent from recovery systems is contained;
- piping, hoses, and valves are connected and functioning properly;
- flow-rates are established at 80-100 milliliters per minute (if applicable);
- contained effluent is copper strip field-tested and below regulatory requirements;
- copper strip field-test results are maintained within an established logbook;
- logbooks will contain:
  a) copper strip field-test results;
  b) quantity of effluent discharged into the sanitary sewer;
  c) date of discharge; and,
  d) individual responsible for the discharge.

- processed effluent is discharged to the sanitary sewer; and
- housekeeping has been maintained prior to the close-of-business.

Housekeeping. As a best management practice (BMP), housekeeping in, around, and adjacent to the precious metals recovery site should be maintained throughout the operational day. Foreign objects or matter that may pinch hosing, alter flow-rates or hinder/impede the operation of the precious metals recovery system in any way will be stored at an appropriate distance away from the recovery unit while still allowing access to the system.

Spill prevention, reporting, and clean-up. Publish and prominently post directives that set forth unit-level policies for the control and prevention of spent silver-bearing hypo-solution and hazardous materials. Any discharges or spills that may occur in and around the area of the precious metals recovery systems must be reported immediately to the Base Fire Protection Division by phoning 911. Units must stock spill containment and control equipment on-site for use of the operating unit in the event of a spill.

In accordance with BO 6240.5B, emergency spill reporting phone numbers will be prominently posted at each site. It is recommended as a BMP that the signage requirements read as follows:

IN CASE OF AN OIL OR HAZARDOUS MATERIALS SPILL
CALL BASE FIRE PROTECTION DIVISION AT 911
NOTIFY YOUR COMMANDER/SUPERVISOR IMMEDIATELY

"No Smoking" and "Authorized Personnel Keep Only" signs are to be prominently posted as well. Signs will be posted at the entrance of each site and will be legible from a distance of 25 feet.

Defense Logistics Agency (DLA), Defense, Reutilization, and Marketing Services (DRMS), and Defense Reutilization and Marketing Office responsibilities (DRMO). DLA, DRMS, and DRMO responsibilities are outlined within the Defense, Reutilization, and Marketing Manual, DoD 4160.21-M publication. This manual outlines laws and regulations applying to the disposition of excess, surplus, and foreign excess personal property, in addition to, precious metals, silver-bearing scrap and silver-bearing hypo-solutions.

Materials acquisition. Units responsible for IEC replacement, stock replenishment, and parts ordering are to obtain and maintain current stock listings through the DRMS-LMS, Operations Division. Replacement stock listings may be obtained through the Command ECC office or directly through the DRMS East, Operations Division. Such acquisition includes, but is not limited to, IEC's or replacement cores, copper strip field-tests, Teflon tubing, valves, clamps, flow regulators, connectors, reducers, couplings, tee's and adaptors.

Current point-of-contact for the DRMS-LMS Precious Metals Recovery Program is Mr. Marlow Burns, Procurement Specialist.

DRMS-LMS
Precious Metals Recovery Program
74 North Washington
Battle Creek, Michigan 49017-3092

Phone: Comm: 616-961-7293; DSN: 932-7293
Fax: Comm: 616-961-7348; DSN: 932-7348
E-mail: mburns@mail.drms.dla.mil

Copper strip field-tests. Prior to silver-bearing effluent being discharged to the sanitary sewer, containerized hypo-solution must be copper strip field-tested. Two, simultaneous strip-tests are to be conducted on containerized effluent. Copper tarnish removal and twenty-second agitation requirements apply for each test. If both tests indicate no discoloration after 20 seconds, the copper strip tests have passed. In such cases, continue to briskly agitate each strip for an additional 40 seconds to ensure ionic exchange cartridges aren't approaching exhaustion. If both tests indicate discoloration prior to 20 seconds, ionic exchange cartridges must be replaced. If the two tests are split, (i.e. one strip test discolored, the other passing) a third copper strip test will be the determining factor with regards to core replacement. All copper strip field tests are to be agitated an additional 40 seconds after the initial 20 second test as a precautionary measure.

Precious metals recovery system core/cartridge removal and disposal. When it is determined that recovery cores/cartridges have been exhausted through failure of duplicate copper strip field-tests, unit personnel should remove and/or install replacement cores/cartridges following the cartridge installation and removal procedures outlined in the Operation and Maintenance Manuals for ACT I, Silver-Sure 250, Silver-Sure 500, or Tandem 200 Precious Metals Recovery Systems.

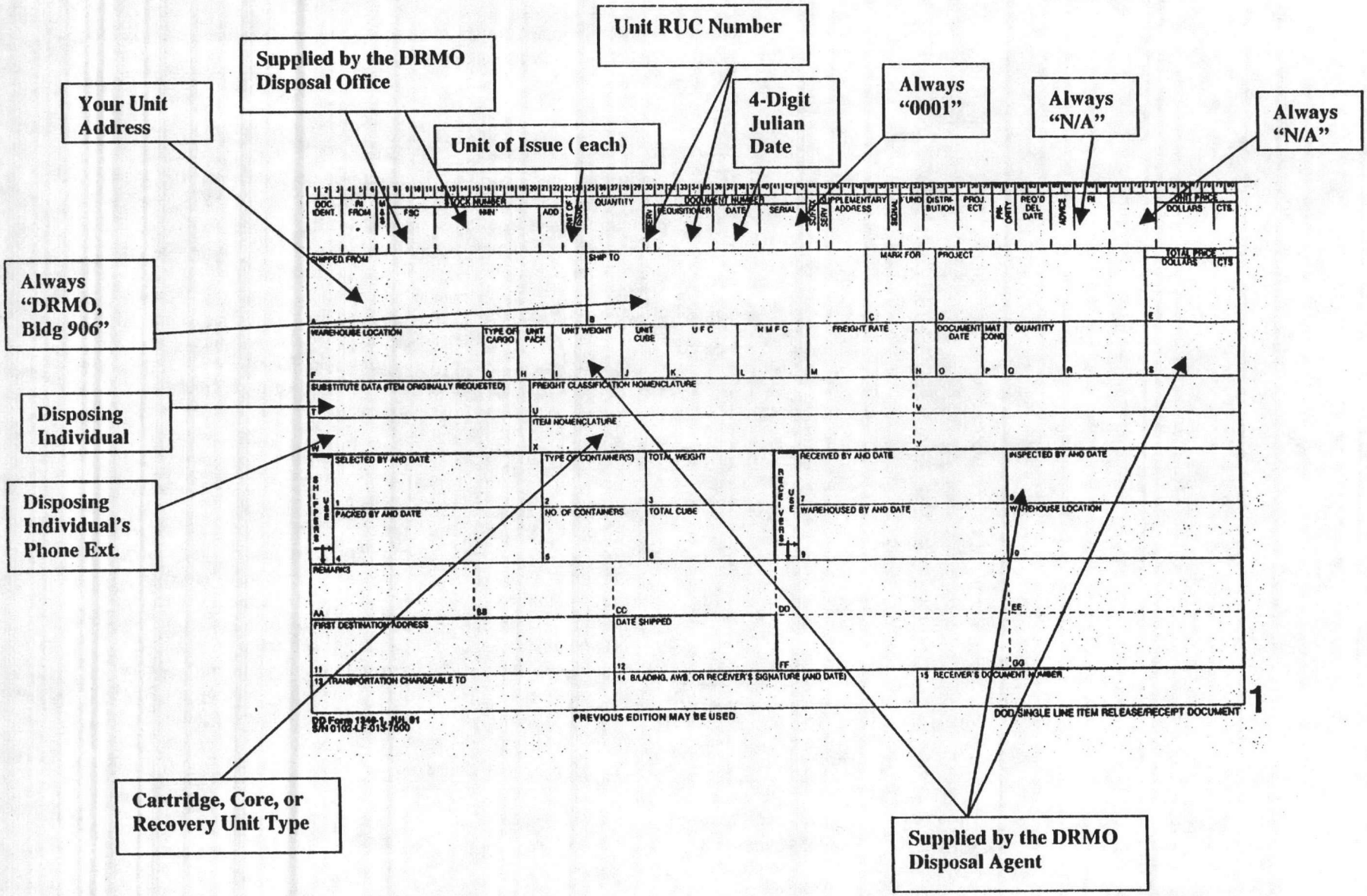
Date put on Core B that changed out ✓

Per MCO 4555.3C, unit personnel will be responsible for the disposal of spent, silver-bearing cores/cartridges within 30 days of removal from the precious metals recovery systems.

Unit personnel responsible for the packaging and disposal of spent, silver-bearing recovery cores/cartridges through the DRMO Disposal Office must ensure the following:

- sufficient silver effluent has been drained from each core/cartridge;
- cores/cartridges are placed in double-lined plastic bags;
- cores/cartridges are packaged in the cardboard containers in which they were shipped;
- all seams for each packaged container are double-taped;
- completed DD-1348 disposal forms accompany each shipment of spent cartridges; and
- DD-1348 disposal forms are archived and maintained for a minimum of three years.

All spent recovery cartridges will be disposed of through the DRMO Disposal Office, Bldg TP-465, Monday through Thursday from 0730 to 1530 hours. All spent cartridges must be accompanied with the appropriate DD-1348 disposal worksheets. Spent recovery cores/cartridges will not be accepted at the DRMO Disposal Office if transported in a POV. Prior to disposal, it is requested that a courtesy phone call be provided to disposal personnel in order to expedite the disposal process at 451-5816. A DD-1348 is provided at the end of this SOP.


Unit RUC Number
Supplied by the DRMO Disposal Office
Your Unit Address
Unit of Issue (each)
4-Digit Julian Date
Always "0001"
Always "N/A"
Always "N/A"
Always "DRMO, Bldg 906"
Disposing Individual
Disposing Individual's Phone Ext.
Cartridge, Core, or Recovery Unit Type
Supplied by the DRMO Disposal Agent
SHIPPED FROM
SHIP TO
MARK FOR
PROJECT
TOTAL PRICE DOLLARS CTS
WAREHOUSE LOCATION
TYPE OF CARGO
UNIT PACK
UNIT WEIGHT
UNIT CUBE
UFC
NMFC
FREIGHT RATE
DOCUMENT DATE
MAT COND
QUANTITY
SUBSTITUTE DATA (ITEM ORIGINALLY REQUESTED)
FREIGHT CLASSIFICATION NOMENCLATURE
ITEM NOMENCLATURE
SHIPPER USE
SELECTED BY AND DATE
PACKED BY AND DATE
TYPE OF CONTAINER(S)
NO. OF CONTAINERS
TOTAL WEIGHT
TOTAL CUBE
RECEIVER USE
RECEIVED BY AND DATE
WAREHOUSED BY AND DATE
INSPECTED BY AND DATE
WAREHOUSE LOCATION
REMARKS
FIRST DESTINATION ADDRESS
DATE SHIPPED
12 TRANSPORTATION CHARGEABLE TO
14 BILADING, AWB, OR RECEIVER'S SIGNATURE (AND DATE)
15 RECEIVER'S DOCUMENT NUMBER
DD Form 1348-1, JUL 91
S/N 0102-LF-013-1600
PREVIOUS EDITION MAY BE USED
DOD SINGLE LINE ITEM RELEASE/RECEIPT DOCUMENT
1

ENVIRONMENTAL MANAGEMENT DEPARTMENT
MARINE CORPS BASE, CAMP LEJEUNE, NC

ENVIRONMENTAL COMPLIANCE EVALUATION

Unit Evaluated: **Unit ECO:** **Phone/Fax:** **Evaluation Date:** **Evaluation By:**	**Type of Evaluation:** **Formal Announced** [ ] **Formal Unannounced** [ ] **Courtesy** [ ] **Follow Up** [ ]	**Media: Precious Metals (Silver) Recovery** **Reference: (R1) BO 4555.1D, (R2) MCO P4555.3C, (R3) BO 11090.3A, (R4) BO 5100.20A, (R5) BO 11320.1J, (R6) BO 6240.5B, (R7) DoD 4160.21-M.**

ADMINISTRATIVE/RECORDS

1. [ ] MSDS's/HMIS and/HW Profiles missing. (R4, R6)
2. [ ] Personnel Training Records missing/inadequate/not current. (R4)
3. [ ] Applicable Base Orders and related local instructions missing. (R6)
4. [ ] HWM Standard Operating Procedures missing/inadequate. (R6)
5. [ ] Daily/weekly operational log missing/inadequate/not current. (R2)
6. [ ] Location sketch of facility showing room number, processing system, recovery unit, capture tank, etc., missing/inadequate/not current. (R6)
7. [ ] DRMO Turn-in receipts/records of recovered materials not maintained/inadequate. (R1, R2, R7)
8. [ ] Other.

HAZARDOUS MATERIALS STORAGE

9. [ ] Container is leaking, corroded, bulging, collapsed, or other structural deficiency. (R3, R6)
10. [ ] Container is open or not secured. (R6)
11. [ ] Inventory of hazardous materials/supplies missing. (R4)
12. [ ] 911 sign not posted/deteriorated. (R3)
13. [ ] Hazardous materials with expired shelf-life. (R6)
14. [ ] Unit Level Spill Contingency Plan missing/inadequate. (R3, R5, R6)
15. [ ] No Smoking sign not posted/deteriorated. (R5)
16. [ ] Fire control, spill control and/or safety equipment missing. (R5, R6)
17. [ ] Recovered silver/materials stored longer than 30 days. (R2)
18. [ ] Restricted access to recovered silver/materials not maintained. (R1, R2, R7)
19. [ ] Written Hazard Communication Plan not missing/not available. (R4)
20. [ ] Incompatible HM's in storage.
21. [ ] Other.

SILVER RECOVERY SITE

22. [ ] Silver recovery equipment inoperational/malfunctioning. (R2, R7)
23. [ ] Silver Recovery Site housekeeping unkept/inadequate. (R3, R7)
24. [ ] Other

REMARKS

ENVIRONMENTAL COMPLIANCE EVALUATION

DATE:
FACILITY BEING EVALUATED:
EVALUATED BY:
EVALUATION PARTICIPANTS:
PHONE NUMBER:

DEFICIENCY F: FINDING D: DISCREPANCY I: ISSUE	REFERENCE	REMARKS	CORRECTIVE ACTION
1. F: MSDS's/HMIS or HW Profiles missing.	BO 5100.20A BO 6240.5B		MSDS's/HMIS or HW profile sheets must be readily available to all personnel in the workplace.
2. D: Personal training records missing/inadequate.	BO 5100.20A		Individuals involved in the storage, usage, and/or disposal of HM must have Hazard Communication training on a yearly basis in order to identify hazardous working conditions within the workplace.
3. D: Applicable Base Orders and related local instructions missing. Note: BO 4555.1C, MCO 4555.3C, BO 11090.1B, BO 5100.20A, BO 11320.1H, BO 6240.5A.	BO 6240.5B		Each organization routinely handling HW/HM is required to maintain at a minimum the noted MCO, BO's, and related local instructions as part of the HWMSOP.
4. D: HWM SOP for site is missing.	BO 6240.5B		OIC/NCOIC's will prepare a written HM management standard operating procedure in cooperation with the cognizant ECO for each facility where greater than 5 ppm silver effluent is generated and stored.
5. I: Daily operational log missing/inadequate.	MCO 4555.3C		To ensure silver effluent that exceeds 5 ppm is not discharged into the sanitary sewer, daily operational logs noting quantity of discharge and results of copper stripping tests must be maintained. Effluent exceeding 5 ppm must be containerized and reprocessed through the individual recovery units.

DEFICIENCY F: FINDING D: DISCREPANCY I: ISSUE	REFERENCE	REMARKS	CORRECTIVE ACTION
6. D: Location sketches missing/inadequate.	BO 6240.5B		Each organization routinely handling hazardous materials is required to maintain at a minimum, a location sketch for each HM generation, accumulation, and storage area.
7. D: Turn-in receipts/ documents missing not maintained.	BO 4555.1D MCO 4555.3C DoD 4160.21M		Persons who store recycled silver must maintain records of all recovered silver turned in to the DRMO Eastern Region.
8. Other			
9. D: Container is not serviceable due to leaking, corroded, bulging, collapsed.	BO 11090.3A BO 6240.5B		A leaking, corroded, bulging , dented, or collapsed container must be transferred to a DoT approved container in good condition.
10. D: Container is open or not secured.	BO 6240.5B		Containers of HM will be closed at all times except when adding or removing product from the container.
11. D: Missing Hazardous Material Inventory List (HMIL).	BO 5100.2A		A current, complete inventory of all HM must be maintained for each shop. The HMIL will include the complete name of the product, manufacturer or distributor, NSN or product identification number.

DEFICIENCY F: FINDING D: DISCREPANCY I: ISSUE	REFERENCE	REMARKS	CORRECTIVE ACTION
12. D: 911 sign not posted or not legible.	BO 11090.1B		Signs shall be posted at every building, tank location, hazardous waste or hazardous materials sites. Signs will have yellow background with black lettering indicating the following information: **IN CASE OF AN OIL OR HAZARDOUS MATERIALS SPILL** **CALL BASE FIRE PROTECTION DIVISION** **911** **NOTIFY YOUR COMMANDER/SUPERVISOR IMMEDIATELY** Information to purchase the signs can be acquired from the ECC.
13. D: HM with expired shelf life.	BO 6240.5B		If the material is type II (as determined from the HMIS), shelf-life can be extended after visual inspection of container, contents, and verifying information on the quality status list (QSL). To receive QSL on a monthly basis contact Lisa Prows @ (804) 279-4140. It is recommended that the units follow shelf-life management procedures outlined in MCO P4450.13 material quality control standards.

DEFICIENCY F: FINDING D: DISCREPANCY I: ISSUE	REFERENCE	REMARKS	CORRECTIVE ACTION
14. F: Unit Level Contingency Plan missing/incomplete.	BO 11090.3A BO 11320.1J BO 6240.5B		HWMSOP shall contain procedures and responsibilities for dealing with HW/HM spills and related emergencies. Units will publish and prominently post the ULCP specifically applicable to their organization. The plan must include: 1. Actions the facility personnel shall take in case of an emergency. 2. Instructions to call the Base Fire Protection Division. 3. A list of names, addresses, and phone numbers of the trained facility personnel, and the ECO and ECC. 4. A list of all spill response equipment available and location of this equipment or materials. 5. An evacuation plan and an alternate evacuation plan.
15. D: " No Smoking" sign not posted or not legible.	BO 11320.1J		No smoking signs are required wherever there is a HW/HM site; signs must be easily seen when a hazard is present.
16. D: Fire control, Spill control, and/or Safety equipment missing.	BO 11320.1J BO 6240.5A		Units are required to maintain absorbents, safety equipment, fire extinguishers, and other supplies for dealing with HM/HW spills at their facility.
17. F: Recovered silver/ materials stored longer than 30 days.	MCO 4555.3C		Recovered silver from spent hyposolutions must be turned in/disposed of through the DRMO Eastern Region Office within 30 days of removal from a recovery unit.

DEFICIENCY F: FINDING D:DISCREPANCY I: ISSUE	REFERENCE	REMARKS	CORRECTIVE ACTION
18. D: Restricted access to recovered silver not maintained.	BO 4555.1D MCO 4555.3C DoD 4160.21M		Generating units will establish suitable controls against loss of recovered silver in the form of a locked storage area, with limited or restricted access.
19. F: Written Hazard Communication Plan not available.	BO 5100.20		The Commanding Officer will ensure that a written Hazard Communication Program is compiled and maintained for each workplace using or handling HM.
20. D: Incompatible materials in storage	BO 6240.5B BO 11320.1J		Separate all incompatible HM to the maximum extent possible. At a minimum "separation" should mean the arrangement of compartments separated by a wall/berm or by other means of approved physical separation. Use the EPA HW Compatibility System located in the EMD CETP manual to determine compatibility.
21. Other			
22. D: Silver recovery equipment inoperational/ malfunctioning.	MCO 4555.3C DoD 4160.21M		Units will ensure that silver recovery equipment is operational and maintained prior to each day of silver effluent processing.
23. D: Silver Recovery Site housekeeping unkempt/ inadequate.	BO 11090.3A DoD 4160.21M		All activities shall guard against the creation of fire and spill hazards and shall promptly report to the Base Fire Protection Division any hazardous conditions that exist.
24. Other			

Finding: A deficiency that could result in a notice of violation, a fine, or other enforcement action if discovered by a regulatory agency.

Discrepancy: A deficiency that would not result in a notice of violation, a fine, or other enforcement action if discovered by regulatory agency. Discrepancies are normally a result of poor management practices or failure to follow installation standard operating procedures, Marine Corps Orders, Department of Defense Directives.

Issues: Issues would include trends across installations/ commands that may require a Marine Corps wide approach or the need for clarification in regulation, guidance, and/or checklists. Issues include significant differences in opinion or interpretation or requirements.

Regulatory Drivers

MCO 4555.3C

LOGISTICS MCB CLNC

106

DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
WASHINGTON, D.C. 20380

MCO 4555.3C
LA-2-cfb
19 Sep 1983

	ACT	INF
ACofS,LOG		✓
SUPMGMT O		
OPNS OFF		
LOG CH		✓
ADM BR		
SUPSUPT BR		
SUPANAL SEC		
MAINSVSUPT		
BUDGET DIV		

MARINE CORPS ORDER 4555.3C w/ch 1

From: Commandant of the Marine Corps
To: Distribution List

Subj: Recovery and Utilization of Precious Metals

Ref: (a) DoD 4160.21-M, Defense Utilization and Disposal Manual
(b) SECNAVINST 5530.5 (NOTAL)

Encl: (1) Precious Metal-Bearing Items
(2) Precious Metal Scrap Recovery Percentages
(3) Precious Metal Area Representatives

1. Purpose. To establish Marine Corps policy and assign responsibility for a program for the recovery of precious metals contained in excess material, residual material, and scrap generated by Marine Corps activities and for utilization of those recovered precious metals as Government-furnished material (GFM) to reduce the cost of new procurement.

2. Cancellation. MCO 4555.3B. ✓

3. Summary of Revision. This revision contains a substantial number of changes and should be completely reviewed.

4. Background

a. The Department of Defense (DoD) Precious Metals Recovery Program (PMRP) is assigned to the Defense Logistics Agency (DLA). Under DLA, the Defense Property Disposal Service (DPDS-R), Federal Center, Battle Creek, Michigan 49016, is responsible for programs associated with the collection, recovery, and processing of precious metals which include silver, gold, platinum, and the platinum family of noble metals (palladium, iridium, rhodium, osmium, and ruthenium). The Defense Industrial Supply Center (DISC) is responsible as the commodity integrated material manager (CIMM) for supply management of the refined precious metals recovered under the PMRP. The expenditure of available resources to recover these precious metals is justified by such factors as the criticality of chemical properties of these metals as used in Defense items, the limited worldwide quantity of these metals, the relative ease of recovery procedures, and the current high prices of precious metals on the open market.

OPTIONAL FORM 99 (7-90)
FAX TRANSMITTAL # of pages ▸ 21
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To Julie S	From Walt
Dept./Agency	Phone #
Fax # 1164	Fax #

NSN 7540-01-317-7368 5099-101 GENERAL SERVICES ADMINISTRATION

b. A precious metal indicator code (PMIC) has been developed and incorporated in the Defense Integrated Data System (DIDS) and Military Standard Requisitioning and Issue Procedure (MILSTRIP) Programs. DoD item managers will assign a PMIC to every item in the supply system. Retroactive coding will be accomplished on an item-by-item basis as file maintenance is required. Effective 1 November 1983, the PMIC will be a mandatory entry on all disposal related MILSTRIP documents. Liaison with the DoD item manager will be required when an item has not been assigned a PMIC in the DIDS.

5. Policy

a. Participation in the PMRP is mandatory for all Marine Corps activities.

b. Reutilization of excess precious metal-bearing items will take precedence over precious metal recovery.

c. DLA is responsible for providing silver recovery equipment to generating activities for use in photographic processing laboratories, printing plants, and microfilm and mircofiche producing facilities, as well as base or station photographic laboratories and hobby shops.

d. Marine Corps funds will not be obligated or otherwise committed for major maintenance, replacement parts for existing equipment, or for the purchase of new or replacement equipment for this program. These requirements will be funded or supplied by DLA.

e. Marine Corps activities will operate and maintain equipment provided to them for use in the PMRP and will be responsible for performing operator level preventive maintenance on recovery equipment in their possession. Preventive maintenance includes day-to-day adjustment, cleaning, replacement of fuses and other available minor repair parts, and any like action which can be performed with a minimum of technical knowledge and effort and within the limitations of reasonably available common tools and equipment, as a safeguard against excessive equipment downtime.

f. Acquisition project officers or item managers will ascertain the availability of precious metals by interrogating the item manager of precious metals stocks at DISC before initiating a new procurement action for precious metals or for precious metal-bearing material and will include a provision for the use of recovered precious metals as GFM in all such procurement requests when it is in the best interest of the Government to do so.

g. Precious metals will not be provided as GFM on new procurement contracts which are solely for foreign military sales (FMS), since these customers are not participants in the PMRP.

6. Procedures

a. Recovery

(1) Identification of precious metal-bearing scrap is a key element of the PMRP. Enclosure (1) provides information for use in the identification of precious metal-bearing items. Enclosure (2) provides data to convert the known precious metal content to troy ounces and to determine a reasonable estimate of recovery potential in troy ounces. Activities should also consult the precious metals master file to identify items or components containing recoverable amounts of precious metals. The precious metals master file may be ordered from Defense Logistics Services Center (DLSC-AP), Federal Center, Battle Creek, MI 49016.

(2) Precious metals and precious metal-bearing scrap will be segregated from nonprecious material by generic category; i.e., silver, gold, platinum, etc. Suitable controls against loss by theft will be established; and a locked storage area, with limited access for authorized personnel only, will be provided. Safeguards will be established to ensure accountability and control of precious metals between pickup and delivery points. Records will be maintained in avoirdupois pounds and ounces of current inventory, receipts, and issues of precious metals and precious metal-bearing scrap.

(3) Marine Corps activities will not discard unserviceable precious metal-bearing items, scrap, residue, or waste but will collect, segregate, and store the material securely until it can be turned in to a Defense property disposal office (DPDO) or shipped to a collection or recovery point designated by DPDS-R.

(4) Precious metal-bearing scrap and waste material will be segregated, as required in the preceding, prior to turn-in to DPDO. Include on the disposal turn-in document (DTID) any available information pertaining to precious metal content (metal type, quantity, and location within the item) of the scrap material turned in. A receipt will be obtained at the time of turn-in.

(5) Transportation, packaging, crating, and handling costs incurred in the shipment or transfer of precious metal-bearing material from a generating activity to the servicing DPDO will be borne by the generating activity.

(6) Transportation, packaging, crating, and handling costs incurred in making DPDS-R authorized shipments to a designated

collection/recovery activity (other than the servicing DPDO) or contractor facility will be charged to the appropriate DPDS-R fund citation obtained from the servicing DPDO.

(7) Generating activities using DPDS-R approved PMRP transportation fund citations for shipping precious metal-bearing material will forward two copies of all shipping documents to the Commander (Attn: DPDS-CF), Defense Property Disposal Service, Federal Center, Battle Creek, MI 49016.

(8) Documentation of shipments of precious metal-bearing material will show the net avoirdupois weight of material shipped. Shipments will be made by the most economical means available which is consistent with safe transit and delivery. All reasonable care will be taken in the packing of material for shipment so as to minimize the possibility of theft or loss through leakage or container damage. Parcel-post shipments will be registered.

(9) Recovery equipment includes but is not limited to electrolytic recovery units, chemical recovery cartridges, plastic hypocollection containers and replacement parts. When cost effective and environmentally acceptable, film burners/ incinerators (for reduction of film and photographic paper to ash for shipment) will be provided by DPDS-R after evaluation of the activity's requirements.

(10) PMRP supplies, such as litmus test paper, plastic collection containers, silver recovery cartridges, fittings, control valves, and other replacement parts, may be obtained without charge by contacting the servicing precious metal area representative (DMAR) or DPDS-R. It is not necessary to use MILSTRIP formats or to identify the requested material by national stock number (NSN). Noun names will be sufficient identification.

(11) Generating activities will apprise their servicing DPDO of the need for PMRP assistance/recovery equipment to start up silver recovery operations or to enhance the effectiveness of ongoing silver recovery operations to ensure maximum recovery.

(12) In addition to the foregoing, DLA has designated PMAR's who may be contacted for technical assistance or information for resolution of PMRP problems. Enclosure (3) is a list of PMAR locations and the geographic areas for which they are responsible.

b. Utilization

(1) Activities procuring precious metals or precious metal-bearing material will screen the DoD inventory of Government-owned assets of precious metals and utilize those

assets as GFM in lieu of contractor-furnished material (CFM) in production contracts for major systems and equipment when such action is determined to be more advantageous to the Government. (This does not apply to procurement actions solely for FMS customers.) See paragraph 5g, preceding. Requisitioners will contact the item manager at DISC (Code ODBA-YC), AUTOVON 442-3045 or 442-3052, to obtain the latest unit price, verify availability, and reserve specific assets. Unit prices will include transportation and insurance.

(2) Solicitations for bids on items requiring precious metals shall include a provision advising bidders/offerors of the Government's intention to provide the precious metals required as GFM. These solicitations shall also provide that the bidders/offerors indicate the quantity and types of precious metals they will require for the contract. In the event that the bidders/offerors require varying quantities of precious metals because of design differences, the current market value of the GFM shall be added to the bids to ensure that no competitive advantage results from the provision of GFM.

(3) After ascertaining that the required precious metals are available and that GFM precious metals should be provided, a funded requisition in MILSTRIP format will be forwarded (preferably by message) to DISC (Code ODBA-YC).

(4) Requisitions will include the following as "exception data":

(a) Precise "ship to" address (specifying building and office, including ZIP code) where the precious metals are to be delivered. All appropriate "mark for" designations must be provided in the event they differ from the "ship to" addresses. The name(s) of the receiving official(s) shall be specified whenever possible.

(b) Contract number to which GFM precious metals will be applied.

(c) End item application (NSN, part number or other identification of the end item) and the quantity of precious metal which will be used per unit, if known.

(d) Specific contact point at the requisitioning activity, including the name, code, and telephone number.

7. Action

a. Procuring contracting officers shall:

(1) Ensure that each solicitation/contract specifies that the required precious metal will be supplied as GFM, when available and in the Government's best interest.

(2) Ensure that the quantity of precious metal requested by the contractor is commensurate with that required in the manufacturing process, considering the contractor's individual item design.

(3) Ensure that, when precious metals are to be furnished as GFM to a subcontractor, the contract identifies the subcontractor and location.

(4) Take appropriate action to assure that administrative contracting officers:

(a) Provide surveillance over all GFM precious metals and ensure that all residual precious metals are returned to the Government.

(b) Furnish prompt disposition instructions to contractors when residual precious metals are reported on hand by the contractor after completion of the contract.

(c) Request assistance from the administrative office having cognizance of the subcontractor's plant when precious metals are to be furnished as GFM to a subcontractor.

b. The inventory control point shall:

(1) Place command emphasis on this program, and allocate the resources (personnel and automatic data processing (ADP) support) necessary to ensure compliance with this Order.

(2) Evaluate items as to their recoverable precious metal content, and assign a PMIC to each new or existing item under their cognizance.

(3) Annotate the procurement specifications that precious metals will be supplied as GFM when in the Government's best interest.

(4) Take appropriate action to requisition precious metals from DISC.

MCO 4555.3C
19 Sep 1983

PRECIOUS METAL AREA REPRESENTATIVES

Name/Address/Telephone	Area Covered
ATTN: PMAR Building 2517/Stop No. 125 Meade Road Fort Belvoir, VA 22060 Comm: 703-664-6551 AV: 354-6551	Maryland Delaware Washington, DC Virginia (metropolitan DC area)
ATTN: PMAR DPDO Philadelphia, Bldg. 648 Philadelphia Naval Shipyard Philadelphia, PA 19112 Comm: 215-755-3735/3222 AV: 443-3736/3222	Massachusetts Maine New Jersey Rhode Island Connecticut Vermont New Hampshire Pennsylvania (eastern) New York (southeastern) Greenland Newfoundland
ATTN: PMAR Building SDA-211 South Annex Norfolk, VA 23511 Comm: 804-444-1318 AV: 564-1318	West Virginia Virginia (except metropolitan DC area) Bermuda
ATTN: PMAR DPDO Wright-Patterson Building 89, Area C Wright-Patterson AFB, OH 45433 Comm: 513-225-4291/4203 AV: 787-4291/4203	Indiana Michigan Ohio Pennsylvania (western) New York (except southeast)
ATTN: PMAR DPDO Charleston P.O. Box 5715 North Charleston, SC 29406 Comm: 803-743-3270 AV: 794-3270	Florida South Carolina North Carolina Georgia (eastern)
ATTN: PMAR DPDO McConnell Building 1349 McConnell AFB, KS 67221 Comm: 316-681-6718 AV: 743-6718	Illinois Missouri Kansas Nebraska Wisconsin Iowa Minnesota

ENCLOSURE (3)

Name/Address/Telephone	Area Covered
ATTN: PMAR DPDO San Antoino Building 3030, East Kelly Kelly AFB, TX 78241 Comm: 205-925-5646/8791 AV: 945-5646/8791	Oklahoma Arkansas Texas (except El Paso area) Panama
ATTN: PMAR 3415/ABG/DPDR-OR Lowry AFB, CO 80230 Comm: 303-370-2019 AV: 926-2019	Colorado New Mexico Utah Wyoming Idaho Texas (El Paso area) Arizona (except Yuma area)
ATTN: PMAR Building 310-B Ft. Gillem Forrest Park, GA 30050 Comm: 404-363-5129 AV: 797-5129	Tennessee Louisiana Mississippi Kentucky Alabama Georgia (western) Puerto Rico Cuba
ATTN: PMAR DPDO Lewis-Puget Sound Branch P.O. Box 2B Puget Sound Navy Shipyard Bremerton, WA 98314 Comm: 206-476-8618 AV: 439-8618	Washington North Dakota South Dakota Montana Oregon Alaska
ATTN: PMAR DPDO Alameda, Building 6 2155 Mariner Square Loop Alameda, CA 94501 Comm: 415-869-3660 AV: 686-3660	California (northern) Nevada (northern)
ATTN: PMAR Building 290, Box 78 NAS North Island, CA 92135 Comm: 714-437-5542 AV: 951-5542	California (southern) Nevada (southern) Arizona (Yuma area)
Defense Property Disposal Region - Europe ATTN: DPDR-ER APO New York 09633 AV: 695-1110, ask for Weisbaden, GE 314-339-1110, ask for ext. 3833	Europe

ENCLOSURE (3)

Name/Address/Telephone	Area Covered
Defense Property Disposal Region - Pacific ATTN: DPDR-PR Camp H. M. Smith, HI 96861 AV: 462-9888, ask for Pearl Harbor 477-5238	Pacific

c. Commanders of major commands shall:

(1) Appoint a PMRP coordinator who will establish, monitor, and coordinate a formal Precious Metals Recovery Program within their activities to ensure that excess precious metal-bearing items, scrap or residue is processed for recovery in accordance with this Order. The name, code, address, and telephone number of each command PMRP coordinator will be provided to the Commandant of the Marine Corps (Code LMM-2) who will also be informed of any changes to this designation.

(2) Local programs will include all of the following as appropriate to the mission and/or assigned equipment and facilities of the activity:

(a) Publication of a PMRP instruction.

(b) Collecting all sensitized photographic and oscillograph materials (including both processed and unprocessed materials), silver bearing photographic fixing and stabilizing solutions, and silver recovered from photographic solutions for turn-in to the servicing DPDO or for shipment to a designated collection or recovery point.

(c) Ensuring that other precious metal-bearing items (such as expended or outdated silver or silver oxide batteries) or any item identified as such by a PMIC are not discarded but collected, secured, segregated, and turned in for recovery of the precious metals as described above.

(d) Limiting the storage of excess precious metal-bearing items and scrap to a maximum period of 30 days. "SPECULATIVE ACCUMULATION"

(e) Operating and maintaining assigned recovery equipment.

(f) Training personnel in the operation of the recovery equipment and in the handling of recovered precious metals.

(g) Establishing and maintaining records of litmus paper tests, dates of silver harvest and amount harvested (where applicable), and dates of canister changes.

(h) Providing security for the recovery equipment and the in-use canisters to preclude pilferage. Refined precious metals will be securely stored in accordance with the provisions of reference (b).

(i) Establishing and maintaining physical security and audit trail procedures for harvested silver, canisters, and other recoverable precious metals from the point of origin to the DPDO, U.S. Postal Service, or public carrier, as appropriate.

(j) Obtaining a signed receipt for all turn-ins from the post office, public carrier, or DPDO, as appropriate, and maintaining a file of those receipts for a period of 3 years.

(k) Informing the PMAR or DPDS-R of local requirements for equipment, major maintenance, spare parts, or supplies.

d. The Commandant of the Marine Corps (Code LMM-2) has been designated the Marine Corps point of contact for the Precious Metals Recovery Program. Any questions, problems, suggestions, etc., concerning this program shall be referred to this point of contact by telephone AUTOVON 224-1600 or 225-3981.

8. Reserve Applicability. This Order is applicable to the Marine Corps Reserve.

H. A. Hatch

H. A. HATCH
Deputy Chief of Staff
for Installations and Logistics

DISTRIBUTION: E plus 7000176 (10)
7000156 (7)

Copy to: 8145001

OPNS

DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
WASHINGTON, D.C. 20380-0001

MCO 4555.3C Ch 1
LMM-2-dt
30 Jan 1986

MARINE CORPS ORDER 4555.3C Ch 1

From: Commandant of the Marine Corps
To: Distribution List

Subj: Recovery and Utilization of Precious Metals

Encl: (1) New page inserts to MCO 4555.3C

1. Purpose. To transmit new page inserts to the basic Order.

2. Action. Remove the present pages 1 and 2 of enclosures (1) and (2) to the basic Order, and replace them with the corresponding pages contained in the enclosure.

3. Change Notation. The paragraphs denoted by an asterisk (*) symbol contain changes not previously published.

4. Filing Instructions. This Change transmittal will be filed immediately following the signature page of the basic Order.

V. J. WALLS
Assistant Deputy Chief of Staff
for Installations and Logistics

DISTRIBUTION: E plus 7000176 (10)
7000156 (7)

Copy to: 8145001

PCN 102 057605 01

MCO 4555.3C
19 Sep 1983

PRECIOUS METAL-BEARING ITEMS

1. Precious metal-bearing items, residue, and material include but are not limited to gold, silver, platinum, and the platinum group from prosthetic appliances; gold, silver, platinum, and platinum group grindings and dust; gold or silver lined, clad, or plated decorations, badges, awards, medals, buttons, and other insignia; silver batteries; silver and gold wire; platinum and palladium wire; silver and gold turnings; spent hypo (fixer) solutions; exposed silver-bearing film/paper regardless of format or condition; unexposed outdated film/paper; dental amalgam scrap; electrical and electronic hardware containing gold, silver, platinum, or any of the platinum group metals; microfilm/microfiche masters and reproducing paper; precious metal-bearing solutions, such as silver nitrate; and disposable electrocardiograph electrodes.

2. National stock number items which contain potentially recoverable precious metals are so coded in the Management Data List (MDL) under the precious metal indicator (PMI).

3. Scrap sources are as follows:

a. <u>Silver Bearing Materials</u>

Anodes

Assemblies--Electrical

Silver/Copper Batteries

Silver/Cadmium Batteries

Silver/Magnesium Batteries

Blanking Scrap--Punchings

Brazing Alloys

Brushes--Electric Motors

Chemical Salts

Clad Bi-Metal Parts

Contacts

Dental Amalgam

Film

ENCLOSURE (1)

Industrial X-Ray

Medical X-Ray

Lithographic

Photographic Negatives

Filters--Plating

* Flake and Sludge--From Electrolytic Processing of Hyposolutions

Hooks--Plating--Nodules

Jewelry Sweeps

Paints--Paste

Paper--Reproduction

Plated Parts--Electrical--Electronic

Plated Serving Pieces

Plated Utensils

Plated Wire

Powders--Granulated

Punchouts

Relays--Electrical

Resins

Silver-Lined Bearings--Diesel Locomotives and Aircraft

Sludges--Plating and Precipitates

Solutions--Plating

Tin Lead Alloys--Contaminated

Turnings

Wave Guides

Wiping Rags

b. Gold Bearing Materials

Brazing Alloys

Clad Metal Parts

Electrical Contacts

Dental Scrap

Dental Sweeps and Grindings

Diodes

Filled Scrap

Filters--Plating

Flakes

Flashings

Foil

Hook--Plating--Nodules

Jewelry Scrap

Jewelry Sweeps and Grindings

Paints and Paste

Peelings

Placer Gold

Plated Parts--Electrical

Plated Wire

Powders

Printed Circuit Boards

Printed Circuit Boards With Components

Punchouts

Resins--Plating

Salts--Chemical

Sludges--Plating

Solutions

Sponge

Tin Lead Alloys--Contaminated

Transistors

Wiping Rags

Wire

c. Platinum Bearing Materials

Catalysts

Chemicals

Clad Materials

Contacts

Dental Alloys

Dental Scrap

Dental Sweeps and Grindings

Jewelry Scraps

Jewelry Sweeps

Laboratory Ware

Magneto Points

Powders and Paste

Solutions--Plating

Spark Plugs--Aircraft

Thermocouple Wire

d. Palladium Bearing Materials

Catalysts

Clad Materials

Contact Points

Dental Alloys

Dental Scraps

Dental Sweeps

Jewelry Scrap (Sweeps)

Paste

Plated Parts

Powders

Relays--Electrical

Salts--Chemicals

Sludges

Solutions

Wire

e. Scrap Containing Combinations of Precious Metals (Gold, Silver, Platinum, and Palladium)

Electronic Scrap

High Temperature Resistant Alloys

Paints

Paste

Powders

Relays--Electrical

Resins

Ribbons

Rings

Salts

Solutions

Sweeps

Telephone Switching Scraps

Thick Film

Wire

ENCLOSURE (1)

MCO 4555.3C
19 Sep 1983

PRECIOUS METAL SCRAP RECOVERY PERCENTAGES

	Silver Percentage (By Weight in Pounds)	Conversion Factor Pounds to Troy Ounces of Anticipated Precious Metals (See Note)
Silver-Bearing-Scrap-Designations		
* Used anodes, drillings from anodes and grain silver, wire for welding or brazing, silver flakes and sludge from electrolytic processing of hyposolutions, and all other silver of a purity content of 90 percent or better	90	(13.13)
Silver foil battery plates separated by magnesium plates and silver chloride sheets (primarily MK 61-0 and MK 67-1 batteries)	41	(5.98)
X-ray film, exposed industrial and aerial film, millimeter film, and all types of shredded or cut-up film	1	(.15)
Battery cell sections consisting of a plastic container (approximately 1/8-inch thick); some cells containing a silver chloride solution (primarily MK 53-0, 42-0, 58-0, and 66-0 batteries)	15	(2.22)
Silver-bearing amalgam	24	(3.50)
Silver-bearing plated electrical components such as leads, capacitors, and other silver plated or bonded materials	4	(.58)
Silver sludge and silver-bearing ash	22	(3.21)
Silver-bearing missile batteries encapsulated in eposy-type plastic with metal cases and attachments	10	(1.46)

ENCLOSURE (2)
Ch 1 (30 Jan 1986)

	Silver Percentage (By Weight in Pounds)	Conversion Factor Pounds to Troy Ounces of Anticipated Precious Metals (See Note)
Silver-Bearing-Scrap-Designations-(con.)		
Silver recovery cartridge consisting of a spun metallic filter through which spent hyposolution has been filtered	4	(.58)
Desalter Kits	24	(3.5)
Gold-Bearing Scrap Designations		
Dental scrap	40	(5.8332)
Metallic (foil, leaf, wire, casting, and brazing alloy)	65	(9.4790)
Dental sweepings	15	(2.1875)
Electronic scrap (plate or washed)	.40	(.0583)
Integrated circuits/assemblies and pins (not boards or transistors) (pins are ferro magnetic)	12.	(1.7500)
Electronic circuits/assemblies and strips	6.50	(.9479)
Electronic hardware, pins and connectors	.60	(.0875)
Rivets (gold-plated)	.50	(.0729)
Electronic chassis parts	.20	(.0292)
Eyeglass frames (gold-filled)	4	(.5833)
Buttons	.90	(.1313)
Insignia and medals	.10	(.0146)

ENCLOSURE (2)

	Silver Percentage (By Weight in Pounds)	Conversion Factor Pounds to Troy Ounces of Anticipated Precious Metals (See Note)
Gold-Bearing Scrap Designations (con.)		
Gold solutions, 8.3 lb per gal (.7 troy ounces per gal)	.60	(.0875)

NOTE: Conversion factors shown in parentheses when used as multipliers applied to the number of avoirdupois pounds of scrap will produce a reasonably accurate estimate of the silver or gold content equated to troy ounces.

Base Order 4555.1D

UNITED STATES MARINE CORPS
MARINE CORPS BASE
PSC BOX 20004
CAMP LEJEUNE, NORTH CAROLINA 28542-0004

BO 4555.1D
BEMD
14 APR 1999

BASE ORDER 4555.1D

From: Commanding General
To: Distribution List

Subj: RECLAMATION AND UTILIZATION OF PRECIOUS METALS FROM SCRAP AND WASTE MATERIALS

Ref: (a) MCO 4555.3C
(b) AC/S, Log ltr 5200 LOG of 9 Aug 93

Encl: (1) Silver-Bearing and Gold-Bearing Scrap Descriptions
(2) DD 1348-1A Sample Turn-in Document

1. Purpose

a. To provide information and instructions in establishing an effective Precious Metals Recovery Program within Marine Corps Base (MCB), Camp Lejeune and Marine Corps Air Station (MCAS), New River, hereafter referred to as the Installation.

b. These requirements are applicable to all organizations aboard the Installation to include: any command active, or reserve component; staff organization; supporting agency which is affiliated with the United States Marine Corps, Department of the Navy, or Department of Defense. This section also applies to organizations organic to or tenanted aboard the Installation, and those in transit or otherwise temporarily resident because of training or mobilization commitments.

2. Cancellation. BO 4555.1C.

3. Background. Reference (a) requires activity commanders to designate a local Precious Metals Recovery Coordinator to internally implement, monitor, and coordinate the activity's Precious Metals Recovery Program as prescribed therein.

4. Information. While the Defense Printing Service, Photographic Laboratories, and Medical/Dental Facilities are the most probable sources for recovery of silver from solutions used in processing photographic and x-ray film (fixing baths), there are other sources where silver bearing material is generated. Enclosure (1) contains a list of silver and gold bearing scrap descriptions.

5. Policy

a. Maximum participation in the Precious Metals Recovery Program is required by all MCB, Camp Lejeune and MCAS, New River activities, including photographic, medical/dental laboratories, printing facilities, etc. Expenses incurred by activities participating in the program are not reimbursable.

b. Generating activities are responsible for the transportation of precious metals scrap (film, recovery cartridges) and harvested silver to the local Defense Reutilization Marketing Office (DRMO). Transportation costs are not reimbursable.

c. The DRMO is responsible for accepting all excess and surplus precious metal or precious metal-bearing materials, including scrap or harvested silver generated by the military services.

6. Action

a. Per reference (b), the Assistant Chief of Staff, Environmental Management Department (AC/S, EMD), is designated as the coordinator for the Precious Metals Recovery Program for commands located on MCB, Camp Lejeune. The Commanding Officer, MCAS, New River is designated as the coordinator for Precious Metals Recovery Program for commands located at MCAS, New River. Appointed Environmental Compliance Coordinators, (ECCs) will serve as the point of contact for their command for Precious Metals Recovery. The ECC guided by the instructions contained in reference (a), will establish an effective Precious Metals Recovery Program to consolidate and monitor the precious metal recovery efforts within their command.

b. Activities generating precious metal bearing materials (hyposolution greater than 5 parts per million (ppm)), but not having a recovery unit at their activities will obtain written permission from the cognizant ECC prior to transporting any precious metals material to a recovery site. Hyposolution shall not be transported on any public highway by the generating activity. Request for transportation of hyposolution will be processed by the unit's ECC. Once permission has been obtained, the owning activity will observe proper change of custody between the owning activity and the receiving activity. A log record of all precious metals recovery shall be maintained by each activity. Change of custody shall reflect the following information:

(1) Date and Time

(2) Owning Activity/Name of Individual/Rank

(3) Receiving Activity/Name of Individual/Rank

(4) Quantity, number gallons, pounds, etc.

c. Those activities turning in precious metal bearing materials to DRMO will identify on the turn-in document (DD-1348-1A), the type of metals being turned in and the precious metal content. The turn-in document will be prepared as shown on enclosure (2). After turn-in of material, DRMO will provide a final copy of the DD 1348-1A to the generating unit through the cognizant ECC.

d. All generating and/or processing (recovery) activities shall have complete accounting records of all precious metals activity in their commands. The above procedure shall be conducted utilizing a log book entry.

e. Defense Reutilization Marketing Office will provide generating activities technical assistance, as required, to ensure visibility of precious metal generations, collection/recovery training requirements, and adequacy of collection/recovery methods, systems, and equipment.

f. Commands will not discharge fixer (hyposolution) directly to the sanitary sewer. Hyposolution will be collected and analyzed with a field test kit approved by the AC/S EMD; when determined to be less than 5 ppm, fixer may be discharged to the drain.

7. Concurrence. This Order has been coordinated with and concurred in by the Commanding Generals, II Marine Expeditionary Force; 2d Marine Division; 2d Force Service Support Group; and the Commanding Officer, Marine Corps Air Station, New River.

B. A. GOMBAR
Chief of Staff

DISTRIBUTION: A plus BEMD 5

SILVER-BEARING AND GOLD-BEARING SCRAP DESCRIPTIONS

1. Silver-Bearing Scrap Designations

Class	Estimated Silver Percentage
CLASS A Consists of used anodes, drillings from anodes and grain silver, wire for welding or brazing, silver flakes, silver extracted from spent hyposolution by the electrolytic process, and all other silver of a purity content of 90 percent or better.	90 (13.13) 1/
CLASS B Consists of silver foil battery plates separated by magnesium plates and silver chloride sheets (primarily MK 61-0 and 67-1 batteries).	49 (7.15) 1/
CLASS C (Reserved)	
CLASS D X-ray film, exposed industrial film and aerial film, millimeter film, and all types of shredded or cut-up film.	1 (1.15) 1/
CLASS E	1.5 (2.22) 1/
CLASS F (Reserved)	
CLASS G (Reserved)	
CLASS H (Reserved)	
CLASS K Silver-bearing amalgam.	33 (4.81) 1/
CLASS L	8 (1.14) 1/

ENCLOSURE (1)

Class	Estimated Silver Percentage
Silver-bearing plated electrical components, such as leads, capacitors, and other silver plated or bonded materials.	
CLASS M	31 (4.47) 1/
Silver sludge and silver-bearing ash.	
CLASS N	10 (1.46) 1/
Silver-bearing missile batteries encapsulated in epoxy-type plastic with metal cases and attachments.	
CLASS P	8 (1.14) 1/
Silver recovery cartridge consisting of a spun metallic filter through which the spent hyposolution has been filtered.	
CLASS R	24 (3.50) 1/
Desalter kits.	

NOTE: 1/ Conversion factors shown in parentheses when used as multipliers applied to the number of avoirdupois pounds of scrap will produce a reasonably accurate estimate of the silver content equated to troy ounces.

2. Gold-bearing Scrap Designations

Class	Description	Est. Gold % by Weight
A	Dental Scrap	40.00% (5.8332)
A-1	Metallic (foil, leaf, wire, casting, and brazing alloy)	65.00% (9.4790)
A-2	Dental sweepings	15.00% (2.1875)

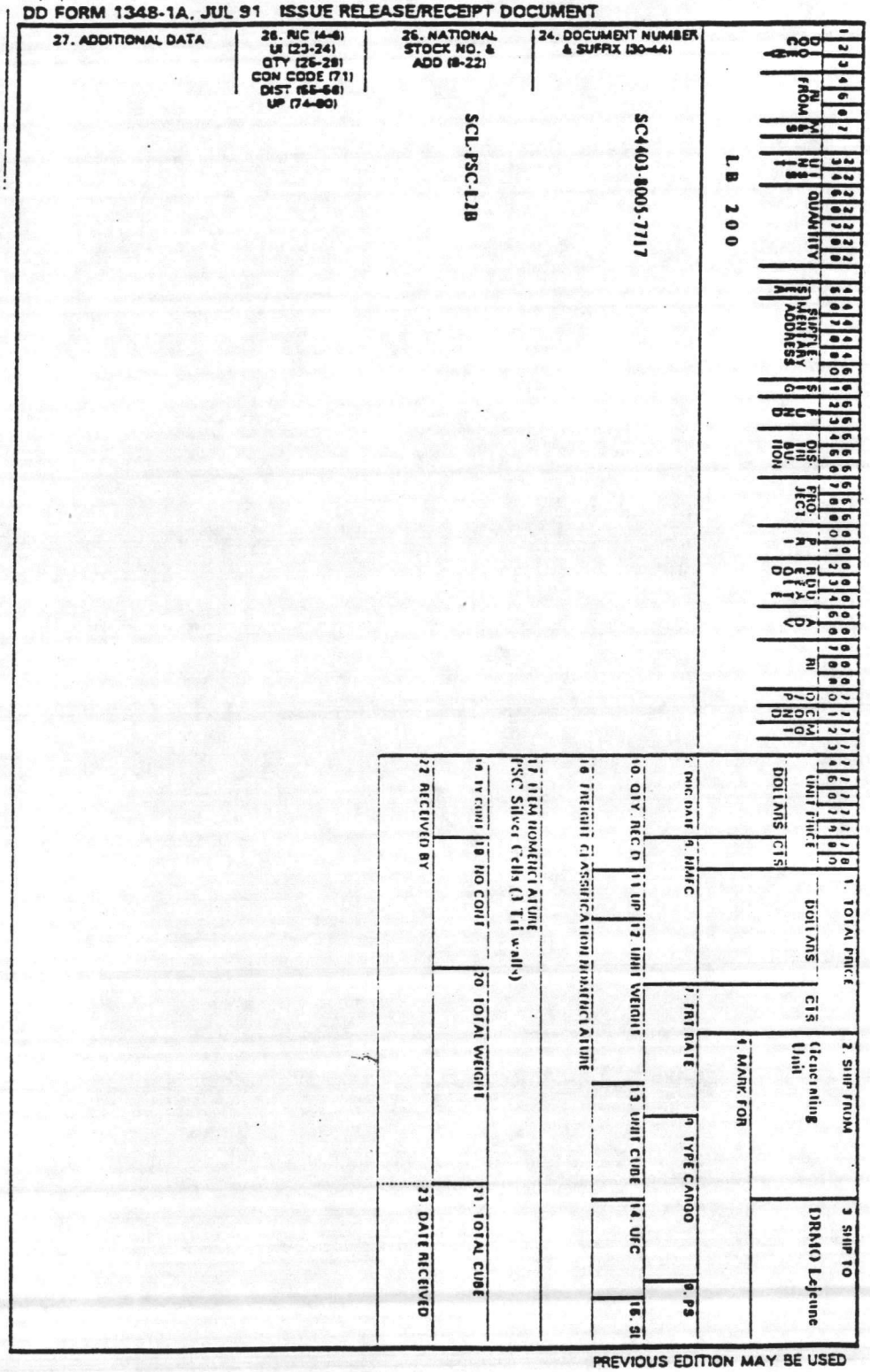
ENCLOSURE (1)

B	Electronic scrap (plated or washed)	0.40% (0.0583)
B-1	Integrated circuits/assembly and pins (not boards or transistors) (pins are ferro magnetic)	12.00% (1.7500)

Gold-bearing Scrap Designations		Est. Gold % by Weight
B-2	Electronic circuits/assembly and strips	6.50% (0.9479)
B-3	Electronic hardware, pins and connectors	0.60% (0.0875)
B-4	Rivets (gold-plated)	0.50% (0.0729)
B-5	Electronic chassis parts	0.20% (0.0292)
C	Eye glass frames (gold filled)	4.00% (0.5833)
D	Buttons	0.90% (0.1313)
E	Insignia and medals	0.10% (0.0146)
F	Gold solutions, 8.3 pounds per gallon (0.7 troy ounces per gallon)	0.60% (0.0875)

ENCLOSURE (1)

DD 1348-1A SAMPLE TURN-IN DOCUMENT



List Point of Contact (POC) in Block 27. Indicate whether silver cell is wet or dry in Block 17.

ENCLOSURE (2)

Base Order 6240.5B

UNITED STATES MARINE CORPS
MARINE CORPS BASE
PSC BOX 20004
CAMP LEJEUNE, NORTH CAROLINA 28542-0004

BO 6240.5B
BEMD

26 APR 1999

BASE ORDER 6240.5B

From: Commanding General
To: Distribution List

Subj: HAZARDOUS WASTE AND HAZARDOUS MATERIAL MANAGEMENT PROGRAM

Ref: (a) Resource Conservation and Recovery Act (42 USC 6901-6987)
(b) North Carolina Administrative Code Title 15, Chapter 13, Subchapter 13A
(c) MCO P5090.2 (NOTAL)

Encl: (1) Common Terms and Definitions
(2) Record of Training

1. Purpose

a. To establish procedures and general responsibilities for the disposal of hazardous material (HM) and hazardous waste (HW) under environmental permits and authorizations held by the Commanding General, Marine Corps Base (CG, MCB), Camp Lejeune.

b. These requirements are applicable to all organizations aboard MCB, Camp Lejeune to include: any command, active, or reserve component; staff organization; or supporting agency which is affiliated with the United States Marine Corps (USMC), Department of the Navy (DoN), or Department of Defense (DoD). This section also applies to organizations organic to or tenanted aboard MCB, Camp Lejeune and those in transit or otherwise temporarily resident because of training or mobilization commitments.

2. Cancellation. BO 6240.5A.

3. Background

a. Environmental management entails the administration and supervision of the interrelated programs enumerated in references (a) and (b). Reference (c) provides comprehensive guidance on a broad range of environmental laws and regulations applicable to the management of hazardous materials within the DoD. The United States Environmental Protection Agency (EPA) and the State of North Carolina administer specific environmental regulatory programs related to the treatment, storage, and disposal of HW. These agencies are empowered to take civil and criminal actions to enforce these requirements. Compliance with these requirements is critical to ensuring protection of MCB, Camp Lejeune personnel and property.

b. Through logistics support agreements and HW disposal contracts the Defense Reutilization and Marketing Office (DRMO), Camp Lejeune is tasked with providing long-term storage of HW awaiting final disposal and transporting waste off-site. Enclosure (1) contains the terms and definitions applicable to this Order.

c. Hazardous waste is a sub-category of both solid waste and hazardous material as is regulated under the Resource Conservation and Recovery Act (RCRA) and the Hazardous Material Transportation Uniform Safety Act (HMTUSA). The Commanding General, MCB, Camp Lejeune, is permitted by the EPA and the State to generate, store, and transport HW. The Commanding Officer, Marine Corps Air Station (CO, MCAS), New River, is also registered with the EPA and the State as a generator and transporter of HW. The DRMO, Camp Lejeune operates a long-term HW storage facility which supports HW disposal generated by both commands.

d. As EPA/State permit holders, the CG, MCB, Camp Lejeune, and the CO, MCAS, New River have the responsibility and authority to establish regulations for the management of several HW management programs. Commands tenant to MCB, Camp Lejeune must comply with this Order and all federal and state regulations pertaining to HW management. Commands tenant to the MCAS, New River must comply with the Air Station Order. Violation of federal and state HW laws is punishable by severe civil and criminal penalties. This Order deals with that aspect of environmental management related to the management, storage, and disposal of hazardous materials and associated waste at MCB, Camp Lejeune.

4. Hazardous Waste Personnel Training Requirements

a. Federal and state regulations promulgated under the RCRA require military and civilian personnel involved in any aspect of HW management to be provided HW training enabling them to carry out assigned HW duties safely and in compliance with HW regulations.

b. All personnel filling HW positions will be assigned in writing by the organizational commanding officer within one week of assignment.

5. Training Records and Certification Requirements

a. Training records will be maintained for each individual and shall be retained for a period of at least three years upon closure of a HW generation or storage facility or at least three years following reassignment from HW duties or end of active service.

b. Environmental Compliance Officers (ECOs) and supervisors will conduct an annual review with each individual in HW positions to identify required refresher training.

c. The certification statements of the training record are a critical component and indicate that an RCRA required review has been satisfactorily completed. Initial certifications will be signed by both the ECO and the subject named individual.

d. Enclosure (2) is the training record format for use at MCB, Camp Lejeune.

6. Installation Hazardous Waste Management Program. Listed below are the required elements of the Installation Hazardous Waste Management Program (IHWMP).

a. Standard Operating Procedures (SOP). Each major subordinate command and organizational element routinely generating or handling HW or disposing of HM will develop an SOP for HW management. At a minimum, the SOP will provide the following:

(1) Names and telephone numbers of the cognizant Environmental Compliance Coordinator (ECC) and ECO.

(2) Training records (Current). Name, rank/grade, title, duties, and HW training records for each current employee.

(3) Training records (Archived). Name, rank, title, duties, and HW training records for each employee in a HW billet for the past three years.

(4) Inspections. Copies of all weekly inspections of HW storage areas and containers performed during the preceding 36 months.

(5) Guidance. Guidance provided by the ECC and/or ECO to implement HW/HM disposal program.

(6) Location Map. Location map for each HW generation, accumulation, and storage area.

(7) Material Safety Data Sheets (MSDS), or allow immediate access to the Hazardous Material Information System Data developed per MCO 5100.25 for all HW generated.

(8) HWPS DD-1930. Copies of the HWPS DD-1930 for those wastes generated.

(9) Copies of Completed Hazardous Waste/Material Disposal Worksheets. Copies of Completed Hazardous Waste/Material Disposal Worksheet for each HW generated and disposed of during the preceding 12 months.

(10) Unit Spill Contingency Plan (USCP). Copies of up-to-date USCP for each site. At a minimum the USCP will contain the following:

(a) List of points of contact, and phone numbers of the ECC, ECO, and those local unit personnel authorized to partake in the response.

(b) Arrangements with local authorities. For USCP purposes contacting the Fire Protection Division (FPD) at 911 satisfies this requirement at the unit level.

(c) Actions trained unit personnel will take. These actions will be strictly defensive (1st Responder Operations) in nature and commensurate with the personal protective equipment available at the time of the incident.

(d) Equipment required to conduct defensive actions. This information is found in the personal protection information section of the chemical specific material safety data sheet.

(e) Evacuation and Staging. Evacuation routes may be the same used in the fire escape plan as long as access is not impinged by the hazardous waste/materials release. A staging area is defined as a predesignated area out of the potential area of danger where personnel will assemble in the event of an emergency. The USCP must state a minimum of two staging areas in the event of an emergency.

(11) Hazardous Waste Accumulation/Storage Areas List. A current list of all Hazardous Waste Accumulation/Storage Areas within each command.

(12) Rosters. Current rosters of all command HW personnel.

b. Unknown Chemicals. In addition to the liability associated with improperly identified HW, DRMO, Camp Lejeune is prohibited from accepting any HM or HW that cannot be identified by NSN or chemical name. If HW/HM is unidentifiable, a sample must be collected and sent to a laboratory for analysis.

(1) Units with containers of unidentified, potentially hazardous chemicals should immediately contact Assistant Chief of Staff, Environment Management Department (AC/S, EMD), the

cognizant safety office, and the Base Fire Protection Department (Base FPD) for guidance in proper storage and handling of the materials until identification is accomplished.

(2) If a need exists to have a material sampled and analyzed, a written request should be sent to the Commanding General, MCB, Camp Lejeune (Attn: AC/S, EMD) via the chain of command. The request for analysis will cite everything that is known about the material, to include where and when it was found, possible contents, and the results of any investigations conducted. Unidentified wastes are an indicator of improper HW management. Because of the severe civil and criminal implications of improper management of HM/HW the highest level of command attention must be given to ensure that such incidents do not occur.

7. Hazardous Waste, Universal Waste (UW), and Silver Storage Recovery, Accumulation, and Storage Areas

a. Types of Accumulation/Storage Areas. The MCB, Camp Lejeune Long-term HW Storage Facility is permitted by the State of North Carolina. It is the intent of this Order that there shall be one such long-term storage facility and that such facility will be operated by the DRMO-Lejeune under the oversight of the Assistant Chief of Staff (AC/S), Environmental Management Department (EMD). The Long-term HW Storage Facility shall be utilized to store HW/HM awaiting disposal generated by MCB, Camp Lejeune and tenant commands. AC/S, EMD validates the need for accumulation or storage areas prior to authorization issuance as well as reauthorizes/validates the need on a yearly basis. Listed below are the types of temporary accumulation and storage sites:

(1) 90-Day Site. An AC/S, EMD authorized area used to temporarily store HW. HW must be removed from the 90-day HW accumulation areas within 90 days of the accumulation start date (ASD) marked on the container.

(2) Satellite Accumulation Area (SAA), is a term developed by the EPA to designate a work site which may generate and accumulate HW without regard to the 90-day storage limit normally applicable to non-permitted HW storage facilities. The purpose of establishing this special category of HW storage is to assist those generating HW at a slower rate. Previously, generators were required to dispose of partially filled containers, thereby increasing the volume of HW generated. Any work site routinely generating a HW at a rate of less than one full container per 60 day interval may benefit from being designated as an SAA.

(3) UW Site (UWS). The purpose of establishing a special sub-category of HW storage is to assist the generators of UW to track and manage UW. Since UW is a sub-category of HW and remains regulated by Federal and State regulations, UW will be collected and managed in the same manner as HW with the exception of the terminology used for identification. UWS's are subject to the same HW inspection and personnel training requirements as standard HW Sites.

(4) Silver Recovery Site (SRS). The purpose of an SRS is to centrally collect and manage silver particles from silver generating processes. Although silver is a regulated HW in excess of 5.0 mg/l, by virtue of a compliant Silver Recovery Program, silver residues and solutions are exempted from Federal and State regulations. SRS's are subject to the same HW inspection and personnel training requirements as standard HW Sites.

b. Accumulation and Storage Areas Authorization and Operation. Each 90-Day Site, SAA, UWS, and SRS existing aboard MCB, Camp Lejeune, must be authorized by and registered with the Commanding General, MCB, Camp Lejeune. Establishment of new sites requires prior approval of the Commanding General, MCB, Camp Lejeune.

(1) Lists of currently authorized sites are available from the AC/S, EMD, MCB, Camp Lejeune.

(2) Establishment of new or temporary accumulation area or storage areas will require prior approval as follows:

(a) The initial recommendation for designating a new accumulation area or storage area will be made by the ECO in consultation with the cognizant ECC.

(b) Proposals for temporary accumulation area or storage area aboard MCB, Camp Lejeune, shall be submitted in writing via the chain of command to the Commanding General, MCB, Camp Lejeune (Attn: AC/S, EMD).

(3) The number of accumulation areas or storage areas should be limited to the minimum number practical within mission constraints.

(4) Access to sites/areas will be limited to properly trained personnel to the maximum extent practicable.

c. Container Selection

(1) Only Department of Transportation (DOT) or military specified approved containers will be used for accumulation and storage of HW. DOT approved containers are those that have successfully passed rigorous testing requirements established by DOT. Subject containers are identified as such by the container manufacturing markings.

(2) HW generators are responsible for providing the proper DOT approved container for the accumulation of HW.

d. Container Management for HW or UW

(1) Ensure containers are not damaged, dented, bulged or have deep pitted rust. Contents of damaged containers holding HW or UW must be transferred to serviceable DOT or mil-spec approved containers.

(2) Bungs and caps must be serviceable and include serviceable gaskets, rings, nuts; and bolts.

(3) Containers must always be closed (wrench tight) during storage, except when it is necessary to add or remove waste.

(4) Containers filled with aqueous solutions, liquids, or sludges will have proper outage to allow for expansion.

(5) Containers will be stored in a manner precluding damage by rainwater or flooding, excessive heat, etc.

(6) Containers will be stored in a manner restricting access except to properly trained personnel.

(7) Containers in EMD authorized accumulation areas or storage areas will be checked weekly for proper closure, container condition, and evidence of leaks or spills. Discrepancies will be corrected and promptly reported and noted to the command ECO.

e. Required Markings on HW or UW Containers. Every container of HW or UW will have the following markings affixed to the container in a permanent manner in contrasting color to the original container utilizing paint markers, medium or large points, or stencils using permanent paint/ink:

(1) Generating Unit HW/UW Container Marking Requirements

(a) Words: HAZARDOUS WASTE or UNIVERSAL WASTE.

(b) Content: Noun name found on the specific Hazardous Waste Profile Sheet (DRMS Form 1930) provided by EMD.

(c) Accumulation Start Date (ASD). If the HW is accumulated in an SAA, the ASD will only be affixed once the container is filled. If the HW is collected in an area other than an EMD authorized SAA, the ASD must be marked on subject container the moment a HW is placed into the HW container (e.g., 90 Day Site, HW Sites established during operations in tactical situations).

(d) Number of Containers. The number of containers marked reflect the total number of containers disposed of within the current document (e.g., 1 of 1, 2 of 3, etc.).

(2) EMD HW or UW Container Identification Requirements

(a) Packing Envelope with DD-1348. This information is derived from an accurately completed HW/HM Disposal Worksheet.

(b) DOT Label. A diamond shaped DOT identification tool used to identify the hazard class of the contents by means of a specific color, class number, and pictorial representative symbol of the HM. The DOT label will be affixed on the same surface of the package and near the proper shipping name marking. DOT Labels are at least 3.9 inches (100 mm) on each side.

(c) EPA Waste Number. The EPA identification designator of the type of HW contained.

f. Mandatory Inspections. Federal and state HW regulations require containers of HW storage containers/areas to be inspected weekly. Written records noting discrepancies as well as corrective actions will be maintained for a period of three years. Inspections should be accomplished by the cognizant HW Site Manager or properly trained alternate if the Site Manager is unavailable.

g. Spill Reporting and Response

(1) All spills of HW/HM will be immediately reported to the FPD at the emergency telephone number 911.

(a) Emergency spill reporting phone numbers will be prominently posted at each site along with "No Smoking," and "Authorized Personnel Only" signs.

(b) Signs will be posted at each entrance to the site and will be legible from a distance of 25 feet.

(2) Spill reporting and response actions required of Site Managers, Handlers, and other personnel should be documented in the USCP for each site where HW/HM/UW are handled and stored.

(a) The generating unit is responsible for developing and posting a site specific USCP which ties into the Installation response plan.

(b) Plans will be made readily available to personnel at each accumulation area or storage area.

(3) USCP's must also specifically address provisions for petroleum, oil, and lubricants (POL) storage sites, underground storage tanks (UST), and above ground storage tanks (AST).

h. HW/HM/UW Turn-In Procedures. Organizational ECO's are responsible for coordinating efforts to ensure proper identification, handling, storage, and turn-in of HW/HM/UW. The ECO of an organization having physical custody of HW/HM/UW is responsible for ensuring turn-in for disposal is accomplished in compliance with the following:

(1) Preparation. The HW/HM/UW will be properly containerized, marked, and placed on a standard size (40" x 48") pallet. Incompatible HW/HM/UW will not be co-located on the same pallet.

(2) HW/HM/UW Disposal Worksheet. Each ECO shall ensure all turn-ins of HW, HM, and UW are accomplished utilizing the current Hazardous Waste Disposal Worksheet and applicable instructions for its preparation.

(3) Organizational Turn-In Requirements. A HW Disposal Worksheet shall be prepared for each container or batch of containers of the same waste, and delivered to AC/S, EMD, MCB, Camp Lejeune not later than 45 days after the ASD for all HW/HM/UW generated by MCB, Camp Lejeune and tenant commands requiring storage at MCB, CampLejeune Long-term HW Storage Facility. The following procedures will be strictly followed for turn-in of all Installation HW/HM/UW requiring disposal:

(a) Properly trained unit personnel will prepare and submit the Hazardous Waste Disposal Worksheet to the cognizant ECO. The signature will certify the accuracy of the identification and estimated weight of the HW/HM/UW being turned-in.

(b) The cognizant ECO (or his/her properly trained authorized representative) will physically inspect the HW/HM/UW and take appropriate action per these guidelines to ensure the accuracy of the identification and the adequacy of containers and associated markings and/or labels.

(4) HW/HM/UW Disposal Worksheet Delivery. After physical inspection and correction of any discrepancies, the ECO or ECC authorized representative will ensure the ECC receives the worksheet, electronic mail delivery of the worksheet is acceptable.

(5) EMD Responsibility. Upon receipt of the worksheet, AC/S, EMD, MCB, Camp Lejeune will prepare the DD-1348 and coordinate delivery of the HW/HM/UW to DRMO, Camp Lejeune or other appropriate disposal authority.

(a) Normally, all discrepancies in marking and packaging must be corrected by the generator prior to DRMO-Lejeune acceptance.

(b) The generating unit will properly store and perform weekly inspections of all containers until deficiencies are corrected and the wastes are transported to the Installation Long-term HW Storage Facility or pickup by a DRMO, Camp Lejuene contractor or other disposal authority.

(c) EMD will arrange for the transportation of the HW/HM/UW to the Installation Long-term HW Storage Facility if required.

(d) Under no circumstances will HW be transported on public highways by Installation units.

(6) DRMO, Camp Lejeune Refusal Authority. If HW/HM/UW is to be picked up by the DRMO, Camp Lejeune contractor or other HW/HM/UW disposal authority directly from the generator facility, DRMO, Camp Lejeune or other appropriate disposal authority representative will inspect prior to loading and is authorized to refuse any container if discrepancies exist.

(a) The DRMO, Camp Lejeune will immediately notify AC/s, EMD, MCB, Camp Lejeune of the nature of the discrepancy and corrective action required.

(b) If the problems cannot be promptly resolved, the generator will be provided a written rejection notification.

(c) The generator will implement required corrective action and request the cognizant ECC to arrange reinspection and pick-up of the HW/HM.

(7) DRMO Refusal Requirements. If an HW/HM/UW is transferred to the MCB, Camp Lejeune Long-term HW Storage Facility, DRMO, Camp Lejeune will inspect prior to unloading and is authorized to refuse any container if discrepancies exist.

(a) DRMO, Camp Lejeune will immediately notify AC/S, EMD, MCB, Camp Lejeune and the HW generator of their refusal to accept the HW.

(b) The transporting vehicle will be secured and will not be moved outside the immediate vicinity of the DRMO, Camp Lejeune facility except for an emergency situation involving risk to public safety or to property.

(c) DRMO, Camp Lejeune and AC/S, EMD, MCB, Camp Lejeune will cooperate in making an immediate decision on corrective action.

(d) Normally, if the deficiencies are the result of generator negligence, errors, or omissions, the cognizant ECC will be notified. The ECC will ensure generating units take appropriate corrective action.

(8) HW/HM/UW Acceptance. The acceptance and physical custody of an HW/HM/UW by DRMO, Camp Lejeune or other proper authority signifies the generating unit has completed its HW/HM/UW disposal responsibilities in compliance with this Order.

8. RESPONSIBILITIES

a. The purpose of this section is to identify the command and staff requirements, and responsibilities for the implementation and management of the HW and HM Management Program aboard MCB, Camp Lejeune. All organizations shall:

(1) Conduct all operations and training aboard MCB, Camp Lejeune in compliance with the mandates of environmental law applicable to the prevention of pollution of the environment by HW/HM.

(2) Ensure commanders, officers-in-charge (OICs), and managers place priority on proper disposal of HW/HM/UW, minimize the volume of HW generated, and prevent and report HW/HM/UW spills.

(3) Appoint all personnel with environmental responsibilities in writing no later than one week after assignment. Positions of environmental responsibility include,

but are not limited to the following: ECC, Assistant ECC (AECC), ECO, Assistant ECO (AECO), Hazardous Waste Site Manager (HWSM), and Hazardous Waste Handler (HWH).

(4) Ensure cognizant ECC's and ECO's have sufficient rank (determined by CO/OIC), authority, and resources to properly manage the organization's HW/HM/UW management program.

(5) Ensure all HW personnel (primary and assistant ECC's, ECO's, HW Site Managers and Handlers) are appointed in writing by the organizational commanding officer. An appointment letter must be kept on file and a copy forwarded to the AC/S, EMD, MCB, Camp Lejeune within one week of assignment.

(6) Ensure training of HW personnel is accomplished within six months of assignment.

(7) Implement an environmental awareness training program in accordance with this Order.

(8) Maintain a current listing/directory of facilities where HW is generated, handled, and stored and ensure each facility is operated in compliance with this Order.

(9) Require ECO's to develop and implement a written SOP for each accumulation and storage facility.

(10) Ensure the HW SOP is readily available to all HW personnel and personnel participating in emergency response.

b. Commanding General, MCB, Camp Lejeune. Provide guidance for the Installation to comply with federal, state, and Marine Corps HW regulations through the MCB, Camp Lejeune HW/HM management program.

c. Assistant Chief Of Staff, Environmental Management

(1) Serves as the principal staff assistant to the CG, MCB, Camp Lejeune, on HW/HM management issues.

(2) Ensures proper Installation registration with and/or permitting by the EPA and the State for generation, transportation, and storage of HW/HM at MCB, Camp Lejeune.

(3) Coordinates the approval of HW generation sites and temporary storage areas within the cognizance of the Commanding General, MCB, Camp Lejeune. Provides technical assistance to ensure that the operation of these sites/areas are in compliance with applicable regulations.

(4) Publishes Base bulletins and other directives and provides technical assistance to organizations aboard MCB, Camp Lejeune as required, to ensure safe, efficient HW/HM disposal in compliance with MCO P5090.2A and related Federal, State and local environmental regulations.

(5) Provides the principal point of contact with Headquarters Marine Corps and other federal, state, and local agencies on all matters pertaining to HW management.

(6) Exercises staff cognizance over the review and environmental approval of proposed and ongoing actions and projects. Projects and actions are normally reviewed to identify and prevent potential HW violations and to promote hazardous material pollution prevention.

(7) Oversees the development and implementation of a plan for the establishment, training, and operation of a hazardous substance spill response team and will ensure the following:

(a) The plan addresses HW operations of MCB, Camp Lejeune, and all tenant organizations.

(b) On-Scene Commanders are kept informed of the HW management and compliance implications of spill containment and clean-up activities.

(c) The plan provides a system for collection and disposal of non-RCRA waste petroleum products and monitoring for water and air pollution.

(d) Timely submittal of required reports to the Joint Public Affairs Office, outside regulatory agencies and higher headquarters.

(8) Participates in the implementation of a hazardous substance spill contingency plan by serving as On-Scene Commander in the event of the absence of the AC/S, Installation Security and Safety (or representative) or by providing or directing others who provide professional and technical advice to other senior command officials serving in the capacity of the designated On-Scene Commander.

(9) Maintains necessary agreements with DRMO-Lejeune for the disposal of HW/HM and initiates action to obtain contract services for the recycling, treatment, and disposal of HW/HM not otherwise available from the DRMO-Lejeune.

(10) Ensures the availability of the MCB, Camp Lejeune Long-term storage facilities for storage of HW generated by MCAS, New River, consistent with the applicable support agreements and RCRA permits and provides technical assistance in all phases of HW management (to include sampling and analysis) on the same basis and terms as is provided to MCB, Camp Lejeune tenant commands.

(11) Reviews and updates this Order periodically to ensure compliance with new regulations.

(12) Provides management support required to ensure the effectiveness and timeliness of HW disposal support services to installation HW generators, including, but not limited to:

(a) Provide a primary and assistant Base HW Program Manager.

(b) Ensure Base HW Program Manager maintains records of HW/HM turn-in transactions and prepares HW reports to regulatory agencies.

(c) Ensuring that the MCB, Camp Lejeune Comprehensive Environmental Training and Education Program (CETEP) training is available.

(d) Coordination with the DRMO, Camp Lejeune and its higher headquarters on routine matters related to new or required changes/improvements to existing DRMO HW/HM disposal services.

(e) Ensures the transportation of HW is in compliance with all regulatory requirements applicable to a licensed HW transporter in the state of North Carolina.

(f) Performs environmental compliance evaluations of the HW activities aboard MCB, Camp Lejeune to determine and improve the status of compliance with federal, state, and Marine Corps environmental laws.

1 Evaluations will be scheduled, conducted, and reported per BO 5041.2R, and related Headquarters Marine Corps environmental compliance evaluation guidance contained in MCO P5090.2A.

2 Compliance deficiencies and appropriate corrective action will be incorporated into formal written reports and provided per BO 5041.2R to the Base Inspector, MCB. Camp Lejeune and the inspected organization.

(g) Oversees participation in the review and environmental approval of proposed actions and other requests for assistance and National Environmental Policy Act (NEPA) procedures.

(h) Implements an environmental awareness training program for the Installation and assists tenant commands with the conduct of their respective awareness programs.

d. Assistant Chief Of Staff, Facilities

(1) Designs and constructs new facilities with adequate provisions for HM and HW management and maintains and repairs existing HW/HM storage facilities to ensure compliance with appropriate HW/HM storage and handling regulatory requirements.

(2) Provides contractual support for HW management and disposal when required.

(3) Provides engineering equipment and operators for oil and hazardous substance spill response and clean up, as required by Base FPD.

e. Assistant Chief Of Staff, Installation Security And Safety

(1) Participates in response and cleanup of spills of HW through implementation of the oil and hazardous substance spill contingency plan and related spill prevention.

(a) Serves as On-Scene Commander and directs others who serve as On-Scene Coordinator.

(b) Provides traffic and crowd control support for oil and hazardous substance (OHS) spill response.

(c) Provides adequate security for restricted area access, if necessary for the protection of human health and the environment during an OHS spill response.

(2) Responds to reported incidents of unauthorized disposal or abandonment of solid waste, HW, and HM aboard the Installation and conducts preliminary investigations. Makes notification of findings to the CG, MCB, Camp Lejeune. When directed, refers such incidents to the Naval Criminal Investigative Service or other appropriate law enforcement agencies.

(3) Oversees the operation of the Base Safety Division and ensures safety support is provided relative to implementation of the Installation HW and HM disposal program and related emergency response. Provides support to the HW training programs of respective commands relative to the Occupational Safety and Health Agency (OSHA) and Marine Corps safety standards for HM handling and storage and related emergency response. Conducts annual safety inspections of command HW/HM long term storage facilities and notifies cognizant officials of unsafe HW/HM storage and handling incidents that are in violation of applicable OSHA or other safety standards.

(4) Provides safety specialists to serve on the Installation OHS spill response team as provided in this Order, applicable logistics support agreements with MCAS, New River, and other pertinent regulations.

(5) Oversees the FPD, provides personnel to serve as On-scene Commander for OHS spill response aboard MCB, Camp Lejeune and outside flight line areas aboard MCAS, New River.

(6) Coordinates the training of the OHS spill response team and maintains associated training records.

(7) Assists in the prevention of HW/HM spills and related emergencies by inspecting work sites and notifying cognizant officials of incidents of improper storage and handling of HW/HM likely to result in a spill, explosion, fire, or similar imminent threat to human health, environment, safety, or property.

f. Assistant Chief of Staff, Logistics. Serves as the principal agent on matters pertaining to the transportation of HM regulated by DOT.

g. Assistant Chief of Staff, Reserve Affairs/Reserve Support Unit. Ensures that reserve units conform to the requirements of this Order.

h. Assistant Chief of Staff, Training, Education, and Operations

(1) Informs the AC/S, EMD, Camp Lejeune a minimum of 180 days prior to the arrival of any unit scheduled to conduct training or participate in exercises, which is not organic to or tenanted aboard the Installation.

(2) Programs environmental awareness training as an annual subject in Professional Military Education (PME) sessions scheduled for the senior military and civilian leadership of the Installation.

(3) Provides audiovisual training support for HW training.

(4) Coordinates emergency planning and response programs with AC/S, EMD, Camp Lejeune OHS plan.

i. Commanding Officer, Naval Hospital, Camp Lejeune

(1) Provides ambulances and related emergency health care support to OHS spill response actions and industrial hygienists to serve on the OHS spill response team.

(2) Provides technical assistance in conjunction with AC/S, EMD, Camp Lejeune to HW generators on occupational health matters related to the collection and disposal of HW/HM and medical waste.

j. Defense Reutilization and Marketing Office, Camp Lejeune

(1) Ensures compliance with Treatment Storage Disposal Facility (TSDF) RCRA Part B permit. Furnishes all information required for EPA/State reporting requested.

(2) Provides MCB, Camp Lejeune safety representatives access to the TSDF upon request.

(3) Maintains records of HW lab analysis results applicable to the turn-in of HW and the operation of the TSDF.

(4) Inspects HW and accepts physical custody as per the Defense Reutilization and Marketing Service instructions.

(5) Operates the TSDF aboard MCB, Camp Lejeune as per the applicable Federal and State RCRA part B permit conditions and Marine Corps Hazardous Waste management requirements.

(6) Immediately reports all HW spills to the Base FPD by calling 911.

(7) Tests and maintains emergency preparedness and prevention equipment.

(8) Ensures training of personnel in the handling, packaging, and storing of HW. Notifies AC/S, EMD, MCB, Camp Lejeune staff in advance of any changes in personnel working at the TSDF.

(9) In the absence of authorized Base personnel, prepares and signs as generator, all federal and state manifests for shipping hazardous property and tracking waste from MCB, Camp Lejeune to the disposal site. Ensures copies of all manifest transactions for shipment from the TSDF to the disposal site are provided to AC/S, EMD, including final certificates of disposition or destruction.

k. Commanding Generals or Commanding Officers of Tenant Commands. Ensure all organizational elements within each command complies with all requirements of this Order.

l. MCB, Camp Lejeune Hazardous Waste (HW) Program Manager

(1) Serves as Command point of contact with Federal and State agencies, and other Marine Corps Installations on routine matters pertaining to HW collection, treatment, and disposal.

(2) Keeps abreast of emerging Marine Corps, Federal, and State HW regulations and HW management technology and initiates action required for the efficient and orderly conduct of HW collection and disposal operations.

(3) Monitors ongoing HW collection, treatment, and disposal activities as required to identify, evaluate and provide environmentally sound, efficient program operation and timely support to Installation HW generators.

(4) Assists Director, Environmental Compliance Division, in the preparation and submittal of periodic budget projections for HW disposal costs and associated handling equipment and facilities improvements to the AC/S, EMD for inclusion in the Annual Operations Plan and/or other appropriate budgetary submittals.

(5) Oversees the day-to-day collection, treatment, and disposal of HW in compliance with all relevant regulations and this Order and provides the following technical assistance and management support:

(a) Provides MCB, Camp Lejeune HW management policies and procedures to the Head, Environmental Quality Compliance Branch, Environmental Compliance Division.

(b) Carries out those ECC HW duties outlined in this Order relating to HW operations of the commands and organizations of MCB, Camp Lejeune.

(c) Receives, processes, and maintains records of HW/HM Disposal Worksheets delivered by Base ECO's, and tenant command ECC's as per this Order.

(d) Coordinates HW transportation services required to transfer Base tenant commands' HW to the Base Long-term HW Storage Facility and HW management and disposal service contracts administered by MCB, Camp Lejeune.

1 Performs quality assurance inspections for generating activities at MCB, Camp Lejeune to ensure compliance with regulatory packaging and documentation requirements prior to transporting to DRMO.

2 Complies with federal and state HW manifesting and/or associated recordkeeping requirements.

3 Provides, or otherwise ensures, a properly trained and authorized individual signs manifests as the HW generator and HW transporter for shipments to off-site contractor facilities.

(e) Coordinates the acceptance of all HW by DRMO and, for MCAS, New River, subsequent Transportation to the Installation's Long-term HW Storage Facility.

(f) Participates in the development of HW/HM site specific HW spill contingency plans and associated HW spill prevention, control, clean-up, and disposal activities.

(6) As required, assists in the conduct of environmental compliance evaluations and other inspections of HW generation and storage sites.

(a) Assists in the development and implementation of corrective actions.

(b) Provides technical assistance to HW generators and to HW management support organizations required to implement recommended corrective actions.

(c) Participates with HW generators in correcting HW management and related environmental compliance deficiencies.

(7) Maintains accurate records of HW management activities and prepares annual HW reports and related routine HW generation and disposal submittals as required for compliance with MCO P5090.2A, this Order, and other pertinent regulations.

m. HW Generator

(1) Develops and maintains command SOP as per this Order to implement the HW management program and command specific requirements. HW management efforts should promote HW minimization and other pollution prevention objectives to the maximum extent practicable within mission and resource constraints.

(2) Ensures HW generation and storage are limited to those types of HW for which MCB, Camp Lejeune is authorized to generate and store, and for which hazardous waste profile sheet (HWPS) has been issued by EMD.

(a) ECO's and HW Site Managers should continuously review HW generation and update changes in waste stream composition.

(b) Any new HW stream generated for which no HWPS should be reported immediately to the Base HW Program Manager.

(3) Ensures that ECO's, HW Site Managers, HW Handlers, and other environmental staff required are appointed in writing and trained.

(a) All HW personnel will be furnished a written description of their HW duties.

(b) Enclosure (2) will be utilized to document HW training.

(4) Ensures HW generation sites, (e.g., 90-day, UW and SAA's) are registered with the AC/S, EMD.

(5) Base tenant HW generators should send appointment letters to the AC/S, EMD.

n. Environmental Compliance Coordinators

(1) Serves as command point of contact for matters involving environmental issues to include management of HM, HW, UW, or Silver Recovery operations and compliance with this Order.

(2) Schedules and participates in the conduct and follow-up of environmental compliance evaluations of HW operations as per this Order, MCO P5090.2A, and Federal and State regulations.

(3) Ensures discrepancies identified through environmental compliance evaluation(s) are corrected.

(4) Develops and maintains command SOP as per this Order to implement the HW management program and command specific requirements. HW management efforts should promote HW minimization and other pollution prevention objectives to the maximum extent practicable within mission and resource constraints.

(5) Oversees and participates in the implementation of command HW collection, handling, and disposal and ensures all HW operations are carried out in strict compliance with the requirements of this Order, MCO P5090.2A, and Federal and State regulations.

(a) Coordinates the review and authorization of new HW generation and accumulation areas by EMD.

(b) Consolidates HW Turn-In Disposal Worksheets from generating units.

(c) Ensures HW Turn-In Disposal Worksheets are complete and accurate.

(d) Inspects contents against HW Turn-In Disposal Worksheets.

(e) Ensures submission of HW Turn-In Disposal Worksheets to EMD.

(f) Maintains appropriate records of HW/HM Disposal Document submissions.

(g) Monitors progress of removal of HW/HM and notifies EMD when HW remains on-site in excess of 75 days of ASD on any container.

(h) Provides assistance to ECO's and Site Managers in resolving HW management problems affecting disposal.

(i) Ensures all required HW inspections are conducted. Completes quarterly inspection of all HW, UW, SRS accumulation areas. In the absence of unit ECO conducts required inspection.

(6) Monitors the respective environmental training program to ensure personnel in positions of environmental responsibility are trained as per the Base CETEP.

(a) Participates and ensures those personnel in positions of environmental responsibility attend HW training sessions and workshops conducted by the command ECC and the AC/S, EMD.

(b) Reviews annually ECO HW duties and training, and submits requests for additional HW training to AC/S, EMD.

(c) Assists command ECO's review of HW Site Managers' HW duties and HW training at intervals of not more than 12 months, and submits requests for additional HW training to AC/S, EMD.

(d) Submits training requests as per the CETEP enrollment procedures for subordinate organizations within their respective commands.

(e) Maintains current HW training records for themselves, ECO's, and AECO's within their command.

(f) Retains former command HW personnel HW training records as per Federal and State regulations and Marine Corps Orders.

(7) Identifies facilities' deficiencies to the appropriate Installation authorities.

o. Environmental Compliance Officers

(1) Serves as command point of contact for matters involving environmental issues to include management of HM, HW, UW, or Silver Recovery operations and compliance with this Order.

(2) Develops and maintains command SOP as per this Order to implement the HW management program outlined in this Order and command specific requirements. HW management efforts should promote HW minimization and other pollution prevention objectives to the maximum extent practicable within mission and resource constraints.

(3) Keeps HW Site Managers and key personnel informed of any changes in regulations affecting HW activities within the ECO's cognizance and ensures that HW SOP's and USCP's are up-to-date and readily available for review by personnel involved in the HW management.

(4) Maintains a list of the location of all HW generation sites, SAA's, UW Sites, 90-day Sites, and Silver Recovery Sites within the command. Provides a current copy of this list to the cognizant organizational ECC, Base HW Program Manager on a monthly basis.

(5) Conducts monthly inspections of HW and UW inventories in command 90-day sites and performs and documents follow-up actions required to ensure correction of container management deficiencies and timely removal of HW.

(6) Informs ECC when unavailable to conduct required inspections.

(7) Ensures all required inspections are conducted when Site Managers or Handlers are unavailable.

(8) Oversees and participates in the implementation of command HW collection, handling, and disposal and ensures all HW operations are carried out in compliance with the requirements of this Order.

(9) Notifies cognizant ECC's by telephone with written follow-up anytime HW or UW remains in the 90-day Site in excess of 75 days of ASD on any container.

(10) Actively promotes the reduction of volume and toxicity of HW/UW/HM produced within the ECO's organization.

(11) Promotes the proper management and segregation of used POL to minimize contamination with water, antifreeze, and other contaminants.

(12) Oversees the management of organization HW training programs including, but not limited to the following:

(a) Maintains a current roster and HW training records of all HW Site Managers and HW Handlers within the command.

1 Ensures that HW training records for HW personnel transferring to another installation or being released from active duty are transferred to the appropriate official for retention per RCRA regulations. Tenants of MCB, Camp Lejeune, will forward the HW training records to the cognizant Command ECC.

2 Ensures HW training for MCB, Camp Lejeune civilian employees is reported to the cognizant Civilian Personnel Office for entry into the Navy Civilian Personnel Data System (NCPDS).

(b) Participates in and ensures HW Site Managers and HW Handlers participate in regular HW training sessions and workshops conducted by the command ECC and EMD.

1 Reviews annually HW Site Managers' HW duties, and submits requests for additional HW training via the cognizant command ECC to EMD.

2 Assists HW Site Managers' annual review of HW Handlers duties, and submits requests for additional HW training per guidance contained in this Order via the cognizant command ECC to EMD.

p. HW Site Managers. For the purposes of this Order, OIC's, Noncommissioned Officers-in-Charge (NCOIC), and civilian supervisors of work sites where HW, UW, or precious metals (Silver Recovery) is generated, handled, or stored shall be considered "HW Site Managers." Additionally, the HW Site Manager must be assigned in writing by their respective commanding officer or supervisor within one week of assignment.

(1) Ensures MCB, Camp Lejeune and command management requirements are implemented for each type of HW, UW, or HM routinely collected and managed for disposal.

(2) Ensures that only authorized, properly trained, and supervised HW personnel are allowed to handle HW or perform associated inspections and record keeping:

(a) Schedules initial HW training for each newly assigned assistant HW Site Manager or HW Handler.

(b) Provides, or ensures other qualified, trained HW personnel provide direct supervision of each assistant HW Site Manager or HW Handler until adequate initial HW management training is provided and documented.

(3) Conducts annual reviews of HW training records for unit HW personnel.

(4) Conducts and properly documents weekly inspections of 90-day Sites, UW, and SAA's per Federal and State HW regulations and performs and documents follow-up actions required to ensure the following are accomplished:

(a) Ensures all containers are clearly marked with appropriate marking requirements.

(b) Ensures HW containers comply with requirements of this Order. In the event a HW container does not meet the noted requirements corrective action will be taken.

(c) Ensures all leaks, releases, or spills are managed according to this Order.

(5) Notifies immediate superior and ECO immediately upon becoming aware of one of the following:

(a) The generation or the proposed generation of a new type of HW or UW.

(b) Existing or potential violations of this Order or deficiencies suspected of posing a threat of a HW spill, fire, explosion, or other danger to human health and safety or to property.

(c) Visits or proposed visits to the work place by a representative of Federal or State environmental agency.

(d) The presence of HW in the 90 Day Site with an ASD over 75 days old which has not been processed for removal.

(6) Ensures the day-to-day collection and storage of HW and excess HM awaiting disposal. Initiates action to dispose of accumulated HW or excess HM.

(7) Provides instructions and supervision required to ensure all HW and HM disposal activities shall be carried out in compliance with this Order.

(8) Ensures that all HW and special wastes are managed in a manner which prevents contamination by unknown items, damage, vandalism, fires, spills, explosions, or other situations likely to pose a hazard to human health or the environment.

(9) Checks HW generation sites and HW storage containers weekly for deficiencies and performs follow-up when required to ensure that problems are corrected.

(10) Ensures containers of HW are confined to authorized and approved SAA's and 90-day accumulation areas.

(11) Ensures mandatory weekly inspections are completed and that inspection follow up action is taken and documented.

(12) Initiates disposal of HW/HM as per guidelines provided in this Order.

(a) HW/HM/UW Disposal Worksheet will be properly prepared and submitted to the cognizant ECO within five working days after a container of HW/HM becomes full.

(b) HW/HM/UW Disposal Worksheet will be delivered to the command ECO.

(c) Provides personnel, equipment, and supplies required to repackage the contents of unserviceable containers of HW/HM/UW.

q. HW Handlers. Are all personnel handling HW for the purposes of storage, transportation, or treatment, not assigned as a HW Site Manager, ECO, or ECC. Additionally, all Handlers must be assigned in writing by their organizational commanding officer or supervisor within one week of assignment. Duties of the HW Handler include:

(1) Properly preparing HW for containerization, storage, and transportation.

(2) Marks all containers with appropriate markings.

(3) Transfers or overpacks contents of unserviceable HW containers to serviceable DOT or approved mil-spec containers.

(4) Reports all leaks or spills as perthis Order.

(5) Collects and stores HW and excess HM awaiting disposal as per the direction provided by the Site Manager.

(6) Handles, stores, or otherwise prevents HW and special wastes from becoming contaminated by unknown items, damage, vandalism, fires, spills, explosions, or other situations likely to pose a hazard to human health, or the environment.

(7) Inspects HW generation sites and HW storage containers weekly for deficiencies and reports all discrepancies to the HW Site Manager.

(8) Informs HW Site Manager or ECO if unable to conduct mandatory weekly inspections.

(9) Stores containers of HW in authorized and approved SAA's and 90-day accumulation areas.

(10) Informs HW Site Manager when a container of HW becomes full and requires disposal.

9. Reserve Applicability. This Order is applicable to the Marine Corps and Naval Reserves.

10. Concurrence. This Order has been coordinated with and concurred in by the Commanding Generals, II Marine Expeditionary Force; 2d Marine Division; 2d Force Service Support Group; and the Commanding Officers, Marine Corps Air Station, New River and Naval Hospital.

B. A. GOMBAR
Chief of Staff

DISTRIBUTION: A plus BEMD 5

COMMON TERMS AND DEFINITIONS

The following terms and definitions are applicable to this Order:

1. Accumulation Start Date (ASD). The date any amount of HW is first placed into a container at any location other than a Satellite Accumulation Area. The ASD must be affixed at the point in time when a container is filled with a Universal Waste in a Satellite Accumulation Area. The ASD is also the date any amount of UW is placed into a container at a Universal Waste site. The ASD will be marked in the day/month/year format.

2. Battery. A device consisting of one or more electrically connected electrochemical cells which is designed to receive, store, and deliver electric energy. An electrochemical cell is a system consisting of an anode, cathode, and an electrolyte, plus such connections (electrical and mechanical) as may be needed to allow the cell to deliver or receive electrical energy. The term battery also includes an intact, unbroken battery from which the electrolyte has been removed.

3. Disposal. The discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste into or on any land or water so that the solid waste or any constituent part of the solid waste may enter the environment or be emitted into the air or discharged into any water, including groundwaters.

4. Environmental Compliance Coordinator (ECC). An individual with sufficient rank, assigned by the respective Commanding General, Head of a Base tenant command/organization, or by the Commanding Officer, MCAS, New River responsible for the management and implementation of the command environmental program.

5. Environmental Compliance Officer (ECO). An individual with sufficient rank, assigned at the regimental, battalion, separate company level and base agency (or equivalent) responsible for the management and implementation of the command environmental program.

6. Environmental Management Department (EMD) Authorization. A site authorization document issued by EMD identifying specific areas to include: Satellite Accumulation Area (SAA), 90 Day Site, Universal Waste Site, and Silver Recovery Site.

7. Excess HM. Unused HM for which its custodian has no requirement. This type of material can frequently be returned to the supplying organization, redistributed, or recycled.

8. Generator. Generator means any person, whose act or process produces HW or Universal Waste identified or listed in 40 CFR parts 261 and 273, or whose act first causes a UW to become subject to regulation. The Commanding General, MCB, Camp Lejeune and the Commanding Officer, MCAS, New River are registered with the EPA as the generators of HW produced aboard their respective installations. For purposes of implementation of this Order

aboard MCB, Camp Lejeune and MCAS, New River complex (hereafter referred to as the Installation), and for administrative purposes to facilitate the understanding of responsibilities of Commanders, Department Heads, Officers-in-Charge, and Supervisors, Generators are identified as follows:

a. Commanding Generals of II Marine Expeditionary Force, 2d Marine Division, and 2d Force Service Support Group.

b. Commanding Officers of the Naval Hospital; Naval Dental Center; Marine Corps Engineer School; Weapons Training Battalion; Field Medical Service School; Marine Corps Service Support Schools; Reserve Support Unit; School of Infantry; Headquarters and Support Battalion, MCB, Camp Lejeune and any subordinate organization requiring an ECO.

c. Heads of the following MCB Camp Lejeune organizations: Facilities Department, Base Maintenance Division; Logistics Department; Marine Corps Community Services; Training, Education and Operations Department; Manpower Department; EMD; Management Support Department; and any subordinate organization requiring an ECO.

d. Group and Squadron Commanding Officers at MCAS, New River.

e. The Resident Officer in Charge of Construction, Jacksonville; Officer in Charge of Facilities Support Contracts, Jacksonville; and other Installation contracting officers are considered the HW generator for any waste generated by contractors operating under their cognizance.

f. Commanders or chief supervisors of any organization aboard the Installation, not otherwise listed, who generate, handle, or store HW.

9. Hazardous Material (HM). A chemical compound or combination of compounds posing or capable of posing a significant risk to public health, safety, or the environment due to its quantity, concentration, or physical/chemical, and/or infectious properties, and/or characteristics.

10. Hazardous Waste (HW)

a. A solid waste, or combination of solid wastes, which because of quantity, concentration, or physical, chemical, or infectious characteristics may:

(1) Cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness, or

(2) Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

b. The two methods used by Federal and State agencies to determine if a solid waste is hazardous are:

(1) Listed HW. A discarded HM no longer usable for its intended purpose and which is named on one of the three HW lists in the HW regulations of the Environmental Protection Agency (EPA) and/or the State Universal Waste regulations. The three HW lists are: non-specific source wastes (F), specific source wastes (K), and commercial chemical products (P & U).

(2) Characteristic HW. A discarded HM no longer usable for its intended purpose and which exceeds one or more EPA standards for the characteristics of ignitability, corrosivity, reactivity, or toxicity and which is not otherwise excluded by EPA and State regulations.

11. HW Determination. The process used to evaluate whether a material being discarded is a solid waste meeting the regulatory definition of a RCRA regulated HW. The decision is based on user knowledge and/or scientifically controlled testing of the material to be discarded.

12. HW Generation Site. A specific location where a HW is stored, handled, or determined to be no longer usable for its intended purpose. Normally that area of real property in the immediate vicinity of the process which produced the waste.

a. 90-Day Site. Under Federal and State HW regulations, HW generators may accumulate HW for up to 90 days or less without having to obtain a HW storage permit. Failure to transfer a HW container from a 90-day Site to the Base Long-Term Universal Waste Storage Facility operated by DRMO or an off-site permitted treatment, storage, or disposal facility within 90 days of the ASD on the container is a violation of EPA and State regulations.

b. Satellite Accumulation Area (SAA). A HW generation point at which waste may be accumulated until the HW storage container is full. A filled container must be transferred within 72 hours to an approved 90-day Site or long-term HW storage facility. Failure to comply is a violation of EPA and State regulations. An EMD Authorization for a SAA must be obtained and posted at the site to preclude a 90-day storage violation. EMD authorization will establish individual limits for each SAA. No SAA authorizations will exceed 55 gallons of HW or 1 quart of acutely HW.

13. HW Handler. An individual assigned in writing by their respective commanding officer that specifically prepares HW for transportation, storage, treatment, or disposal.

14. Hazardous Waste Management. The systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery and disposal of hazardous wastes.

15. HW Container Marking Requirements. EPA and State regulations require specific markings for containers used for the storage of HW. Every container of HW must be marked with the information listed in 10304. 7.

16. HW Profile Sheet (HWPS) - DRMS 1930. A form requested by the Defense Reutilization and Marketing Service (DRMS) which lists the physical and chemical characteristics of a waste as well as generator information. This form is required and used by the Defense Reutilization and Marketing Office (DRMO) to assure proper identification of HW. The HWPS is prepared by EMD. Units generating HW must obtain the specific HWPS from EMD prior to generating a HW. Updated HWPS will be maintained by the HW Site Manager, ECO, and ECC.

17. HW Site Manager. The HW Site Manager is the OIC, NCOIC, or civilian supervisor in immediate charge of the work site or shop where the HW is being generated or stored.

18. HW Transportation. The differences between two categories of HW transportation must be understood to assure efficient movement of wastes in compliance with Federal and State HW regulations:

a. Off-Base Transportation. Transportation of HW on public highways is strictly controlled by Federal and State HW regulations. The Commanding General, MCB, Camp Lejeune, is registered with EPA and the State as a HW transporter. As a result, MCB, Camp Lejeune can legally transport HW on public highways. Examples of public highways are: US-17, NC-24, NC-210, and sections of NC-172 off-base. Transportation of HW on public highways will be performed by the Transportation Section, EMD, or by a properly licensed commercial HW transporter.

b. On-Base Transportation. Transportation of HW on Base highways, which includes NC-172 from Triangle Outpost to the Sneads Ferry Gate, is not considered HW transportation as defined in the RCRA. HW generators are authorized to transport HW on highways within MCB, Camp Lejeune, provided public highways are not used or crossed. All HW moved by the generator will be carried out under the direction of the cognizant ECC. Vehicle operators will have proper HM safety, health, and HW management training; and an appropriate vehicle operator's license.

19. Installation Hazardous Waste Program Manager (Base HW Program Manager). The Head of the Resource Conservation and Recovery Branch, Environmental Compliance Division, Environmental Management Department, MCB, Camp Lejeune or his/her authorized representative.

20. Long-Term HW Storage. The containment of HW for an indefinite period of time in a permitted facility designed to maintain HW in compliance with Federal and State HW regulations. Storage of RCRA regulated HW, unless in an EMD authorized Satellite Accumulation Area, for longer than 90 days is considered long-term HW storage. DRMO is the only State permitted facility for long-term storage of HW aboard MCB, Camp Lejeune.

21. Outage. The amount of free space left in a container. The purpose of outage is to allow for expansion.

22. Person. An individual, corporation, company, association, partnership, unit of local government, State agency, Federal agency or other legal entity.

23. Pesticide. Any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or desiccant, other than any article that:

a. Is a new animal drug under FFDCA section 201(w), or

b. Is an animal drug that has been determined by regulation of the Secretary of Health and Human Services not to be a new animal drug, or

c. Is an animal feed under FFDCA section 201(x) that bears or contains any substances described by paragraph (a) or (b) of this section.

24. Shelf-Life Expired HM. Unused HM which has exceeded the useful life specified by the manufacturer or other authority and is no longer suitable for its original purpose. Under normal circumstances expired, non-extendable shelf-life materials become HW. Refer to the shelf-life management section CETEP course manuals for detailed shelf-life management operating parameters.

25. Sludge. Sludge means any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility exclusive of the treated effluent from a wastewater treatment plant.

26. Special Waste. A discarded used or unused HM (to include residues from the cleanup of HM spills) which is no longer suitable for one or more of the purposes for which the item was manufactured and which is not a regulated HW.

27. Storage. Storage means the holding of HW for a temporary period, at the end of which the Universal Waste is treated, disposed of, or stored elsewhere.

28. Thermostat. A temperature control device that contains metallic mercury in an ampule attached to a bimetal sensing element, and mercury-containing ampules that have been removed from these temperature control devices in compliance with the requirements of 40 CFR 273.13(c)(2) or 273.33(c)(2).

29. Treatment. Treatment includes any activity or process designed to change the physical form or chemical composition of HW so as to render it less hazardous or nonhazardous.

30. Unit Spill Contingency Plan (USCP). The purpose of the USCP is to minimize the potential hazards to human health, the environment, and property associated with hazardous releases. USCP's are the first line of defense against possible releases and tie into higher level plans such as those required for HW facilities, emergency response plans, facility response plans, spill prevention, control and countermeasure plans, regional and national contingency plans.

31. Universal Waste. Any of the following hazardous wastes that are subject to the Universal Waste requirements of 40 CFR part 273:

a. Batteries as described in 40 CFR 273.2; (does not include automotive wet cell batteries)

b. Pesticides as described in 40 CFR 273.3; and

c. Thermostats as described in 40 CFR 273.4.

32. Universal Waste Handler. A generator, as defined in this Order, of Universal Waste; or the owner or operator of a facility, including all contiguous property, that receives UW from other UW handlers, accumulates UW, and sends UW to another UW handler, to a destination facility, or to a foreign destination.

33. Universal Waste Transfer Facility. Any transportation-related facility including loading docks, parking areas, storage areas and other similar areas where shipments of Universal Waste are held during the normal course of transportation for 10 days or less.

34. Universal Waste Transporter. A person engaged in the off-site transportation of Universal Waste by air, rail, highway, or water.

35. Used Oil. Any oil which has been refined from crude oil or synthetic oil and, as a result of use, storage, or handling, has become unsuitable for its original purpose due to the presence of impurities or loss of original properties. Used oil may be suitable for further use and is economically recyclable, therefore is managed as a separate category of material.

RECORD OF TRAINING

EMPLOYEE NAME/UNIT: _____

JOB TITLE/DESCRIPTION: _____

DATE ASSIGNED: _____

DATE RECORD CLOSED: _____

DATE	DESCRIPTION OF TRAINING	NAME OR COMPANY OF TRAINER	Training Hours

Signature: _____ Date: _____
(Employee's)

Signature: _____ Date: _____
(ECO's or Supervisor's)

ENCLOSURE (2)

DoDI 4160.21-M

CHAPTER 11

PRECIOUS METALS RECOVERY PROGRAM

A. GENERAL

1. The PMRP promotes the economic recovery of precious metals from excess and surplus precious metal-bearing materials, and also the reutilization of recovered fine precious metal for authorized internal purposes or as GFM. The program encompasses silver, gold, and the platinum family. The platinum family includes platinum, palladium, iridium, rhodium, osmium, and ruthenium.

2. Many items traditionally processed through the PMRP are now governed by Federal and State environmental regulations. Proper guidance for the processing of these materials will be as stated in this chapter, or Chapter 10, Environmentally Regulated and Hazardous Property, as required by governing law.

B. RESPONSIBILITIES

1. HQ DLA

a. Administer and monitor the PMRP

b. Develop plans and policy guidance for administration of the overall program within DLA.

c. Maintain liaison with DUSD (L) and other DoD components, other Government agencies and industry on policy matters pertaining to the program.

d. Review and analyze data in evaluating program performance, identify and resolve deficiencies, and develop and recommend corrective action.

e. Review and approve resources, equipment augmentation, and replacement requirements in support of the PMRP.

f. Review, for compliance with policy, implementing manuals and publications prepared by DLA primary level field activities.

g. Conduct and participate in studies, technical reviews, and surveys to ensure that current and future program operations are compatible with, and responsive to, effective and economical support requirements.

h. Develop, in coordination with the Military Services/Defense Agencies, and GSA, uniform procedures to implement the policies contained here.

i. Develop, through the Logistics Data Element Standardization Office, and in coordination with the Military Services/Defense Agencies, and GSA, a system of standard codes for identifying DoD materiel that contain precious metals.

j. Provide program reports required by GSA or by DUSD (L).

k. Recommend to DUSD (L) discontinuance of the program or any part of it when determined no longer cost effective.

2. DoD Activities

a. Participate in the PMRP.

b. Maintain a focal point to coordinate on all matters pertaining to the PMRP. (See attachment 1 for listing of focal points.)

c. Maximize the use of fine precious metals for authorized internal use or as GFM (see DoDI 4140.41, Government-Owned Materiel Assets Utilized as Government-Furnished Material.)

d. Identify the type, quantity, and location of the precious metal contained in the item management assigned assets and assign a Precious Metal Indicator Code (PMIC), to the item. Notify DLA in order that such items may be included in the Federal Catalog records.

e. Operate recovery equipment currently under their purview, and additional equipment, if required, when jointly agreeable and approved by DLA.; perform operating level maintenance for equipment in their possession; advise DLA when major repairs or services are needed and skills or parts are not available at the local activity for equipment they operate; recommend or identify to the servicing PMRP representative equipment and major repair parts and services required for maximizing recovery efforts.

f. Transfer precious metals-bearing material to the nearest DRMO or, when jointly agreeable or approved by DRMS and subject to receipt of fund citation from DRMS, ship to the collection or recovery activity designated by DRMS.

g. Assist in the identification of potential additional generating activities within DoD.

3. Participating Federal Civil Agencies. Federal civil agencies may participate in the DoD PMRP in accordance with the FPMR, Subpart 101-42.3, and ISAs in effect between

DLA and individual Federal civil agencies.

4. DRMS

a. Provide program guidance for administering the receipt, storage, processing, shipment, and refining of precious metal-bearing scrap and residual material generated by DoD components and participating Federal civil agencies.

b. Assist in the development of budgetary programs for management of recovery operations under the program.

c. Provide DLA implementing procedures for operation of the DoD PMRP in accordance with the policies and procedures prescribed here.

d. Ensure records of all costs allocable to the PMRP are maintained.

e. Establish standards to measure the efficiency and cost effectiveness of recovery efforts.

f. Establish procedures for acquisition and accountability of PMRP equipment, repair parts, and maintenance services.

g. Ensure DRMOs accept unclassified excess and surplus precious metal-bearing materials generated by DoD components or participating Federal civil agencies.

h. Develop and implement procedures for maintaining accountability over all precious metal-bearing scrap and residual materials received.

i. Provide appropriate precious metals recovery equipment to generating activities when economically feasible and justifiable, and replace this equipment, as necessary.

j. In coordination with DISC, complete section D, Precious Metals Recovery Program, as part of the PAR, for submission to HQ DLA. Data to include precious metals recovered, issued, costs avoided and all PMRP expenses

k. Develop statements of work, solicit, award, and perform post-award functions for precious metals recovery contracts.

l. Conduct staff visits to DoD installations and participating Federal civil agencies to provide technical assistance and support.

5. DISC

a. Function as the commodity IMM in the supply and DWCF management of fine metals under the PMRP.

b. Receive deposits of fine precious metals from DRMS recovery contractors and reimburse DRMS for incurred recovery expenses from the DISC DWCF.

c. Provide fine precious metals at recovery cost plus authorized surcharge (such as, administration, insurance, transportation) to authorized DoD activities and participating Federal civil agencies for internal use or use as GFM.

d. Accept fine precious metals offered by DoD components and Federal civil agencies through direct transfer of such assets if earlier certification has been furnished that the material offered is at least equal in purity to that identified in specifications of the applicable NSN. Where the purity is not at least equal or the determination cannot be made, DISC is authorized to instruct the offering activity to contact DRMS for disposal instructions.

e. Establish DISC DWCF issue prices for each precious metal based on PMRP recovery costs and authorized surcharges. Prices shall be fixed during the budget execution year to the maximum practicable extent.

f. Establish and maintain DWCF records of receipts, quantity on hand, location, and issues by primary or significant customers for each precious metal.

g. Report excess precious metals to GSA for transfer to the national stockpile as required in Chapter 4, Property Requiring Special Processing, paragraph B62.

h. Provide data to DRMS for completion of Section D of the PAR and necessary reports to DLA under RCS: DLA(Q) 2067 (S), as follows:

(1) Fine precious metals (troy ounces) available for issue: gold, silver, and the platinum family of metals.

(2) Issues (troy ounces) of gold, silver, and the platinum family of metals.

(3) Issue price of gold, silver, and the platinum family of metals.

6. Defense Contract Management Command (DCMC)

a. Conduct preaward surveys and post award precious metal recovery contract actions, as required.

b. Administer precious metals recovery contracts in accordance with terms of the contract and applicable regulations.

c. Maintain liaison with the DLA Program Manager concerning PMRP policy matters to inform contractors of requirements for precious metals recovery or changes thereto.

C. TURN IN, RECEIVING, AND PROCESSING

1. General. DoD generating activities and other participating Federal civil agencies are required to turn-in all excess fine precious metals and precious metal-bearing material to their servicing DRMO. There may be times, however, when a generating activity desires and may be authorized to ship precious metal bearing materials; such as, electrolytic flake, film ash or electronics, directly to a commercial contractor. For precious metal-bearing material that requires special handling as a part of the turn in process, see Chapter 4, Property Requiring Special Processing.

2. Generating Activities. Generating activities shall:

a. Turn in excess usable precious metal-bearing property, scrap, and waste material, in accordance with uniform turn in procedures contained in Chapter 3, Receipt, Handling and Accounting.

b. Include on the DTID or attached documentation, any available information pertaining to the precious metals content; such as, metal type, quantity, location, PMIC, and any known/suspected hazardous components.

c. Properly segregate precious metal-bearing scrap and waste material before turn in to the DRMO.

3. DRMOs

a. Guidance set forth in Chapter 3, Receipt, Handling and Accounting, applies generally to precious metal-bearing material, particularly as it relates to receipt and documentation of material at DRMOs.

b. DRMOs shall accept accountability for precious metal-bearing material turn-ins except where acceptance is prevented by law or regulation. However, when appropriate storage or security facilities are not available, the DRMO shall arrange for the generating activity or the host installation to retain or accept custody of the material until such time as disposition can be accomplished.

c. When material is received that has not been identified as precious metal-bearing

material but which, on the basis of experience or visual inspection, is suspected of containing precious metals, every effort should be made to confirm the presence of precious metals. Assistance can be obtained from the Precious Metals Master File (PMMF) (for items identified by NSN); through actual chemical testing of the material following prescribed metals identification procedures; or recommendation to DRMS that the material be assayed.

d. Precious metal-bearing items shall be processed as follows:

(1) Screened for RTD as items.

(2) Offered for sale as items at minimum acceptable bid prices which reflect the net recovery value of precious metal content based on current market price. The net recovery value is determined by first converting the known precious metal content to troy ounces. Conversion factors in Attachment 2, this chapter, should be used for this purpose. The number of troy ounces multiplied by the current market price of the fine precious metals less the estimated cost of recovery/refining gives the net recovery value of precious metal content in an item.

(3) Sold, if high bid reduced by the estimated cost of sale meets or exceeds the established minimum acceptable bid price.

(4) Downgraded and processed for precious metals recovery, if not environmentally regulated, whenever the sale of property is determined, through use of the above computation, not to be in the best interest of the U.S. Government.

e. Precious metal-bearing scrap shall be processed as follows:

(1) For precious metals recovery when economically feasible. The scrap shall be:

(a) Accumulated, extensively sorted, and segregated by type of precious metal to enhance economic recovery.

(b) Shipped, as directed, to a collection site, or

(c) Held at the DRMO awaiting recovery contractor pick up.

(2) Low content, highly contaminated, precious metal-bearing scrap which is not conducive to economic recovery shall be offered for sale as precious metal-bearing scrap, and described as such in the sale solicitation when DRMS determines that the cost of recovery/refining would exceed the market value of precious metals to be recovered. If the scrap was turned in by a DWCF funded activity and so identified, the proceeds from sale shall be returned to the DWCF account identified on the DTID.

D. PRECIOUS METALS RECOVERY EQUIPMENT. DLA provides precious metals recovery equipment to generating activities when economically feasible and justifiable. Equipment considered to be "precious metals recovery equipment" as used in this paragraph is addressed at Attachment 3 and includes electrolytic recovery units, passive silver cells (PSCs), plastic hypo collection containers, replacement parts, and vacuum sweepers. Film burners/incinerators and gram scales, which are not recovery equipment, are also included in Attachment 3.

E. TRANSPORTATION

1. General. The generating activity shall pay PCH&T costs incurred in the shipment or transfer of precious metal-bearing material from a generating activity to the servicing DRMO. Transportation costs incurred in making DRMS authorized shipments of precious metal-bearing material from generating activity direct to a designated collection site or DRMO shall be accomplished using a fund citation obtained from DRMS.

2. Billing Procedures. DoD components and participating Federal civil agencies which use DRMS approved PMRP transportation-fund citations for moving precious metal-bearing material shall forward all shipping documents with the Government Bill of Lading (GBL) to the Transportation Division, DFAS, Indianapolis Center, Indianapolis, IN 46249-3001. The GBL will cite the fund citation along with the following document number "SO(Y)JHH2582.01 MS" where (Y) equals the last digit of the fiscal year.

3. Preparation for Shipment to a Recovery Contractor

a. Documentation for shipments, DD Form 1348-1A, of precious metal-bearing material shall be prepared in accordance with Chapter 3, Attachment 1, and any special provisions provided by DRMS.

(1) Documentation shall show, as the document quantity, the net avoirdupois weight (in pounds and decimals of a pound) of material shipped.

(2) Shipping documents shall cite this paragraph as authority for shipment and identify, as fully as possible, the contents of each container.

(3) Two advance copies of each shipping document shall be forwarded to the designated collection site or DRMO.

b. Care shall be exercised to use secure, nonporous containers (glass not acceptable) when shipping precious metal-bearing material. Paper or ooden containers must not normally be used to ship material that may be susceptible to loss through particle adhesion.

c. All reasonable care shall be taken in the packaging of material for shipment to minimize the possibility of theft or loss through leakage or container damage.

d. Unless specific shipping instructions apply, shipments shall be made by the most economical means available that is consistent with safe transit and delivery. Parcel post shipments shall be registered.

F. SECURITY

1. General. Whenever a DRMO accepts accountability for precious metal-bearing material but the generating activity retains custody of the material, the generating activity continues to be responsible for the care and safekeeping of material until it is placed in the physical possession of the DRMO, or released to a commercial contractor.

2. Precious metal-bearing material in the custody of a generating activity is subject to respective Military Service/Defense Agency security requirements. However, for the material which is in the custody of DRMOs, the following minimum requirements for secured storage and handling apply:

a. High purity material shall be stored in a safe or locked cabinet within a locked room. More bulky precious metal-bearing material shall be stored in a locked room when practicable. Where the volume of this material is so large as to make inside storage impracticable, it may be stored outside within a chain link fence enclosure.

b. Weighing of precious metal-bearing material receipts and shipments shall be accomplished by a designated weigher in the presence of a disinterested person (the same disinterested individual must not be allowed to sign for more than 2 consecutive days in 1 week), and the names of both persons must appear on the weigh bill or other processing document.

c. Entry to those areas where high purity precious metals are stored shall be by access list only.

(1) This list should be kept current, limited to employees with a need to enter, and posted inside the entrance.

(2) Visitors shall be required to sign the visitor register and be accompanied by an individual on the access list. The visitor must have a need to enter, and further identification may be requested.

(3) Access list personnel do not require security clearance.

G. REUTILIZATION OF FINE PRECIOUS METALS

1. General

a. DoD components and participating Federal civil agencies shall requisition PMRP metals for approved contracts.

b. PMRP metals are priced at the cost of recovery plus an authorized administrative surcharge.

c. It is DLA policy not to procure precious metals from the commercial market if the PMRP does not provide sufficient quantities to the DLA Distribution System to satisfy customer demand. Therefore, requiring activities are encouraged to call DISC-YAA/GA (DSN 442-2734; Commercial (215) 697-2734) for asset availability before requisitioning any quantity of precious metal. DISC shall reserve requested quantities of precious metals for 120 days.

2. DISC currently manages nine precious metals NSNs, each having a unit of issue of troy ounce:

Nomenclature	NSN
Gold	9660-00-042-7733
Silver	9660-00-106-9432
Platinum	9660-00-151-4050
Palladium	9660-01-039-0320
Rhodium	9660-01-010-2625
Iridium	9660-00-011-1937
Ruthenium	9660-01-039-0313

3. The above NSNs are stored at two locations: Engelhard Industries, Iselin, NJ; Handy and Harman, Fairfield, NJ. These commercial firms are under contract with DISC to provide no-cost storage of precious metals. Due to the large volume of business compounding silver alloys that these companies do for various U.S. Government customers, it has proven cost-effective to maintain silver stocks at each facility to enable transfer of PMRP silver to given contracts without the program incurring the expense of repeated small shipments of silver to these companies.

4. The following specific procedures shall be used to requisition fine precious metals from DISC:

a. A MILSTRIP requisition shall be submitted citing one of the above NSNs. The

requisition must cite full troy ounces, not partial quantities. (Quantities cited in partial ounces such as 700.2 shall be rounded off.)

b. Exception data shall be cited in the "REMARKS" section of the requisition. These data include:

(1) An unclassified "ship to" address specifying exact location (building, office, and individual) and applicable zip code. The DoDAAC is not always sufficient for delivery.

(2) The number of the contract or work order on which the precious metal is to be used, for control and audit purposes.

(3) The end item application, the NSN, part number, or any other data that identifies the item or component in which the precious metal shall be used, as well as the quantity of precious metal which shall be used for each item or component, if known.

(4) Name and telephone number of a contact point at the requisitioning activity, to resolve any problem, as required.

c. The requisition may be submitted by message or letter, however, electrical transmission is preferred. To avoid being mis-routed, messages shall be addressed to DISC-YAB/GD. Delivery normally shall be accomplished within 2 to 3 weeks after receipt of the requisition.

5. Transportation charges are included in the unit price. Transportation is usually by premium mode (armored van). Therefore, requisitions to the same destination should be consolidated whenever possible.

6. Questions concerning the above procedures or availability of assets should be directed to the DISC focal point (see Attachment 4, this chapter).

ATT 1
CHAP 11

PRECIOUS METALS RECOVERY PROGRAM FOCAL POINTS

Reference: Chapter 11, Paragraph B2b

The DoD program for the recovery and use of precious metals from excess and surplus end items, scrap, hypo solutions, and other precious metal-bearing materials provides for the establishment of focal points at DoD component levels to coordinate on all matters pertaining to the PMRP.

(1) Headquarters DLA	DLSC-LC 8725 John J. Kingman Road, STE 4133 Fort Belvoir, VA 22060-6221
(2) Defense Reutilization and Marketing Service (DRMS)	DRMS 74 N. Washington Avenue Battle Creek, MI 49017-3092
(3) Defense Industrial Supply Center	DISC-OIBA/YC (DISC) 700 Robbins Avenue Philadelphia, PA 19111-5096
(4) Army	HQ DA (DALO SMP) 5006 Army Pentagon Washington, DC 20301-0500
(5) Army Alternate	HQ AMC (AMC LG MS) 5001 Eisenhower Avenue Alexandria, VA 22333-0001
(6) Navy	Naval Supply Systems Command 5450 Carlisle Pike P.O. BOX 2050 Mechanicsburg, PA 17055-0791
(7) Air Force	HQ AFMC/LGIA 4375 Chidlaw Road, STE 6 Wright-Patterson AFB, OH 45433-5006

(8) Marine Corps	HQ US Marine Corps (CODE LPP-2) 2 Navy Annex Washington, DC 20380-1775
(9) U.S. Coast Guard	U. S. Coast Guard (G-CFM-3) 2100 Second Street, SW. Washington, DC 20593-0001

CONVERSION FACTORS USED IN THE PMRP

Reference: Chapter 11, Paragraph C3d(2)

Multiply	by	to obtain
Gallon (US)	3.78543	Liters
Gallon (US)	0 .82367	Imperial gallon
Gallon (Imperial)	4.546	Liters
Gallon (Imperial)	1.201	US gallon
Grains (troy)	0.06480	Grams
Grains (troy)	0.0020834	Troy ounces
Grams	0.03215	Troy ounces
Grams	0.03527	Avoir ounces
Grams	15.43	Grains
Kilograms	2.205	Avoir pounds
Kilograms	0.0011023	Short tons
Liter	0.219973	Imperial gallon
Liter	0.2642	US gallon
Ounces (avoir)	0.9115	Troy ounces
Ounces (troy)	0.06857	Avoir pounds
Ounces (troy)	1.09714	Avoir ounces
Ounces (troy)	31.103481	Grams
Ounces (avoir)	28.349527	Grams
Pounds (avoir)	453.592	Grams
Pounds (avoir)	0.45351	Kilograms
Pounds (avoir)	14.5833	Troy ounces
Ton (short)	2000	Pounds
Ton (short)	907.18486	Kilograms

ATT 3
CHAP 11

PMRP EQUIPMENT

Reference: Chapter 11, Paragraph D

1. Incinerators/Furnaces. Procurement or replacement of Military Service and other DoD component-owned and operated incinerators or furnaces, which are used for the DEMIL or declassification of classified film or other classified materials, is the responsibility of the Military Services or owning DoD components. Likewise, the DEMIL or destruction of classified film or other classified materials is a Military Service/Defense Agency responsibility. This responsibility is exercised at the option of the Military Service/Defense Agency either by incineration or other means at the Military Service/Defense Agency facilities or through transfer through the Intelligence Community Network for incineration or destruction at the centralized Intelligence Community Destruction Facility at Fort Meade, Maryland. In either event, the resulting precious metal-bearing ash or residues are required to be turned-in to DRMOs or released, as directed by DRMS, to a commercial contractor for precious metal recovery. Special care shall be exercised to ensure incinerators are effectively used, operated, and maintained in order to maximize silver recovery while conforming to local air pollution standards.

2. Electrolytic Recovery Units/Passive Silver Cells

a. General. In photographic and X-ray processing, significant amounts of high purity silver are generated in fixing baths as a result of chemical action. Recovery of silver from the spent fixing solution (hypo) can be accomplished by chemical precipitation, metal displacement, or electrolytic methods. Potential generators of spent hypo are hospitals, dispensaries, dental clinics, photographic laboratories, printing plants, microfilm and microfiche producing facilities, and hobby craft shops.

b. Acquisition of Silver Recovery Supplies/Equipment.

(1) PMRP generators shall submit requests for PMRP supplies; such as, silver test paper, PSCs, fittings, control valves, replacement parts which are peculiar to recovery equipment, to the appropriate PMRP representative who shall arrange for shipment from stock or forward request to DRMS for initiation of a purchasing action.

(2) Electrolytic recovery equipment shall be acquired and installed as follows:

(a) Generating activities shall apprise DRMS (see Attachment 4, this chapter) of the need for PMRP assistance or recovery equipment to start up silver recovery operations or to enhance the effectiveness of ongoing silver recovery operations to ensure maximum recovery.

(b) The PMRP representative shall make arrangements to have the hypo-generating work site surveyed as the basis for determining specific onsite equipment needs.

(c) DRMS shall procure and furnish without cost to authorized PMRP participants electrolytic recovery units, PSCs, chemical tanks, and supporting parts and equipment used to recover silver from silver-bearing film processing solutions.

(d) Generating activities are responsible for installing silver recovery equipment.

1 DRMS shall provide installation and operating instructions with the equipment.

2 When special or unusual circumstances arise, generators shall request assistance from the PMRP representative (preferably in conjunction with actions outlined in subparagraphs b(2)(a) or (b)).

(3) Maintenance of Silver Recovery Equipment

(a) Generating activities are responsible for performing operating level preventive maintenance on recovery equipment in their possession. Preventive maintenance includes day-to-day adjustments, cleaning, replacement of fuses and gaskets, and any like action which can be performed periodically with a minimum of effort as a safeguard against excessive equipment downtime.

(b) The servicing representative shall be contacted immediately in the event of equipment malfunctions that defy "troubleshooting" efforts of the generating activity. Representatives shall respond promptly to such notices and make all arrangements necessary to repair or replace equipment in a timely manner.

(c) During any period when silver recovery equipment is deadlined, enerating activities shall ensure that no spent hypo solution is discarded. Spent hypo solution shall either be collected and turned in to the servicing DRMO along with a generator fund cite for ultimate disposal, taken to another nearby recovery facility, or collected and retained until deadlined recovery equipment is again operating. Spent hypo solution shall be handled in accordance with all Federal, state, and local environmental and transportation regulations.

3. Vacuum Sweepers

a. DRMS shall procure and provide, without cost to authorized users, vacuum sweepers and collection bags, used primarily in dental facilities to collect precious metals bearing dust or sweeps.

b Generators shall turn-in precious metals dust collected through use of the vacuum sweepers.

4. Gram Scales

a. Gram scales are not construed to be "precious metals recovery oriented" and are authorized to be purchased for use by DRMOs and other DRMS facilities to ascertain precise weights of scrap material, as needed, for the purpose of inventory and accountability.

b. DLA will not procure gram scales for use by generating activities turning in scrap for precious metals recovery.

5. Special Supporting Equipment for Precious Metals Processing and Preparing. Special precious metals processing equipment required by DRMOs for the processing or preparation of precious metal-bearing property may be purchased as needed to support approved precious metals processing. Such equipment would include special power tools, cutters, saws to facilitate the sorting, segregation, or upgrading of precious metal-bearing scrap.

6. Accountability for Precious Metals Recovery Equipment

a. When precious metals recovery equipment is needed, it shall be issued from stock or purchased (with PMRP funds) and shipped to the generating activity concerned. The Accountable Property Officer or equivalent shall hand-receipt equipment to a responsible individual at the generating activity upon delivery of equipment or, as in the case of equipment already in DoD component custody, as soon as possible after such equipment is transferred to DRMS.

b. Precious metals recovery equipment in the possession of DoD components and participating Federal civil agencies shall be carried on the property account of DRMS.

c. DRMS shall maintain a current record of all precious metals recovery equipment in the custody of serviced generating activities.

d. Generating activities shall contact the PMRP representative for turn in of precious metals recovery equipment. DRMS shall provide instructions to include a document number for turning in the equipment.

ATT 4
CHAP 11

PMRP REPRESENTATIVES LOCATIONS AND AREAS COVERED

Reference: Chapter 11, Attachment 3, Paragraph 2b(2)(a)

Address and Telephone	Areas Covered
	OPERATIONS EAST AREA
DRMS Eastern Region ATTN: DRMS-DEO 926 Taylor Station Road Blacklick, OH 43004-9615 DSN 850-2114/4195 COM (614) 692-2114/4195	United States -- east of the Mississippi River plus Missouri, and Puerto Rico and Panama
	OPERATIONS WEST AREA
DRMS Western Region ATTN: DRMS-DWO 500 West 12th Street Bldg 2A-1 Ogden, UT 84407-5001 DSN 352-7033/7041 COM (801) 399-7033/7041	United States -- west of the Mississippi River, including Guam, less Missouri
	EUROPE and ASIA
DRMS International ATTN: DRMSI-O Unit 29263 Box 2000 APO AE 09096	

SILVER RECOVERY OPERATIONS TRAINING

Installations and Environment Department
Environmental Management Division
Comprehensive Environmental Training Program
Marine Corps Base Camp Lejeune

Hazard Communication Standard Requirements

Hazard Communication Standard Requirements

HAZARD COMMUNICATION STANDARD REQUIREMENTS

SECTION 1: OBJECTIVES

SECTION 2: BODY

HAZARD COMMUNICATION STANDARD REQUIREMENTS

SECTION 3: ADDITIONAL INFORMATION

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TABLES

HAZARD COMMUNICATION STANDARD REQUIREMENTS

SECTION 1: OBJECTIVES

TERMINAL LEARNING OBJECTIVE. Demonstrate the knowledge and skills required to establish a compliant and functional Hazard Communication Program in accordance with Federal Occupational Safety and Health Act (OSHA), Department of Defense (DoD) and Marine Corps Base Camp Lejeune requirements.

ENABLING LEARNING OBJECTIVES (ELO). Given an open manual examination identify, describe, define, or otherwise explain the following:

1. Required local information prior to establishing the Hazard Communication Program.

2. The required information contained in the Hazardous Material Inventory List (HMIL).

3. How to acquire a missing MSDS.

4. Four requirements of the Hazard Communication Program.

5. The purpose of the MSDS.

6. Elements of the hazard information section of the employee information and training requirement.

7. Elements of the hazard training section of the employee information and training requirement.

HAZARD COMMUNICATION STANDARD REQUIREMENTS

SECTION 2:

1. **CHEMICALS IN THE WORKPLACE.** About 32 million workers are potentially exposed to one or more chemical hazards. There are an estimated 600,000 existing chemical products, and hundreds of new ones introduced annually. This poses a serious problem for exposed workers and their employers.

Chemical exposure may cause or contribute to many serious health effects such as heart ailments, kidney and lung damage, sterility, cancer, burns, and rashes. Some chemicals may also be safety hazards and have the potential to cause fires and explosions and other serious accidents.

Because of the seriousness of these safety and health problems, and because many employers and employees know little or nothing about them, the Occupational Safety and Health Administration (OSHA) issued a rule called *"Hazard Communication."* The basic goal of the standard is to be sure employers and employees know about work hazards and how to protect themselves; this should help to reduce the incidence of chemical source illness and injuries.

The hazard communication standard establishes uniform requirements to ensure that the hazards of all chemicals imported into, produced, or used in the United States workplaces are evaluated, and that this hazard information is transmitted to affected employers and exposed employees.

Chemical manufacturers and importers must convey the hazard information they learn from their evaluations to downstream employers by means of labels on containers and Material Safety Data Sheets (MSDS's). In addition, all covered employers must have a hazard communication program to get this information to their employees through labels on containers, MSDS's, and training.

This program ensures that all employers receive the information they need to inform and train their employees properly and to design and put in place employee protection programs. It also provides necessary hazard information to employees so they can participate in, and support, the protective measures in place at their workplaces.

The hazard communication standard is different from other OSHA health rules in that it covers all hazardous chemicals. The rule also incorporates a "downstream flow of information," which means that producers of chemicals have the primary responsibility for generating and disseminating information, whereas users of chemicals must obtain the information and transmit it to their employees. The hazard communication program flow is designed to work in the following manner:

HAZARD COMMUNICATION PROGRAM FLOW	
Chemical Manufacturers/ Importers	Determine the hazards of each product.
Chemical Manufacturers/ Importers/Distributors	Communicate the hazard information and associated protective measures downstream to customers through labels and MSDS's.
Employers	1. Identify and list hazardous chemicals in their workplaces. 2. Obtain MSDS's and labels for each hazardous chemical. 3. Develop and implement a written hazard communication program including labels, MSDS's and employee training on the list of chemicals in the workplace, MSDS, and label information. 4. Communicate hazard information to their employees through labels, MSDS's and formal training.

PREPARATION FOR ESTABLISHING THE HAZARD COMMUNICATION PROGRAM. ***Prior to a establishing a hazard communication program, a unit must have an accurate inventory (Hazardous Material Inventory List) of all the chemicals used and maintained in the workplace (ELO 1).*** Once the HMIL is established in accordance with this paragraph, the unit must ensure accurate MSDS's are maintained for every chemical in the workplace.

1. **ESTABLISHING THE HAZARDOUS MATERIAL INVENTORY LIST (HMIL)**

The HMIL will be comprehensive and must include **(ELO 2)**:

a. Complete name of hazardous chemical.
b. Name of manufacturer or distributor.
c. National Stock Number (NSN) or identification number.
d. Quantity Maintained on Hand.

2. **MATERIAL SAFETY DATA SHEET (MSDS) DETERMINATION.** The responsible individual should verify the list against the on-hand MSDS file. If any MSDS's are missing, a current MSDS should be acquired either by contacting the manufacturer directly, printing a copy from the Hazardous Material Information System (HMIS), or by accessing the exact chemical and manufacturer from a variety of search engines on the Internet® ***(ELO 3).***

http://siri.uvm.edu/msds/msds/

http://msds.pdc.cornell.edu/

REQUIREMENTS OF THE HAZARD COMMUNICATION PROGRAM. ***A compliant hazard communication program requires four essential components:*** labels and other forms of warning, MSDS'S, employee training and information, and the written hazard communication program ***(ELO 4).***

1. **LABELS AND OTHER FORMS OF WARNING.** Containers of hazardous materials in the workplace must be labeled, tagged, or marked with the following information:

a. **CHEMICAL IDENTITY** - trade name or synonym.
b. **PHYSICAL HAZARDS** - a brief statement of the hazardous effects of the chemical.
c. **MANUFACTURER'S NAME AND ADDRESS**.

The manufacturer, importer, or distributor is responsible for applying the required labels to the containers of hazardous material. **If the material is transferred from the original container into an approved container, the responsibility falls on the using unit to label that container with the requirements listed above**. Although those containers of hazardous material, which will be of immediate use, are subject to the portable container exemption, it is highly recommended that every container be properly labeled, as a common inspection violation at MCB Camp Lejeune is UNMARKED SECONDARY CHEMICAL CONTAINERS.

2. **MATERIAL SAFETY DATA SHEET (MSDS)**

a. **PURPOSE.** The purpose of the MSDS is to provide detailed information on each hazardous chemical, including its potential hazardous effects, its physical and chemical characteristics, and recommendations for appropriate protective measures ***(ELO 5).*** The manufacturer of hazardous chemicals is required to develop and provide an MSDS for each hazardous chemical produced at the time of initial shipment. The distributor is also responsible for ensuring that MSDS's are provided to the purchaser/user of those hazardous chemicals. Units must have an MSDS for every chemical used in the workplace as part of the hazard communication program.

b. **ACCESSIBILITY.** MSDS's must be readily acceptable to employees when they are in their work areas. Acceptable methods for retaining MSDS's in the workplace are the MSDS File and the HMIS.

(1) MSDS File. Generally, maintained in a common area in a highly visible protective casing.

(2) HMIS. The HMIS although legally acceptable is not the most user-friendly method of maintaining local MSDS's.

3. **EMPLOYEE INFORMATION AND TRAINING.** Employers must establish an information and training program for every employee who may be exposed to hazardous chemicals when working. Employees must be provided information and trained *prior* to initial assignment to work with a hazardous chemical, and whenever the hazards change. Information and training may be done either by individual chemical, or by categories of hazards. Record of training contents and personnel trained should be maintained by the unit Environmental Compliance Officer or Safety Officer.

a. **HAZARD INFORMATION.** At a minimum the hazard information portion of the unit's written HAZCOM Program will include ***(ELO 6):***

(1) The hazard communication standard and its requirements.
(2) The components of the hazard communication program in the employees' workplace.
(3) Operations in work areas where hazardous chemicals are present.
(4) Where the employer will keep the written communication program, lists of hazardous chemicals, and the required MSDS's.

b. **HAZARD TRAINING.** At a minimum the training portion of the unit's written HAZCOM Program will include ***(ELO 7):***

(1) How the hazard communication program is implemented in the workplace.
(2) How to read and interpret information on labels and the MSDS.
(3) How employees can obtain and use the available hazard information.
(4) Hazards of chemicals in the work area.
(5) Measures employees can take to protect themselves from the hazards (PPE).
(6) Specific procedures put into effect by the employer to provide protection such as engineered controls (exhaust hoods, climate control, etc.).
(7) Methods and observations workers can use to detect the presence of hazard chemicals to which they may be exposed.

4. **WRITTEN HAZARD COMMUNICATION PROGRAM.** Employers must develop, implement, and maintain at the workplace a written, comprehensive hazard communication program that includes provisions for container labeling, collection and availability of MSDS's, and an employee information and training program. The program must also contain list of chemicals in each work area, the means the employer will use to inform employees of the hazards of non-routine tasks, and the hazards associated with chemicals in unlabeled pipes. Hazardous chemical information must also be made available to non-organic personnel such as contractors conducting work at each site.

REQUIRED INFORMATION IN THE MATERIAL SAFETY DATA SHEET. The Material Safety Data Sheet is a manufacturer produced, chemical specific technical bulletin. The MSDS can prevent injury and harm to the handlers and to the environment. By law, MSDS' must be posted in an accessible place to all personnel that use or handle chemicals in the workplace. The MSDS provides specific, detailed information on the following information:

THE CHEMICAL AND COMMON NAME(S) OF all ingredients which have been determined to present a physical hazard when present in the mixture.

PHYSICAL AND CHEMICAL CHARACTERISTICS of the hazardous chemical (such as vapor pressure, flash point).

THE PHYSICAL HAZARDS of the hazardous chemical, including the potential for fire, explosion, and reactivity.

THE PRIMARY ROUTE(S) OF ENTRY. To include absorption, inhalation, ingestion, or injection.

a. **SKIN ABSORPTION/INJECTION.** The skin is the body's first line of defense against foreign materials. Foreign material may enter the body through the skin and eyes by either ***absorption*** or ***injection***. Some chemicals have characteristics against which the skin provides no barrier and can be directly absorbed. Sharp objects contaminated with harmful chemicals may pierce the skin, injecting the material through the skin into the bloodstream. Wearing protective clothing over exposed skin helps avoid skin exposure. If skin exposure does occur, the affected area should be washed with water, or addressed according to manufacturers material safety data sheet or medical guidance. Sometimes a detergent may be needed to dissolve a chemical that normally does not dissolve in water. Care should be taken in selecting detergent or soap if the skin has been injured since some cleaning compounds are abrasive or corrosive.

Toxic chemicals can also be absorbed through the eyes. Chemicals splashed or sprayed into the eyes can result in blindness. The blood vessels on the eye's surface will quickly carry these chemicals into the bloodstream. Splashing hazardous liquids into your eyes or rubbing your eyes after your hands have been contaminated can lead to eye absorption of hazardous chemicals. Eye protection should always be worn when working with hazardous materials.

b. **INHALATION.** Inhalation is the most efficient way of transporting hazardous material into the body. The surface area of the lungs averages 70 square meters on a human, all of which is exposed, compared to only about 2 square meters of skin surface area. Hazardous materials may be in the air in the form of particulates, vapors, or gases. Even in small concentrations there is ample opportunity for absorption. When inhaled, a hazardous chemical is transferred into the bloodstream similarly to oxygen. In a contaminated environment, the use of protective breathing equipment is the way to avoid inhalation of hazardous materials. Airborne contaminants result from many types of activities including cutting, sanding, cleaning, welding, painting, sweeping and soldering. Dust, fumes, vapors, mists, and gases represent the more common inhalation hazards.

c. **INGESTION.** Although less common in the workplace ingested chemicals enter the body through the mouth and are absorbed into the bloodstream through the lining of the digestive tract. If the food we eat or the liquids we drink are contaminated with hazardous chemicals, they may enter the bloodstream along with digested food. In a warehouse, the transfer of hazardous materials to food may occur by smoking or eating foods in areas where dusts of hazardous materials are in the air or by handling food with contaminated hands. Even licking your lips may allow exposure. Good housekeeping and personal hygiene is the best way to avoid exposure through ingestion.

OSHA PERMISSIBLE EXPOSURE LIMIT. ACGIH Threshold Limit Value, and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the material safety data sheet, where available.

POTENTIAL CARCINOGEN. Whether the hazardous chemical is listed in the National Toxicology Program (NTP) Annual Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest editions), or by OSHA.

SAFE HANDLING MEASURES. Any generally applicable precautions for safe handling and which are known to the chemical manufacturer, importer or employer preparing the material safety data sheet, including appropriate hygienic practices, protective measures during repair and maintenance of contaminated equipment, and procedures for clean-up of spills and leaks.

CONTROL MEASURES. Any generally applicable control measures which are known to the chemical manufacturer, importer or employer preparing the material safety data sheet, such as appropriate engineering controls, work practices, or personal protective equipment.

EMERGENCY AND FIRST AID PROCEDURES.

DATE OF PREPARATION of the material safety data sheet or the last change to it.

NAME, ADDRESS, AND TELEPHONE NUMBER of the chemical manufacturer, importer, employer or other responsible party preparing or distributing the material safety data sheet, who can provide additional information on the hazardous chemical and appropriate emergency procedures, if necessary.

UNDERSTANDING THE MATERIAL SAFETY DATA SHEET. Although 29 CFR 1910.1200 mandates the information above be included in every Material Safety Data Sheet. The regulation does not require the information to be presented in any specific order or format. Generally, the required information is divided into nine or more sections.

MATERIAL SAFETY DATA SHEET BREAKDOWN BY SECTION	
SECTION	**DESCRIPTION**
1	Product Identification.
2	Hazardous Ingredients.
3	Physical Data.
4	Fire and Explosion Data.
5	Health Hazard Information.
6	Reactivity Data.
7	Spill or Leak Procedures.
8	Special Protection Information.
9	Special Precautions{
10	Transportation Information{

1 Note: Often Sections 9 and 10 are similar in content, i.e. hazard classification information, transportation and storage, and handling and storage information can be located in either section.

2 See note 1.

CONCLUSION. The contents of this chapter allows for the effective management and maintenance of the unit's Hazard Communication Program. By following the requirements of this chapter work related chemical illnesses and injuries will be reduced.

HAZARD COMMUNICATION STANDARD REQUIREMENTS

[EXERPTED FROM BO 5100.20A]

EXAMPLE OF A WRITTEN HAZARD COMMUNICATION PROGRAM

1. GENERAL INFORMATION

To comply with 29 CFR 1910.1200 Hazard Communication, the following written Hazard Communication Program has been established for ___(WORK CENTER OR OPERATION)___.

The written program will be available in the_____(LOCATION)___.for review by any interested employee.

a. CONTAINER LABELING

The_____(PERSON/POSITION)_____ shall verify that all containers received for use will:

- † Be clearly labeled as to the identity of the hazardous chemical(s).
- † Note the appropriate hazard warning.
- † List the name and address of the manufacturer.

The _____(PERSON/POSITION)_____ in each section will ensure that all secondary containers are labeled with an extra copy of the manufacturers label or with a generic label which identifies the material, list the appropriate hazard warnings and identifies the target organs if appropriate. Labels for items with National Stock Numbers (NSNs) can be acquired from the Hazardous Material Information System (HMIS).

The _____(PERSON/POSITION)_____ will review the work place labeling system and update as required.

b. MATERIAL SAFETY DATA SHEETS (MSDS)

The_____(PERSON/POSITION)_____ will be responsible for obtaining and maintaining the data the data sheet system for the work center.

The _____(PERSON/POSITION)_____ will review incoming data sheets for new and significant health and safety information. The responsible individual will ensure that any new information is passed on to the affected employees.

Copies of MSDS's for all hazardous chemicals to which employees may be exposed will be kept in _____(LOCATION)___.

MSDSs will be available to all employees in their work area for review during each work shift. If MSDSs are not available or new chemicals in use do not have MSDSs, immediately contact: (PERSON/POSITION)_____ .

c. EMPLOYEE TRAINING AND INFORMATION

The _____(PERSON/POSITION)_____ is responsible for the employee training program, SNM will ensure that all elements specified below are carried out. Prior to starting work, each new employee will attend a health and safety orientation and will receive information and training on the following:

(1) An overview of the requirements contained in the Hazard Communication Standard. (29 CFR 1910.1200)

(2) Chemicals present in their workplace operations.

(3) Location and availability of unit's written Hazard Communication Program.

(4) Physical and health effects of the hazardous chemicals.

(5) Observation techniques used to determine the presence or release of hazardous chemicals in the workplace.

(6) Mitigating exposure through work practices and protective personal protective equipment.

(7) Emergency procedures in the event personnel are exposed to chemicals present in the workplace.

(8) Proper interpretation of the MSDS and hazard warning labels.

(9) Location of the MSDS file and Hazardous Material Inventory List (HMIL).

(OPTIONAL): After attending the training class, each employee will sign a form verifying their attendance as well as understood the policies set forth.

Prior to a new chemical being introduced to the workplace, every impacted employee will be given information as outlined above. The _____(PERSON/POSITION)_____ is responsible for ensuring that MSDSs for the new chemical(s) are available.

2. LIST OF HAZARDOUS CHEMICALS

A list of all known Hazardous Chemicals is located at _____(LOCATION)_____. Further information on each noted chemical can be obtained by reviewing the MSDS located at (LOCATION)___.

3. HAZARDOUS NON-ROUTINE TASKS

Periodically, employees are required to perform non-routine tasks. Prior to starting work on such projects, every employee will be given information by their supervisor about hazardous chemicals to which they may be exposed during such activity.

This information will include:

a. Specific chemical hazards.
b. Protective/safety measures the employee can take.
c. Measures the workplace has taken to lessen the hazards, to include ventilation, respirators, presence of another employee, and emergency procedures.

Examples of non-routine tasks performed in this workplace are:

Task	Hazardous Chemical(s)

4. UNLABELED PIPES

The below listed chemicals are stored or transited through unlabeled pipes in this workplace. In the event of rupture, leakage or fire, the following action by personnel will be taken:

5. INFORMING OUTSIDE EMPLOYEES/CONTRACTORS

It is the responsibility of _____(PERSON/POSITION)_____ to provide outside employees/ contractors the following information:

a. Hazardous chemicals to which they may be exposed while on the job site.
b. Precautions the contractors may take to lessen the possibility of exposure by usage of appropriate protective measures.

It is the responsibility of _____(PERSON/POSITION)_____ for contacting the contractor before work is started and to gather and disseminate information concerning chemical hazards that the contractor is bringing into the workplace.

EASTMAN KODAK -- 158 2352 KODAK EXTACOLOR RA BLEACH FIXER - RA-4; - BLEACH, PHOTOG
MATERIAL SAFETY DATA SHEET
NSN: 6750013765884
Manufacturer's CAGE: 19139
Part No. Indicator: B
Part Number/Trade Name: 158 2352 KODAK EXTACOLOR RA BLEACH FIXER / RA-4;
P/N = B

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General Information

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Item Name: BLEACH, PHOTOGRAPHIC
Company's Name: EASTMAN KODAK COMPANY
Company's Street: 343 STATE STREET
Company's City: ROCHESTER
Company's State: NY
Company's Country: US
Company's Zip Code: 14650
Company's Emerg Ph #: 716-722-5151
Company's Info Ph #: 716-477-3194 MSDS :800- 242-2424
Distributor/Vendor # 1: EASTMAN KODAK COMPANY, EASTERN REGIONAL
Distributor/Vendor # 1 Cage: 5K871
Record No. For Safety Entry: 002
Tot Safety Entries This Stk#: 003
Status: SE
Date MSDS Prepared: 05JUN97
Safety Data Review Date: 26FEB98
Supply Item Manager: CX
MSDS Serial Number: BWRZD
Hazard Characteristic Code: C3
Unit Of Issue: BT
Unit Of Issue Container Qty: MAKES 1 GAL
Type Of Container: UNKNOWN
Net Unit Weight: UNKNOWN

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Ingredients/Identity Information

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Proprietary: NO
Ingredient: WATER
Ingredient Sequence Number: 01
Percent: 75-80
NIOSH (RTECS) Number: ZC0110000
CAS Number: 7732-18-5
OSHA PEL: NOT ESTABLISHED
ACGIH TLV: NOT ESTABLISHED
Other Recommended Limit: NONE RECOMMENDED

Proprietary: NO
Ingredient: FERRIC AMMONIUM ETHYLENEDIAMINETETRAACETIC ACID
Ingredient Sequence Number: 02
Percent: 15-20
NIOSH (RTECS) Number: 1001409FA
CAS Number: 21265-50-9
OSHA PEL: NOT ESTABLISHED
ACGIH TLV: NOT ESTABLISHED
Other Recommended Limit: NONE RECOMMENDED

Proprietary: NO
Ingredient: ACETIC ACID (SARA III)
Ingredient Sequence Number: 03
Percent: 1-5
NIOSH (RTECS) Number: AF1225000
CAS Number: 64-19-7
OSHA PEL: 10 PPM

ACGIH TLV: 10 PPM/15 STEL; 9394
Other Recommended Limit: NONE RECOMMENDED

Physical/Chemical Characteristics

Appearance And Odor: BROWN LIQUID WITH A SLIGHT AMMONIA ODOR.
Boiling Point: >212F,>100C
Melting Point: NOT GIVEN
Vapor Pressure (MM Hg/70 F): 18
Vapor Density (Air=1): 0.6
Specific Gravity: 1.12
Decomposition Temperature: NOT GIVEN
Evaporation Rate And Ref: NOT GIVEN
Solubility In Water: COMPLETE
Percent Volatiles By Volume: 75-80
pH: 6.2
Corrosion Rate (IPY): UNKNOWN

Fire and Explosion Hazard Data

Flash Point: NONE
Lower Explosive Limit: NOT GIVEN
Upper Explosive Limit: NOT GIVEN
Extinguishing Media: WATER SPRAY, CARBON DIOXIDE, DRY CHEMICAL, ALCOHOL FOAM.
Special Fire Fighting Proc: WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING. FIRE OR EXCESSIVE HEAT MAY PRODUCE HAZARDOUS DECOMPOSITION PRODUCTS.
Unusual Fire And Expl Hazrds: NONE SPECIFIED BY MANUFACTURER.

Reactivity Data

Stability: YES
Cond To Avoid (Stability): NONE SPECIFIED BY MANUFACTURER.
Materials To Avoid: BASES, STRONG OXIDIZING AGENTS, SODIUM HYPOCHLORITE (BLEACH).
Hazardous Decomp Products: AMMONIA, CHLORAMINE
Hazardous Poly Occur: NO
Conditions To Avoid (Poly): NONE. WILL NOT OCCUR.

Health Hazard Data

LD50-LC50 Mixture: NONE SPECIFIED BY MANUFACTURER.
Route Of Entry - Inhalation: NO
Route Of Entry - Skin: NO
Route Of Entry - Ingestion: NO
Health Haz Acute And Chronic: INHALATION- LOW HAZARD FOR RECOMMENDED HANDLING. EYES- MAY CAUSE TRANSIENT IRRITATION. SKIN- LOW HAZARD FOR RECOMMENDED HANDLING. INGESTION- EXPECTED TO BE A LOW INGESTION HAZARD.
Carcinogenicity - NTP: NO
Carcinogenicity - IARC: NO
Carcinogenicity - OSHA: NO
Explanation Carcinogenicity: THIS COMPOUND CONTAINS NO INGREDIENTS AT CONCENTRATIONS OF 0.1% OR GREATER THAT ARE CARCINOGENS OR SUSPECT CARCINOGENS.
Signs/Symptoms Of Overexp: EYE IRRITATION.
Med Cond Aggravated By Exp: NONE SPECIFIED BY MANUFACTURER.
Emergency/First Aid Proc: INHALATION- IF SYMPTOMATIC, MOVE TO FRESH AIR. EYES- WASH OUT IMMEDIATELY WITH WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION. SKIN- WASH WITH SOAP AND WATER. GET MEDICAL ATTENTION IF SYMPTOMS OCCUR. INGESTION- DRINK 1-2 GLASSES OF WATER. CALL A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY.

Precautions for Safe Handling and Use

Steps If Matl Released/Spill: DISCHARGE, TREATMENT, OR DISPOSAL MAY BE SUBJECT TO NATIONAL, STATE, OR LOCAL LAWS. FLUSH TO SEWER WITH LARGE AMOUNTS OF WATER. OTHERWISE, ABSORB SPILL WITH VERMICULITE OR OTHER INERT MATERIAL, THEN PLACE IN A CONTAINER FOR CHEMICAL WASTE.
Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.
Waste Disposal Method: DISCHARGE, TREATMENT, OR DISPOSAL MAY BE SUBJECT TO NATIONAL, STATE, OR LOCAL LAWS.
Precautions-Handling/Storing: KEEP CONTAINER TIGHTLY CLOSED. KEEP AWAY FORM INCOMPATIBLE SUBSTANCES.
Other Precautions: USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING THIS MATERIAL.

Control Measures

Respiratory Protection: NONE NORMALLY REQUIRED.
Ventilation: GOOD GENERAL VENTILATION SHOULD BE USED (TYPICALLY 10 AIR CHANGES PER HOUR). MATCH RATE TO CONDITIONS.
Protective Gloves: WEAR IMPERVIOUS GLOVES.
Eye Protection: WEAR SAFETY GLASSES WITH SIDE SHIELDS.
Other Protective Equipment: EYE BATH, WASHING FACILITIES, SAFETY SHOWER.
Work Hygienic Practices: WASH HANDS THOROUGHLY WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES.
Suppl. Safety & Health Data: KEY1:N1.

Transportation Data

Trans Data Review Date: 95109
DOT PSN Code: ZZZ
DOT Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION
IMO PSN Code: ZZZ
IMO Proper Shipping Name: NOT REGULATED FOR THIS MODE OF TRANSPORTATION
IATA PSN Code: ZZZ
IATA Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION
AFI PSN Code: ZZZ
AFI Prop. Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION
MMAC Code: NR
Additional Trans Data: PSN AS SPECIFIED BY KODAK BLDES CODE 0017.

Disposal Data

Label Data

Label Required: YES
Technical Review Date: 20APR95
Label Status: F
Common Name: 158 2352 KODAK EXTACOLOR RA BLEACH FIXER / RA-4;
P/N = B
Chronic Hazard: NO
Signal Word: NONE
Acute Health Hazard-None: X
Contact Hazard-None: X
Fire Hazard-None: X
Reactivity Hazard-None: X
Special Hazard Precautions: INHALATION- LOW HAZARD FOR RECOMMENDED HANDLING. EYES- MAY CAUSE TRANSIENT IRRITATION. SKIN- LOW HAZARD FOR RECOMMENDED HANDLING. INGESTION- EXPECTED TO BE A LOW INGESTION HAZARD. KEEP CONTAINER TIGHTLY CLOSED. KEEP AWAY FORM INCOMPATIBLE SUBSTANCES. FIRST AID: INHALATION- IF SYMPTOMATIC, MOVE TO FRESH AIR. EYES- WASH OUT IMMEDIATELY WITH WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION. SKIN- WASH WITH SOAP AND WATER. GET MEDICAL ATTENTION IF SYMPTOMS OCCUR. INGESTION- DRINK 1-2 GLASSES OF WATER. CALL A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY.

Protect Eye: Y
Label Name: EASTMAN KODAK COMPANY
Label Street: 343 STATE STREET
Label City: ROCHESTER
Label State: NY
Label Zip Code: 14650
Label Country: US
Label Emergency Number: 716-722-5151

Standard Operating Procedures

For

Silver Recovery Operations

STANDARD OPERATING PROCEDURES

ENSURING ENVIRONMENTAL COMPLIANCE AT PRECIOUS METALS RECOVERY FACILITIES

Precious metals recovery systems recycle silver-bearing hypo-solutions generated from black-and-white/color photo processing, dental X-ray processing, and medical X-ray processing. These hypo-solutions are collected and processed through various ionic exchange cores/ cartridges, which remove and reduce silver concentrations at or below regulatory levels (i.e. < 5 ppm) before being discharged to the sanitary sewer. Precious metals recovery systems consist of ionic exchange cartridges (IEC's) and their associated influent sources. These systems primarily collect silver-bearing hypo-solutions from the aforementioned fixer and bleach fix processes.

Spent hypo-solution and recovered IEC's are exempt from hazardous waste requirements, and per DoD 4160.21-M are deemed as recyclable materials. If these chemicals and/or materials are mismanaged, all applicable restrictions for hazardous waste will apply. It is imperative that Commands ensure the operation and maintenance guidelines outlined in this enclosure are strictly adhered to. Without this oversight, silver-bearing hypo-solutions, cores, and cartridges will be subject to handling, storage, and disposal restrictions for hazardous waste and may result in the discharge of silver-bearing hazardous wastes to MCB, Camp Lejeune's multi-million dollar wastewater treatment plant which is in violation of the NPDES permit. Thus, it is important that operating personnel or persons having cognizance over facility usage implement the following best management practices to comply with environmental regulatory requirements and MCB directives.

Training. Unit commanders shall ensure that personnel are properly trained in the operation and maintenance of precious metals recovery systems. Personnel shall be educated on the environmental impact of hazardous material spills as well as the prevention of such incidents. This training may be accomplished by registering personnel in the Silver Recovery Training (EM104) Course offered by EMD.

Monitoring. Establish a schedule to inspect the precious metals recovery system at the close of each operational day. Unit personnel will ensure the following:

- effluent from recovery systems is contained;
- piping, hoses, and valves are connected and functioning properly;
- flow-rates are established at 80-100 milliliters per minute (if applicable);
- contained effluent is copper strip field-tested and below regulatory requirements;
- copper strip field-test results are maintained within an established logbook;
- logbooks will contain:
  a) copper strip field-test results;
  b) quantity of effluent discharged into the sanitary sewer;
  c) date of discharge; and,
  d) individual responsible for the discharge.

- processed effluent is discharged to the sanitary sewer; and
- housekeeping has been maintained prior to the close-of-business.

Housekeeping. As a best management practice (BMP), housekeeping in, around, and adjacent to the precious metals recovery site should be maintained throughout the operational day. Foreign objects or matter that may pinch hosing, alter flow-rates or hinder/impede the operation of the precious metals recovery system in any way will be stored at an appropriate distance away from the recovery unit while still allowing access to the system.

Spill prevention, reporting, and clean-up. Publish and prominently post directives that set forth unit-level policies for the control and prevention of spent silver-bearing hypo-solution and hazardous materials. Any discharges or spills that may occur in and around the area of the precious metals recovery systems must be reported immediately to the Base Fire Protection Division by phoning 911. Units must stock spill containment and control equipment on-site for use of the operating unit in the event of a spill.

In accordance with BO 6240.5B, emergency spill reporting phone numbers will be prominently posted at each site. It is recommended as a BMP that the signage requirements read as follows:

IN CASE OF AN OIL OR HAZARDOUS MATERIALS SPILL
CALL BASE FIRE PROTECTION DIVISION AT 911
NOTIFY YOUR COMMANDER/SUPERVISOR IMMEDIATELY

"No Smoking" and "Authorized Personnel Keep Only" signs are to be prominently posted as well. Signs will be posted at the entrance of each site and will be legible from a distance of 25 feet.

Defense Logistics Agency (DLA), Defense, Reutilization, and Marketing Services (DRMS), and Defense Reutilization and Marketing Office responsibilities (DRMO). DLA, DRMS, and DRMO responsibilities are outlined within the Defense, Reutilization, and Marketing Manual, DoD 4160.21-M publication. This manual outlines laws and regulations applying to the disposition of excess, surplus, and foreign excess personal property, in addition to, precious metals, silver-bearing scrap and silver-bearing hypo-solutions.

Materials acquisition. Units responsible for IEC replacement, stock replenishment, and parts ordering are to obtain and maintain current stock listings through the DRMS-LMS, Operations Division. Replacement stock listings may be obtained through the Command ECC office or directly through the DRMS East, Operations Division. Such acquisition includes, but is not limited to, IEC's or replacement cores, copper strip field-tests, Teflon tubing, valves, clamps, flow regulators, connectors, reducers, couplings, tee's and adaptors.

OK

Current point-of-contact for the DRMS-LMS Precious Metals Recovery Program is Mr. Marlow Burns, Procurement Specialist.

Laura Green
ATTN: 7071

DRMS-LMS
Precious Metals Recovery Program
74 North Washington
Battle Creek, Michigan 49017-3092

Phone: Comm: 616-961-7293; DSN: 932-7293
Fax: Comm: 616-961-7348; DSN: 932-7348
E-mail: mburns@mail.drms.dla.mil

Copper strip field-tests. Prior to silver-bearing effluent being discharged to the sanitary sewer, containerized hypo-solution must be copper strip field-tested. Two, simultaneous strip-tests are to be conducted on containerized effluent. Copper tarnish removal and twenty-second agitation requirements apply for each test. If both tests indicate no discoloration after 20 seconds, the copper strip tests have passed. In such cases, continue to briskly agitate each strip for an additional 40 seconds to ensure ionic exchange cartridges aren't approaching exhaustion. If both tests indicate discoloration prior to 20 seconds, ionic exchange cartridges must be replaced. If the two tests are split, (i.e. one strip test discolored, the other passing) a third copper strip test will be the determining factor with regards to core replacement. All copper strip field tests are to be agitated an additional 40 seconds after the initial 20 second test as a precautionary measure.

Precious metals recovery system core/cartridge removal and disposal. When it is determined that recovery cores/cartridges have been exhausted through failure of duplicate copper strip field-tests, unit personnel should remove and/or install replacement cores/cartridges following the cartridge installation and removal procedures outlined in the Operation and Maintenance Manuals for ACT I, Silver-Sure 250, Silver-Sure 500, or Tandem 200 Precious Metals Recovery Systems.

Per MCO 4555.3C, unit personnel will be responsible for the disposal of spent, silver-bearing cores/cartridges within 30 days of removal from the precious metals recovery systems.

Unit personnel responsible for the packaging and disposal of spent, silver-bearing recovery cores/cartridges through the DRMO Disposal Office must ensure the following:

- sufficient silver effluent has been drained from each core/cartridge;
- cores/cartridges are placed in double-lined plastic bags;
- cores/cartridges are packaged in the cardboard containers in which they were shipped;
- all seams for each packaged container are double-taped;
- completed DD-1348 disposal forms accompany each shipment of spent cartridges; and
- DD-1348 disposal forms are archived and maintained for a minimum of three years.

All spent recovery cartridges will be disposed of through the DRMO Disposal Office, Bldg TP-465, Monday through Thursday from 0730 to 1530 hours. All spent cartridges must be accompanied with the appropriate DD-1348 disposal worksheets. Spent recovery cores/cartridges will not be accepted at the DRMO Disposal Office if transported in a POV. Prior to disposal, it is requested that a courtesy phone call be provided to disposal personnel in order to expedite the disposal process at 451-5816. A DD-1348 is provided at the end of this SOP.

Unit RUC Number

Supplied by the DRMO Disposal Office

Your Unit Address

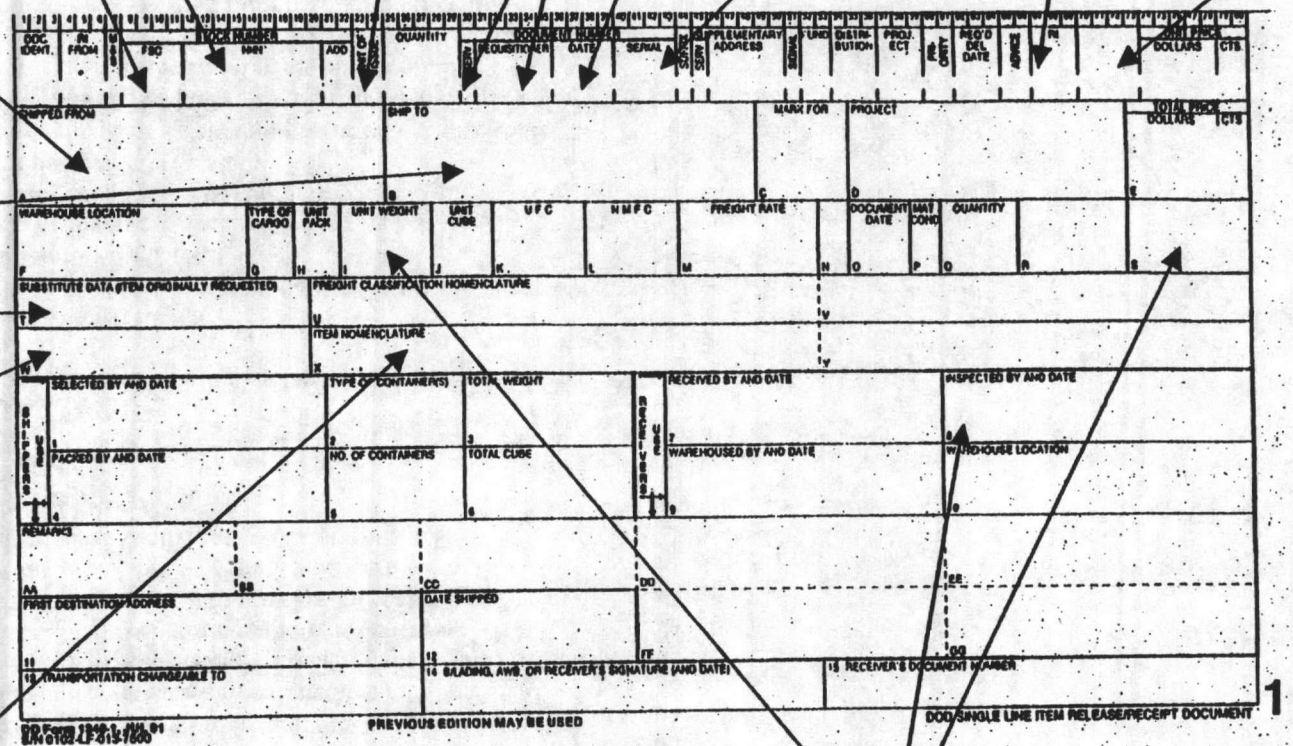
Unit of Issue (each)

4-Digit Julian Date

Always "0001"

Always "N/A"

Always "N/A"



Always "DRMO, Bldg 906"

Disposing Individual

Disposing Individual's Phone Ext.

Cartridge, Core, or Recovery Unit Type

Supplied by the DRMO Disposal Agent

ENVIRONMENTAL MANAGEMENT DEPARTMENT
MARINE CORPS BASE, CAMP LEJEUNE, NC

ENVIRONMENTAL COMPLIANCE EVALUATION

Unit Evaluated: Unit ECO: Phone/Fax: Evaluation Date: Evaluation By:	Type of Evaluation: Formal Announced [ ] Formal Unannounced [ ] Courtesy [ ] Follow Up [ ]	Media: Precious Metals (Silver) Recovery Reference: (R1) BO 4555.1D, (R2) MCO P4555.3C, (R3) BO 11090.3A, (R4) BO 5100.20A, (R5) BO 11320.1J, (R6) BO 6240.5B, (R7) DoD 4160.21-M.

ADMINISTRATIVE/RECORDS

1. [ ] MSDS's/HMIS and/HW Profiles missing. (R4, R6)
2. [ ] Personnel Training Records missing/inadequate/not current. (R4)
3. [ ] Applicable Base Orders and related local instructions missing. (R6)
4. [ ] HWM Standard Operating Procedures missing/inadequate. (R6)
5. [ ] Daily/weekly operational log missing/inadequate/not current. (R2)
6. [ ] Location sketch of facility showing room number, processing system, recovery unit, capture tank, etc., missing/inadequate/not current. (R6)
7. [ ] DRMO Turn-in receipts/records of recovered materials not maintained/inadequate. (R1, R2, R7)
8. [ ] Other.

HAZARDOUS MATERIALS STORAGE

9. [ ] Container is leaking, corroded, bulging, collapsed, or other structural deficiency. (R3, R6)
10. [ ] Container is open or not secured. (R6)
11. [ ] Inventory of hazardous materials/supplies missing. (R4)
12. [ ] 911 sign not posted/deteriorated. (R3)
13. [ ] Hazardous materials with expired shelf-life. (R6)
14. [ ] Unit Level Spill Contingency Plan missing/inadequate. (R3, R5, R6)
15. [ ] No Smoking sign not posted/deteriorated. (R5)
16. [ ] Fire control, spill control and/or safety equipment missing. (R5, R6)
17. [ ] Recovered silver/materials stored longer than 30 days. (R2)
18. [ ] Restricted access to recovered silver/materials not maintained. (R1, R2, R7)
19. [ ] Written Hazard Communication Plan not missing/not available. (R4)
20. [ ] Incompatible HM's in storage.
21. [ ] Other.

SILVER RECOVERY SITE

22. [ ] Silver recovery equipment inoperational/malfunctioning. (R2, R7)
23. [ ] Silver Recovery Site housekeeping unkept/inadequate. (R3, R7)
24. [ ] Other

REMARKS

ENVIRONMENTAL COMPLIANCE EVALUATION

DATE:
FACILITY BEING EVALUATED:
EVALUATED BY:
EVALUATION PARTICIPANTS:
PHONE NUMBER:

DEFICIENCY F: FINDING D: DISCREPANCY I: ISSUE	REFERENCE	REMARKS	CORRECTIVE ACTION
1. F: MSDS's/HMIS or HW Profiles missing.	BO 5100.20A BO 6240.5B		MSDS's/HMIS or HW profile sheets must be readily available to all personnel in the workplace.
2. D: Personal training records missing/inadequate.	BO 5100.20A		Individuals involved in the storage, usage, and/or disposal of HM must have Hazard Communication training on a yearly basis in order to identify hazardous working conditions within the workplace.
3. D: Applicable Base Orders and related local instructions missing. Note: BO 4555.1C, MCO 4555.3C, BO 11090.1B, BO 5100.20A, BO 11320.1H, BO 6240.5A.	BO 6240.5B		Each organization routinely handling HW/HM is required to maintain at a minimum the noted MCO, BO's, and related local instructions as part of the HWMSOP.
4. D: HWM SOP for site is missing.	BO 6240.5B		OIC/NCOIC's will prepare a written HM management standard operating procedure in cooperation with the cognizant ECO for each facility where greater than 5 ppm silver effluent is generated and stored.
5. I: Daily operational log missing/inadequate.	MCO 4555.3C		To ensure silver effluent that exceeds 5 ppm is not discharged into the sanitary sewer, daily operational logs noting quantity of discharge and results of copper stripping tests must be maintained. Effluent exceeding 5 ppm must be containerized and reprocessed through the individual recovery units.

DEFICIENCY F: FINDING D: DISCREPANCY I: ISSUE	REFERENCE	REMARKS	CORRECTIVE ACTION
6. D: Location sketches missing/inadequate.	BO 6240.5B		Each organization routinely handling hazardous materials is required to maintain at a minimum, a location sketch for each HM generation, accumulation, and storage area.
7. D: Turn-in receipts/ documents missing not maintained.	BO 4555.1D MCO 4555.3C DoD 4160.21M		Persons who store recycled silver must maintain records of all recovered silver turned in to the DRMO Eastern Region.
8. Other			
9. D: Container is not serviceable due to leaking, corroded, bulging, collapsed.	BO 11090.3A BO 6240.5B		A leaking, corroded, bulging , dented, or collapsed container must be transferred to a DoT approved container in good condition.
10. D: Container is open or not secured.	BO 6240.5B		Containers of HM will be closed at all times except when adding or removing product from the container.
11. D: Missing Hazardous Material Inventory List (HMIL).	BO 5100.2A		A current, complete inventory of all HM must be maintained for each shop. The HMIL will include the complete name of the product, manufacturer or distributor, NSN or product identification number.

DEFICIENCY F: FINDING D: DISCREPANCY I: ISSUE	REFERENCE	REMARKS	CORRECTIVE ACTION
12. D: 911 sign not posted or not legible.	BO 11090.1B		Signs shall be posted at every building, tank location, hazardous waste or hazardous materials sites. Signs will have yellow background with black lettering indicating the following information: **IN CASE OF AN OIL OR HAZARDOUS MATERIALS SPILL** **CALL BASE FIRE PROTECTION DIVISION** **911** **NOTIFY YOUR COMMANDER/SUPERVISOR IMMEDIATELY** Information to purchase the signs can be acquired from the ECC.
13. D: HM with expired shelf life.	BO 6240.5B		If the material is type II (as determined from the HMIS), shelf-life can be extended after visual inspection of container, contents, and verifying information on the quality status list (QSL). To receive QSL on a monthly basis contact Lisa Prows @ (804) 279-4140. It is recommended that the units follow shelf-life management procedures outlined in MCO P4450.13 material quality control standards.

DEFICIENCY F: FINDING D: DISCREPANCY I: ISSUE	REFERENCE	REMARKS	CORRECTIVE ACTION
14. F: Unit Level Contingency Plan missing/incomplete.	BO 11090.3A BO 11320.1J BO 6240.5B		HWMSOP shall contain procedures and responsibilities for dealing with HW/HM spills and related emergencies. Units will publish and prominently post the ULCP specifically applicable to their organization. The plan must include: 1. Actions the facility personnel shall take in case of an emergency. 2. Instructions to call the Base Fire Protection Division. 3. A list of names, addresses, and phone numbers of the trained facility personnel, and the ECO and ECC. 4. A list of all spill response equipment available and location of this equipment or materials. 5. An evacuation plan and an alternate evacuation plan.
15. D: " No Smoking" sign not posted or not legible.	BO 11320.1J		No smoking signs are required wherever there is a HW/HM site; signs must be easily seen when a hazard is present.
16. D: Fire control, Spill control, and/or Safety equipment missing.	BO 11320.1J BO 6240.5A		Units are required to maintain absorbents, safety equipment, fire extinguishers, and other supplies for dealing with HM/HW spills at their facility.
17. F: Recovered silver/ materials stored longer than 30 days.	MCO 4555.3C		Recovered silver from spent hyposolutions must be turned in/disposed of through the DRMO Eastern Region Office within 30 days of removal from a recovery unit.

DEFICIENCY F: FINDING D:DISCREPANCY I: ISSUE	REFERENCE	REMARKS	CORRECTIVE ACTION
18. D: Restricted access to recovered silver not maintained.	BO 4555.1D MCO 4555.3C DoD 4160.21M		Generating units will establish suitable controls against loss of recovered silver in the form of a locked storage area, with limited or restricted access.
19. F: Written Hazard Communication Plan not available.	BO 5100.20		The Commanding Officer will ensure that a written Hazard Communication Program is compiled and maintained for each workplace using or handling HM.
20. D: Incompatible materials in storage	BO 6240.5B BO 11320.1J		Separate all incompatible HM to the maximum extent possible. At a minimum "separation" should mean the arrangement of compartments separated by a wall/berm or by other means of approved physical separation. Use the EPA HW Compatibility System located in the EMD CETP manual to determine compatibility.
21. Other			
22. D: Silver recovery equipment inoperational/ malfunctioning.	MCO 4555.3C DoD 4160.21M		Units will ensure that silver recovery equipment is operational and maintained prior to each day of silver effluent processing.
23. D: Silver Recovery Site housekeeping unkempt/ inadequate.	BO 11090.3A DoD 4160.21M		All activities shall guard against the creation of fire and spill hazards and shall promptly report to the Base Fire Protection Division any hazardous conditions that exist.
24. Other			

Finding: A deficiency that could result in a notice of violation, a fine, or other enforcement action if discovered by a regulatory agency.

Discrepancy: A deficiency that would not result in a notice of violation, a fine, or other enforcement action if discovered by regulatory agency. Discrepancies are normally a result of poor management practices or failure to follow installation standard operating procedures, Marine Corps Orders, Department of Defense Directives.

Issues: Issues would include trends across installations/ commands that may require a Marine Corps wide approach or the need for clarification in regulation, guidance, and/or checklists. Issues include significant differences in opinion or interpretation or requirements.

Regulatory Drivers

MCO 4555.3C

LOGISTICS MCB CLNC

106

DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
WASHINGTON, D.C. 20380

MCO 4555.3C
LA-2-cfb
19 Sep 1983

	ACT	INF
ACofS,LOG		✓
SUPMGMT O		
OPNS OFF		
LOG CH		✓
ADM BR		
SUPSUPT BR		
SUPANAL SEC		
MAINSVSUPT		
BUDGET DIVISION		

MARINE CORPS ORDER 4555.3C w/ch 1

From: Commandant of the Marine Corps
To: Distribution List

Subj: Recovery and Utilization of Precious Metals

Ref: (a) DoD 4160.21-M, Defense Utilization and Disposal Manual
(b) SECNAVINST 5530.5 (NOTAL)

Encl: (1) Precious Metal-Bearing Items
(2) Precious Metal Scrap Recovery Percentages
(3) Precious Metal Area Representatives

1. Purpose. To establish Marine Corps policy and assign responsibility for a program for the recovery of precious metals contained in excess material, residual material, and scrap generated by Marine Corps activities and for utilization of those recovered precious metals as Government-furnished material (GFM) to reduce the cost of new procurement.

2. Cancellation. MCO 4555.3B. ✓

3. Summary of Revision. This revision contains a substantial number of changes and should be completely reviewed.

4. Background

a. The Department of Defense (DoD) Precious Metals Recovery Program (PMRP) is assigned to the Defense Logistics Agency (DLA). Under DLA, the Defense Property Disposal Service (DPDS-R), Federal Center, Battle Creek, Michigan 49016, is responsible for programs associated with the collection, recovery, and processing of precious metals which include silver, gold, platinum, and the platinum family of noble metals (palladium, iridium, rhodium, osmium, and ruthenium). The Defense Industrial Supply Center (DISC) is responsible as the commodity integrated material manager (CIMM) for supply management of the refined precious metals recovered under the PMRP. The expenditure of available resources to recover these precious metals is justified by such factors as the criticality of chemical properties of these metals as used in Defense items, the limited worldwide quantity of these metals, the relative ease of recovery procedures, and the current high prices of precious metals on the open market.

OPTIONAL FORM 99 (7-90)
FAX TRANSMITTAL # of pages ▸ 21
To Julie S From Walt
Dept./Agency Phone #
Fax # 1164 Fax #
NSN 7540-01-317-7368 5099-101 GENERAL SERVICES ADMINISTRATION

057605 00

b. A precious metal indicator code (PMIC) has been developed and incorporated in the Defense Integrated Data System (DIDS) and Military Standard Requisitioning and Issue Procedure (MILSTRIP) Programs. DoD item managers will assign a PMIC to every item in the supply system. Retroactive coding will be accomplished on an item-by-item basis as file maintenance is required. Effective 1 November 1983, the PMIC will be a mandatory entry on all disposal related MILSTRIP documents. Liaison with the DoD item manager will be required when an item has not been assigned a PMIC in the DIDS.

5. Policy

a. Participation in the PMRP is mandatory for all Marine Corps activities.

b. Reutilization of excess precious metal-bearing items will take precedence over precious metal recovery.

c. DLA is responsible for providing silver recovery equipment to generating activities for use in photographic processing laboratories, printing plants, and microfilm and mircofiche producing facilities, as well as base or station photographic laboratories and hobby shops.

d. Marine Corps funds will not be obligated or otherwise committed for major maintenance, replacement parts for existing equipment, or for the purchase of new or replacement equipment for this program. These requirements will be funded or supplied by DLA.

e. Marine Corps activities will operate and maintain equipment provided to them for use in the PMRP and will be responsible for performing operator level preventive maintenance on recovery equipment in their possession. Preventive maintenance includes day-to-day adjustment, cleaning, replacement of fuses and other available minor repair parts, and any like action which can be performed with a minimum of technical knowledge and effort and within the limitations of reasonably available common tools and equipment, as a safeguard against excessive equipment downtime.

f. Acquisition project officers or item managers will ascertain the availability of precious metals by interrogating the item manager of precious metals stocks at DISC before initiating a new procurement action for precious metals or for precious metal-bearing material and will include a provision for the use of recovered precious metals as GFM in all such procurement requests when it is in the best interest of the Government to do so.

g. Precious metals will not be provided as GFM on new procurement contracts which are solely for foreign military sales (FMS), since these customers are not participants in the PMRP.

6. Procedures

a. Recovery

(1) Identification of precious metal-bearing scrap is a key element of the PMRP. Enclosure (1) provides information for use in the identification of precious metal-bearing items. Enclosure (2) provides data to convert the known precious metal content to troy ounces and to determine a reasonable estimate of recovery potential in troy ounces. Activities should also consult the precious metals master file to identify items or components containing recoverable amounts of precious metals. The precious metals master file may be ordered from Defense Logistics Services Center (DLSC-AP), Federal Center, Battle Creek, MI 49016.

(2) Precious metals and precious metal-bearing scrap will be segregated from nonprecious material by generic category; i.e., silver, gold, platinum, etc. Suitable controls against loss by theft will be established; and a locked storage area, with limited access for authorized personnel only, will be provided. Safeguards will be established to ensure accountability and control of precious metals between pickup and delivery points. Records will be maintained in avoirdupois pounds and ounces of current inventory, receipts, and issues of precious metals and precious metal-bearing scrap.

(3) Marine Corps activities will not discard unserviceable precious metal-bearing items, scrap, residue, or waste but will collect, segregate, and store the material securely until it can be turned in to a Defense property disposal office (DPDO) or shipped to a collection or recovery point designated by DPDS-R.

(4) Precious metal-bearing scrap and waste material will be segregated, as required in the preceding, prior to turn-in to DPDO. Include on the disposal turn-in document (DTID) any available information pertaining to precious metal content (metal type, quantity, and location within the item) of the scrap material turned in. A receipt will be obtained at the time of turn-in.

(5) Transportation, packaging, crating, and handling costs incurred in the shipment or transfer of precious metal-bearing material from a generating activity to the servicing DPDO will be borne by the generating activity.

(6) Transportation, packaging, crating, and handling costs incurred in making DPDS-R authorized shipments to a designated

collection/recovery activity (other than the servicing DPDO) or contractor facility will be charged to the appropriate DPDS-R fund citation obtained from the servicing DPDO.

(7) Generating activities using DPDS-R approved PMRP transportation fund citations for shipping precious metal-bearing material will forward two copies of all shipping documents to the Commander (Attn: DPDS-CF), Defense Property Disposal Service, Federal Center, Battle Creek, MI 49016.

(8) Documentation of shipments of precious metal-bearing material will show the net avoirdupois weight of material shipped. Shipments will be made by the most economical means available which is consistent with safe transit and delivery. All reasonable care will be taken in the packing of material for shipment so as to minimize the possibility of theft or loss through leakage or container damage. Parcel-post shipments will be registered.

(9) Recovery equipment includes but is not limited to electrolytic recovery units, chemical recovery cartridges, plastic hypocollection containers and replacement parts. When cost effective and environmentally acceptable, film burners/ incinerators (for reduction of film and photographic paper to ash for shipment) will be provided by DPDS-R after evaluation of the activity's requirements.

(10) PMRP supplies, such as litmus test paper, plastic collection containers, silver recovery cartridges, fittings, control valves, and other replacement parts, may be obtained without charge by contacting the servicing precious metal area representative (DMAR) or DPDS-R. It is not necessary to use MILSTRIP formats or to identify the requested material by national stock number (NSN). Noun names will be sufficient identification.

(11) Generating activities will apprise their servicing DPDO of the need for PMRP assistance/recovery equipment to start up silver recovery operations or to enhance the effectiveness of ongoing silver recovery operations to ensure maximum recovery.

(12) In addition to the foregoing, DLA has designated PMAR's who may be contacted for technical assistance or information for resolution of PMRP problems. Enclosure (3) is a list of PMAR locations and the geographic areas for which they are responsible.

b. Utilization

(1) Activities procuring precious metals or precious metal-bearing material will screen the DoD inventory of Government-owned assets of precious metals and utilize those

assets as GFM in lieu of contractor-furnished material (CFM) in production contracts for major systems and equipment when such action is determined to be more advantageous to the Government. (This does not apply to procurement actions solely for FMS customers.) See paragraph 5g, preceding. Requisitioners will contact the item manager at DISC (Code ODBA-YC), AUTOVON 442-3045 or 442-3052, to obtain the latest unit price, verify availability, and reserve specific assets. Unit prices will include transportation and insurance.

(2) Solicitations for bids on items requiring precious metals shall include a provision advising bidders/offerors of the Government's intention to provide the precious metals required as GFM. These solicitations shall also provide that the bidders/offerors indicate the quantity and types of precious metals they will require for the contract. In the event that the bidders/offerors require varying quantities of precious metals because of design differences, the current market value of the GFM shall be added to the bids to ensure that no competitive advantage results from the provision of GFM.

(3) After ascertaining that the required precious metals are available and that GFM precious metals should be provided, a funded requisition in MILSTRIP format will be forwarded (preferably by message) to DISC (Code ODBA-YC).

(4) Requisitions will include the following as "exception data":

(a) Precise "ship to" address (specifying building and office, including ZIP code) where the precious metals are to be delivered. All appropriate "mark for" designations must be provided in the event they differ from the "ship to" addresses. The name(s) of the receiving official(s) shall be specified whenever possible.

(b) Contract number to which GFM precious metals will be applied.

(c) End item application (NSN, part number or other identification of the end item) and the quantity of precious metal which will be used per unit, if known.

(d) Specific contact point at the requisitioning activity, including the name, code, and telephone number.

7. Action

a. Procuring contracting officers shall:

(1) Ensure that each solicitation/contract specifies that the required precious metal will be supplied as GFM, when available and in the Government's best interest.

(2) Ensure that the quantity of precious metal requested by the contractor is commensurate with that required in the manufacturing process, considering the contractor's individual item design.

(3) Ensure that, when precious metals are to be furnished as GFM to a subcontractor, the contract identifies the subcontractor and location.

(4) Take appropriate action to assure that administrative contracting officers:

(a) Provide surveillance over all GFM precious metals and ensure that all residual precious metals are returned to the Government.

(b) Furnish prompt disposition instructions to contractors when residual precious metals are reported on hand by the contractor after completion of the contract.

(c) Request assistance from the administrative office having cognizance of the subcontractor's plant when precious metals are to be furnished as GFM to a subcontractor.

b. The inventory control point shall:

(1) Place command emphasis on this program, and allocate the resources (personnel and automatic data processing (ADP) support) necessary to ensure compliance with this Order.

(2) Evaluate items as to their recoverable precious metal content, and assign a PMIC to each new or existing item under their cognizance.

(3) Annotate the procurement specifications that precious metals will be supplied as GFM when in the Government's best interest.

(4) Take appropriate action to requisition precious metals from DISC.

MCO 4555.3C
19 Sep 1983

PRECIOUS METAL AREA REPRESENTATIVES

Name/Address/Telephone	Area Covered
ATTN: PMAR Building 2517/Stop No. 125 Meade Road Fort Belvoir, VA 22060 Comm: 703-664-6551 AV: 354-6551	Maryland Delaware Washington, DC Virginia (metropolitan DC area)
ATTN: PMAR DPDO Philadelphia, Bldg. 648 Philadelphia Naval Shipyard Philadelphia, PA 19112 Comm: 215-755-3735/3222 AV: 443-3736/3222	Massachusetts Maine New Jersey Rhode Island Connecticut Vermont New Hampshire Pennsylvania (eastern) New York (southeastern) Greenland Newfoundland
ATTN: PMAR Building SDA-211 South Annex Norfolk, VA 23511 Comm: 804-444-1318 AV: 564-1318	West Virginia Virginia (except metropolitan DC area) Bermuda
ATTN: PMAR DPDO Wright-Patterson Building 89, Area C Wright-Patterson AFB, OH 45433 Comm: 513-225-4291/4203 AV: 787-4291/4203	Indiana Michigan Ohio Pennsylvania (western) New York (except southeast)
ATTN: PMAR DPDO Charleston P.O. Box 5715 North Charleston, SC 29406 Comm: 803-743-3270 AV: 794-3270	Florida South Carolina North Carolina Georgia (eastern)
ATTN: PMAR DPDO McConnell Building 1349 McConnell AFB, KS 67221 Comm: 316-681-6718 AV: 743-6718	Illinois Missouri Kansas Nebraska Wisconsin Iowa Minnesota

ENCLOSURE (3)

Name/Address/Telephone	Area Covered
ATTN: PMAR DPDO San Antoino Building 3030, East Kelly Kelly AFB, TX 78241 Comm: 205-925-5646/8791 AV: 945-5646/8791	Oklahoma Arkansas Texas (except El Paso area) Panama
ATTN: PMAR 3415/ABG/DPDR-OR Lowry AFB, CO 80230 Comm: 303-370-2019 AV: 926-2019	Colorado New Mexico Utah Wyoming Idaho Texas (El Paso area) Arizona (except Yuma area)
ATTN: PMAR Building 310-B Ft. Gillem Forrest Park, GA 30050 Comm: 404-363-5129 AV: 797-5129	Tennessee Louisiana Mississippi Kentucky Alabama Georgia (western) Puerto Rico Cuba
ATTN: PMAR DPDO Lewis-Puget Sound Branch P.O. Box 2B Puget Sound Navy Shipyard Bremerton, WA 98314 Comm: 206-476-8618 AV: 439-8618	Washington North Dakota South Dakota Montana Oregon Alaska
ATTN: PMAR DPDO Alameda, Building 6 2155 Mariner Square Loop Alameda, CA 94501 Comm: 415-869-3660 AV: 686-3660	California (northern) Nevada (northern)
ATTN: PMAR Building 290, Box 78 NAS North Island, CA 92135 Comm: 714-437-5542 AV: 951-5542	California (southern) Nevada (southern) Arizona (Yuma area)
Defense Property Disposal Region - Europe ATTN: DPDR-ER APO New York 09633 AV: 695-1110, ask for Weisbaden, GE 314-339-1110, ask for ext. 3833	Europe

ENCLOSURE (3)

Name/Address/Telephone	Area Covered
Defense Property Disposal Region - Pacific ATTN: DPDR-PR Camp H. M. Smith, HI 96861 AV: 462-9888, ask for Pearl Harbor 477-5238	Pacific

ENCLOSURE (3)

c. Commanders of major commands shall:

(1) Appoint a PMRP coordinator who will establish, monitor, and coordinate a formal Precious Metals Recovery Program within their activities to ensure that excess precious metal-bearing items, scrap or residue is processed for recovery in accordance with this Order. The name, code, address, and telephone number of each command PMRP coordinator will be provided to the Commandant of the Marine Corps (Code LMM-2) who will also be informed of any changes to this designation.

(2) Local programs will include all of the following as appropriate to the mission and/or assigned equipment and facilities of the activity:

(a) Publication of a PMRP instruction.

(b) Collecting all sensitized photographic and oscillograph materials (including both processed and unprocessed materials), silver bearing photographic fixing and stabilizing solutions, and silver recovered from photographic solutions for turn-in to the servicing DPDO or for shipment to a designated collection or recovery point.

(c) Ensuring that other precious metal-bearing items (such as expended or outdated silver or silver oxide batteries) or any item identified as such by a PMIC are not discarded but collected, secured, segregated, and turned in for recovery of the precious metals as described above.

(d) Limiting the storage of excess precious metal-bearing items and scrap to a maximum period of 30 days. *SPECULATIVE ACCUMULATIO

(e) Operating and maintaining assigned recovery equipment.

(f) Training personnel in the operation of the recovery equipment and in the handling of recovered precious metals.

(g) Establishing and maintaining records of litmus paper tests, dates of silver harvest and amount harvested (where applicable), and dates of canister changes.

(h) Providing security for the recovery equipment and the in-use canisters to preclude pilferage. Refined precious metals will be securely stored in accordance with the provisions of reference (b).

(i) Establishing and maintaining physical security and audit trail procedures for harvested silver, canisters, and other recoverable precious metals from the point of origin to the DPDO, U.S. Postal Service, or public carrier, as appropriate.

(j) Obtaining a signed receipt for all turn-ins from the post office, public carrier, or DPDO, as appropriate, and maintaining a file of those receipts for a period of 3 years.

(k) Informing the PMAR or DPDS-R of local requirements for equipment, major maintenance, spare parts, or supplies.

d. The Commandant of the Marine Corps (Code LMM-2) has been designated the Marine Corps point of contact for the Precious Metals Recovery Program. Any questions, problems, suggestions, etc., concerning this program shall be referred to this point of contact by telephone AUTOVON 224-1600 or 225-3981.

8. Reserve Applicability. This Order is applicable to the Marine Corps Reserve.

H. A. Hatch
H. A. HATCH
Deputy Chief of Staff
for Installations and Logistics

DISTRIBUTION: E plus 7000176 (10)
7000156 (7)

Copy to: 8145001

OPNS

DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
WASHINGTON, D.C. 20380-0001

MCO 4555.3C Ch 1
LMM-2-dt
30 Jan 1986

MARINE CORPS ORDER 4555.3C Ch 1

From: Commandant of the Marine Corps
To: Distribution List

Subj: Recovery and Utilization of Precious Metals

Encl: (1) New page inserts to MCO 4555.3C

1. Purpose. To transmit new page inserts to the basic Order.

2. Action. Remove the present pages 1 and 2 of enclosures (1) and (2) to the basic Order, and replace them with the corresponding pages contained in the enclosure.

3. Change Notation. The paragraphs denoted by an asterisk (*) symbol contain changes not previously published.

4. Filing Instructions. This Change transmittal will be filed immediately following the signature page of the basic Order.

V. J. WALLS
Assistant Deputy Chief of Staff
for Installations and Logistics

DISTRIBUTION: E plus 7000176 (10)
7000156 (7)

Copy to: 8145001

PCN 102 057605 01

MCO 4555.3C
19 Sep 1983

PRECIOUS METAL-BEARING ITEMS

1. Precious metal-bearing items, residue, and material include but are not limited to gold, silver, platinum, and the platinum group from prosthetic appliances; gold, silver, platinum, and platinum group grindings and dust; gold or silver lined, clad, or plated decorations, badges, awards, medals, buttons, and other insignia; silver batteries; silver and gold wire; platinum and palladium wire; silver and gold turnings; spent hypo (fixer) solutions; exposed silver-bearing film/paper regardless of format or condition; unexposed outdated film/paper; dental amalgam scrap; electrical and electronic hardware containing gold, silver, platinum, or any of the platinum group metals; microfilm/microfiche masters and reproducing paper; precious metal-bearing solutions, such as silver nitrate; and disposable electrocardiograph electrodes.

2. National stock number items which contain potentially recoverable precious metals are so coded in the Management Data List (MDL) under the precious metal indicator (PMI).

3. Scrap sources are as follows:

a. <u>Silver Bearing Materials</u>

Anodes

Assemblies--Electrical

Silver/Copper Batteries

Silver/Cadmium Batteries

Silver/Magnesium Batteries

Blanking Scrap--Punchings

Brazing Alloys

Brushes--Electric Motors

Chemical Salts

Clad Bi-Metal Parts

Contacts

Dental Amalgam

Film

ENCLOSURE (1)

Industrial X-Ray

Medical X-Ray

Lithographic

Photographic Negatives

Filters--Plating

* Flake and Sludge--From Electrolytic Processing of Hyposolutions

Hooks--Plating--Nodules

Jewelry Sweeps

Paints--Paste

Paper--Reproduction

Plated Parts--Electrical--Electronic

Plated Serving Pieces

Plated Utensils

Plated Wire

Powders--Granulated

Punchouts

Relays--Electrical

Resins

Silver-Lined Bearings--Diesel Locomotives and Aircraft

Sludges--Plating and Precipitates

Solutions--Plating

Tin Lead Alloys--Contaminated

Turnings

Wave Guides

Wiping Rags

b. Gold Bearing Materials

Brazing Alloys

Clad Metal Parts

Electrical Contacts

Dental Scrap

Dental Sweeps and Grindings

Diodes

Filled Scrap

Filters--Plating

Flakes

Flashings

Foil

Hook--Plating--Nodules

Jewelry Scrap

Jewelry Sweeps and Grindings

Paints and Paste

Peelings

Placer Gold

Plated Parts--Electrical

Plated Wire

Powders

Printed Circuit Boards

Printed Circuit Boards With Components

Punchouts

Resins--Plating

Salts--Chemical

Sludges--Plating

Solutions

Sponge

Tin Lead Alloys--Contaminated

Transistors

Wiping Rags

Wire

c. Platinum Bearing Materials

Catalysts

Chemicals

Clad Materials

Contacts

Dental Alloys

Dental Scrap

Dental Sweeps and Grindings

Jewelry Scraps

Jewelry Sweeps

Laboratory Ware

Magneto Points

Powders and Paste

Solutions--Plating

Spark Plugs--Aircraft

Thermocouple Wire

d. Palladium Bearing Materials

Catalysts

Clad Materials

Contact Points

Dental Alloys

Dental Scraps

Dental Sweeps

Jewelry Scrap (Sweeps)

Paste

Plated Parts

Powders

Relays--Electrical

Salts--Chemicals

Sludges

Sclutions

Wire

e. Scrap Containing Combinations of Precious Metals (Gold, Silver, Platinum, and Palladium)

Electronic Scrap

High Temperature Resistant Alloys

Paints

Paste

Powders

Relays--Electrical

Resins

Ribbons

Rings

Salts

Solutions

Sweeps

Telephone Switching Scraps

Thick Film

Wire

ENCLOSURE (1)

MCO 4555.3C
19 Sep 1983

PRECIOUS METAL SCRAP RECOVERY PERCENTAGES

	Silver Percentage (By Weight in Pounds)	Conversion Factor Pounds to Troy Ounces of Anticipated Precious Metals (See Note)
Silver-Bearing-Scrap-Designations		
* Used anodes, drillings from anodes and grain silver, wire for welding or brazing, silver flakes and sludge from electrolytic processing of hyposolutions, and all other silver of a purity content of 90 percent or better	90	(13.13)
Silver foil battery plates separated by magnesium plates and silver chloride sheets (primarily MK 61-0 and MK 67-1 batteries)	41	(5.98)
X-ray film, exposed industrial and aerial film, millimeter film, and all types of shredded or cut-up film	1	(.15)
Battery cell sections consisting of a plastic container (approximately 1/8-inch thick); some cells containing a silver chloride solution (primarily MK 53-0, 42-0, 58-0, and 66-0 batteries)	15	(2.22)
Silver-bearing amalgam	24	(3.50)
Silver-bearing plated electrical components such as leads, capacitors, and other silver plated or bonded materials	4	(.58)
Silver sludge and silver-bearing ash	22	(3.21)
Silver-bearing missile batteries encapsulated in eposy-type plastic with metal cases and attachments	10	(1.46)

ENCLOSURE (2)
Ch 1 (30 Jan 1986)

	Silver Percentage (By Weight in Pounds)	Conversion Factor Pounds to Troy Ounces of Anticipated Precious Metals (See Note)
Silver-Bearing-Scrap-Designations-(con.)		
Silver recovery cartridge consisting of a spun metallic filter through which spent hyposolution has been filtered	4	(.58)
Desalter Kits	24	(3.5)
Gold-Bearing Scrap Designations		
Dental scrap	40	(5.8332)
Metallic (foil, leaf, wire, casting, and brazing alloy)	65	(9.4790)
Dental sweepings	15	(2.1875)
Electronic scrap (plate or washed)	.40	(.0583)
Integrated circuits/assemblies and pins (not boards or transistors) (pins are ferro magnetic)	12.	(1.7500)
Electronic circuits/assemblies and strips	6.50	(.9479)
Electronic hardware, pins and connectors	.60	(.0875)
Rivets (gold-plated)	.50	(.0729)
Electronic chassis parts	.20	(.0292)
Eyeglass frames (gold-filled)	4	(.5833)
Buttons	.90	(.1313)
Insignia and medals	.10	(.0146)

ENCLOSURE (2)

	Silver Percentage (By Weight in Pounds)	Conversion Factor Pounds to Troy Ounces of Anticipated Precious Metals (See Note)
Gold-Bearing Scrap Designations (con.)		
Gold solutions, 8.3 lb per gal (.7 troy ounces per gal)	.60	(.0875)

NOTE: Conversion factors shown in parentheses when used as multipliers applied to the number of avoirdupois pounds of scrap will produce a reasonably accurate estimate of the silver or gold content equated to troy ounces.

Base Order 4555.1D

UNITED STATES MARINE CORPS
MARINE CORPS BASE
PSC BOX 20004
CAMP LEJEUNE, NORTH CAROLINA 28542-0004

BO 4555.1D
BEMD
14 APR 1999

BASE ORDER 4555.1D

From: Commanding General
To: Distribution List

Subj: RECLAMATION AND UTILIZATION OF PRECIOUS METALS FROM SCRAP AND WASTE MATERIALS

Ref: (a) MCO 4555.3C
(b) AC/S, Log ltr 5200 LOG of 9 Aug 93

Encl: (1) Silver-Bearing and Gold-Bearing Scrap Descriptions
(2) DD 1348-1A Sample Turn-in Document

1. Purpose

a. To provide information and instructions in establishing an effective Precious Metals Recovery Program within Marine Corps Base (MCB), Camp Lejeune and Marine Corps Air Station (MCAS), New River, hereafter referred to as the Installation.

b. These requirements are applicable to all organizations aboard the Installation to include: any command active, or reserve component; staff organization; supporting agency which is affiliated with the United States Marine Corps, Department of the Navy, or Department of Defense. This section also applies to organizations organic to or tenanted aboard the Installation, and those in transit or otherwise temporarily resident because of training or mobilization commitments.

2. Cancellation. BO 4555.1C.

3. Background. Reference (a) requires activity commanders to designate a local Precious Metals Recovery Coordinator to internally implement, monitor, and coordinate the activity's Precious Metals Recovery Program as prescribed therein.

4. Information. While the Defense Printing Service, Photographic Laboratories, and Medical/Dental Facilities are the most probable sources for recovery of silver from solutions used in processing photographic and x-ray film (fixing baths), there are other sources where silver bearing material is generated. Enclosure (1) contains a list of silver and gold bearing scrap descriptions.

5. Policy

a. Maximum participation in the Precious Metals Recovery Program is required by all MCB, Camp Lejeune and MCAS, New River activities, including photographic, medical/dental laboratories, printing facilities, etc. Expenses incurred by activities participating in the program are not reimbursable.

b. Generating activities are responsible for the transportation of precious metals scrap (film, recovery cartridges) and harvested silver to the local Defense Reutilization Marketing Office (DRMO). Transportation costs are not reimbursable.

c. The DRMO is responsible for accepting all excess and surplus precious metal or precious metal-bearing materials, including scrap or harvested silver generated by the military services.

6. Action

a. Per reference (b), the Assistant Chief of Staff, Environmental Management Department (AC/S, EMD), is designated as the coordinator for the Precious Metals Recovery Program for commands located on MCB, Camp Lejeune. The Commanding Officer, MCAS, New River is designated as the coordinator for Precious Metals Recovery Program for commands located at MCAS, New River. Appointed Environmental Compliance Coordinators, (ECCs) will serve as the point of contact for their command for Precious Metals Recovery. The ECC guided by the instructions contained in reference (a), will establish an effective Precious Metals Recovery Program to consolidate and monitor the precious metal recovery efforts within their command.

b. Activities generating precious metal bearing materials (hyposolution greater than 5 parts per million (ppm)), but not having a recovery unit at their activities will obtain written permission from the cognizant ECC prior to transporting any precious metals material to a recovery site. Hyposolution shall not be transported on any public highway by the generating activity. Request for transportation of hyposolution will be processed by the unit's ECC. Once permission has been obtained, the owning activity will observe proper change of custody between the owning activity and the receiving activity. A log record of all precious metals recovery shall be maintained by each activity. Change of custody shall reflect the following information:

(1) Date and Time

(2) Owning Activity/Name of Individual/Rank

(3) Receiving Activity/Name of Individual/Rank

(4) Quantity, number gallons, pounds, etc.

c. Those activities turning in precious metal bearing materials to DRMO will identify on the turn-in document (DD-1348-1A), the type of metals being turned in and the precious metal content. The turn-in document will be prepared as shown on enclosure (2). After turn-in of material, DRMO will provide a final copy of the DD 1348-1A to the generating unit through the cognizant ECC.

d. All generating and/or processing (recovery) activities shall have complete accounting records of all precious metals activity in their commands. The above procedure shall be conducted utilizing a log book entry.

e. Defense Reutilization Marketing Office will provide generating activities technical assistance, as required, to ensure visibility of precious metal generations, collection/recovery training requirements, and adequacy of collection/recovery methods, systems, and equipment.

f. Commands will not discharge fixer (hyposolution) directly to the sanitary sewer. Hyposolution will be collected and analyzed with a field test kit approved by the AC/S EMD; when determined to be less than 5 ppm, fixer may be discharged to the drain.

7. Concurrence. This Order has been coordinated with and concurred in by the Commanding Generals, II Marine Expeditionary Force; 2d Marine Division; 2d Force Service Support Group; and the Commanding Officer, Marine Corps Air Station, New River.

B. A. GOMBAR
Chief of Staff

DISTRIBUTION: A plus BEMD 5

SILVER-BEARING AND GOLD-BEARING SCRAP DESCRIPTIONS

1. Silver-Bearing Scrap Designations

Class	Estimated Silver Percentage
CLASS A Consists of used anodes, drillings from anodes and grain silver, wire for welding or brazing, silver flakes, silver extracted from spent hyposolution by the electrolytic process, and all other silver of a purity content of 90 percent or better.	90 (13.13) 1/
CLASS B Consists of silver foil battery plates separated by magnesium plates and silver chloride sheets (primarily MK 61-0 and 67-1 batteries).	49 (7.15) 1/
CLASS C (Reserved)	
CLASS D X-ray film, exposed industrial film and aerial film, millimeter film, and all types of shredded or cut-up film.	1 (1.15) 1/
CLASS E	1.5 (2.22) 1/
CLASS F (Reserved)	
CLASS G (Reserved)	
CLASS H (Reserved)	
CLASS K Silver-bearing amalgam.	33 (4.81) 1/
CLASS L	8 (1.14) 1/

ENCLOSURE (1)

Class	Estimated Silver Percentage
Silver-bearing plated electrical components, such as leads, capacitors, and other silver plated or bonded materials.	
CLASS M	31 (4.47) 1/
Silver sludge and silver-bearing ash.	
CLASS N	10 (1.46) 1/
Silver-bearing missile batteries encapsulated in epoxy-type plastic with metal cases and attachments.	
CLASS P	8 (1.14) 1/
Silver recovery cartridge consisting of a spun metallic filter through which the spent hyposolution has been filtered.	
CLASS R	24 (3.50) 1/
Desalter kits.	

NOTE: 1/ Conversion factors shown in parentheses when used as multipliers applied to the number of avoirdupois pounds of scrap will produce a reasonably accurate estimate of the silver content equated to troy ounces.

2. Gold-bearing Scrap Designations

Class	Description	Est. Gold % by Weight
A	Dental Scrap	40.00% (5.8332)
A-1	Metallic (foil, leaf, wire, casting, and brazing alloy)	65.00% (9.4790)
A-2	Dental sweepings	15.00% (2.1875)

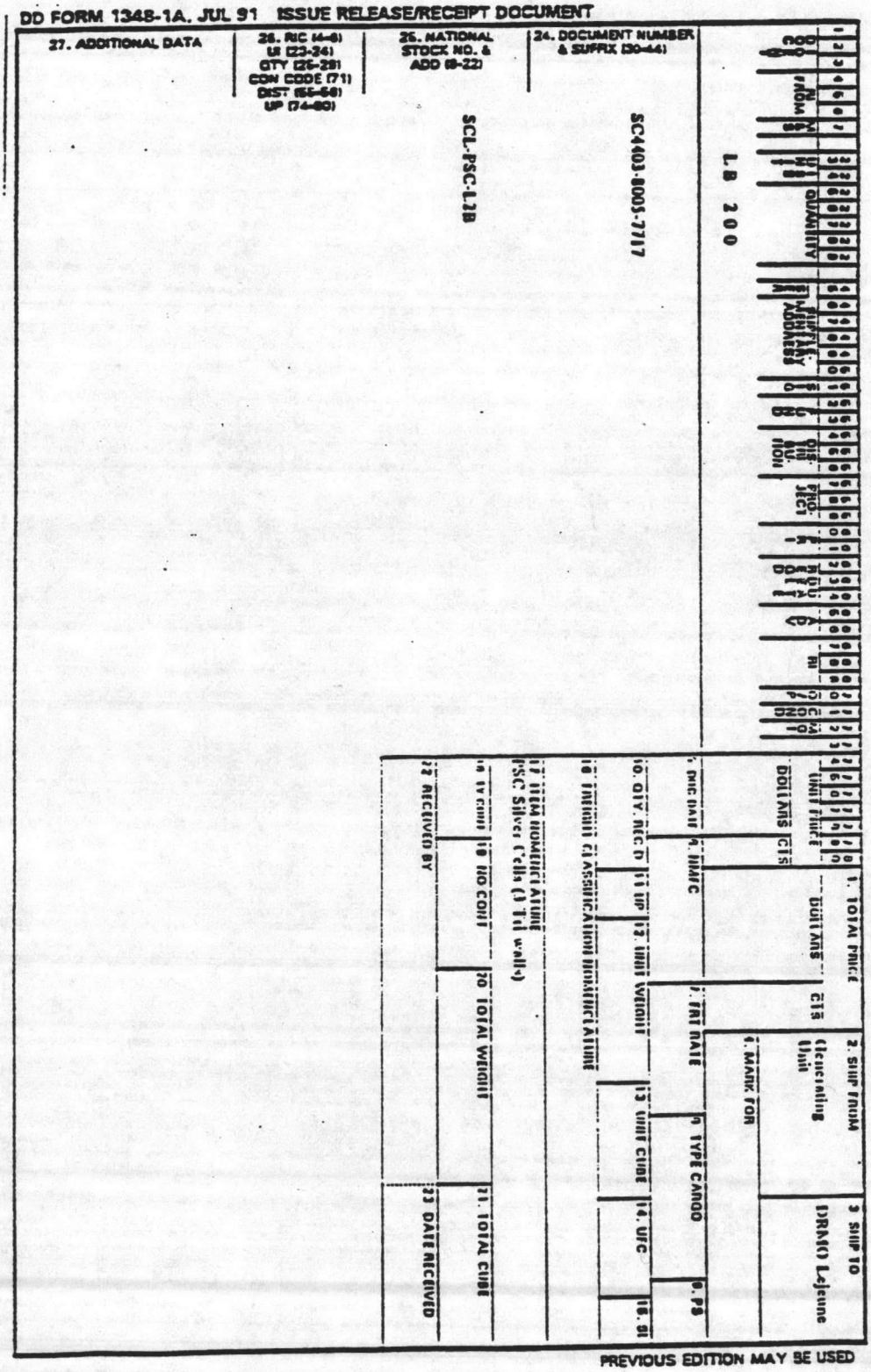
ENCLOSURE (1)

B	Electronic scrap (plated or washed)	0.40% (0.0583)
B-1	Integrated circuits/assembly and pins (not boards or transistors) (pins are ferro magnetic)	12.00% (1.7500)

Gold-bearing Scrap Designations		Est. Gold % by Weight
B-2	Electronic circuits/assembly and strips	6.50% (0.9479)
B-3	Electronic hardware, pins and connectors	0.60% (0.0875)
B-4	Rivets (gold-plated)	0.50% (0.0729)
B-5	Electronic chassis parts	0.20% (0.0292)
C	Eye glass frames (gold filled)	4.00% (0.5833)
D	Buttons	0.90% (0.1313)
E	Insignia and medals	0.10% (0.0146)
F	Gold solutions, 8.3 pounds per gallon (0.7 troy ounces per gallon)	0.60% (0.0875)

ENCLOSURE (1)

DD 1348-1A SAMPLE TURN-IN DOCUMENT



PREVIOUS EDITION MAY BE USED

List Point of Contact (POC) in Block 27. Indicate whether silver cell is wet or dry in Block 17.

ENCLOSURE (2)

Base Order 6240.5B

UNITED STATES MARINE CORPS
MARINE CORPS BASE
PSC BOX 20004
CAMP LEJEUNE, NORTH CAROLINA 28542-0004

BO 6240.5B
BEMD
26 APR 1999

BASE ORDER 6240.5B

From: Commanding General
To: Distribution List

Subj: HAZARDOUS WASTE AND HAZARDOUS MATERIAL MANAGEMENT PROGRAM

Ref: (a) Resource Conservation and Recovery Act (42 USC 6901-6987)
(b) North Carolina Administrative Code Title 15, Chapter 13, Subchapter 13A
(c) MCO P5090.2 (NOTAL)

Encl: (1) Common Terms and Definitions
(2) Record of Training

1. Purpose

a. To establish procedures and general responsibilities for the disposal of hazardous material (HM) and hazardous waste (HW) under environmental permits and authorizations held by the Commanding General, Marine Corps Base (CG, MCB), Camp Lejeune.

b. These requirements are applicable to all organizations aboard MCB, Camp Lejeune to include: any command, active, or reserve component; staff organization; or supporting agency which is affiliated with the United States Marine Corps (USMC), Department of the Navy (DoN), or Department of Defense (DoD). This section also applies to organizations organic to or tenanted aboard MCB, Camp Lejeune and those in transit or otherwise temporarily resident because of training or mobilization commitments.

2. Cancellation. BO 6240.5A.

3. Background

a. Environmental management entails the administration and supervision of the interrelated programs enumerated in references (a) and (b). Reference (c) provides comprehensive guidance on a broad range of environmental laws and regulations applicable to the management of hazardous materials within the DoD. The United States Environmental Protection Agency (EPA) and the State of North Carolina administer specific environmental regulatory programs related to the treatment, storage, and disposal of HW. These agencies are empowered to take civil and criminal actions to enforce these requirements. Compliance with these requirements is critical to ensuring protection of MCB, Camp Lejeune personnel and property.

b. Through logistics support agreements and HW disposal contracts the Defense Reutilization and Marketing Office (DRMO), Camp Lejeune is tasked with providing long-term storage of HW awaiting final disposal and transporting waste off-site. Enclosure (1) contains the terms and definitions applicable to this Order.

c. Hazardous waste is a sub-category of both solid waste and hazardous material as is regulated under the Resource Conservation and Recovery Act (RCRA) and the Hazardous Material Transportation Uniform Safety Act (HMTUSA). The Commanding General, MCB, Camp Lejeune, is permitted by the EPA and the State to generate, store, and transport HW. The Commanding Officer, Marine Corps Air Station (CO, MCAS), New River, is also registered with the EPA and the State as a generator and transporter of HW. The DRMO, Camp Lejeune operates a long-term HW storage facility which supports HW disposal generated by both commands.

d. As EPA/State permit holders, the CG, MCB, Camp Lejeune, and the CO, MCAS, New River have the responsibility and authority to establish regulations for the management of several HW management programs. Commands tenant to MCB, Camp Lejeune must comply with this Order and all federal and state regulations pertaining to HW management. Commands tenant to the MCAS, New River must comply with the Air Station Order. Violation of federal and state HW laws is punishable by severe civil and criminal penalties. This Order deals with that aspect of environmental management related to the management, storage, and disposal of hazardous materials and associated waste at MCB, Camp Lejeune.

4. Hazardous Waste Personnel Training Requirements

a. Federal and state regulations promulgated under the RCRA require military and civilian personnel involved in any aspect of HW management to be provided HW training enabling them to carry out assigned HW duties safely and in compliance with HW regulations.

b. All personnel filling HW positions will be assigned in writing by the organizational commanding officer within one week of assignment.

5. Training Records and Certification Requirements

a. Training records will be maintained for each individual and shall be retained for a period of at least three years upon closure of a HW generation or storage facility or at least three years following reassignment from HW duties or end of active service.

b. Environmental Compliance Officers (ECOs) and supervisors will conduct an annual review with each individual in HW positions to identify required refresher training.

c. The certification statements of the training record are a critical component and indicate that an RCRA required review has been satisfactorily completed. Initial certifications will be signed by both the ECO and the subject named individual.

d. Enclosure (2) is the training record format for use at MCB, Camp Lejeune.

6. Installation Hazardous Waste Management Program. Listed below are the required elements of the Installation Hazardous Waste Management Program (IHWMP).

a. Standard Operating Procedures (SOP). Each major subordinate command and organizational element routinely generating or handling HW or disposing of HM will develop an SOP for HW management. At a minimum, the SOP will provide the following:

(1) Names and telephone numbers of the cognizant Environmental Compliance Coordinator (ECC) and ECO.

(2) Training records (Current). Name, rank/grade, title, duties, and HW training records for each current employee.

(3) Training records (Archived). Name, rank, title, duties, and HW training records for each employee in a HW billet for the past three years.

(4) Inspections. Copies of all weekly inspections of HW storage areas and containers performed during the preceding 36 months.

(5) Guidance. Guidance provided by the ECC and/or ECO to implement HW/HM disposal program.

(6) Location Map. Location map for each HW generation, accumulation, and storage area.

(7) Material Safety Data Sheets (MSDS), or allow immediate access to the Hazardous Material Information System Data developed per MCO 5100.25 for all HW generated.

(8) HWPS DD-1930. Copies of the HWPS DD-1930 for those wastes generated.

(9) Copies of Completed Hazardous Waste/Material Disposal Worksheets. Copies of Completed Hazardous Waste/Material Disposal Worksheet for each HW generated and disposed of during the preceding 12 months.

(10) Unit Spill Contingency Plan (USCP). Copies of up-to-date USCP for each site. At a minimum the USCP will contain the following:

(a) List of points of contact, and phone numbers of the ECC, ECO, and those local unit personnel authorized to partake in the response.

(b) Arrangements with local authorities. For USCP purposes contacting the Fire Protection Division (FPD) at 911 satisfies this requirement at the unit level.

(c) Actions trained unit personnel will take. These actions will be strictly defensive (1st Responder Operations) in nature and commensurate with the personal protective equipment available at the time of the incident.

(d) Equipment required to conduct defensive actions. This information is found in the personal protection information section of the chemical specific material safety data sheet.

(e) Evacuation and Staging. Evacuation routes may be the same used in the fire escape plan as long as access is not impinged by the hazardous waste/materials release. A staging area is defined as a predesignated area out of the potential area of danger where personnel will assemble in the event of an emergency. The USCP must state a minimum of two staging areas in the event of an emergency.

(11) Hazardous Waste Accumulation/Storage Areas List. A current list of all Hazardous Waste Accumulation/Storage Areas within each command.

(12) Rosters. Current rosters of all command HW personnel.

b. Unknown Chemicals. In addition to the liability associated with improperly identified HW, DRMO, Camp Lejeune is prohibited from accepting any HM or HW that cannot be identified by NSN or chemical name. If HW/HM is unidentifiable, a sample must be collected and sent to a laboratory for analysis.

(1) Units with containers of unidentified, potentially hazardous chemicals should immediately contact Assistant Chief of Staff, Environment Management Department (AC/S, EMD), the

cognizant safety office, and the Base Fire Protection Department (Base FPD) for guidance in proper storage and handling of the materials until identification is accomplished.

(2) If a need exists to have a material sampled and analyzed, a written request should be sent to the Commanding General, MCB, Camp Lejeune (Attn: AC/S, EMD) via the chain of command. The request for analysis will cite everything that is known about the material, to include where and when it was found, possible contents, and the results of any investigations conducted. Unidentified wastes are an indicator of improper HW management. Because of the severe civil and criminal implications of improper management of HM/HW the highest level of command attention must be given to ensure that such incidents do not occur.

7. Hazardous Waste, Universal Waste (UW), and Silver Storage Recovery, Accumulation, and Storage Areas

a. Types of Accumulation/Storage Areas. The MCB, Camp Lejeune Long-term HW Storage Facility is permitted by the State of North Carolina. It is the intent of this Order that there shall be one such long-term storage facility and that such facility will be operated by the DRMO-Lejeune under the oversight of the Assistant Chief of Staff (AC/S), Environmental Management Department (EMD). The Long-term HW Storage Facility shall be utilized to store HW/HM awaiting disposal generated by MCB, Camp Lejeune and tenant commands. AC/S, EMD validates the need for accumulation or storage areas prior to authorization issuance as well as reauthorizes/validates the need on a yearly basis. Listed below are the types of temporary accumulation and storage sites:

(1) 90-Day Site. An AC/S, EMD authorized area used to temporarily store HW. HW must be removed from the 90-day HW accumulation areas within 90 days of the accumulation start date (ASD) marked on the container.

(2) Satellite Accumulation Area (SAA), is a term developed by the EPA to designate a work site which may generate and accumulate HW without regard to the 90-day storage limit normally applicable to non-permitted HW storage facilities. The purpose of establishing this special category of HW storage is to assist those generating HW at a slower rate. Previously, generators were required to dispose of partially filled containers, thereby increasing the volume of HW generated. Any work site routinely generating a HW at a rate of less than one full container per 60 day interval may benefit from being designated as an SAA.

(3) UW Site (UWS). The purpose of establishing a special sub-category of HW storage is to assist the generators of UW to track and manage UW. Since UW is a sub-category of HW and remains regulated by Federal and State regulations, UW will be collected and managed in the same manner as HW with the exception of the terminology used for identification. UWS's are subject to the same HW inspection and personnel training requirements as standard HW Sites.

(4) Silver Recovery Site (SRS). The purpose of an SRS is to centrally collect and manage silver particles from silver generating processes. Although silver is a regulated HW in excess of 5.0 mg/l, by virtue of a compliant Silver Recovery Program, silver residues and solutions are exempted from Federal and State regulations. SRS's are subject to the same HW inspection and personnel training requirements as standard HW Sites.

b. Accumulation and Storage Areas Authorization and Operation. Each 90-Day Site, SAA, UWS, and SRS existing aboard MCB, Camp Lejeune, must be authorized by and registered with the Commanding General, MCB, Camp Lejeune. Establishment of new sites requires prior approval of the Commanding General, MCB, Camp Lejeune.

(1) Lists of currently authorized sites are available from the AC/S, EMD, MCB, Camp Lejeune.

(2) Establishment of new or temporary accumulation area or storage areas will require prior approval as follows:

(a) The initial recommendation for designating a new accumulation area or storage area will be made by the ECO in consultation with the cognizant ECC.

(b) Proposals for temporary accumulation area or storage area aboard MCB, Camp Lejeune, shall be submitted in writing via the chain of command to the Commanding General, MCB, Camp Lejeune (Attn: AC/S, EMD).

(3) The number of accumulation areas or storage areas should be limited to the minimum number practical within mission constraints.

(4) Access to sites/areas will be limited to properly trained personnel to the maximum extent practicable.

c. Container Selection

(1) Only Department of Transportation (DOT) or military specified approved containers will be used for accumulation and storage of HW. DOT approved containers are those that have successfully passed rigorous testing requirements established by DOT. Subject containers are identified as such by the container manufacturing markings.

(2) HW generators are responsible for providing the proper DOT approved container for the accumulation of HW.

d. Container Management for HW or UW

(1) Ensure containers are not damaged, dented, bulged or have deep pitted rust. Contents of damaged containers holding HW or UW must be transferred to serviceable DOT or mil-spec approved containers.

(2) Bungs and caps must be serviceable and include serviceable gaskets, rings, nuts; and bolts.

(3) Containers must always be closed (wrench tight) during storage, except when it is necessary to add or remove waste.

(4) Containers filled with aqueous solutions, liquids, or sludges will have proper outage to allow for expansion.

(5) Containers will be stored in a manner precluding damage by rainwater or flooding, excessive heat, etc.

(6) Containers will be stored in a manner restricting access except to properly trained personnel.

(7) Containers in EMD authorized accumulation areas or storage areas will be checked weekly for proper closure, container condition, and evidence of leaks or spills. Discrepancies will be corrected and promptly reported and noted to the command ECO.

e. Required Markings on HW or UW Containers. Every container of HW or UW will have the following markings affixed to the container in a permanent manner in contrasting color to the original container utilizing paint markers, medium or large points, or stencils using permanent paint/ink:

(1) Generating Unit HW/UW Container Marking Requirements

(a) Words: HAZARDOUS WASTE or UNIVERSAL WASTE.

(b) Content: Noun name found on the specific Hazardous Waste Profile Sheet (DRMS Form 1930) provided by EMD.

(c) Accumulation Start Date (ASD). If the HW is accumulated in an SAA, the ASD will only be affixed once the container is filled. If the HW is collected in an area other than an EMD authorized SAA, the ASD must be marked on subject container the moment a HW is placed into the HW container (e.g., 90 Day Site, HW Sites established during operations in tactical situations).

(d) Number of Containers. The number of containers marked reflect the total number of containers disposed of within the current document (e.g., 1 of 1, 2 of 3, etc.).

(2) EMD HW or UW Container Identification Requirements

(a) Packing Envelope with DD-1348. This information is derived from an accurately completed HW/HM Disposal Worksheet.

(b) DOT Label. A diamond shaped DOT identification tool used to identify the hazard class of the contents by means of a specific color, class number, and pictorial representative symbol of the HM. The DOT label will be affixed on the same surface of the package and near the proper shipping name marking. DOT Labels are at least 3.9 inches (100 mm) on each side.

(c) EPA Waste Number. The EPA identification designator of the type of HW contained.

f. Mandatory Inspections. Federal and state HW regulations require containers of HW storage containers/areas to be inspected weekly. Written records noting discrepancies as well as corrective actions will be maintained for a period of three years. Inspections should be accomplished by the cognizant HW Site Manager or properly trained alternate if the Site Manager is unavailable.

g. Spill Reporting and Response

(1) All spills of HW/HM will be immediately reported to the FPD at the emergency telephone number 911.

(a) Emergency spill reporting phone numbers will be prominently posted at each site along with "No Smoking," and "Authorized Personnel Only" signs.

(b) Signs will be posted at each entrance to the site and will be legible from a distance of 25 feet.

(2) Spill reporting and response actions required of Site Managers, Handlers, and other personnel should be documented in the USCP for each site where HW/HM/UW are handled and stored.

(a) The generating unit is responsible for developing and posting a site specific USCP which ties into the Installation response plan.

(b) Plans will be made readily available to personnel at each accumulation area or storage area.

(3) USCP's must also specifically address provisions for petroleum, oil, and lubricants (POL) storage sites, underground storage tanks (UST), and above ground storage tanks (AST).

h. HW/HM/UW Turn-In Procedures. Organizational ECO's are responsible for coordinating efforts to ensure proper identification, handling, storage, and turn-in of HW/HM/UW. The ECO of an organization having physical custody of HW/HM/UW is responsible for ensuring turn-in for disposal is accomplished in compliance with the following:

(1) Preparation. The HW/HM/UW will be properly containerized, marked, and placed on a standard size (40" x 48") pallet. Incompatible HW/HM/UW will not be co-located on the same pallet.

(2) HW/HM/UW Disposal Worksheet. Each ECO shall ensure all turn-ins of HW, HM, and UW are accomplished utilizing the current Hazardous Waste Disposal Worksheet and applicable instructions for its preparation.

(3) Organizational Turn-In Requirements. A HW Disposal Worksheet shall be prepared for each container or batch of containers of the same waste, and delivered to AC/S, EMD, MCB, Camp Lejeune not later than 45 days after the ASD for all HW/HM/UW generated by MCB, Camp Lejeune and tenant commands requiring storage at MCB, CampLejeune Long-term HW Storage Facility. The following procedures will be strictly followed for turn-in of all Installation HW/HM/UW requiring disposal:

(a) Properly trained unit personnel will prepare and submit the Hazardous Waste Disposal Worksheet to the cognizant ECO. The signature will certify the accuracy of the identification and estimated weight of the HW/HM/UW being turned-in.

(b) The cognizant ECO (or his/her properly trained authorized representative) will physically inspect the HW/HM/UW and take appropriate action per these guidelines to ensure the accuracy of the identification and the adequacy of containers and associated markings and/or labels.

(4) HW/HM/UW Disposal Worksheet Delivery. After physical inspection and correction of any discrepancies, the ECO or ECC authorized representative will ensure the ECC receives the worksheet, electronic mail delivery of the worksheet is acceptable.

(5) EMD Responsibility. Upon receipt of the worksheet, AC/S, EMD, MCB, Camp Lejeune will prepare the DD-1348 and coordinate delivery of the HW/HM/UW to DRMO, Camp Lejeune or other appropriate disposal authority.

(a) Normally, all discrepancies in marking and packaging must be corrected by the generator prior to DRMO-Lejeune acceptance.

(b) The generating unit will properly store and perform weekly inspections of all containers until deficiencies are corrected and the wastes are transported to the Installation Long-term HW Storage Facility or pickup by a DRMO, Camp Lejuene contractor or other disposal authority.

(c) EMD will arrange for the transportation of the HW/HM/UW to the Installation Long-term HW Storage Facility if required.

(d) Under no circumstances will HW be transported on public highways by Installation units.

(6) DRMO, Camp Lejeune Refusal Authority. If HW/HM/UW is to be picked up by the DRMO, Camp Lejeune contractor or other HW/HM/UW disposal authority directly from the generator facility, DRMO, Camp Lejeune or other appropriate disposal authority representative will inspect prior to loading and is authorized to refuse any container if discrepancies exist.

(a) The DRMO, Camp Lejeune will immediately notify AC/s, EMD, MCB, Camp Lejeune of the nature of the discrepancy and corrective action required.

(b) If the problems cannot be promptly resolved, the generator will be provided a written rejection notification.

(c) The generator will implement required corrective action and request the cognizant ECC to arrange reinspection and pick-up of the HW/HM.

(7) DRMO Refusal Requirements. If an HW/HM/UW is transferred to the MCB, Camp Lejeune Long-term HW Storage Facility, DRMO, Camp Lejeune will inspect prior to unloading and is authorized to refuse any container if discrepancies exist.

(a) DRMO, Camp Lejeune will immediately notify AC/S, EMD, MCB, Camp Lejeune and the HW generator of their refusal to accept the HW.

(b) The transporting vehicle will be secured and will not be moved outside the immediate vicinity of the DRMO, Camp Lejeune facility except for an emergency situation involving risk to public safety or to property.

(c) DRMO, Camp Lejeune and AC/S, EMD, MCB, Camp Lejeune will cooperate in making an immediate decision on corrective action.

(d) Normally, if the deficiencies are the result of generator negligence, errors, or omissions, the cognizant ECC will be notified. The ECC will ensure generating units take appropriate corrective action.

(8) HW/HM/UW Acceptance. The acceptance and physical custody of an HW/HM/UW by DRMO, Camp Lejeune or other proper authority signifies the generating unit has completed its HW/HM/UW disposal responsibilities in compliance with this Order.

8. RESPONSIBILITIES

a. The purpose of this section is to identify the command and staff requirements, and responsibilities for the implementation and management of the HW and HM Management Program aboard MCB, Camp Lejeune. All organizations shall:

(1) Conduct all operations and training aboard MCB, Camp Lejeune in compliance with the mandates of environmental law applicable to the prevention of pollution of the environment by HW/HM.

(2) Ensure commanders, officers-in-charge (OICs), and managers place priority on proper disposal of HW/HM/UW, minimize the volume of HW generated, and prevent and report HW/HM/UW spills.

(3) Appoint all personnel with environmental responsibilities in writing no later than one week after assignment. Positions of environmental responsibility include,

but are not limited to the following: ECC, Assistant ECC (AECC), ECO, Assistant ECO (AECO), Hazardous Waste Site Manager (HWSM), and Hazardous Waste Handler (HWH).

(4) Ensure cognizant ECC's and ECO's have sufficient rank (determined by CO/OIC), authority, and resources to properly manage the organization's HW/HM/UW management program.

(5) Ensure all HW personnel (primary and assistant ECC's, ECO's, HW Site Managers and Handlers) are appointed in writing by the organizational commanding officer. An appointment letter must be kept on file and a copy forwarded to the AC/S, EMD, MCB, Camp Lejeune within one week of assignment.

(6) Ensure training of HW personnel is accomplished within six months of assignment.

(7) Implement an environmental awareness training program in accordance with this Order.

(8) Maintain a current listing/directory of facilities where HW is generated, handled, and stored and ensure each facility is operated in compliance with this Order.

(9) Require ECO's to develop and implement a written SOP for each accumulation and storage facility.

(10) Ensure the HW SOP is readily available to all HW personnel and personnel participating in emergency response.

b. Commanding General, MCB, Camp Lejeune. Provide guidance for the Installation to comply with federal, state, and Marine Corps HW regulations through the MCB, Camp Lejeune HW/HM management program.

c. Assistant Chief Of Staff, Environmental Management

(1) Serves as the principal staff assistant to the CG, MCB, Camp Lejeune, on HW/HM management issues.

(2) Ensures proper Installation registration with and/or permitting by the EPA and the State for generation, transportation, and storage of HW/HM at MCB, Camp Lejeune.

(3) Coordinates the approval of HW generation sites and temporary storage areas within the cognizance of the Commanding General, MCB, Camp Lejeune. Provides technical assistance to ensure that the operation of these sites/areas are in compliance with applicable regulations.

(4) Publishes Base bulletins and other directives and provides technical assistance to organizations aboard MCB, Camp Lejeune as required, to ensure safe, efficient HW/HM disposal in compliance with MCO P5090.2A and related Federal, State and local environmental regulations.

(5) Provides the principal point of contact with Headquarters Marine Corps and other federal, state, and local agencies on all matters pertaining to HW management.

(6) Exercises staff cognizance over the review and environmental approval of proposed and ongoing actions and projects. Projects and actions are normally reviewed to identify and prevent potential HW violations and to promote hazardous material pollution prevention.

(7) Oversees the development and implementation of a plan for the establishment, training, and operation of a hazardous substance spill response team and will ensure the following:

(a) The plan addresses HW operations of MCB, Camp Lejeune, and all tenant organizations.

(b) On-Scene Commanders are kept informed of the HW management and compliance implications of spill containment and clean-up activities.

(c) The plan provides a system for collection and disposal of non-RCRA waste petroleum products and monitoring for water and air pollution.

(d) Timely submittal of required reports to the Joint Public Affairs Office, outside regulatory agencies and higher headquarters.

(8) Participates in the implementation of a hazardous substance spill contingency plan by serving as On-Scene Commander in the event of the absence of the AC/S, Installation Security and Safety (or representative) or by providing or directing others who provide professional and technical advice to other senior command officials serving in the capacity of the designated On-Scene Commander.

(9) Maintains necessary agreements with DRMO-Lejeune for the disposal of HW/HM and initiates action to obtain contract services for the recycling, treatment, and disposal of HW/HM not otherwise available from the DRMO-Lejeune.

(10) Ensures the availability of the MCB, Camp Lejeune Long-term storage facilities for storage of HW generated by MCAS, New River, consistent with the applicable support agreements and RCRA permits and provides technical assistance in all phases of HW management (to include sampling and analysis) on the same basis and terms as is provided to MCB, Camp Lejeune tenant commands.

(11) Reviews and updates this Order periodically to ensure compliance with new regulations.

(12) Provides management support required to ensure the effectiveness and timeliness of HW disposal support services to installation HW generators, including, but not limited to:

(a) Provide a primary and assistant Base HW Program Manager.

(b) Ensure Base HW Program Manager maintains records of HW/HM turn-in transactions and prepares HW reports to regulatory agencies.

(c) Ensuring that the MCB, Camp Lejeune Comprehensive Environmental Training and Education Program (CETEP) training is available.

(d) Coordination with the DRMO, Camp Lejeune and its higher headquarters on routine matters related to new or required changes/improvements to existing DRMO HW/HM disposal services.

(e) Ensures the transportation of HW is in compliance with all regulatory requirements applicable to a licensed HW transporter in the state of North Carolina.

(f) Performs environmental compliance evaluations of the HW activities aboard MCB, Camp Lejeune to determine and improve the status of compliance with federal, state, and Marine Corps environmental laws.

1 Evaluations will be scheduled, conducted, and reported per BO 5041.2R, and related Headquarters Marine Corps environmental compliance evaluation guidance contained in MCO P5090.2A.

2 Compliance deficiencies and appropriate corrective action will be incorporated into formal written reports and provided per BO 5041.2R to the Base Inspector, MCB. Camp Lejeune and the inspected organization.

(g) Oversees participation in the review and environmental approval of proposed actions and other requests for assistance and National Environmental Policy Act (NEPA) procedures.

(h) Implements an environmental awareness training program for the Installation and assists tenant commands with the conduct of their respective awareness programs.

d. Assistant Chief Of Staff, Facilities

(1) Designs and constructs new facilities with adequate provisions for HM and HW management and maintains and repairs existing HW/HM storage facilities to ensure compliance with appropriate HW/HM storage and handling regulatory requirements.

(2) Provides contractual support for HW management and disposal when required.

(3) Provides engineering equipment and operators for oil and hazardous substance spill response and clean up, as required by Base FPD.

e. Assistant Chief Of Staff, Installation Security And Safety

(1) Participates in response and cleanup of spills of HW through implementation of the oil and hazardous substance spill contingency plan and related spill prevention.

(a) Serves as On-Scene Commander and directs others who serve as On-Scene Coordinator.

(b) Provides traffic and crowd control support for oil and hazardous substance (OHS) spill response.

(c) Provides adequate security for restricted area access, if necessary for the protection of human health and the environment during an OHS spill response.

(2) Responds to reported incidents of unauthorized disposal or abandonment of solid waste, HW, and HM aboard the Installation and conducts preliminary investigations. Makes notification of findings to the CG, MCB, Camp Lejeune. When directed, refers such incidents to the Naval Criminal Investigative Service or other appropriate law enforcement agencies.

(3) Oversees the operation of the Base Safety Division and ensures safety support is provided relative to implementation of the Installation HW and HM disposal program and related emergency response. Provides support to the HW training programs of respective commands relative to the Occupational Safety and Health Agency (OSHA) and Marine Corps safety standards for HM handling and storage and related emergency response. Conducts annual safety inspections of command HW/HM long term storage facilities and notifies cognizant officials of unsafe HW/HM storage and handling incidents that are in violation of applicable OSHA or other safety standards.

(4) Provides safety specialists to serve on the Installation OHS spill response team as provided in this Order, applicable logistics support agreements with MCAS, New River, and other pertinent regulations.

(5) Oversees the FPD, provides personnel to serve as On-scene Commander for OHS spill response aboard MCB, Camp Lejeune and outside flight line areas aboard MCAS, New River.

(6) Coordinates the training of the OHS spill response team and maintains associated training records.

(7) Assists in the prevention of HW/HM spills and related emergencies by inspecting work sites and notifying cognizant officials of incidents of improper storage and handling of HW/HM likely to result in a spill, explosion, fire, or similar imminent threat to human health, environment, safety, or property.

f. Assistant Chief of Staff, Logistics. Serves as the principal agent on matters pertaining to the transportation of HM regulated by DOT.

g. Assistant Chief of Staff, Reserve Affairs/Reserve Support Unit. Ensures that reserve units conform to the requirements of this Order.

h. Assistant Chief of Staff, Training, Education, and Operations

(1) Informs the AC/S, EMD, Camp Lejeune a minimum of 180 days prior to the arrival of any unit scheduled to conduct training or participate in exercises, which is not organic to or tenanted aboard the Installation.

(2) Programs environmental awareness training as an annual subject in Professional Military Education (PME) sessions scheduled for the senior military and civilian leadership of the Installation.

(3) Provides audiovisual training support for HW training.

(4) Coordinates emergency planning and response programs with AC/S, EMD, Camp Lejeune OHS plan.

i. Commanding Officer, Naval Hospital, Camp Lejeune

(1) Provides ambulances and related emergency health care support to OHS spill response actions and industrial hygienists to serve on the OHS spill response team.

(2) Provides technical assistance in conjunction with AC/S, EMD, Camp Lejeune to HW generators on occupational health matters related to the collection and disposal of HW/HM and medical waste.

j. Defense Reutilization and Marketing Office, Camp Lejeune

(1) Ensures compliance with Treatment Storage Disposal Facility (TSDF) RCRA Part B permit. Furnishes all information required for EPA/State reporting requested.

(2) Provides MCB, Camp Lejeune safety representatives access to the TSDF upon request.

(3) Maintains records of HW lab analysis results applicable to the turn-in of HW and the operation of the TSDF.

(4) Inspects HW and accepts physical custody as per the Defense Reutilization and Marketing Service instructions.

(5) Operates the TSDF aboard MCB, Camp Lejeune as per the applicable Federal and State RCRA part B permit conditions and Marine Corps Hazardous Waste management requirements.

(6) Immediately reports all HW spills to the Base FPD by calling 911.

(7) Tests and maintains emergency preparedness and prevention equipment.

(8) Ensures training of personnel in the handling, packaging, and storing of HW. Notifies AC/S, EMD, MCB, Camp Lejeune staff in advance of any changes in personnel working at the TSDF.

(9) In the absence of authorized Base personnel, prepares and signs as generator, all federal and state manifests for shipping hazardous property and tracking waste from MCB, Camp Lejeune to the disposal site. Ensures copies of all manifest transactions for shipment from the TSDF to the disposal site are provided to AC/S, EMD, including final certificates of disposition or destruction.

k. Commanding Generals or Commanding Officers of Tenant Commands. Ensure all organizational elements within each command complies with all requirements of this Order.

l. MCB, Camp Lejeune Hazardous Waste (HW) Program Manager

(1) Serves as Command point of contact with Federal and State agencies, and other Marine Corps Installations on routine matters pertaining to HW collection, treatment, and disposal.

(2) Keeps abreast of emerging Marine Corps, Federal, and State HW regulations and HW management technology and initiates action required for the efficient and orderly conduct of HW collection and disposal operations.

(3) Monitors ongoing HW collection, treatment, and disposal activities as required to identify, evaluate and provide environmentally sound, efficient program operation and timely support to Installation HW generators.

(4) Assists Director, Environmental Compliance Division, in the preparation and submittal of periodic budget projections for HW disposal costs and associated handling equipment and facilities improvements to the AC/S, EMD for inclusion in the Annual Operations Plan and/or other appropriate budgetary submittals.

(5) Oversees the day-to-day collection, treatment, and disposal of HW in compliance with all relevant regulations and this Order and provides the following technical assistance and management support:

(a) Provides MCB, Camp Lejeune HW management policies and procedures to the Head, Environmental Quality Compliance Branch, Environmental Compliance Division.

(b) Carries out those ECC HW duties outlined in this Order relating to HW operations of the commands and organizations of MCB, Camp Lejeune.

(c) Receives, processes, and maintains records of HW/HM Disposal Worksheets delivered by Base ECO's, and tenant command ECC's as per this Order.

(d) Coordinates HW transportation services required to transfer Base tenant commands' HW to the Base Long-term HW Storage Facility and HW management and disposal service contracts administered by MCB, Camp Lejeune.

1 Performs quality assurance inspections for generating activities at MCB, Camp Lejeune to ensure compliance with regulatory packaging and documentation requirements prior to transporting to DRMO.

2 Complies with federal and state HW manifesting and/or associated recordkeeping requirements.

3 Provides, or otherwise ensures, a properly trained and authorized individual signs manifests as the HW generator and HW transporter for shipments to off-site contractor facilities.

(e) Coordinates the acceptance of all HW by DRMO and, for MCAS, New River, subsequent Transportation to the Installation's Long-term HW Storage Facility.

(f) Participates in the development of HW/HM site specific HW spill contingency plans and associated HW spill prevention, control, clean-up, and disposal activities.

(6) As required, assists in the conduct of environmental compliance evaluations and other inspections of HW generation and storage sites.

(a) Assists in the development and implementation of corrective actions.

(b) Provides technical assistance to HW generators and to HW management support organizations required to implement recommended corrective actions.

(c) Participates with HW generators in correcting HW management and related environmental compliance deficiencies.

(7) Maintains accurate records of HW management activities and prepares annual HW reports and related routine HW generation and disposal submittals as required for compliance with MCO P5090.2A, this Order, and other pertinent regulations.

m. HW Generator

(1) Develops and maintains command SOP as per this Order to implement the HW management program and command specific requirements. HW management efforts should promote HW minimization and other pollution prevention objectives to the maximum extent practicable within mission and resource constraints.

(2) Ensures HW generation and storage are limited to those types of HW for which MCB, Camp Lejeune is authorized to generate and store, and for which hazardous waste profile sheet (HWPS) has been issued by EMD.

(a) ECO's and HW Site Managers should continuously review HW generation and update changes in waste stream composition.

(b) Any new HW stream generated for which no HWPS should be reported immediately to the Base HW Program Manager.

(3) Ensures that ECO's, HW Site Managers, HW Handlers, and other environmental staff required are appointed in writing and trained.

(a) All HW personnel will be furnished a written description of their HW duties.

(b) Enclosure (2) will be utilized to document HW training.

(4) Ensures HW generation sites, (e.g., 90-day, UW and SAA's) are registered with the AC/S, EMD.

(5) Base tenant HW generators should send appointment letters to the AC/S, EMD.

n. Environmental Compliance Coordinators

(1) Serves as command point of contact for matters involving environmental issues to include management of HM, HW, UW, or Silver Recovery operations and compliance with this Order.

(2) Schedules and participates in the conduct and follow-up of environmental compliance evaluations of HW operations as per this Order, MCO P5090.2A, and Federal and State regulations.

(3) Ensures discrepancies identified through environmental compliance evaluation(s) are corrected.

(4) Develops and maintains command SOP as per this Order to implement the HW management program and command specific requirements. HW management efforts should promote HW minimization and other pollution prevention objectives to the maximum extent practicable within mission and resource constraints.

(5) Oversees and participates in the implementation of command HW collection, handling, and disposal and ensures all HW operations are carried out in strict compliance with the requirements of this Order, MCO P5090.2A, and Federal and State regulations.

(a) Coordinates the review and authorization of new HW generation and accumulation areas by EMD.

(b) Consolidates HW Turn-In Disposal Worksheets from generating units.

(c) Ensures HW Turn-In Disposal Worksheets are complete and accurate.

(d) Inspects contents against HW Turn-In Disposal Worksheets.

(e) Ensures submission of HW Turn-In Disposal Worksheets to EMD.

(f) Maintains appropriate records of HW/HM Disposal Document submissions.

(g) Monitors progress of removal of HW/HM and notifies EMD when HW remains on-site in excess of 75 days of ASD on any container.

(h) Provides assistance to ECO's and Site Managers in resolving HW management problems affecting disposal.

(i) Ensures all required HW inspections are conducted. Completes quarterly inspection of all HW, UW, SRS accumulation areas. In the absence of unit ECO conducts required inspection.

(6) Monitors the respective environmental training program to ensure personnel in positions of environmental responsibility are trained as per the Base CETEP.

(a) Participates and ensures those personnel in positions of environmental responsibility attend HW training sessions and workshops conducted by the command ECC and the AC/S, EMD.

(b) Reviews annually ECO HW duties and training, and submits requests for additional HW training to AC/S, EMD.

(c) Assists command ECO's review of HW Site Managers' HW duties and HW training at intervals of not more than 12 months, and submits requests for additional HW training to AC/S, EMD.

(d) Submits training requests as per the CETEP enrollment procedures for subordinate organizations within their respective commands.

(e) Maintains current HW training records for themselves, ECO's, and AECO's within their command.

(f) Retains former command HW personnel HW training records as per Federal and State regulations and Marine Corps Orders.

(7) Identifies facilities' deficiencies to the appropriate Installation authorities.

o. Environmental Compliance Officers

(1) Serves as command point of contact for matters involving environmental issues to include management of HM, HW, UW, or Silver Recovery operations and compliance with this Order.

(2) Develops and maintains command SOP as per this Order to implement the HW management program outlined in this Order and command specific requirements. HW management efforts should promote HW minimization and other pollution prevention objectives to the maximum extent practicable within mission and resource constraints.

(3) Keeps HW Site Managers and key personnel informed of any changes in regulations affecting HW activities within the ECO's cognizance and ensures that HW SOP's and USCP's are up-to-date and readily available for review by personnel involved in the HW management.

(4) Maintains a list of the location of all HW generation sites, SAA's, UW Sites, 90-day Sites, and Silver Recovery Sites within the command. Provides a current copy of this list to the cognizant organizational ECC, Base HW Program Manager on a monthly basis.

(5) Conducts monthly inspections of HW and UW inventories in command 90-day sites and performs and documents follow-up actions required to ensure correction of container management deficiencies and timely removal of HW.

(6) Informs ECC when unavailable to conduct required inspections.

(7) Ensures all required inspections are conducted when Site Managers or Handlers are unavailable.

(8) Oversees and participates in the implementation of command HW collection, handling, and disposal and ensures all HW operations are carried out in compliance with the requirements of this Order.

(9) Notifies cognizant ECC's by telephone with written follow-up anytime HW or UW remains in the 90-day Site in excess of 75 days of ASD on any container.

(10) Actively promotes the reduction of volume and toxicity of HW/UW/HM produced within the ECO's organization.

(11) Promotes the proper management and segregation of used POL to minimize contamination with water, antifreeze, and other contaminants.

(12) Oversees the management of organization HW training programs including, but not limited to the following:

(a) Maintains a current roster and HW training records of all HW Site Managers and HW Handlers within the command.

1 Ensures that HW training records for HW personnel transferring to another installation or being released from active duty are transferred to the appropriate official for retention per RCRA regulations. Tenants of MCB, Camp Lejeune, will forward the HW training records to the cognizant Command ECC.

2 Ensures HW training for MCB, Camp Lejeune civilian employees is reported to the cognizant Civilian Personnel Office for entry into the Navy Civilian Personnel Data System (NCPDS).

(b) Participates in and ensures HW Site Managers and HW Handlers participate in regular HW training sessions and workshops conducted by the command ECC and EMD.

1 Reviews annually HW Site Managers' HW duties, and submits requests for additional HW training via the cognizant command ECC to EMD.

2 Assists HW Site Managers' annual review of HW Handlers duties, and submits requests for additional HW training per guidance contained in this Order via the cognizant command ECC to EMD.

p. HW Site Managers. For the purposes of this Order, OIC's, Noncommissioned Officers-in-Charge (NCOIC), and civilian supervisors of work sites where HW, UW, or precious metals (Silver Recovery) is generated, handled, or stored shall be considered "HW Site Managers." Additionally, the HW Site Manager must be assigned in writing by their respective commanding officer or supervisor within one week of assignment.

(1) Ensures MCB, Camp Lejeune and command management requirements are implemented for each type of HW, UW, or HM routinely collected and managed for disposal.

(2) Ensures that only authorized, properly trained, and supervised HW personnel are allowed to handle HW or perform associated inspections and record keeping:

(a) Schedules initial HW training for each newly assigned assistant HW Site Manager or HW Handler.

(b) Provides, or ensures other qualified, trained HW personnel provide direct supervision of each assistant HW Site Manager or HW Handler until adequate initial HW management training is provided and documented.

(3) Conducts annual reviews of HW training records for unit HW personnel.

(4) Conducts and properly documents weekly inspections of 90-day Sites, UW, and SAA's per Federal and State HW regulations and performs and documents follow-up actions required to ensure the following are accomplished:

(a) Ensures all containers are clearly marked with appropriate marking requirements.

(b) Ensures HW containers comply with requirements of this Order. In the event a HW container does not meet the noted requirements corrective action will be taken.

(c) Ensures all leaks, releases, or spills are managed according to this Order.

(5) Notifies immediate superior and ECO immediately upon becoming aware of one of the following:

(a) The generation or the proposed generation of a new type of HW or UW.

(b) Existing or potential violations of this Order or deficiencies suspected of posing a threat of a HW spill, fire, explosion, or other danger to human health and safety or to property.

(c) Visits or proposed visits to the work place by a representative of Federal or State environmental agency.

(d) The presence of HW in the 90 Day Site with an ASD over 75 days old which has not been processed for removal.

(6) Ensures the day-to-day collection and storage of HW and excess HM awaiting disposal. Initiates action to dispose of accumulated HW or excess HM.

(7) Provides instructions and supervision required to ensure all HW and HM disposal activities shall be carried out in compliance with this Order.

(8) Ensures that all HW and special wastes are managed in a manner which prevents contamination by unknown items, damage, vandalism, fires, spills, explosions, or other situations likely to pose a hazard to human health or the environment.

(9) Checks HW generation sites and HW storage containers weekly for deficiencies and performs follow-up when required to ensure that problems are corrected.

(10) Ensures containers of HW are confined to authorized and approved SAA's and 90-day accumulation areas.

(11) Ensures mandatory weekly inspections are completed and that inspection follow up action is taken and documented.

(12) Initiates disposal of HW/HM as per guidelines provided in this Order.

(a) HW/HM/UW Disposal Worksheet will be properly prepared and submitted to the cognizant ECO within five working days after a container of HW/HM becomes full.

(b) HW/HM/UW Disposal Worksheet will be delivered to the command ECO.

(c) Provides personnel, equipment, and supplies required to repackage the contents of unserviceable containers of HW/HM/UW.

q. HW Handlers. Are all personnel handling HW for the purposes of storage, transportation, or treatment, not assigned as a HW Site Manager, ECO, or ECC. Additionally, all Handlers must be assigned in writing by their organizational commanding officer or supervisor within one week of assignment. Duties of the HW Handler include:

(1) Properly preparing HW for containerization, storage, and transportation.

(2) Marks all containers with appropriate markings.

(3) Transfers or overpacks contents of unserviceable HW containers to serviceable DOT or approved mil-spec containers.

(4) Reports all leaks or spills as perthis Order.

(5) Collects and stores HW and excess HM awaiting disposal as per the direction provided by the Site Manager.

(6) Handles, stores, or otherwise prevents HW and special wastes from becoming contaminated by unknown items, damage, vandalism, fires, spills, explosions, or other situations likely to pose a hazard to human health, or the environment.

(7) Inspects HW generation sites and HW storage containers weekly for deficiencies and reports all discrepancies to the HW Site Manager.

(8) Informs HW Site Manager or ECO if unable to conduct mandatory weekly inspections.

(9) Stores containers of HW in authorized and approved SAA's and 90-day accumulation areas.

(10) Informs HW Site Manager when a container of HW becomes full and requires disposal.

9. Reserve Applicability. This Order is applicable to the Marine Corps and Naval Reserves.

10. Concurrence. This Order has been coordinated with and concurred in by the Commanding Generals, II Marine Expeditionary Force; 2d Marine Division; 2d Force Service Support Group; and the Commanding Officers, Marine Corps Air Station, New River and Naval Hospital.

B. A. GOMBAR
Chief of Staff

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COMMON TERMS AND DEFINITIONS

The following terms and definitions are applicable to this Order:

1. Accumulation Start Date (ASD). The date any amount of HW is first placed into a container at any location other than a Satellite Accumulation Area. The ASD must be affixed at the point in time when a container is filled with a Universal Waste in a Satellite Accumulation Area. The ASD is also the date any amount of UW is placed into a container at a Universal Waste site. The ASD will be marked in the day/month/year format.

2. Battery. A device consisting of one or more electrically connected electrochemical cells which is designed to receive, store, and deliver electric energy. An electrochemical cell is a system consisting of an anode, cathode, and an electrolyte, plus such connections (electrical and mechanical) as may be needed to allow the cell to deliver or receive electrical energy. The term battery also includes an intact, unbroken battery from which the electrolyte has been removed.

3. Disposal. The discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste into or on any land or water so that the solid waste or any constituent part of the solid waste may enter the environment or be emitted into the air or discharged into any water, including groundwaters.

4. Environmental Compliance Coordinator (ECC). An individual with sufficient rank, assigned by the respective Commanding General, Head of a Base tenant command/organization, or by the Commanding Officer, MCAS, New River responsible for the management and implementation of the command environmental program.

5. Environmental Compliance Officer (ECO). An individual with sufficient rank, assigned at the regimental, battalion, separate company level and base agency (or equivalent) responsible for the management and implementation of the command environmental program.

6. Environmental Management Department (EMD) Authorization. A site authorization document issued by EMD identifying specific areas to include: Satellite Accumulation Area (SAA), 90 Day Site, Universal Waste Site, and Silver Recovery Site.

7. Excess HM. Unused HM for which its custodian has no requirement. This type of material can frequently be returned to the supplying organization, redistributed, or recycled.

8. Generator. Generator means any person, whose act or process produces HW or Universal Waste identified or listed in 40 CFR parts 261 and 273, or whose act first causes a UW to become subject to regulation. The Commanding General, MCB, Camp Lejeune and the Commanding Officer, MCAS, New River are registered with the EPA as the generators of HW produced aboard their respective installations. For purposes of implementation of this Order

aboard MCB, Camp Lejeune and MCAS, New River complex (hereafter referred to as the Installation), and for administrative purposes to facilitate the understanding of responsibilities of Commanders, Department Heads, Officers-in-Charge, and Supervisors, Generators are identified as follows:

a. Commanding Generals of II Marine Expeditionary Force, 2d Marine Division, and 2d Force Service Support Group.

b. Commanding Officers of the Naval Hospital; Naval Dental Center; Marine Corps Engineer School; Weapons Training Battalion; Field Medical Service School; Marine Corps Service Support Schools; Reserve Support Unit; School of Infantry; Headquarters and Support Battalion, MCB, Camp Lejeune and any subordinate organization requiring an ECO.

c. Heads of the following MCB Camp Lejeune organizations: Facilities Department, Base Maintenance Division; Logistics Department; Marine Corps Community Services; Training, Education and Operations Department; Manpower Department; EMD; Management Support Department; and any subordinate organization requiring an ECO.

d. Group and Squadron Commanding Officers at MCAS, New River.

e. The Resident Officer in Charge of Construction, Jacksonville; Officer in Charge of Facilities Support Contracts, Jacksonville; and other Installation contracting officers are considered the HW generator for any waste generated by contractors operating under their cognizance.

f. Commanders or chief supervisors of any organization aboard the Installation, not otherwise listed, who generate, handle, or store HW.

9. Hazardous Material (HM). A chemical compound or combination of compounds posing or capable of posing a significant risk to public health, safety, or the environment due to its quantity, concentration, or physical/chemical, and/or infectious properties, and/or characteristics.

10. Hazardous Waste (HW)

a. A solid waste, or combination of solid wastes, which because of quantity, concentration, or physical, chemical, or infectious characteristics may:

(1) Cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness, or

(2) Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

b. The two methods used by Federal and State agencies to determine if a solid waste is hazardous are:

(1) Listed HW. A discarded HM no longer usable for its intended purpose and which is named on one of the three HW lists in the HW regulations of the Environmental Protection Agency (EPA) and/or the State Universal Waste regulations. The three HW lists are: non-specific source wastes (F), specific source wastes (K), and commercial chemical products (P & U).

(2) Characteristic HW. A discarded HM no longer usable for its intended purpose and which exceeds one or more EPA standards for the characteristics of ignitability, corrosivity, reactivity, or toxicity and which is not otherwise excluded by EPA and State regulations.

11. HW Determination. The process used to evaluate whether a material being discarded is a solid waste meeting the regulatory definition of a RCRA regulated HW. The decision is based on user knowledge and/or scientifically controlled testing of the material to be discarded.

12. HW Generation Site. A specific location where a HW is stored, handled, or determined to be no longer usable for its intended purpose. Normally that area of real property in the immediate vicinity of the process which produced the waste.

a. 90-Day Site. Under Federal and State HW regulations, HW generators may accumulate HW for up to 90 days or less without having to obtain a HW storage permit. Failure to transfer a HW container from a 90-day Site to the Base Long-Term Universal Waste Storage Facility operated by DRMO or an off-site permitted treatment, storage, or disposal facility within 90 days of the ASD on the container is a violation of EPA and State regulations.

b. Satellite Accumulation Area (SAA). A HW generation point at which waste may be accumulated until the HW storage container is full. A filled container must be transferred within 72 hours to an approved 90-day Site or long-term HW storage facility. Failure to comply is a violation of EPA and State regulations. An EMD Authorization for a SAA must be obtained and posted at the site to preclude a 90-day storage violation. EMD authorization will establish individual limits for each SAA. No SAA authorizations will exceed 55 gallons of HW or 1 quart of acutely HW.

13. HW Handler. An individual assigned in writing by their respective commanding officer that specifically prepares HW for transportation, storage, treatment, or disposal.

14. Hazardous Waste Management. The systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery and disposal of hazardous wastes.

15. HW Container Marking Requirements. EPA and State regulations require specific markings for containers used for the storage of HW. Every container of HW must be marked with the information listed in 10304. 7.

16. HW Profile Sheet (HWPS) - DRMS 1930. A form requested by the Defense Reutilization and Marketing Service (DRMS) which lists the physical and chemical characteristics of a waste as well as generator information. This form is required and used by the Defense Reutilization and Marketing Office (DRMO) to assure proper identification of HW. The HWPS is prepared by EMD. Units generating HW must obtain the specific HWPS from EMD prior to generating a HW. Updated HWPS will be maintained by the HW Site Manager, ECO, and ECC.

17. HW Site Manager. The HW Site Manager is the OIC, NCOIC, or civilian supervisor in immediate charge of the work site or shop where the HW is being generated or stored.

18. HW Transportation. The differences between two categories of HW transportation must be understood to assure efficient movement of wastes in compliance with Federal and State HW regulations:

a. Off-Base Transportation. Transportation of HW on public highways is strictly controlled by Federal and State HW regulations. The Commanding General, MCB, Camp Lejeune, is registered with EPA and the State as a HW transporter. As a result, MCB, Camp Lejeune can legally transport HW on public highways. Examples of public highways are: US-17, NC-24, NC-210, and sections of NC-172 off-base. Transportation of HW on public highways will be performed by the Transportation Section, EMD, or by a properly licensed commercial HW transporter.

b. On-Base Transportation. Transportation of HW on Base highways, which includes NC-172 from Triangle Outpost to the Sneads Ferry Gate, is not considered HW transportation as defined in the RCRA. HW generators are authorized to transport HW on highways within MCB, Camp Lejeune, provided public highways are not used or crossed. All HW moved by the generator will be carried out under the direction of the cognizant ECC. Vehicle operators will have proper HM safety, health, and HW management training; and an appropriate vehicle operator's license.

19. Installation Hazardous Waste Program Manager (Base HW Program Manager). The Head of the Resource Conservation and Recovery Branch, Environmental Compliance Division, Environmental Management Department, MCB, Camp Lejeune or his/her authorized representative.

20. Long-Term HW Storage. The containment of HW for an indefinite period of time in a permitted facility designed to maintain HW in compliance with Federal and State HW regulations. Storage of RCRA regulated HW, unless in an EMD authorized Satellite Accumulation Area, for longer than 90 days is considered long-term HW storage. DRMO is the only State permitted facility for long-term storage of HW aboard MCB, Camp Lejeune.

21. Outage. The amount of free space left in a container. The purpose of outage is to allow for expansion.

22. Person. An individual, corporation, company, association, partnership, unit of local government, State agency, Federal agency or other legal entity.

23. Pesticide. Any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or desiccant, other than any article that:

a. Is a new animal drug under FFDCA section 201(w), or

b. Is an animal drug that has been determined by regulation of the Secretary of Health and Human Services not to be a new animal drug, or

c. Is an animal feed under FFDCA section 201(x) that bears or contains any substances described by paragraph (a) or (b) of this section.

24. Shelf-Life Expired HM. Unused HM which has exceeded the useful life specified by the manufacturer or other authority and is no longer suitable for its original purpose. Under normal circumstances expired, non-extendable shelf-life materials become HW. Refer to the shelf-life management section CETEP course manuals for detailed shelf-life management operating parameters.

25. Sludge. Sludge means any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility exclusive of the treated effluent from a wastewater treatment plant.

26. Special Waste. A discarded used or unused HM (to include residues from the cleanup of HM spills) which is no longer suitable for one or more of the purposes for which the item was manufactured and which is not a regulated HW.

27. Storage. Storage means the holding of HW for a temporary period, at the end of which the Universal Waste is treated, disposed of, or stored elsewhere.

28. Thermostat. A temperature control device that contains metallic mercury in an ampule attached to a bimetal sensing element, and mercury-containing ampules that have been removed from these temperature control devices in compliance with the requirements of 40 CFR 273.13(c)(2) or 273.33(c)(2).

29. Treatment. Treatment includes any activity or process designed to change the physical form or chemical composition of HW so as to render it less hazardous or nonhazardous.

30. Unit Spill Contingency Plan (USCP). The purpose of the USCP is to minimize the potential hazards to human health, the environment, and property associated with hazardous releases. USCP's are the first line of defense against possible releases and tie into higher level plans such as those required for HW facilities, emergency response plans, facility response plans, spill prevention, control and countermeasure plans, regional and national contingency plans.

31. Universal Waste. Any of the following hazardous wastes that are subject to the Universal Waste requirements of 40 CFR part 273:

a. Batteries as described in 40 CFR 273.2; (does not include automotive wet cell batteries)

b. Pesticides as described in 40 CFR 273.3; and

c. Thermostats as described in 40 CFR 273.4.

32. Universal Waste Handler. A generator, as defined in this Order, of Universal Waste; or the owner or operator of a facility, including all contiguous property, that receives UW from other UW handlers, accumulates UW, and sends UW to another UW handler, to a destination facility, or to a foreign destination.

33. Universal Waste Transfer Facility. Any transportation-related facility including loading docks, parking areas, storage areas and other similar areas where shipments of Universal Waste are held during the normal course of transportation for 10 days or less.

34. Universal Waste Transporter. A person engaged in the off-site transportation of Universal Waste by air, rail, highway, or water.

35. Used Oil. Any oil which has been refined from crude oil or synthetic oil and, as a result of use, storage, or handling, has become unsuitable for its original purpose due to the presence of impurities or loss of original properties. Used oil may be suitable for further use and is economically recyclable, therefore is managed as a separate category of material.

RECORD OF TRAINING

EMPLOYEE NAME/UNIT:

JOB TITLE/DESCRIPTION:

DATE ASSIGNED:

DATE RECORD CLOSED:

DATE	DESCRIPTION OF TRAINING	NAME OR COMPANY OF TRAINER	Training Hours

Signature:_____ Date:_____
(Employee's)

Signature:_____ Date:_____
(ECO's or Supervisor's)

ENCLOSURE (2)

DoDI 4160.21-M

CHAPTER 11

PRECIOUS METALS RECOVERY PROGRAM

A. GENERAL

1. The PMRP promotes the economic recovery of precious metals from excess and surplus precious metal-bearing materials, and also the reutilization of recovered fine precious metal for authorized internal purposes or as GFM. The program encompasses silver, gold, and the platinum family. The platinum family includes platinum, palladium, iridium, rhodium, osmium, and ruthenium.

2. Many items traditionally processed through the PMRP are now governed by Federal and State environmental regulations. Proper guidance for the processing of these materials will be as stated in this chapter, or Chapter 10, Environmentally Regulated and Hazardous Property, as required by governing law.

B. RESPONSIBILITIES

1. HQ DLA

a. Administer and monitor the PMRP

b. Develop plans and policy guidance for administration of the overall program within DLA.

c. Maintain liaison with DUSD (L) and other DoD components, other Government agencies and industry on policy matters pertaining to the program.

d. Review and analyze data in evaluating program performance, identify and resolve deficiencies, and develop and recommend corrective action.

e. Review and approve resources, equipment augmentation, and replacement requirements in support of the PMRP.

f. Review, for compliance with policy, implementing manuals and publications prepared by DLA primary level field activities.

g. Conduct and participate in studies, technical reviews, and surveys to ensure that current and future program operations are compatible with, and responsive to, effective and economical support requirements.

h. Develop, in coordination with the Military Services/Defense Agencies, and GSA, uniform procedures to implement the policies contained here.

i. Develop, through the Logistics Data Element Standardization Office, and in coordination with the Military Services/Defense Agencies, and GSA, a system of standard codes for identifying DoD materiel that contain precious metals.

j. Provide program reports required by GSA or by DUSD (L).

k. Recommend to DUSD (L) discontinuance of the program or any part of it when determined no longer cost effective.

2. DoD Activities

a. Participate in the PMRP.

b. Maintain a focal point to coordinate on all matters pertaining to the PMRP. (See attachment 1 for listing of focal points.)

c. Maximize the use of fine precious metals for authorized internal use or as GFM (see DoDI 4140.41, Government-Owned Materiel Assets Utilized as Government-Furnished Material.)

d. Identify the type, quantity, and location of the precious metal contained in the item management assigned assets and assign a Precious Metal Indicator Code (PMIC), to the item. Notify DLA in order that such items may be included in the Federal Catalog records.

e. Operate recovery equipment currently under their purview, and additional equipment, if required, when jointly agreeable and approved by DLA.; perform operating level maintenance for equipment in their possession; advise DLA when major repairs or services are needed and skills or parts are not available at the local activity for equipment they operate; recommend or identify to the servicing PMRP representative equipment and major repair parts and services required for maximizing recovery efforts.

f. Transfer precious metals-bearing material to the nearest DRMO or, when jointly agreeable or approved by DRMS and subject to receipt of fund citation from DRMS, ship to the collection or recovery activity designated by DRMS.

g. Assist in the identification of potential additional generating activities within DoD.

3. Participating Federal Civil Agencies. Federal civil agencies may participate in the DoD PMRP in accordance with the FPMR, Subpart 101-42.3, and ISAs in effect between

DLA and individual Federal civil agencies.

4. DRMS

a. Provide program guidance for administering the receipt, storage, processing, shipment, and refining of precious metal-bearing scrap and residual material generated by DoD components and participating Federal civil agencies.

b. Assist in the development of budgetary programs for management of recovery operations under the program.

c. Provide DLA implementing procedures for operation of the DoD PMRP in accordance with the policies and procedures prescribed here.

d. Ensure records of all costs allocable to the PMRP are maintained.

e. Establish standards to measure the efficiency and cost effectiveness of recovery efforts.

f. Establish procedures for acquisition and accountability of PMRP equipment, repair parts, and maintenance services.

g. Ensure DRMOs accept unclassified excess and surplus precious metal-bearing materials generated by DoD components or participating Federal civil agencies.

h. Develop and implement procedures for maintaining accountability over all precious metal-bearing scrap and residual materials received.

i. Provide appropriate precious metals recovery equipment to generating activities when economically feasible and justifiable, and replace this equipment, as necessary.

j. In coordination with DISC, complete section D, Precious Metals Recovery Program, as part of the PAR, for submission to HQ DLA. Data to include precious metals recovered, issued, costs avoided and all PMRP expenses

k. Develop statements of work, solicit, award, and perform post-award functions for precious metals recovery contracts.

l. Conduct staff visits to DoD installations and participating Federal civil agencies to provide technical assistance and support.

5. DISC

a. Function as the commodity IMM in the supply and DWCF management of fine metals under the PMRP.

b. Receive deposits of fine precious metals from DRMS recovery contractors and reimburse DRMS for incurred recovery expenses from the DISC DWCF.

c. Provide fine precious metals at recovery cost plus authorized surcharge (such as, administration, insurance, transportation) to authorized DoD activities and participating Federal civil agencies for internal use or use as GFM.

d. Accept fine precious metals offered by DoD components and Federal civil agencies through direct transfer of such assets if earlier certification has been furnished that the material offered is at least equal in purity to that identified in specifications of the applicable NSN. Where the purity is not at least equal or the determination cannot be made, DISC is authorized to instruct the offering activity to contact DRMS for disposal instructions.

e. Establish DISC DWCF issue prices for each precious metal based on PMRP recovery costs and authorized surcharges. Prices shall be fixed during the budget execution year to the maximum practicable extent.

f. Establish and maintain DWCF records of receipts, quantity on hand, location, and issues by primary or significant customers for each precious metal.

g. Report excess precious metals to GSA for transfer to the national stockpile as required in Chapter 4, Property Requiring Special Processing, paragraph B62.

h. Provide data to DRMS for completion of Section D of the PAR and necessary reports to DLA under RCS: DLA(Q) 2067 (S), as follows:

(1) Fine precious metals (troy ounces) available for issue: gold, silver, and the platinum family of metals.

(2) Issues (troy ounces) of gold, silver, and the platinum family of metals.

(3) Issue price of gold, silver, and the platinum family of metals.

6. Defense Contract Management Command (DCMC)

a. Conduct preaward surveys and post award precious metal recovery contract actions, as required.

b. Administer precious metals recovery contracts in accordance with terms of the contract and applicable regulations.

c. Maintain liaison with the DLA Program Manager concerning PMRP policy matters to inform contractors of requirements for precious metals recovery or changes thereto.

C. TURN IN, RECEIVING, AND PROCESSING

1. General. DoD generating activities and other participating Federal civil agencies are required to turn-in all excess fine precious metals and precious metal-bearing material to their servicing DRMO. There may be times, however, when a generating activity desires and may be authorized to ship precious metal bearing materials; such as, electrolytic flake, film ash or electronics, directly to a commercial contractor. For precious metal-bearing material that requires special handling as a part of the turn in process, see Chapter 4, Property Requiring Special Processing.

2. Generating Activities. Generating activities shall:

a. Turn in excess usable precious metal-bearing property, scrap, and waste material, in accordance with uniform turn in procedures contained in Chapter 3, Receipt, Handling and Accounting.

b. Include on the DTID or attached documentation, any available information pertaining to the precious metals content; such as, metal type, quantity, location, PMIC, and any known/suspected hazardous components.

c. Properly segregate precious metal-bearing scrap and waste material before turn in to the DRMO.

3. DRMOs

a. Guidance set forth in Chapter 3, Receipt, Handling and Accounting, applies generally to precious metal-bearing material, particularly as it relates to receipt and documentation of material at DRMOs.

b. DRMOs shall accept accountability for precious metal-bearing material turn-ins except where acceptance is prevented by law or regulation. However, when appropriate storage or security facilities are not available, the DRMO shall arrange for the generating activity or the host installation to retain or accept custody of the material until such time as disposition can be accomplished.

c. When material is received that has not been identified as precious metal-bearing

material but which, on the basis of experience or visual inspection, is suspected of containing precious metals, every effort should be made to confirm the presence of precious metals. Assistance can be obtained from the Precious Metals Master File (PMMF) (for items identified by NSN); through actual chemical testing of the material following prescribed metals identification procedures; or recommendation to DRMS that the material be assayed.

d. Precious metal-bearing items shall be processed as follows:

(1) Screened for RTD as items.

(2) Offered for sale as items at minimum acceptable bid prices which reflect the net recovery value of precious metal content based on current market price. The net recovery value is determined by first converting the known precious metal content to troy ounces. Conversion factors in Attachment 2, this chapter, should be used for this purpose. The number of troy ounces multiplied by the current market price of the fine precious metals less the estimated cost of recovery/refining gives the net recovery value of precious metal content in an item.

(3) Sold, if high bid reduced by the estimated cost of sale meets or exceeds the established minimum acceptable bid price.

(4) Downgraded and processed for precious metals recovery, if not environmentally regulated, whenever the sale of property is determined, through use of the above computation, not to be in the best interest of the U.S. Government.

e. Precious metal-bearing scrap shall be processed as follows:

(1) For precious metals recovery when economically feasible. The scrap shall be:

(a) Accumulated, extensively sorted, and segregated by type of precious metal to enhance economic recovery.

(b) Shipped, as directed, to a collection site, or

(c) Held at the DRMO awaiting recovery contractor pick up.

(2) Low content, highly contaminated, precious metal-bearing scrap which is not conducive to economic recovery shall be offered for sale as precious metal-bearing scrap, and described as such in the sale solicitation when DRMS determines that the cost of recovery/refining would exceed the market value of precious metals to be recovered. If the scrap was turned in by a DWCF funded activity and so identified, the proceeds from sale shall be returned to the DWCF account identified on the DTID.

D. PRECIOUS METALS RECOVERY EQUIPMENT. DLA provides precious metals recovery equipment to generating activities when economically feasible and justifiable. Equipment considered to be "precious metals recovery equipment" as used in this paragraph is addressed at Attachment 3 and includes electrolytic recovery units, passive silver cells (PSCs), plastic hypo collection containers, replacement parts, and vacuum sweepers. Film burners/incinerators and gram scales, which are not recovery equipment, are also included in Attachment 3.

E. TRANSPORTATION

1. General. The generating activity shall pay PCH&T costs incurred in the shipment or transfer of precious metal-bearing material from a generating activity to the servicing DRMO. Transportation costs incurred in making DRMS authorized shipments of precious metal-bearing material from generating activity direct to a designated collection site or DRMO shall be accomplished using a fund citation obtained from DRMS.

2. Billing Procedures. DoD components and participating Federal civil agencies which use DRMS approved PMRP transportation-fund citations for moving precious metal-bearing material shall forward all shipping documents with the Government Bill of Lading (GBL) to the Transportation Division, DFAS, Indianapolis Center, Indianapolis, IN 46249-3001. The GBL will cite the fund citation along with the following document number "SO(Y)JHH2582.01 MS" where (Y) equals the last digit of the fiscal year.

3. Preparation for Shipment to a Recovery Contractor

a. Documentation for shipments, DD Form 1348-1A, of precious metal-bearing material shall be prepared in accordance with Chapter 3, Attachment 1, and any special provisions provided by DRMS.

(1) Documentation shall show, as the document quantity, the net avoirdupois weight (in pounds and decimals of a pound) of material shipped.

(2) Shipping documents shall cite this paragraph as authority for shipment and identify, as fully as possible, the contents of each container.

(3) Two advance copies of each shipping document shall be forwarded to the designated collection site or DRMO.

b. Care shall be exercised to use secure, nonporous containers (glass not acceptable) when shipping precious metal-bearing material. Paper or ooden containers must not normally be used to ship material that may be susceptible to loss through particle adhesion.

c. All reasonable care shall be taken in the packaging of material for shipment to minimize the possibility of theft or loss through leakage or container damage.

d. Unless specific shipping instructions apply, shipments shall be made by the most economical means available that is consistent with safe transit and delivery. Parcel post shipments shall be registered.

F. SECURITY

1. General. Whenever a DRMO accepts accountability for precious metal-bearing material but the generating activity retains custody of the material, the generating activity continues to be responsible for the care and safekeeping of material until it is placed in the physical possession of the DRMO, or released to a commercial contractor.

2. Precious metal-bearing material in the custody of a generating activity is subject to respective Military Service/Defense Agency security requirements. However, for the material which is in the custody of DRMOs, the following minimum requirements for secured storage and handling apply:

a. High purity material shall be stored in a safe or locked cabinet within a locked room. More bulky precious metal-bearing material shall be stored in a locked room when practicable. Where the volume of this material is so large as to make inside storage impracticable, it may be stored outside within a chain link fence enclosure.

b. Weighing of precious metal-bearing material receipts and shipments shall be accomplished by a designated weigher in the presence of a disinterested person (the same disinterested individual must not be allowed to sign for more than 2 consecutive days in 1 week), and the names of both persons must appear on the weigh bill or other processing document.

c. Entry to those areas where high purity precious metals are stored shall be by access list only.

(1) This list should be kept current, limited to employees with a need to enter, and posted inside the entrance.

(2) Visitors shall be required to sign the visitor register and be accompanied by an individual on the access list. The visitor must have a need to enter, and further identification may be requested.

(3) Access list personnel do not require security clearance.

G. REUTILIZATION OF FINE PRECIOUS METALS

1. General

a. DoD components and participating Federal civil agencies shall requisition PMRP metals for approved contracts.

b. PMRP metals are priced at the cost of recovery plus an authorized administrative surcharge.

c. It is DLA policy not to procure precious metals from the commercial market if the PMRP does not provide sufficient quantities to the DLA Distribution System to satisfy customer demand. Therefore, requiring activities are encouraged to call DISC-YAA/GA (DSN 442-2734; Commercial (215) 697-2734) for asset availability before requisitioning any quantity of precious metal. DISC shall reserve requested quantities of precious metals for 120 days.

2. DISC currently manages nine precious metals NSNs, each having a unit of issue of troy ounce:

Nomenclature	NSN
Gold	9660-00-042-7733
Silver	9660-00-106-9432
Platinum	9660-00-151-4050
Palladium	9660-01-039-0320
Rhodium	9660-01-010-2625
Iridium	9660-00-011-1937
Ruthenium	9660-01-039-0313

3. The above NSNs are stored at two locations: Engelhard Industries, Iselin, NJ; Handy and Harman, Fairfield, NJ. These commercial firms are under contract with DISC to provide no-cost storage of precious metals. Due to the large volume of business compounding silver alloys that these companies do for various U.S. Government customers, it has proven cost-effective to maintain silver stocks at each facility to enable transfer of PMRP silver to given contracts without the program incurring the expense of repeated small shipments of silver to these companies.

4. The following specific procedures shall be used to requisition fine precious metals from DISC:

a. A MILSTRIP requisition shall be submitted citing one of the above NSNs. The

requisition must cite full troy ounces, not partial quantities. (Quantities cited in partial ounces such as 700.2 shall be rounded off.)

b. Exception data shall be cited in the "REMARKS" section of the requisition. These data include:

(1) An unclassified "ship to" address specifying exact location (building, office, and individual) and applicable zip code. The DoDAAC is not always sufficient for delivery.

(2) The number of the contract or work order on which the precious metal is to be used, for control and audit purposes.

(3) The end item application, the NSN, part number, or any other data that identifies the item or component in which the precious metal shall be used, as well as the quantity of precious metal which shall be used for each item or component, if known.

(4) Name and telephone number of a contact point at the requisitioning activity, to resolve any problem, as required.

c. The requisition may be submitted by message or letter, however, electrical transmission is preferred. To avoid being mis-routed, messages shall be addressed to DISC-YAB/GD. Delivery normally shall be accomplished within 2 to 3 weeks after receipt of the requisition.

5. Transportation charges are included in the unit price. Transportation is usually by premium mode (armored van). Therefore, requisitions to the same destination should be consolidated whenever possible.

6. Questions concerning the above procedures or availability of assets should be directed to the DISC focal point (see Attachment 4, this chapter).

ATT 1
CHAP 11

PRECIOUS METALS RECOVERY PROGRAM FOCAL POINTS

Reference: Chapter 11, Paragraph B2b

The DoD program for the recovery and use of precious metals from excess and surplus end items, scrap, hypo solutions, and other precious metal-bearing materials provides for the establishment of focal points at DoD component levels to coordinate on all matters pertaining to the PMRP.

(1) Headquarters DLA	DLSC-LC 8725 John J. Kingman Road, STE 4133 Fort Belvoir, VA 22060-6221
(2) Defense Reutilization and Marketing Service (DRMS)	DRMS 74 N. Washington Avenue Battle Creek, MI 49017-3092
(3) Defense Industrial Supply Center	DISC-OIBA/YC (DISC) 700 Robbins Avenue Philadelphia, PA 19111-5096
(4) Army	HQ DA (DALO SMP) 5006 Army Pentagon Washington, DC 20301-0500
(5) Army Alternate	HQ AMC (AMC LG MS) 5001 Eisenhower Avenue Alexandria, VA 22333-0001
(6) Navy	Naval Supply Systems Command 5450 Carlisle Pike P.O. BOX 2050 Mechanicsburg, PA 17055-0791
(7) Air Force	HQ AFMC/LGIA 4375 Chidlaw Road, STE 6 Wright-Patterson AFB, OH 45433-5006

(8) Marine Corps	HQ US Marine Corps (CODE LPP-2) 2 Navy Annex Washington, DC 20380-1775
(9) U.S. Coast Guard	U. S. Coast Guard (G-CFM-3) 2100 Second Street, SW. Washington, DC 20593-0001

CONVERSION FACTORS USED IN THE PMRP

Reference: Chapter 11, Paragraph C3d(2)

Multiply	by	to obtain
Gallon (US)	3.78543	Liters
Gallon (US)	0 .82367	Imperial gallon
Gallon (Imperial)	4.546	Liters
Gallon (Imperial)	1.201	US gallon
Grains (troy)	0.06480	Grams
Grains (troy)	0.0020834	Troy ounces
Grams	0.03215	Troy ounces
Grams	0.03527	Avoir ounces
Grams	15.43	Grains
Kilograms	2.205	Avoir pounds
Kilograms	0.0011023	Short tons
Liter	0.219973	Imperial gallon
Liter	0.2642	US gallon
Ounces (avoir)	0.9115	Troy ounces
Ounces (troy)	0.06857	Avoir pounds
Ounces (troy)	1.09714	Avoir ounces
Ounces (troy)	31.103481	Grams
Ounces (avoir)	28.349527	Grams
Pounds (avoir)	453.592	Grams
Pounds (avoir)	0.45351	Kilograms
Pounds (avoir)	14.5833	Troy ounces
Ton (short)	2000	Pounds
Ton (short)	907.18486	Kilograms

ATT 3
CHAP 11

PMRP EQUIPMENT

Reference: Chapter 11, Paragraph D

1. Incinerators/Furnaces. Procurement or replacement of Military Service and other DoD component-owned and operated incinerators or furnaces, which are used for the DEMIL or declassification of classified film or other classified materials, is the responsibility of the Military Services or owning DoD components. Likewise, the DEMIL or destruction of classified film or other classified materials is a Military Service/Defense Agency responsibility. This responsibility is exercised at the option of the Military Service/Defense Agency either by incineration or other means at the Military Service/Defense Agency facilities or through transfer through the Intelligence Community Network for incineration or destruction at the centralized Intelligence Community Destruction Facility at Fort Meade, Maryland. In either event, the resulting precious metal-bearing ash or residues are required to be turned-in to DRMOs or released, as directed by DRMS, to a commercial contractor for precious metal recovery. Special care shall be exercised to ensure incinerators are effectively used, operated, and maintained in order to maximize silver recovery while conforming to local air pollution standards.

2. Electrolytic Recovery Units/Passive Silver Cells

a. General. In photographic and X-ray processing, significant amounts of high purity silver are generated in fixing baths as a result of chemical action. Recovery of silver from the spent fixing solution (hypo) can be accomplished by chemical precipitation, metal displacement, or electrolytic methods. Potential generators of spent hypo are hospitals, dispensaries, dental clinics, photographic laboratories, printing plants, microfilm and microfiche producing facilities, and hobby craft shops.

b. Acquisition of Silver Recovery Supplies/Equipment.

(1) PMRP generators shall submit requests for PMRP supplies; such as, silver test paper, PSCs, fittings, control valves, replacement parts which are peculiar to recovery equipment, to the appropriate PMRP representative who shall arrange for shipment from stock or forward request to DRMS for initiation of a purchasing action.

(2) Electrolytic recovery equipment shall be acquired and installed as follows:

(a) Generating activities shall apprise DRMS (see Attachment 4, this chapter) of the need for PMRP assistance or recovery equipment to start up silver recovery operations or to enhance the effectiveness of ongoing silver recovery operations to ensure maximum recovery.

(b) The PMRP representative shall make arrangements to have the hypo-generating work site surveyed as the basis for determining specific onsite equipment needs.

(c) DRMS shall procure and furnish without cost to authorized PMRP participants electrolytic recovery units, PSCs, chemical tanks, and supporting parts and equipment used to recover silver from silver-bearing film processing solutions.

(d) Generating activities are responsible for installing silver recovery equipment.

1 DRMS shall provide installation and operating instructions with the equipment.

2 When special or unusual circumstances arise, generators shall request assistance from the PMRP representative (preferably in conjunction with actions outlined in subparagraphs b(2)(a) or (b)).

(3) Maintenance of Silver Recovery Equipment

(a) Generating activities are responsible for performing operating level preventive maintenance on recovery equipment in their possession. Preventive maintenance includes day-to-day adjustments, cleaning, replacement of fuses and gaskets, and any like action which can be performed periodically with a minimum of effort as a safeguard against excessive equipment downtime.

(b) The servicing representative shall be contacted immediately in the event of equipment malfunctions that defy "troubleshooting" efforts of the generating activity. Representatives shall respond promptly to such notices and make all arrangements necessary to repair or replace equipment in a timely manner.

(c) During any period when silver recovery equipment is deadlined, enerating activities shall ensure that no spent hypo solution is discarded. Spent hypo solution shall either be collected and turned in to the servicing DRMO along with a generator fund cite for ultimate disposal, taken to another nearby recovery facility, or collected and retained until deadlined recovery equipment is again operating. Spent hypo solution shall be handled in accordance with all Federal, state, and local environmental and transportation regulations.

3. Vacuum Sweepers

a. DRMS shall procure and provide, without cost to authorized users, vacuum sweepers and collection bags, used primarily in dental facilities to collect precious metals bearing dust or sweeps.

b Generators shall turn-in precious metals dust collected through use of the vacuum sweepers.

4. Gram Scales

a. Gram scales are not construed to be "precious metals recovery oriented" and are authorized to be purchased for use by DRMOs and other DRMS facilities to ascertain precise weights of scrap material, as needed, for the purpose of inventory and accountability.

b. DLA will not procure gram scales for use by generating activities turning in scrap for precious metals recovery.

5. Special Supporting Equipment for Precious Metals Processing and Preparing. Special precious metals processing equipment required by DRMOs for the processing or preparation of precious metal-bearing property may be purchased as needed to support approved precious metals processing. Such equipment would include special power tools, cutters, saws to facilitate the sorting, segregation, or upgrading of precious metal-bearing scrap.

6. Accountability for Precious Metals Recovery Equipment

a. When precious metals recovery equipment is needed, it shall be issued from stock or purchased (with PMRP funds) and shipped to the generating activity concerned. The Accountable Property Officer or equivalent shall hand-receipt equipment to a responsible individual at the generating activity upon delivery of equipment or, as in the case of equipment already in DoD component custody, as soon as possible after such equipment is transferred to DRMS.

b. Precious metals recovery equipment in the possession of DoD components and participating Federal civil agencies shall be carried on the property account of DRMS.

c. DRMS shall maintain a current record of all precious metals recovery equipment in the custody of serviced generating activities.

d. Generating activities shall contact the PMRP representative for turn in of precious metals recovery equipment. DRMS shall provide instructions to include a document number for turning in the equipment.

ATT 4
CHAP 11

PMRP REPRESENTATIVES LOCATIONS AND AREAS COVERED

Reference: Chapter 11, Attachment 3, Paragraph 2b(2)(a)

Address and Telephone	Areas Covered
	OPERATIONS EAST AREA
DRMS Eastern Region ATTN: DRMS-DEO 926 Taylor Station Road Blacklick, OH 43004-9615 DSN 850-2114/4195 COM (614) 692-2114/4195	United States -- east of the Mississippi River plus Missouri, and Puerto Rico and Panama
	OPERATIONS WEST AREA
DRMS Western Region ATTN: DRMS-DWO 500 West 12th Street Bldg 2A-1 Ogden, UT 84407-5001 DSN 352-7033/7041 COM (801) 399-7033/7041	United States -- west of the Mississippi River, including Guam, less Missouri
	EUROPE and ASIA
DRMS International ATTN: DRMSI-O Unit 29263 Box 2000 APO AE 09096	