

## CHAPTER 14

### SOLID WASTE MANAGEMENT AND RESOURCE RECOVERY ASHORE

#### 14-1 Scope

**14-1.1** This chapter identifies solid waste management, affirmative procurement, waste prevention, recycling, policy, and responsibilities within the United States, the Commonwealth of Puerto Rico, Guam, American Samoa, U.S. Virgin Islands and the Commonwealth of the Northern Marianas Islands. The requirements do not apply to ships at sea, aircraft in the air, and forces on maneuvers. Chapter 18 discusses Navy policy for overseas installations.

D)

R) **14-1.2** Chapter 12 discusses the management of Hazardous Waste (HW) while Chapter 9 covers reclamation and recycling of used oils. Chapter 19 discusses the handling of solid wastes aboard ship.

#### 14-1.3 References. Relevant references are:

a. 29 CFR 1910, Occupational Safety and Health Standards;

b. 40 CFR 247, Guidelines for Procurement of Products that Contain Recycled Material;

c. NFESC UG-2003-ENV, Qualified Recycling Program (QRP) Development Guide; (NOTAL);

d. DOD Memorandum, 18 August 1993, DOD Personal Property Disposal and Recycling. Guidance for personal property disposal and recycling operations; (NOTAL);

e. 40 CFR 246, Guidelines for Source Separation for Materials Recovery;

f. 40 CFR 243, Guidelines for Solid Waste Storage and Collection;

g. 40 CFR 262.11, Hazardous Waste Determination;

h. 40 CFR 245, Guidelines for Resource Recovery Facilities;

i. DOD Memorandum, 28 September 1993 Policy for DOD Recycling Clarification of scrap metal classification; (NOTAL);

j. 32 CFR 172 (DOD Instruction 7310.1 of 10 July 1989), DOD Regulations for the Disposition of Proceeds from Sales of Surplus Property;

k. NAVFAC Design Manual 5.10, Civil Engineering Solid Waste Disposal; (NOTAL); (D)

l. 40 CFR 268, Regulations on Land Disposal Restrictions;

m. NAVFACENGCOM MO 213, Guidance on Solid Waste; (NOTAL);

n. 40 CFR 257, Regulations on Criteria for Classification of Solid Waste Disposal Facilities and Practices;

o. 40 CFR 258, Criteria for Municipal Solid Waste Landfills;

p. DEPSECDEF Memorandum, 28 January 1983, Sales of Recyclable Materials. Interim Guidance for Establishing and Operating a Qualified Recycling Program Establishment and Implementation; (NOTAL);

q. NEESA 5.0-004, Solid Waste Management Plan (SWMP) Guide; (NOTAL) (available from NFESC); (A)

r. DOD Instruction 4715.4 Pollution Prevention, 18 June 1996 (NOTAL); (A)

s. NAVFAC P-442, Economic Analysis Handbook; (NOTAL);

t. 40 CFR 244, Guidelines for Solid Waste Management of Beverage Containers;

A) u. NFESC UG-2025-ENV, Dec. 1997, Pollution Prevention Annual Data Summary Guide.

v. DOD Instruction 7310.1 of 10 July 1989, Disposition of Proceeds from DOD Sales of Surplus Personal Property; (NOTAL);

A) w. Solid Waste Annual Report-Base (SWAR-Base), available from DESCIM, 200 Stoval St. Rm. 12549, Alexandria, VA 22332-2300 or by download from DENIX Website;

x. DRMS (Defense Reutilization and Marketing Service) Directive No. 4160.5, 21 September 1988, Recyclable Materials Sales Program; (NOTAL);

## 14-2 Legislation

**14-2.1 Federal Facilities Compliance Act (FFCA).** This law significantly expands the enforcement authority of Federal and State regulators with respect to solid and hazardous waste (HW) management at Federal facilities. FFCA requires Federal facilities to pay any nondiscriminatory fees or service charges assessed in connection with a Federal, State, interstate, or local solid or HW regulatory program.

**14-2.2 Military Construction Authorization Act of 1975.** This Act allows the proceeds from the sale of recyclable material to be credited to the installation to cover, first, the cost of the recycling operation and, second, cover costs for environmental or energy conservation projects.

**14-2.3 Military Construction Codification Act Section 6, 1982.** Amends 10 U.S.C 2577 to allow

the use of recycling proceeds for MWR installations.

**14-2.4 Occupational Safety and Health Act, 1970, 29 U.S.C. 651 et seq.** This Act assures safe and healthful working conditions for men and women by authorizing enforcement of the standards developed under the Act: by assisting and encouraging the States in their efforts to assure safe and healthful conditions; and by providing for research, information, education, and training in the field of occupational safety and health. See reference (a). OSHA is made applicable to federal facilities through Executive Order 12196. (R)

**14-2.5 Solid Waste Disposal Act (SWDA) of 1965, as amended by RCRA.** SWDA requires that Federal facilities comply with all Federal, State, interstate, and local requirements concerning the disposal and management of solid wastes. Such requirements include permitting, licensing, and reporting. The SWDA encourages beneficial reuse of wastes through recycling and burning for energy recovery. The Act also requires Federal agencies to procure EPA guideline products containing recovered materials to the maximum extent possible. The Comprehensive Procurement Guideline is codified as 40 CFR 247. See reference (b). (R)

## 14-3 Terms and Definitions

**14-3.1 Activity.** An independent command performing a specific mission having its own Unit Identification Code (UIC).

**14-3.2 Contained Disposal.** Landfilling or incineration of solid waste in a permitted facility. This is the least desirable solid waste option and ranks at the bottom of the priority list for integrated solid waste management. (A)

**14-3.3 Direct Sales.** Competitively selling recyclable materials to a vendor by the managing activity without utilizing the Defense Reutilization and Marketing Office (DRMO). (A)

- A) **14-3.4 Energy Recovery.** Steam or electrical energy produced from solid waste used as a fuel in a waste to energy plant.

**14-3.5 Facility.** For the purposes of this chapter, a facility is a contiguous piece of land with structures, other appurtenances, and improvements under common ownership or control, fenceline to fenceline.

**14-3.6 Managing Activity.** An administrative element assigned to manage a recycling program (including personnel, funds, and equipment).

**14-3.7 Office Waste.** Solid wastes generated by the every day affairs of government workers in government buildings and rooms. Excludes waste generated in cafeterias, snack bars, or other food preparation and sales installations.

**14-3.8 Office Workers.** Military and civilian personnel other than janitorial and trade specialists.

- R) **14-3.9 Qualified Recycling Programs (QRP).** A recycling program that addresses the regulations for the sale of installation-generated recycled material purchased with appropriated funds. Examples of recyclable materials include office paper, cardboard, pressboard, glass, plastics, aluminum, scrap metal, wood, textiles, carpet, food waste, beverage containers, newspaper and magazines. Commingled solid waste can be a source of recyclable materials that are separated at a materials recovery facility (MRF). An installation with a QRP can retain the revenues of scrap or other recycled materials purchased with appropriated funds. Installations without a QRP will not retain the revenues of appropriated funded scrap; revenues will be deposited to the U.S. Treasury or other designated account. Reference (c) covers issues such as: how to (guidance) and should do (policy), types of recycling programs, operational limits, funding procedures, internal controls, self audits, and ECE inspections (Chapter 20).

**14-3.10 Recyclable Materials.** Materials diverted from the solid waste stream and the beneficial use of such materials. Recyclable materials do not include precious metal-bearing scrap and those items that may be used again for their original purposes or functions without any special processing (i.e., used vehicles, vehicle or machine parts, bottles (not scrap glass), electrical components, unopened containers of unused oil or solvent). Recyclable materials do not include ships, planes, weapons, or any discarded material that must undergo demilitarization or mutilation prior to sale.

**14-3.11 Recycling.** The result of a series of activities by which materials that would become or otherwise remain waste, are diverted from the solid waste stream by collection, separation, and processing, and are used as raw materials in the manufacture of goods sold or distributed in commerce, or the reuse of such materials as substitutes for goods made of virgin materials. For purposes of a QRP, scrap metal is a recyclable material (reference (d)).

**14-3.12 Recycling Program.** An organized operation that requires concerted efforts to divert or recover scrap or waste from waste streams, as well as efforts to identify, segregate, and maintain the integrity of the recyclable materials in order to maintain or enhance their marketability. (A

**14-3.13 Resource Recovery.** The recovery of materials or energy from solid waste.

**14-3.14 Resource Recovery Facility.** Any physical plant that processes non-hazardous, commercial, or institutional solid waste, biologically, chemically, or physically and recovers useful products, such as shredded fuel, combustible oil or gas, steam, metal, and glass for resale or reuse.

**14-3.15 Solid Waste.** Any garbage, refuse, or sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility, and other discarded material, including solid, liquid, semisolid, or contained gaseous material (R

resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but not including solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permits under Section 1342 of Title 33, or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923) [42 U.S.C.A Sect. 2011 et seq.].

**14-3.16 Source Reduction (Pollution Prevention).** Reducing, at the point of introduction into the process, the volume or toxicity of material used before the products are purchased, used or discarded. This includes reuse of materials, items, or products prior to recycling and extension of shelf life.

**14-3.17 Source Separation.** The separation of recyclable materials at their point of generation by the generator. See reference (e).

**14-3.18 Waste Office Paper.** Letterhead, dry copy papers, miscellaneous business forms, stationary, typing paper, tablet sheets, and computer printouts and cards. Classified wastes are explicitly excluded, except as allowed by applicable security directives.

- A) **14-3.19 Waste Treatment.** Composted materials, mulch, or other products produced by composting, shredding, or chipping the organic matter in solid waste or yard (green or vegetative) waste at a composting or mulching facility. Use these products as mulch or as a solid conditioner.

## **14-4 Requirements**

**14-4.1 Solid Waste Collection and Storage.** Federal, State, and local requirements concerning collection and storage apply to military facilities generating solid wastes, whether the solid waste is collected by the military or by a non-military collector. See reference (f).

Reference (g) requires any person who generates solid waste to determine if that waste is a hazardous waste. Refer to Chapter 12 for hazardous waste determination and management requirements.

**14-4.2 Source Reduction** Federal, State, and local requirements concerning source reduction (pollution prevention) apply to Navy facilities. This technique of preventing waste is the preferred method of managing solid waste.

**14-4.3 Solid Waste Resource Recovery.** EPA, with the cooperation of Federal agencies, has surveyed Federal activities to determine installation solid waste disposal rates within Standard Metropolitan Statistical Areas (SMSA). If the total solid wastes disposed of for all Federal installations within a SMSA totals 100 tons or more per workday (equivalent to 26,000 tons or more annually) after implementation and other waste reduction procedures, and one of the agencies accounts for 50 or more tons per workday (equivalent to 13,000 tons annually), EPA will designate a lead Federal agency to plan, organize, and manage resource recovery activities for all the Federal agencies in the SMSA, reference (h).

**14-4.3.1 Resource Recovery Alternatives.** Alternatives for disposition of recovered materials include:

a. Sale of the solid wastes through the Defense Logistic Agency (DLA); examples would be the sale of refuse to a commercial or community facility that processes the waste into a fuel, or the sale of recyclable materials.

b. Use of the solid waste as a fuel or fuel supplement at a Federal installation.

c. Participation in existing or planned civilian community or commercial resource recovery facilities or systems. Where warranted, such participation may include funding a pro rata share of a community facility.

d. Donation of waste materials to a voluntary or community organization, even when the materials are located on DOD-owned, -leased, or -occupied facilities if:

(1) Materials were not government purchased or generated.

(2) Materials, while owned or generated by DOD, are uneconomical for government supported collection and disposal.

e. Direct sale of recovered material by authorized shore installations.

- R) **14-4.3.2 Recyclable Materials Sales Program.** An installation may use up to 50 percent of remaining funds for pollution abatement after payment of costs of operation, maintenance, and overhead incurred in recycling program operation. (Military Construction Authorization Act of 1975 and Military Construction Codification Act of 1982). See definition of recyclable material in paragraph 14-3.8 and references (d) and (i). Navy Working Capital Fund (NWCF) will restrict use of proceeds of the sales of industrial scrap. Generating activities will deposit the proceeds of NWCF sales to the overhead account per reference (j). They will not commingle NWCF scrap revenues with QRP revenues of non-NWCF activities except under certain conditions. See reference (c) for guidance.

**14-4.4 Solid Waste Disposal.** Local requirements apply to solid waste disposal operations on Federal property, regardless of whether Federal or other sources create the waste. Reference (k) gives base-specific solid waste disposal methods. Also, comply with local requirements for solid waste disposal operations off Federal property if the agency has direct management control of the disposal operation.

- R) **14-4.4.1 Incineration of Solid Waste.** Federal, State, and local requirements apply to incineration facilities designed to process 50 tons of solid waste

or more per day. Interpret the application of this capacity criterion to mean any facility designed to process, or which actually processes, an average of 2.1 tons or more per hour.

Installations will not exceed existing air quality or emission standards established by EPA, State, or local agencies. They will sufficiently treat all waters discharged from the facility to meet applicable effluent limitation standards. They will obtain all necessary permits.

Installations will operate an incineration facility for solid wastes in conjunction with a final land disposal facility. Land disposal is required, under EPA guidelines and applicable State regulations, for residues from the incineration operation and those non-hazardous wastes that cannot be incinerated for reasons of health, safety, or technological limitation. Installations will use only those land disposal facilities with appropriate operating permits for residues and non-combustible materials. See reference (f).

**14-4.4.2 Disposal in Military-Owned Landfills.** (R) Installations will design, construct, and operate land disposal sites to protect the health and safety of personnel associated with their operation. They will apply pertinent provisions of the Occupational Safety and Health Act and attendant regulations.

They will locate, design, construct, and operate the land disposal site to minimize environmental hazards and conform to the most stringent of applicable Federal, State, or local standards and requirements (reference (l)). Reference (m) provides guidelines for operation and maintenance of a sanitary landfill. See also references (n) and (o).

**14-4.5 Affirmative Procurement.** (R) Installations will follow affirmative procurement programs for the purchase of EPA guideline items that contain recycled materials. Section 6002 of RCRA and EO 12873 mandate and support Affirmative Procurement. The EPA guideline items include paper and paper products; vehicular, construction, trans-

portation, park and recreation, landscaping, and non-paper office products; and a miscellaneous category.

Section 6002(i) of RCRA requires the Navy to review annually the effectiveness of its affirmative procurement program and provide a report of its findings to the EPA's Office of Federal Procurement Policy (OFPP) by 15 December of each year.

#### 14-5 Navy Policy

**14-5.1 Property.** Navy installations shall consider solid waste generated by Navy operations and actions on a Navy installation as government property for purposes of disposal except in those instances where Navy exchanges and commissary stores salvage and dispose of their recoverable resources. Contractors shall treat solid waste they generate on a Navy installation under the requirements of their contracts (see reference (p)).

R) **14-5.2 Navy Solid Waste Management Disposal Programs.** All Navy installations shall develop and implement Solid Waste Management Plans (SWMPs). The SWMP is a comprehensive study of all aspects of the activity's solid waste management program. It is the essential tool for developing and maintaining a solid waste program that is in compliance with all Federal, State, and local regulations and DOD/Navy instructions. A SWMP includes legal and regulatory framework, waste characterization, existing collection and disposal systems, recycling program assessment, source reduction, record keeping, assessments of future processing and disposal facilities, education and information, institutional needs, and assignment of responsibilities for carrying out various actions required of the plan. Installations shall refer to reference (q) in developing these plans.

Installations shall design these programs as total systems that consider relative economic advantages of the latest technology as well as the potential for resource recovery. Installations shall develop SWMPs using the following priority basis:

- a. Source reduction.
- b. Recycling.
- c. Energy recovery.
- d. Waste treatment.
- e. Contained disposal.

Note that not all solid waste must be containerized prior to disposal (but must be placed in appropriately designed and constructed landfills).

**14-5.2.1** Reference (m) provides guidance on requirements, maintenance, and operation of solid waste collection, storage, disposal, recycling, and energy recovery systems. MO-213 is available from NAVICP, P.O. Box 2020, 5450 Carlisle Pike, Mechanicsburg, PA 17055-0788.

**14-5.2.2** Navy shore activities must achieve DOD solid waste reduction and recycling goals, known as Measures of Merit (MOM), reference (r). The Department of Defense has established a solid waste reduction goal of reducing by 50 percent the amount of solid waste generated in 1992 by the end of 1999. To achieve this goal, shore activities will have to increase source reduction, recycling and composting. The Solid Waste Annual Report software and Pollution Prevention Annual Data Summary (P2ADS) tracks this goal. (A)

**14-5.3 Source Reduction.** Shore activities shall incorporate the following in Navy source reduction or pollution prevention programs, where feasible: (R)

a. Reduction of packaging, especially where packaging is used for attractive merchandising or convenience functions. (D)

b. Good housekeeping or best management practices.

c. Employee training.

- d. Process modifications.
- e. Procurement of materials that generate less solid waste.
- f. Reduction of waste generation in the office by:

- (1) Reusing materials (i.e., file folders, paper clips, interoffice routing envelopes, etc.).

- (2) Dual-sided copying.

- (3) Using electronic mail instead of paper memos.

- (4) Reduced mailing and distribution lists.

- (5) Duplex Printing.

A) g. Maximum use of the General Supply Administration (GSA) supply system for paper and paper products.

- h. Any reasonable mechanism that successfully avoids, prevents, or reduces solid waste at the source.

#### **14-5.4 Solid Waste Resource Recovery**

R) **14-5.4.1 Recycling.** Navy installations shall comply with Federal, State, and local recycling laws, regulations, and policies. All Navy installations, except small, isolated facilities such as reserve centers, shall implement source separation for recycling and develop a single authorized QRP. All tenant activities shall participate in the host activity's QRP. Obtain proceeds from installations for materials to be sold through the host activity's QRP. Industrial funded activities shall operate a separate authorized recycling program for materials purchased with industrial funds. Commissary and Navy exchanges may operate authorized recycling programs outside of a QRP. Reference (s) provides guidance for the establishment or aboli-

tion of resource recovery and source separation programs. Construction, repair, and demolition contracts awarded by contracting officers at naval installations shall evaluate and determine the extent of recycling, reuse, and composting required for the project.

An installation shall establish a recycling program for the following purposes:

- a. To comply with Federal, State, and local environmental laws and regulations.

- b. To reuse readily available resources.

- c. To avoid excessive costs for disposal of solid waste by other means (cost avoidance).

- d. To reduce the volume of wastes disposed of in landfills.

- e. To obtain proceeds from the sale of recyclable materials.

**14-5.4.1.1** Installations shall separate the following materials for recycling:

- a. Scrap metal (ferrous and nonferrous).

- b. High-grade paper.

- c. Corrugated containers (e.g. cardboard).

- d. Aluminum cans.

- e. Newspapers.

- f. Magazines.

- g. Office paper.

- h. Plastics.

- i. Wood.

j. Other materials as market conditions allow.

Scrap metal includes firing range-expended brass and mixed metals from firing range cleanup that do not require demilitarization. Reference (v) provides that range brass collected for direct sales must be crushed, shredded, or otherwise destroyed prior to public sale.

**14-5.4.1.2** Installations shall consider excepting from recycling the materials in paragraph 14-5.4.1.1 if Federal, State, and local regulations do not apply to the recycling of the materials and:

a. Market analyses conducted by DRMO or the managing activity indicate that the recovered materials cannot be sold; or

b. The net costs exceed net income plus avoided costs for disposal by another means. Appendix J provides cost analysis factors.

R) **14-5.4.1.3** The recycling manager should request estimation of the market for recovered materials, including estimated return from sale and length of market availability, from DRMO prior to any source separation effort.

The organization responsible for sales in each Federal agency is responsible for market research.

R) **14-5.4.1.4** The recycling manager is not restricted to the items listed in paragraph 14-5.4.1.1 but may add any suitable material to those being recycled. Installations must increase recycling rates.

The recycling manager should maintain economic analysis and market determination on file at the managing activity and incorporate the resulting information into the SWMP.

**14-5.4.2 Resource Recovery Facilities.** Installations shall consider construction of Navy resource recovery facilities only after thoroughly

studying alternative methods of processing solid wastes.

**14-5.4.3 Returnable Beverage Containers.** Navy installations in States with beverage container recovery laws already in force shall comply with State laws. The installation should bring any conflicts between Federal (reference (t)) and State requirements, as well as any situations that preclude compliance, to the attention of DCNO (Logistics).

**14-5.4.4 Records.** Each installation shall make a determination as to what actions shall be or have been taken to adopt source separation requirements. If an installation decides not to source separate, base such decision only on a fully supported rational analysis. To determine solid waste management requirements, each installation shall keep records of solid waste disposal of materials recycled. Keep records by the actual weight measurement (in tons) and also by material and product type. Each installation shall also keep records of quantities (measured by actual weight) and types of wastes that are recycled, proceeds from the sale of recyclable materials, and avoided costs for disposal, as explained in reference (m).

**14-5.4.5** After the establishment of an organized QRP, or concurrent with such program development, the installation shall coordinate with DRMO to determine whether the specific materials to be sold are actually recyclable materials. If a dispute occurs, refer the matter through the chain of command for resolution. DRMO shall sell recyclable material and return 100 percent of the proceeds for use in the installation. The managing activity can sell recycling materials through DRMO or by direct sales if major claimants grant such authority. DRMO will return net proceeds (selling price of recycled materials minus handling fees) to the QRP. The handling fee charged by DRMO is not a fixed percentage. DRMO will determine the handling fee. The cost of direct sales is an expense of the QRP.



**14-5.4.6** All Navy installations, including those which operate under Navy Working Capital Funds (NWCF), will participate in the program.

- R) **14-5.4.7** Navy installations with a qualified recycling program shall deposit proceeds from the sale of recyclable materials to \*\*F3875 "Budget Clearing Account (suspense)." Fiscal year end does not affect the accumulation of funds in \*\*F3875, so proceeds acquired during 1 fiscal year may be carried forward and merged with proceeds of subsequent fiscal years. Segregate the proceeds within the account to allow accounting as to the amounts collected and their disposition. Reference (v) details the disposition of proceeds from the sale of recycled material. Defense Environmental Security Corporate Information Management (DESCIM) and Solid Waste Annual Report (SWAR)-based (reference (w)) software is available from DESCIM for installations to manage their solid waste program and prepare their SWAR. Directions for electronic submittal of the SWAR through the Defense Environmental Network and Information Exchange Bulletin Board System (DENIX BBS) are available from NFESC.

**14-5.4.8** Installations shall first withdraw proceeds from \*\*F3875 to cover costs of operations, maintenance, and overhead for processing and handling the recyclable materials (including the cost of any equipment purchased for recycling purposes). Do not reimburse military personnel with proceeds from this account. Installations must account for all operational costs.

**14-5.4.9** If a balance remains, installations may not use more than 50 percent of that balance for projects for pollution abatement, energy conservation, and occupational safety and health activities. Do not pay for more than 50 percent of a minor construction project with proceeds from recyclable material sales. The installation shall not include pollution abatement, energy conservation, and occupational safety and health projects in the normal military construction program if sufficient

recycling proceeds are available at the installation that requires the projects.

**14-5.4.10** The installation may transfer any remaining balance to one or more of the local non-appropriated funding instruments supporting MWR activities of the installation as defined in existing DON regulations.

**14-5.4.11** If the balance of an installation's proceeds remaining in \*\*F3875 exceeds \$2 million at the end of a fiscal year, the installation shall deposit the amount in excess of \$2 million into the U.S. Treasury as miscellaneous receipts.

**14-5.4.12** Navy shore installations must achieve DOD recycling goals, reference (o). Add the amount of waste composted to that recycled for the purpose of calculating the recycling MOM goal. To achieve this goal, shore activities will have to increase source reduction, recycling, and composting. The SWAR-Base software and P2ADS track the MOM goals. (A

**14-5.5 Composting.** Shore activities shall compost organic waste as an alternative to land filling whenever possible. Compost landscaping cuttings, yard and green waste, limbs, branches, and other organic materials suitable for composting at a facility at the shore activity or at a municipal or private facility. Each shore activity shall determine the most feasible method for composting. Consider the following composting alternatives: (A

a. Establishing a backyard composting plan for housing

b. Requiring a landscaping contractor to deposit green waste at a composting facility. Records of the amount composted are then reported in the SWAR-Base software or the P2ADS, paragraph 14.5.7

c. Using a municipal or regional composting facility (regional composting facilities' tipping

fees are almost always less than landfill tipping fees).

d. Establishing a composting facility at the shore facility if municipal composting facilities are not available or feasible.

R) **14-5.6 Solid Waste Disposal.** The Navy shall not open new solid waste disposal facilities except where it is in the clear interest of the Navy.

A) **14-5.6.1** Design Navy-owned landfills to meet the most stringent of Federal, State, or local regulations and to meet the following minimum criteria:

a. Avoid constructing major structures on a completed land disposal site because of unpredictable settling and emission of entrapped methane gas.

b. Do not locate the site in an area where the attraction of birds would pose a hazard to low-flying aircraft.

c. Evaluate the hydrogeology of the site to provide for the protection of ground water resources.

d. Construct and grade the land disposal site to promote rapid surface water runoff without excessive erosion.

e. Ensure that the landfill has a double liner with a leachate collection system.

f. Construct a groundwater monitoring system for the landfill.

g. Ensure the landfill has a leachate collection, monitoring and disposal system.

**NOTE:**

Leachate may be hazardous and could require a permit to discharge.

**14-5.6.2** Installations shall not burn Navy waste materials including trash, rubbish, dunnage, garbage, construction debris, and liquid wastes, in open fires (except in limited situations as determined by health or safety considerations and with the approval of the appropriate local agency, State agency, and EPA regional office). (A

**14-5.7 Navy Solid Waste Annual Report [quarterly reporting].** All Navy shore activities worldwide that generate more than one ton per day of solid waste shall prepare an annual fiscal year report per guidance provided by the Naval Facility Engineering Service Center (NFESC) (Report Symbol DD-A&T(SA) 1485 (5090)). Mail the report to NFESC no later than 16 February following the end of the calendar year, with copies to the major claimant and EFD. Host installations shall report for their tenant activities. The report can be prepared by using the SWAR-Base software. (R

**14-5.8 Procurement of Products Containing Recovered Materials.** The Navy shall implement affirmative procurement preference programs for the purchase of products containing recovered materials. Affirmative procurement programs help recycling efforts by strengthening the markets that purchase recycled material. The Navy shall follow reference (b) and E.O. 12873. These guidelines recommend procedures for developing the programs to ensure that the specifications for, and the procurement actions taken, shall result in the increased use of recycled materials contained in the following products: (R

a. Paper and paper products.

b. Vehicular Products: lubricating oil, retread tires, and engine coolants.

c. Construction Products: building insulation, structural fiberboard and laminated paperboard, cement and concrete, carpet, floor tiles and patio blocks.

d. Transportation products: temporary traffic control devices.

e. Park and recreation products: playground surfaces and running tracks.

f. Landscaping products: hydraulic mulch, yard trimmings and compost.

g. Non-paper office products: office recycling containers and office waste receptacles, plastic desktop accessories, toner cartridges, binders and plastic trash bags.

h. Miscellaneous products: (these products are not yet listed).

A) **14-5.9 Recyclable Materials Sales Program.**

Authorize accumulation of proceeds from sales of recyclable materials only for installations that have a QRP. Reference (c) provides guidance for setting up a QRP and establishing and operating a qualified recycling program at Navy and Marine Corps installations. A QRP includes the following program requirements:

a. The activity commanding officer shall designate the managing activity. Potential managing units are the morale, welfare, and recreation (MWR) department, the environmental department, the supply department, or the public works department.

b. Means for maintaining fiscal accountability for all funds received and disbursed.

c. Maintenance of records of the quantity and types of materials sold for recycling.

d. Review of all projects funded with the proceeds of recycling sales by the same chain of command that would normally review such projects if funded from normal appropriations. An installation may notify DRMO and accumulate proceeds through the sale of recyclable materials

during the period that an activity directive is being prepared.

e. Specific implementation of recyclable material sales requirements contained in this instruction.

f. Notification of DRMO that the installation has a QRP as established by the Military Construction Codification Act and that the QRP is implemented by a directive or instruction.

g. Submit request to conduct direct sales of recyclable materials purchased with appropriate funds to the major claimant for approval. The request shall be subject to oversight by CNO (N45). Forward a copy of direct sales approval letter to CNO (N45). Managing activities with a QRP must conduct direct sales in accordance with references (j), (c) and (x) and will be subject to Environmental Compliance Evaluation (ECE), audits, inspections, and other oversights.

h. Submission of a request to conduct direct sales of recyclable materials purchased with appropriated funds per references (p) and (d) with a copy to CNO (N45) and major claimant.

**14-5.10 Solid Waste Training.** Solid waste and recycling managers should budget for and attend the annual combined services recycling workshop held during the National Recycling Coalition Annual Congress. The Army, Navy, or Air Force hosts this workshop each year. Solid waste and recycling managers from all services (Coast Guard, Defense Logistics Agency (DLA) and other Federal agencies) meet to discuss current topics relevant to recycling and solid waste management. Another solid waste training opportunity, the Annual Pollution Prevention Conference held in Washington, DC also features sessions on solid waste management and other waste reduction issues. (A

## **14-6 Responsibilities**

### **14-6.1 COMNAVFACENGCOM shall:**

- a. Be the technical focal point for solid waste management issues.
- b. Maintain appropriate technical directives, design manuals, and operation manuals concerning solid waste source reduction, collection, storage, disposal, affirmative procurement, and resource recovery.
- c. Assist, as requested, commanders and commanding officers of shore activities in developing resource recovery programs and SWMPs.
- d. Develop and maintain solid waste reporting and information collecting systems.
- e. Prepare and issue the SWAR from the information collected.
- f. Ensure that all contracts include, to the maximum extent practical, clauses or provisions that require contract deliverables that meet the affirmative procurement guidelines for recycled material content.
- g. Collect information to prepare the annual affirmative procurement program report for Office of Federal Procurement Policy (OFPP).

### **14-6.2 COMNAVSUPSYSCOM shall:**

- a. Investigate and develop methods to reduce packaging of materials supplied to the Navy.
- b. Develop specifications for the purchase of items manufactured with recyclable materials.
- c. Ensure that all contracts include, to the maximum extent practical, clauses or provisions that require contract deliverables that meet the affirmative procurement guidelines for recycled material content.

- d. Provide affirmative procurement guidance to procurement community-contract officers, purchasing agents, supply corps officers, supply department managers, and customers. The guidance should address identification of NSN, GSA, and local purchase affirmative procurement products and items, keeping records of total value of affirmative procurement items purchased and ensuring that affirmative procurement practices are followed for credit card purchases. (A)

### **14-6.3 Major claimants and subordinate commands shall:**

- a. Ensure that installations under their command, comply with current Federal requirements as well as applicable requirements of State, interstate, or local solid waste management agencies.
- b. Ensure that all contracts include, to the maximum extent practical, clauses or provisions that require contract deliverables that meet the affirmative procurement guidelines for recycled material content.
- c. Encourage installations under their command to divert solid waste from landfilling and incineration by promoting source reduction, recycling, and composting. (A)

### **14-6.4 Commanding officers of shore activities shall:**

- a. Develop SWMPs, including source reduction and recycling programs and resource recovery facilities that incorporate all Federal, State, and local requirements.
- b. Cooperate with the installation or lessor that provides solid waste collection and disposal services in the establishment of source reduction, separation programs, and affirmative procurement programs if in a tenant status.

c. Cooperate with the designated standard metropolitan statistical area (SMSA) lead agency, if in a listed SMSA.

D) d. Provide a P2ADS Report or SWAR-Base report to NFESC no later than 15 February of each year, per paragraph 14-5.7.

e. Ensure that all contracts include, to the maximum extent practical, clauses or provisions that require contract deliverables that meet the affirmative procurement guidelines for recycled material content.

**14-6.5 Commanding officers of fleet activities** shall cooperate with the host activity while in port and comply with the activity's solid waste management requirements.