



UNITED STATES MARINE CORPS
1ST MARINE DIVISION (REIN), FMF
BOX 555380
CAMP PENDLETON, CALIFORNIA 92055-5380

IN REPLY REFER TO
DivO P5100.17A
ENV

JUL 1 2015

DIVISION ORDER P5100.17A

From: Commanding General
To: Distribution List

Subj: STANDING OPERATING PROCEDURES FOR HAZARDOUS MATERIALS AND
HAZARDOUS WASTE MANAGEMENT

Ref: (a) MCO P5090.2A W/CH 1-3
(b) MCIWEST-MCB CAMPENO 5100.3
(c) BO 5090.7
(d) BO 5090.3A
(e) BO 5090.6
(f) BO 5090.2
(g) BO 6280.5B
(h) Title 22 California Code of Regulations (22 CCR)
(i) Title 8 California Code of Regulations (8 CCR)
(j) Title 29 Code of Federal Regulations (29 CFR)
(k) Title 40 Code of Federal Regulations (40 CFR)
(l) Title 49 Code of Federal Regulations (49 CFR)
(m) MCAGCC 29 Palms BO 5090.1F
(n) TM 38-410
(o) OPNAVINST 5100.23C

Encl: (a) LOCATOR SHEET

1. Purpose. To set forth the policies and procedures for the Hazardous Material and Hazardous Waste Management Program.

2. Cancellation. DivO P5100.17

3. Action.

a. The provisions set forth in this Manual comply with current references and are effective upon receipt. Should any conflict arise between this Manual and directives issued by higher authority, including civil laws, the more stringent shall take precedence.

b. This Manual is directive in nature and its provisions are applicable to all personnel assigned to the 1st Marine Division, FMF, Camp Pendleton, California (CA) and Marine Corps Air Ground Combat

Center (MCAGCC) 29 Palms, California. Violation of this Manual may result in disciplinary action under the Uniform Code of Military Justice, punitive and/or administrative action for persons violating its provisions or intent. Civil laws may take precedence for willful negligence for hazardous materials or hazardous waste issues.

4. Changes. This Manual has been completely rewritten and should be reviewed in its entirety. Recommended changes to this Manual are encouraged and should be submitted to the Assistant Chief of Staff G7 Readiness, via the chain of command.

5. Applicability. This Manual is applicable to all members of the 1st Marine Division and detachments. Reference (1) will establish procedures for the units training at, stationed on, or are associated with MCAGCC, 29 Palms, CA.

6. Certification. Reviewed and approved this date.


C. S. DOWLING
By direction

DISTRIBUTION: C

Copy to: MCB Environmental Security

LOCATOR SHEET

Location:

(Indicate the location(s) of the copy(s) of this Manual)

ENCLOSURE (1)

RECORD OF CHANGES

1. Log complete changes action as indicated.

Change number	Date of Change	Date Entered	Signature of person Incorporated Change

CONTENTS

CHAPTER(S)

1	INTRODUCTION
2	GENERAL
3	TRAINING
4	SPILL RESPONSE CRITERIA
5	WASTE ACCUMULATION SITES
6	HAZARDOUS MATERIAL MINIMIZATION PROGRAM
7	FIELD SITE REQUIREMENTS
8	INSPECTIONS

ENCLOSURES

A	DEFINITIONS
B	TRAINING FORMS
C	AREA DESIGNATED ACCUMULATION SITES
D	DETAILED 60 DAY WASTE ACCUMULATION SITE CHECKLIST
E	WEEKLY HAZARDOUS MATERIAL STORAGE CHECKLIST
F	HAZARDOUS SUBSTANCE RELEASE / SPILL REPORT FORMAT
G	HAZARDOUS MATERIAL BUSINESS PLAN
H	INITIAL RESPONSE FOR TIER I INCIDENTS

INTRODUCTION

	<u>PARAGRAPH</u>	<u>PAGE</u>
POLICY	1000	7
RESPONSIBILITIES	1001	7
ASSISTANT CHIEF OF STAFF G-1	1002	7
ASSISTANT CHIEF OF STAFF G-3	1003	7
ASSISTANT CHIEF OF STAFF G-7	1004	8
DIVISION COMPTROLLER	1005	9
DIVISION SURGEON	1006	9
REGIMENTAL AND SEPARATE BATTALIONS COMMANDERS	1007	9
ENVIRONMENTAL OFFICER	1008	11
ENVIRONMENTAL COMPLIANCE COORDINATOR	1009	12
ASSISTANT ENVIRONMENTAL COMPLIANCE COORDINATOR	1009	12
HAZARDOUS MATERIAL AND WASTE HANDLERS	1010	12

CHAPTER 1

1000. POLICY.

1. Compliance with environmental laws and regulations is fundamental to the 1st Marine Division's commitment to attain and maintain environmental quality. A clear and concise delineation of tasks and responsibilities is essential to systematic efficiency. The purpose of this Standard Operating Procedures (SOP) is to provide such guidance.

1001. RESPONSIBILITIES.

1. The Assistant Chief of Staff G7 is responsible for developing comprehensive environmental management strategies to the Commanding General of 1st Marine Division.

2. Commanders are responsible for implementing these SOPs and maintaining compliance with various federal, state, county and local laws and regulations directed by the Marine Corps, Marine Corps Base (MCB), Camp Pendleton and MCAGCC 29 Palms.

1002. ASSISTANT CHIEF OF STAFF G-1.

1. Personnel staffing for G-7 Environmental Management Program section will require two Officers (One Active Duty and one Reserve) and two Staff Noncommissioned Officers (One Active Duty and one Reserve).

2. Ensure all Active Duty personnel are assigned a minimum of one year. A minimum of 60 days training/ transition time is required prior to reassignment of personnel.

1003. ASSISTANT CHIEF OF STAFF G-3/G-4.

1. Assist organizations in arranging required training.

2. Include in all Operation Orders Plans for handling of hazardous materials and disposal of hazardous waste.

1004. ASSISTANT CHIEF OF STAFF G-7.

1. Assist in policy development and guidance relating to environmental concerns.

2. Assist organizations in identifying suitable substances for replacing identified hazardous materials, reducing the hazardous waste stream and implementing means of recycling hazardous materials prior to becoming hazardous waste.

3. Provide staff oversight of the Pollution Prevention Programs.

4. Ensure the Commanding General is apprised of all pertinent aspects of command environmental issues.
5. Maintain liaison with Camp Pendleton's Base Environmental Security Department and MCAGCC 29 Palms' Natural Resources and Environmental Affairs (NREA) involving above/underground storage tanks, oil/water separators, solid waste (non-hazardous) recyclable materials and hazardous waste environmental issues.
6. Provide direction and assistance to subordinate units and maintain liaison with Base Environmental concerning hazardous materials and hazardous waste management.
7. Assist organizations in hazardous material and hazardous waste programs' development and training per guidelines/requirements of the Base Environmental Department.
8. Conduct and document unit inspections regarding hazardous material programs and hazardous waste programs in all units, including generators accumulation sites.
9. Establish a comprehensive training program in accordance with MCB Camp Pendleton's Environmental Training Section that increases the awareness and proficiency for handling hazardous materials and hazardous waste. Track training and turnover of personnel at each unit to ensure billets are filled with rank appropriate personnel who possess sufficient training and will hold the billet sufficiently for a long time.
10. Maintain an Environmental Management Program library.
11. Budget for progressive training programs, inspections, professional library changes/updates and appropriate seminars.
12. Assist organizations in obtaining Safety Data Sheets (SDS's). These were formerly known as Material Safety Data Sheets (MSDS's).

1005. DIVISION COMPTROLLER.

1. Establish guidelines for submission of budget requirements to support the 1st Marine Division Environmental Management Program.

1006. DIVISION SURGEON.

1. Supervise to ensure that all required personnel are assigned to the Respiratory Protection Program (RPP) after Base Safety and Base Industrial Hygiene conduct required monitoring of selected workplaces. The monitoring and placement of individuals into this program are Base functions. Follow-up occupational health screening responsibilities for identified Division personnel is a medical responsibility.

2. Direct and supervise the establishment of medical surveillance programs for personnel who are or may be exposed to hazardous materials/substances or health hazards at or above the established Permissible Exposure Limits (PEL), without regard to the use of respirators for 30 days or more a year. Personnel are assigned into medical surveillance programs by the Consolidated Base Safety Office and Base Hygiene. The Division Surgeon will establish monitoring programs for ensuring implementation of recommendations made by the Base Safety and Industrial Hygiene Offices.

3. The Division Surgeon will ensure the biomedical waste program is maintained and monitored in conjunction with the Environmental Security Department, Marine Corps Installation WEST-MCB Camp Pendleton procedures for proper handling of biomedical waste generated onboard Camp Pendleton is the responsibility of Base and is outlined by Naval Hospital Camp Pendleton Instructions in accordance with San Diego County Ordinance Number 7646. Biomedical waste procedures for proper handling and disposal are also outlined in Division Preventive Medical Representatives SOP (PMR SOP).

1007. REGIMENTAL AND SEPARATE BATTALION COMMANDERS.

1. Ensure MCB Camp Pendleton and MCAGCC 29 Palms designate centralized hazardous waste accumulation sites, Reference (m) Appendix (C), is consolidating hazardous waste from designated generators.

2. Ensure an aggressive hazardous material and hazardous waste program is implemented, including a hazardous material minimization program, reducing the quantities of hazardous waste generated.

3. Establish a 24 hour capable hazardous material/hazardous waste spill response team at all designated accumulation sites.

4. Assign personnel to designated hazardous waste accumulation sites for a minimum of one (1) year to achieve a return on the costly specialized training.

5. Ensure a "Right to Know" written Hazardous Communication Program is implemented.

6. Ensure Marines receive appropriate training in handling hazardous materials and proper disposition of hazardous waste.

7. Appoint in writing an organizational Environmental Officer, Environmental Compliance Coordinator (ECC) and an Assistant Environmental Compliance Coordinator (AECC). The ECC must be a Staff Sergeant (E-6) as directed by the Commanding General and shall be appointed for a minimum period of one (1) year. The AECC shall be a Sergeant (E-5) and be appointed for a minimum period of one (1) year. The Environmental Compliance Coordinator and the Assistant Environmental Compliance Coordinator will not have more than one other collateral duty in order to allow sufficient focus on Environmental

Programs. Provide copies of the appointment letters of staff level personnel to the Assistant Chief of Staff G-7 and maintain a copy of subject appointment letters in the Site Administration Book/Turnover Folder as required.

8. Assign at least one hazardous material handler per company/battery in hazardous materials and hazardous waste accumulation sites, i.e. battery lockers, motor transport facilities, communication shops, centralized paint lockers, NBC Defense storage areas, reproduction facilities, supply points and the solid waste (non-hazardous) recycling program. These personnel will be identified as Hazardous Material Handlers, will be appointed in writing and receive appropriate training for the type of hazardous materials they handle.

9. Incorporate hazardous material handling and disposal procedures such as General Environmental Awareness or Hazardous Communication Training into back in the saddle training (BITS), safety stand-downs, maintenance stand-downs and/or troop information programs. Environmental Security Department, Camp Pendleton, Base Comprehensive Environmental Training and Education Program section MCB and NREA MCAGCC 29 Palms can provide assistance.

10. Ensure the unit has at least two or more Marines who attained the AMOS 8056 Hazardous Waste Handlers are present to properly manage the unit accumulation sites in garrison and during deployments. Requests for school seat quotas will be coordinated directly with G7 and MCB Camp Pendleton, Environmental Training Section. 11. Make sure that the unit has a documented SOP to cover practices that affect the environment (i.e. spill response, pollution prevention, hazardous material handling, and hazardous waste storage, use of SDSs, wash racks, oil-water separators, used oil management, solid waste and electronic recycling) to include elements which support Marine Corps environmental goals. SOPs and orders will be reviewed annually.

11. Establish a budget for, pay for, and track costs associated with the generation, containment, preparation for treatment, and transportation of unit generated hazardous materials and hazardous waste associated with garrison, day to day activities and training not incidental to exercises with specific funding responsibilities.

12. Attend the Commander's Environmental Orientation Briefing after command selection (either during the Commander's Course or given by the installation environmental staff). The unit commander shall attend the brief at the assigned base or station.

1008. ENVIRONMENTAL OFFICER (EO).

1. Responsible for the implementation and management of the hazardous material and hazardous waste programs.

2. Develop an Emergency Response Plan and Environmental Business Plan depicting the layout of facilities and the location of hazardous

materials stored and waste accumulation areas. Camp Pendleton units will use the Base's Spill Hazmat and Response Planning (SHARP) program.

3. Environmental Officers in charge of designated accumulation sites, Appendix C, will ensure that disposal of hazardous waste is accomplished in accordance with applicable directives and under the guidelines established by state, county and base.

4. Ensure a training program is implemented and documented that identifies specific training requirements for defined billets and expected hazardous materials/substances that will be encountered. An example is radioactive waste from a broken lensatic compass stored in the armory.

5. Ensure appropriate internal inspections are conducted and documented weekly utilizing, Appendix D. The detailed inspection checklist should be utilized by inexperienced personnel; the Weekly Site Inspection is designed for experienced personnel that are fully trained and aware of environmental regulations.

6. Establish and maintain a complete and current Hazardous Communications Information System (HAZCOM Station, pertinent publications and orders).

7. Ensure the S-3 and S-4 officers take the on-line base Environmental Awareness Course for S-3/S-4 Officers and give a copy of your certificate to your ECC. They have the responsibility to assist the EO and ECC on the training for the regiment or battalion. The S-4 officer shall take the place of the Environmental Officer if none is appointed.

1009. ENVIRONMENTAL COMPLIANCE COORDINATOR (ECC) AND ASSISTANT ECC (AECC).

1. Establish/follow base directed procedures that ensure all hazardous waste or discarded hazardous material cycles through the area's accumulation site.

2. Develop an SOP that is consistent with the Installation Facility and according with the unit. The SOP should identify procedures for collection, relationship to users, inspection procedures, training requirements, and disposition procedures and identify users of the accumulation site. Submit a copy of the SOP to the Environmental Chief G7.

3. Maintain Hazardous Communication Stations (Right to Know) including:

- a. An Emergency Response Plan.
- b. Safety Data Sheets.

- c. Inventory of hazardous materials on hand.
 - d. Usage log for all hazardous material storage sites.
4. Ensure all Marines in the unit received the General Environmental Awareness or HAZCOM training.
5. Establish quarterly training information sessions on proper handling and disposal of hazardous materials for all hands. Division Environmental Chief, Environmental Security Department, MCB Camp Pendleton (Training Section) and NREA MCAGCC 29 Palms can provide assistance.

1010. HAZARDOUS MATERIAL AND WASTE HANDLERS.

1. Hazardous Material Handlers will be appointed in writing and will receive training for the type of hazardous materials they handle in addition to the following classes: Introduction to Hazardous Materials and Hazardous Waste, Hazardous Communication Class, Hazardous Waste Handler, First Responder Operations.
2. The hazardous materials and waste handlers are responsible for storing, moving, and handling hazardous or non-hazardous materials. They oversee the process of moving and distributing materials. Hazardous material handlers identify, label, pack, and transport materials to the 60/90/180 day sites for disposal, clean secondary containments of all waste and dispose of in proper barrels and conduct police call around 60/180 day site and all dumpsters. They also ensure that all trash is in the proper dumpster, scrap metal, recycle, non-treated wood, and treated wood dumpster. Handlers deal with issues of Petroleum Oil and Lubricants (POLs) to all the sections, conduct walkthroughs of all Satellite Accumulation Sites and ensure all hazardous waste and materials are properly stored, waste is in proper containers and proper handling and Personal Protective Equipment (PPE) is worn. Additionally, they ensure housekeeping meets the standards of hazmat regulations inspect all Above Storage Tanks (ASTs) for serviceability and that all POLs are properly pumped at the end of each working day.
3. Weekly inspections are conducted of all Satellite Accumulation Sites to ensure that all hazardous waste is disposed of, ensure proper PPE is worn and clean-up of spills is conducted properly. All fire extinguishers and eyewash stations are also inspected weekly for serviceability within the hazardous materials site.

CHAPTER 2

GENERAL

	<u>PARAGRAPH</u>	<u>PAGE</u>
LAWS AND REGULATIONS	2000	15
RESPONSIBILITIES	2001	15

CHAPTER 2

GENERAL

2000. LAWS AND REGULATIONS.

1. Stringent laws and regulations have been adopted to protect the environment and health of personnel associated with hazardous substances, either defined as hazardous materials or residual defined as hazardous waste. Specific definitions are located in Appendix A. This order provides guidance for compliance with current laws and regulations. If a conflict exists between various laws or regulations and this order, the applicable law or regulation will take precedence.
2. The Commandant of the Marine Corps reaffirms the Marine Corps obligation to fully comply with all environmental laws pertaining to either hazardous materials or the generation of hazardous waste.
3. These laws and regulations govern everything associated with hazardous materials and hazardous waste, whether in storage, transportation, packaging, active usage, or disposal. It is the responsibility of all personnel to become aware of these requirements prior to usage or disposal of hazardous materials. Because of the waiver of sovereign immunity for Resource Conservation and Recovery Act (RCRA), which outlines the responsibilities and requirements of hazardous waste management, ignorance of these requirements is not an excuse.
4. Federal Officers and employees can be held personally liable for civil or criminal penalties, fines, and imprisonment, if personal negligence on the Commander's part is construed in the handling of hazardous materials or improper disposal of hazardous waste. In addition, Federal Officers and employees prosecuted in federal courts for violations of environmental laws will not be provided government counsel. They must retain an attorney at their own expense, even if the defendant claims that the violation occurred in the course of official duties. Federal Officers and employees also face the possibility that they may be prosecuted in state and local courts for violations of state and local environmental laws. If convicted, they may be held personally liable for any fines or penalties.

2001. RESPONSIBILITIES.

1. Marine Corps Base, Camp Pendleton and MCAGCC 29 Palms (installation facilities) have established 60 day (MCB Camp Pendleton) and a 90 Day (MCAGCC 29 Palms) hazardous waste storage sites licensed by the County of San Diego and/or state of California under Resource Conservation and Recovery Act. Ultimately, these installations carry the requirements of hazardous substance management, to include generation, storage, handling and disposal for all tenant commands and organizations.

2. Tenant commands and organizations have the responsibility to support the host installation's programs.

3. Reference (o), Appendix C, identifies Accumulation Sites for area generators of hazardous waste and designates Area Commanders as controllers of these accumulation sites. The management's responsibility for these accumulations sites is equal to the responsibility of the licensed facility and governed by the same applicable laws and regulations. Reference (b) establishes specific standards for a hazardous substance management plan.

CHAPTER 3

TRAINING

	<u>PARAGRAPH</u>	<u>PAGE</u>
GENERAL REQUIREMENTS	3000	18
ACCUMULATION SITES	3001	18
HAZARDOUS MATERIAL USERS	3002	22
TRAINING SOURCES	3003	22

CHAPTER 3

TRAINING

3000. GENERAL REQUIREMENTS.

1. Training requirements for hazardous material and hazardous waste association is mandated by a multitude of Code of Federal Regulations (CFRs) and California Code of Regulations (CCRs) according to the level and activity involved.
2. This training section will attempt to identify general requirements for billets/positions and not to the specific type hazardous substances encountered. In handling specific type of hazardous substances, either materials or waste, refer to Safety Data Sheets (SDSs). SDSs identifies safety equipment required to be worn, how to minimize exposure, proper packing and handling, and disposal guidance. SDSs are an important part of the training evolution. Marines who may be exposed to special hazards shall be provided additional training, (i.e. armorers may require more training in regards to radioactive ions). The level of training provided shall be consistent with the individual Marine's job function and responsibilities.
3. Identified trainers shall require a level of training higher than and including the subject matter of the level of instruction that they are providing.
4. Documentation of training is mandated by 40 CFR 265.16 and CCR Title 22, Section 66265.16. Appendix B will be incorporated for all training records. Training records shall be kept for 3 years.

3001. ACCUMULATION SITES.

1. Designated accumulation sites are normally at the consolidated motor pools or near the point of hazardous waste generation.
2. The Environmental Coordinator and Assistant Environmental Coordinator have the responsibility of providing guidance to generators in the handling of hazardous materials, substances, and waste. Marine Corps Base, Camp Pendleton has designated hazardous waste storage sites that can store hazardous waste for a period not to exceed 60 days (Appendix C). Units, commands and/or activities aboard Camp Pendleton also maintain satellite accumulation points located at or near the point of generation for hazardous waste streams (i.e., inside a motor pool bay at an oil change point) that shall not exceed 180 day accumulation time. Bulk storage of hazardous substances mandates the unit maintains a capability to respond effectively to a hazardous spill. Units that store hazardous substances will compose a spill response team and ensure the following training is accomplished:

Environmental Officer, Environmental Compliance Coordinator and the Assistant Environmental Coordinator (40 CFR 265.16, 22 CCR 66265.16 and the CCR Section 5192).

a. REGIMENTAL AND SEPARATE BATTALION COMMANDERS.

(1) Environmental Awareness for Commanders (one-time requirement) Environmental Learning Management System (ELMS)

b. ENVIRONMENTAL OFFICER.

(1) Introduction to Hazardous Materials and Hazardous Waste Course (one-time requirement), Environmental Learning Management System (ELMS).

(2) Environmental Coordinator Course (one time requirement), Formal Course. Register using the Environmental Learning Management System (ELMS).

(3) Hazardous Waste Handler (one-time requirement). Register using the Environmental Learning Management System (ELMS).

(4) First Responder Operations (FRO) Course (one-time requirement). Register using the Environmental Learning Management System (ELMS).

(5) General Environmental Awareness or Hazardous Communication Training (annual requirement) Base Safety.

(6) Procedures for Handling Hazardous Materials including Hazardous Waste (annual requirement), Unit Environmental Compliance Coordinator.

(7) Procedures for coordinating with Emergency Response Agencies (annual requirement), Unit Environmental Compliance Coordinator.

(8) Use of Emergency Response Equipment under the Business Control (annual requirement), Unit Environmental Compliance Coordinator.

(9) Emergency Response Plan Implementation (annual requirement), Unit Environmental Compliance Coordinator

(10) Hazardous Waste Handler Refresher (annual requirement), Register using the Environmental Learning Management System (ELMS).

(11) First Responder Operations (FRO) Course (one-time requirement), Register using the Environmental Learning Management System (ELMS).

(12) Respirator Training (annual, only if the unit has a Respirator Program), Request training to Base Safety.

(13) Environmental Awareness for S-3/S-4 Officers and SNCO's (one time requirement), Environmental Learning Management System (ELMS).

c. ENVIRONMENTAL COMPLIANCE COORDINATOR (ECC) AND ASSISTANT ENVIRONMENTAL COORDINATOR (AECC).

(1) Introduction to Hazardous Materials and Hazardous Waste Course (one-time requirement), Environmental Learning Management System (ELMS).

(2) Environmental Coordinator Course (one time requirement), Environmental Learning Management System (ELMS)

(3) Hazardous Waste Handler (one-time requirement). Register using the Environmental Learning Management System (ELMS).

(4) First Responder Operations (FRO) Course (one-time requirement). Register using the Environmental Learning Management System (ELMS).

(5) General Environmental Awareness or Hazardous Communication Training (annual requirement). Request training to Base Safety.

(6) Procedures for Handling Hazardous Materials including Hazardous Waste (annual requirement), Unit Environmental Compliance Coordinator.

(7) Procedures for coordinating with Emergency Response Agencies (annual requirement), Unit Environmental Compliance Coordinator.

(8) Use of Emergency Response Equipment under the Business Control (annual requirement), Unit Environmental Compliance Coordinator.

(9) Emergency Response Plan Implementation (annual requirement), Unit Environmental Compliance Coordinator.

(10) Hazardous Waste Handler Refresher (annual requirement), Unit Environmental Compliance Coordinator.

(11) First Responder Operations (FRO) Course (one-time requirement), Formal Course. Register using the Environmental Learning Management System (ELMS).

(12) Respirator Training (annual, only if the unit has a Respirator Program). Request training to Base Safety.

(13) Environmental Awareness for S-3/S-4 Officers and SNCO's (one time requirement), Environmental Learning Management System (ELMS).

(14) Underground/aboveground Storage Tank Compliance (one-time requirement if applicable), Environmental Learning Management System (ELMS).

(15) Monthly Base Environmental Compliance Coordinators Meeting: All meetings are held at Bldg. 2282 aboard Camp Pendleton and commence at 1330. Meetings are scheduled every second Tuesday of each month. The units aboard 29 Palms shall attend the monthly ECC meeting at the NREA Office MCAGCC 29 Palms.

(16) Spill, Hazmat and Response Planning (SHARP) Training (one-time requirement) - Division Environmental Chief/ G-7.

(17) Battery Charging and Storage Course (one-time requirement), Environmental Learning Management System (ELMS).

(18) Environmental Management System (EMS) Training (one-time requirement), Environmental Learning Management System (ELMS).

d. DESIGNATED ACCUMULATION SITE SPILL RESPONSE TEAM MEMBERS (8 CCR SECTION 5192).

(1) First responders at the operational level are individuals who respond to release or potential releases of hazardous substances as part of the initial response to the site for the purpose of protecting nearby persons, property, or the environment from effects of the release. They are trained to respond in a defensive fashion without actually trying to stop the release. Their function is to contain the release from a safe distance, keep it from spreading, and prevent exposures.

(2) Well versed in the Accumulation Site Emergency Response Plan (ERP).

(3) Training shall not exceed Level D protection. This is to ensure that personnel are not involved in spill situations when special equipment is not available for use.

(4) Specific training requirements:

(a) Hazardous Waste Handler.

(b) First Responder Operations (FRO) Course.

(c) Hazardous Waste Handler Refresher.

(d) First Responder Operations (FRO) Refresher.

3002. HAZARDOUS MATERIALS USERS.

1. Training requirements take time to complete but are mandatory and prevent fines and negligent situations. Personnel will be assigned to Environmental billets for a minimum of one year to allow sufficient time to complete the required training and sufficient understanding to be effective.

2. Personnel handling hazardous materials on assigned missions often believe that health and safety concerns do not apply resulting in the disposition of either the residue or container as hazardous waste not given appropriate consideration. Workplace exposures to chemicals are more direct and concentrated than environmental exposures to the general population. Workers encounter hazardous chemicals such as solvents, paints, or cleaners routinely. Therefore, the term Hazardous Chemicals encompasses a larger universe of substances regulated at lower levels.

3. Division personnel use hazardous materials numerous times every day. It is not realistic to attempt identification of all positions and billets. Some examples are: NBC Defense storage areas, supply, maintenance storage areas, armories, motor transport areas and medical facilities. For all routine users of hazardous materials and defined storage areas of hazardous materials, personnel will received the following minimum levels of training:

a. Introduction to Hazardous Materials and Hazardous Waste Course (one-time requirement) on MarineNet.

b. Environmental Coordinator Course (one time requirement).

c. Hazardous Waste Handler (one-time requirement) on MarineNet.

d. First Responder Operations (FRO) Course (one-time requirement) on MarineNet.

e. General Environmental Awareness or Hazardous Communication Training (annual requirement) on MarineNet.

f. Procedures for Handling Hazardous Materials including Hazardous Waste (annual requirement) on MarineNet.

g. Procedures for coordinating with Emergency Response Agencies (annual requirement) on MarineNet.

h. Use of Emergency Response Equipment under the Business Control (annual requirement) on MarineNet.

i. Emergency Response Plan Implementation (annual requirement) on MarineNet.

- j. Hazardous Waste Handler Refresher (annual requirement) on MarineNet.
- k. First Responder Operations (FRO) Course (one-time requirement) on MarineNet.
- l. Respirator Training (annual, only if the unit has a Respirator Program) on MarineNet.
- m. Underground/aboveground Storage Tank Compliance (one-time requirement if applicable) on MarineNet.
- n. Battery Charging and Storage Course (one-time requirement) on MarineNet.
- o. Any other training related to the assigned billet.

3003. TRAINING SOURCE.

- 1. 1st Marine Division:
 - a. Environmental Director.
 - b. Environmental Chief.
- 2. Environmental Security Department, Training Section.
 - a. Base Environmental Training Section (Camp Pendleton).
 - b. Natural Resources and Environmental Agency (MCAGCC 29 Palms).

CHAPTER 4

SPILL RESPONSE CRITERIA

	<u>PARAGRAPH</u>	<u>PAGE</u>
GENERAL REQUIREMENTS	4000	25
SPECIFIC REQUIREMENTS	4001	25

CHAPTER 4

SPILL RESPONSE CRITERIA

4000. GENERAL REQUIREMENTS.

1. Reference (d) directs procedures for hazardous and extremely hazardous substance release reporting. Reference (e), paragraph 7c (3) establishes prompt notification to Base Environmental Department or the Natural Resource and Environmental Agency Office of any spills or releases of hazardous substances. Notification to the 1st Marine Division Environmental Chief (G-7) will be accomplished immediately thereafter. Reference (e) paragraph 7f (4) further establishes that the Base Fire Chief will provide initial emergency response to hazardous substance releases aboard the installation. Appendix F will be submitted to the Pollution Prevention Section (Camp Pendleton) or the Natural Resources and Environmental Agency Office (MCAGCC 29 Palms) on any spills or releases of hazardous substances.

2. Identified Accumulation Sites and all hazardous material issue/storage areas will maintain a limited incidental spill response capability. Personnel will be trained as identify in Section III. The minimum number of personnel assigned to the spill response team will be determined by the quantity of hazardous material or hazardous waste stored at the Accumulation Site or maintained in the satellite units of the Accumulation Site. Spill Response Team Identification Rosters will be submitted to the Division Environmental Chief (G-7) with a copy to Base Environmental Security Department, Spill Prevention and Planning Section on a quarterly basis, NLT the 5th working day of the quarter.

4001. SPECIFIC REQUIREMENTS.

1. Incidental spills or releases of hazardous substance that can be absorbed, neutralized, or otherwise controlled at the time of release by personnel in the immediate release area are not considered to be emergency responses (29 CFR 1910.120), but still need to be reported to the installation if the spill exceeds five (5) gallons. Maximum capability will consist of identification and containment of hazardous substances when personnel will not be endangered. Repackaging of spilled hazardous substances will be accomplished when quantities are at a manageable level. Determination of a manageable level will be based on the specific type of hazardous substance spilled or released and the criteria established on the applicable SDS.

2. Personnel will not respond to any spills or releases when the type substance is unknown, type of hazardous material or hazardous waste SDSs require a protection level greater than category D, or the Permissible Exposure Limit (PEL) may be exceeded as specified in the SDS. When the PEL is not specified on the SDS, notification to the

Base Fire Chief will be made and personnel will remain outside of the spill area.

3. Spill response kits will be established at all 60 day hazardous waste storage sites, satellite accumulation points, and hazardous material issue/storage areas. Quantity and type of containment requirements will be determined by the specific hazardous material/waste. SDSs dictate appropriate absorption or pick-up materials required and proper personal protective equipment (PPE) and health safety equipment.

CHAPTER 5

HAZARDOUS WASTE SITES

	<u>PARAGRAPH</u>	<u>PAGE</u>
GENERAL	5000	29
PURPOSE	5001	29
HAZARDOUS WASTE	5002	29
GENERATORS	5003	30

CHAPTER 5

WASTE SITES

5000. GENERAL. The Resource Conservation and Recovery Act (RCRA) addresses the dangers of improper storage of hazardous waste. The requirements vary considerably depending on the category of the party storing the hazardous waste. Regulations make an important distinction between the generator's practical need to hold hazardous waste until the transporter comes to pick it up "accumulation" and cases where hazardous waste must be stored for a long period of time "storage" (i.e., not longer than 60 days as per MCB Camp Pendleton's more stringent program).

5001. PURPOSE.

1. Consolidation of hazardous waste to a central collection point reduces costs associated with disposal. These costs are reduced by ensuring containers are filled to capacity (minus outage) prior to disposal, reducing filler quantities, and possible recycling many items. Hazardous material identified by the user as hazardous waste may be utilized in other means, eliminating the "waste" altogether.

2. 60 day hazardous waste storage sites and associated satellite accumulation points are established at each Regiment and separate Battalions. Area Commanders are identified as the controller. Procedures will be developed that are consistent with references (a) through (e).

5002. HAZARDOUS WASTE AREAS DEFINED.

1. Two distinct categories of hazardous waste areas are identified: 60-day hazardous waste storage sites and 180-day satellite accumulation points. Transportation aboard MCB Camp Pendleton from a satellite accumulation point to a 60 day hazardous waste storage site or one 60 day hazardous waste storage site to another 60 day hazardous waste storage site WHILE NOT LEAVING THE CONFINES OF CAMP PENDLETON (i.e., transportation of hazardous waste on I-5 IS NOT AUTHORIZED IN ANY INSTANCE) is not regulated by Department of Transportation (DOT), 40 CFR or Title 22 Regulations and use of a Uniformed Hazardous Waste Manifest is not required. Transportation of hazardous waste external of MCB Camp Pendleton or MCAGCC 29 Palms must be in accordance with all applicable regulations. The owning units of hazardous materials are designated as generators (40 CFR 262.34). Generators are limited to storage periods not to exceed 60 days at hazardous waste storage sites or 180 days at a satellite accumulation point. No storage of hazardous waste beyond the 60 day/180 day time frame is authorized aboard Camp Pendleton. 1st Marine Division Units will only transport hazardous waste from their satellite accumulation points to their designated 60 day hazardous waste storage site.

5003. GENERATORS.

1. Generators must follow regulations governing the management of containers for onsite accumulation as defined in 40 CFR 262.34 and Base-mandates requirements meeting the State of California, Health and Safety Code. The accumulation regulations apply only to generators and represent an exception to the general rule which requires a RCRA permit for storage of hazardous waste. Some of the requirements are identified as follows:

a. Hazardous waste storage time limits:

(1) Hazardous waste storage site; 60-days MCB Camp Pendleton, 90 days MCAGCC 29 Palms.

(2) Satellite accumulation points; 180-days MCB Camp Pendleton, 90 days at MCAGCC 29 Palms.

(3) Universal waste (i.e., lithium batteries, alkaline batteries, fluorescent light tubes, e-waste, ect.); 1 year.

(4) Treated Wood Waste (i.e., ammo crates, railroad ties, telephone poles, ect.); 90-days.

(5) Waste tires (to include run flats up to 50 tires per site); 1 year.

b. Marking Regulations (CCR Title 22, section 66262.35F3) delineates and require marking of all containers of hazardous waste.

(1) Drums/containers containing hazardous waste must be marked clearly with the words "Hazardous Waste" while being accumulated on site, and to be clearly marked with the "accumulation start date" of when the generator began accumulating waste in the drum/container (i.e., 1st drop placed into the drum/container). Additionally, the units address, phone number, contents/composition of the drum/container, physical characteristics and hazard classification must be identified on the marking.

(2) The marking must be clearly visible while the drum/container is in the accumulation areas so that ECC, AECC, Base inspectors and/or regulatory agency inspectors can conduct inspections accordingly.

c. The satellite accumulation point and the hazardous waste storage site must be in the same vicinity (i.e., unit fence line/jurisdiction).

d. Drum/Container management during accumulation.

(1) The container must be kept closed except when adding or removing waste.

(2) Ignitable hazardous waste containers must be properly grounded.

(3) Containers must be DOT approved and serviceable with no rust or dents that compromise the integrity.

e. Regular training as outlined in para 3001.

f. Separation of incompatible materials.

g. Hazardous Material Management System (HMMS).

h. Safety Data Sheet (SDS).

i. Weekly documented inspections utilizing Appendix D.

j. Satellite Accumulation Points must follow additional requirements to comply with State regulations:

(1) The container must not be larger than 55 gallon capacity and be compatible with the waste streams held inside.

(2) No more than one drum of each compatible waste stream may be held at the Satellite Accumulation Point any given time.

(3) The hazardous waste containers must be located at or near the point of generation where the waste is generated.

(4) The container must be marked with the Satellite Accumulation Start Date when 1st drop of hazardous waste is placed into the drum/container. The container may be stored for no more than 180-days from that date or until the container is full (minus head space). All other marking requirements as outlined in para 5003 (c) must be identified as well.

(5) When the container is "full" or the satellite accumulation point storage time limit of 180-days is met the generator has three days to move the waste from the satellite accumulation point to the 60-day hazardous waste storage site. The generator CANNOT fill another drum of this hazardous waste stream until the full drum has been moved. No more than 55 gallons of a compatible hazardous waste stream can be maintained at a satellite accumulation point at any time per State and Federal environmental laws.

CHAPTER 6

HAZARDOUS MATERIAL MINIMIZATION PROGRAM

	<u>PARAGRAPH</u>	<u>PAGE</u>
GENERAL	6000	34
REQUIREMENT	6001	34
HAZARDOUS MATERIAL CONTROL	6002	35
PROCUREMENT	6003	35
CONSOLIDATE ISSUE POINTS	6004	35

CHAPTER 6

HAZARDOUS MATERIAL MINIMIZATION PROGRAM

6000. GENERAL.

1. A hazardous material is any product listed in 49 CFR, Sections 100-199. Most of the regulated chemicals are listed by name, sometimes by product type (batteries), in the DOT Hazardous Material Table (49 CFR 172.101). More than 16,000 items have been identified as a substance or material in a quantity or form which may pose an unreasonable risk to safety, health, and property.
2. Hazardous materials require a SDS per 29 CFR 1910.1200 during and use, treatment handling, packaging, storage, transportation, dismissal, meets or has components which meet or have the potential to meet the definition of a hazardous waste as defined by 40 CFR 261, Subparts A, B, or D.
3. Proper management of hazardous materials will reduce the hazardous waste stream, creating a reduction in disposal costs.

6001. REQUIREMENT.

1. Reference (c) implements policy guidelines, assigns responsibilities and prescribes procedures for HMPP. It further states "Tenant commands and organizations shall develop their HMPP plan to support and augment the host command/installation's HMPP program." Each plan shall at a minimum:
 - a. Incorporate HMPP in all phases of new systems from concept through design, production, deployment, operation, and ultimate disposal and in modified systems.
 - b. Include pollution prevention assessments in the testing and evaluation of new and modified systems.
 - c. Modify functional are efforts, procedures, guidance documents, or common practices to improve the way hazardous material or the problems caused by hazardous material are managed.
 - d. Eliminate, to the extent practicable, use of hazardous materials through substitution of non or less hazardous materials.
 - e. Improve material management practices to minimize the quantities and types of hazardous materials stored and used on installations.
 - f. Follow appropriate Marine Corps procedures for identifying, tracking, storing, handling, and disposal of hazardous material in cases where its use cannot be avoided. Users shall apply best

management practices that avoid harm to human health and the environment.

2. 1st Marine Division will establish a program to reduce the volume and toxicity of waste generated, determined to be economically practicable, and select the practicable method of treatment, storage, or disposal currently available which minimizes the present and future threat to human health and the environment.

6002. HAZARDOUS MATERIAL CONTROL. Effective hazardous material control methods at the operational level include procurement, distribution and storage, identification and user training. Hazardous material control is the easiest and most cost effective way to reduce waste. The following paragraphs are mandated to minimize hazardous material within 1st Marine Division.

6003. PROCUREMENT. Supply has the responsibility to control and monitor the procurement process to minimize materials utilized. Give consideration to environmentally safe products to replace hazardous materials or identify less hazardous materials to accomplish the same objectives. Procedures will be established to identify materials to effectively replace hazardous materials.

6004. CONSOLIDATE ISSUE POINTS.

1. All commands will consolidate down to the lowest level hazardous material issue/storage points to ensure that only necessary hazardous materials are procured and issued. This is proven effective means to reduce cost severally in several areas without reducing capabilities. For example, a battalion consolidated all paint products into a singular issue/storage point and reduced procurement costs per quarter to \$500 on the average including repainting all embark boxes upon returning from UDP. All paint products were used vice half empty cans being stored throughout the battalion areas, waste diminished to empty cans vice old unusable paints or inadequate spray nozzles from internal hardness. Paint waste generated and disposal costs for FY-92 are recaptured as follows:

DESCRIPTION	WEIGHT (LBS)	DISPOSAL COST
Paint, Carc	851	\$2,204
Paint, Enamel	5900	\$8,024
Paint, Latex	1612	\$1,564
Paint, Misc	2514	\$3,419
Paint, Spray (NOT EMPTY)	1700	\$2,684

Unusable paint designated as waste, cost in excess of \$17,000 during FY-92. There is more uncontrolled paint throughout the division than is available for procurement at CMSC. Various other commodities, i.e. non depleted batteries, are in the same situation. Batteries are expended without testing for usable life remaining. The assumption is made that once a battery is used, no matter what time length expended,

the battery is fully discharged and disposed of accordingly. Procedures must be established to rectify this situation. Incorporating the use of a battery tester will identify whether the battery is "good" or "bad", signifying if usage is still available. Utilizing the battery to the fullest extent will reduce procurement and disposal costs.

2. Various issue points will be required, (i.e. battery issue/storage lockers, paint issue/storage lockers, housekeeping issue/storage lockers, issue/storage lockers for administration supplies etc.). Material issue/storage points will not be waste accumulation areas and segregation must be maintained. Each consolidated issue/storage point will maintain at a minimum the following:

a. Minimum access and designated issue personnel appointed in writing.

b. Inventory of all hazardous materials on hand, date issued, quantity used, quantity returned, disposition of containers (i.e. hazardous waste, normal trash or recycled). Appendix G will be utilized.

c. Centralized issue/storage points will maintain a minimum quantity on-hand to satisfy required uses. It is not intended that these issue/storage points become miniature CMSCs. Identify requirements and quantities of hazardous materials needed to accomplish specific unusual task prior to procurement of large quantities. Quantities stored should not exceed a two-week cycle prior to complete use of the product.

d. An emergency response locker will be part of the issue/storage locker with the capability to control and rectify any incidental spills or releases of hazardous materials maintained.

e. Maintain SDSs for each identified hazardous materials on hand.

f. Establish ERP for the issue/storage point (Reference c, 5a2(f))

g. Proper training as identified in section III for Hazardous Material Users.

h. Issue/storage areas clearly identified as Hazardous Material storage areas and appropriately marked.

i. Compatible hazardous materials stored together and clearly marked.

j. Designated Accumulation Sites (Appendix C) establish procedures for the management of hazardous waste by products (containers).

k. Restricted procedures for procurement of hazardous materials from CMSC or through the supply system established so that specific issue/storage points are the only authorized procurement sources through the unit's S-4 or supply.

CHAPTER 7

FIELD SITE REQUIREMENTS

	<u>PARAGRAPH</u>	<u>PAGE</u>
GENERAL	7000	38
GENERAL REQUIREMENTS	7001	38
SPECIFIC REQUIREMENTS	7002	39

CHAPTER 7

FIELD SITE REQUIREMENTS

7000. GENERAL.

1. Proper planning for the management of hazardous materials and hazardous waste residue during the concept of initial planning for field evolutions is critical. Expeditionary means of containment for hazardous liquids, segregation of incompatible substances (lithium and magnesium), designated accumulation areas for hazardous waste, and numerous other considerations are required.
2. During the concept of operations planning, a multitude of environment restraints related to hazardous materials and hazardous waste can be overcome without influencing mission integrity. Special areas are designated for ammunition storage points (ASP), incorporating special requirements. Hazardous material/waste accumulation areas should receive equal consideration.
3. It is the responsibility of the unit to plan accordingly for accidental discharges of hazardous liquids and react accordingly. This should include planning for Petroleum, oil and Lubricant (POL) spills, (cracked transmission case leaking 3 gallons of fluid) or over fueling from jersey cans into generators creating a spill contributed by overflow. By proper planning, many "accidental" spills can be prevented.
4. Field training sites located off of Camp Pendleton may have specific requirements. Marine Corps Combat Center Twenty-Nine Palms establishes essentials in reference (a). Training conducted in other states or on Land Bureau of Management (LBM) property must be considered when planning for hazardous material or hazardous waste preconditions.

7001. GENERAL REQUIREMENTS.

1. Ensure procedures are established for management of hazardous material in a field environment. Consideration must be given for the area of operations.
2. Develop an Emergency Response Plan (ERP) for field evolutions, to include designated hazardous material/waste site layout plans and incorporating appropriate safety measures.
3. Ensure hazardous waste is identified and disposed of in accordance to applicable laws and regulations where the field operation is conducted.

7002. SPECIFIC REQUIREMENTS.1. Hazardous Materials.

- a. Segregation by compatible substances.
- b. Secondary containment for liquids capable of holding 110% of the total liquid stored for use (i.e. 55 gallons require 61 gallon containment area).
- c. Internal/external communication, identified spill warning system.
- d. Bulk items stored on pallets (steel/plastic preferred).
- e. Emergency Response Spill response kit established for specific type materials on site.
- f. Personal protection for type of hazardous material encountered.
- g. Generic field site plan that outlines emergency response procedures.
- h. Safety Data Sheets (SDSs).
- i. Appropriate fire extinguishers.
- j. Proper labeling of hazardous materials.
- k. Contained water source for eye wash station if required for type hazardous material on site.
- l. Limited Access.
- m. Area identified as a hazardous material storage area.

2. Hazardous Waste.

- a. An area identified as hazardous waste storage site is segregated from the units hazardous materials storage area. Both areas may be in close proximity and share common required items, (i.e. communication equipment and safety equipment).
- b. Secondary containment for liquids.
- c. All waste drums/containers are properly marked as defined in para. 5003 (c) of this order.
- d. Limited Access.

e. Proper trained personnel assigned to area with spill response capability.

3. Possible hazardous materials located in field sites that may be designated as hazardous waste. This list is not all inclusive.

- a. Meal Ready to Eat (MRE) heating packets.
- b. New and spent lithium batteries.
- c. Unleaded fuels, diesel fuel, white gas, kerosene.
- d. Petroleum, oils, lubricants, anti-freeze, automatic transmission fluid.
- e. Unserviceable tires, electronic waste (E-Waste).

CHAPTER 8
INSPECTIONS

	<u>PARAGRAPH</u>	<u>PAGE</u>
GENERAL	8000	43
INSPECTION TYPE	8001	43

CHAPTER 8

INSPECTIONS

8000. GENERAL. Hazardous waste management and hazardous material programs are routinely inspected for compliance by numerous sources, ranging from County of San Diego, Hazardous Materials Division, California Environmental Protection Agency (EPA) to Inspector General, Headquarters Marine Corps. Checklists are disseminated by each respective agency.

8001. INSPECTION TYPE.

1. Inspector General, Headquarters Marine Corps has incorporated the Hazardous Material Prevention Program into the Environmental Management IGMC checklist. Areas identified are minimization programs, training, waste management, and hazardous material.
2. The County of San Diego, Hazardous Materials Division (HMD) conducts inspections on a 24 month cycle. These inspections are sanctioned by the State of California, Department of Toxic Control (DTSC) in the State's Certified Uniform Program Agency (CUPA) Inspection Program. Under CUPA inspections are centralized around hazardous waste management and proper storage procedures. Regulations are determined by CCRs. CUPA certified agencies can levy fines based on the seriousness of the violations and may also "shut down" licensed facilities. CUPA agencies will utilize the appropriate county District Attorney when establishing a case to determine noncompliance with environmental law. Accumulation Sites are emphasized during this inspection.
3. The Environmental Security Department (Inspection and Compliance Branch, Inspections Section) conducts annual inspections of all generators of hazardous waste aboard Camp Pendleton. These inspections are no-notice type inspections in keeping with the Commandant of the Marine Corps inspections policy to afford the maximum opportunity for MCB Camp Pendleton to obtain a true picture of environmental status prior to a regulatory inspection. Areas inspected can be environmental documentation/records, hazardous waste management/storage, air pollution controls, underground and above ground storage tanks, and all pertinent environmental permits.
4. Inspectors are assigned specific areas of Camp Pendleton. If there is conflicting guidance between Inspections Section and the Environmental Security Department, Hazardous Waste Section contact the Division Environmental Chief (G-7) for resolution prior to correcting discrepancies identified. Division Environmental Chief (G-7) will coordinate with all sections to resolve the conflict. Technical

Assistance Visits (TAV) may be scheduled through the Base Environmental Security Department, Inspections Section or Division Environmental Chief (G-7).

ENCLOSURE A

DEFINITIONS

ABSORPTION - The taking up of matter in bulk by other matter.

60 DAY HAZARDOUS WASTE STORAGE SITE - Is the temporary holding of hazardous waste prior to treatment, storage, or disposal. Not to exceed 60 days.

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act gives EPA authority to require reporting of hazardous substance releases and to require cleanup for contamination caused by hazardous substances.

CFR - The Code of Federal Regulations, a document containing all finalized regulations.

CONTINGENCY PLAN, (EMERGENCY RESPONSE PLAN) (BUSINESS PLAN) - A document establishing an organized, planned and coordinated course of action to be followed in case of fire or explosion or a release of hazardous waste or hazardous waste constituents from a treatment, storage, or disposal facility that could threaten human health or the environment. This can include hazardous material being stored for use prior to being designated as a hazardous waste.

FACILITY - All contiguous land, structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage, or disposal operation units, (e.g. one or more landfills, surface impoundments, or a combination of them).

GENERATOR - Any person/unit who first creates a hazardous waste, or any person/unit who first makes the waste subject to the Subtitle C regulation (e.g. imports a hazardous waste, initiates a shipment of a hazardous waste from a TSD facility, or mixes hazardous waste of different DOT shipping descriptions by placing them into a single container).

HAZCOM - Hazard Communication. The responsibility of managers concerning possible hazards in workplace and notification of hazards and necessary precautions for their employees.

HAZARDOUS MATERIALS - Any materials, including substances and wastes, which may pose an unreasonable risk to health, safety, property, or the environment, when they exist in specific quantities and forms.

HAZMIN - Hazardous Waste Minimization. Those efforts taken to reduce hazardous waste.

HAZARDOUS SUBSTANCE - Under CERCLA, any element, compound, mixture, solution, or substance which, when released into the environment, may present substantial danger to public health/welfare or the environment.

HAZARDOUS WASTE - Waste which, if improperly managed, can create a risk to the safety or health of people or to the environment. EPA considers hazardous waste a subset of both solid waste and hazardous materials.

PEL - Permissible Exposure Limit. An exposure limit that is published and enforced by the Occupational Safety and Health Administration as a legal standard.

RCRA - Resource Conservation and Recovery Act of 1976. RCRA is an amendment to the solid Waste Disposal Act of 1965. RCRA was amended in 1980 and most recently on Nov 1984 by HSWA (Hazardous and Solid Waste Amendments). Sovereign Immunity was waived for RCRA violations in 1992 and subsequently allows the federal government to hold an individual accountable for hazardous waste violations by law. RCRA sets standards and procedures for solid and hazardous waste management.

RECYCLING - The process by which recovered materials are transformed into new or usable products.