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Environmental Quality
INTEGRATED SOLID WASTE MANAGEMENT AT ABERDEEN PROVING
GROUND

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CHAPTER 1

GENERAL PROVISIONS

1-1. PURPOSE. This regulation specifies policies, assigns responsibilities, and establishes procedures for the management, and disposal of nonhazardous solid waste; including used oil, oil contaminated soil, special medical waste, investigation derived materials and remediation derived wastes generated at Aberdeen Proving Ground.

1-2. SCOPE. This regulation applies to U.S. Army Garrison, Aberdeen Proving Ground (USAGAPG), post tenant organizations, and contractors that generate, handle, store, treat, dispose, or otherwise manage nonhazardous solid waste at Aberdeen Proving Ground.

a. The Resource Conservation and Recovery Act (RCRA) does not directly define nonhazardous solid waste, but instead uses a two-part test to first determine if a waste is solid and, if so, if it is hazardous. Wastes that meet the definition of a solid waste, but not the definition of a hazardous waste, are considered nonhazardous solid waste. The AR 420-49, Utility Services, defines solid waste as: "Garbage, refuse, sludge, and other waste materials not excluded by Federal regulations. Any solid, liquid, semi-solid, or contained gaseous material resulting from institutional, industrial, commercial, mining, agricultural, or community operations and activities. They are discarded or being accumulated, stored, or treated prior to being discarded. Infectious wastes are not included in this category for purposes related to recycling." For the purposes of this regulation, references to solid waste refer to nonhazardous solid waste. A complete definition of nonhazardous solid waste is contained in the glossary of this document.

b. Hazardous wastes are materials and/or chemicals requiring special disposal because they exhibit a dangerous characteristic, are the result of a specific process, and/or are identified on a list of hazardous wastes. Part 261, Title 40, Code of Federal Regulations (40 CFR 261). "Identification and Listing of Hazardous Wastes," identifies those solid wastes which are subject to regulation as hazardous waste. Additional rules and guidance for determining if a solid waste is also a hazardous waste are provided in APG Regulation 200-60.

1-3. REFERENCES. Referenced publications are listed in appendix A.

1-4. DEFINITIONS. Terms used in this regulation are explained in the glossary.

1-5. POLICIES.

a. Aberdeen Proving Ground will comply with all applicable federal, state, local, and Army regulations/guidelines. This document incorporates the applicable federal, state, local, and Army environmental regulations for the management of nonhazardous solid waste.

b. The Aberdeen Proving Ground Integrated Solid Waste Management Plan provides a management tool necessary for the proper handling of solid waste. The term "Integrated Solid Waste Management" refers to the complementary use of a variety of waste management practices to safely and effectively handle the solid waste stream with the least adverse impact on human health and the environment. The Pollution Prevention Act of 1990 ranks these waste management practices in the following hierarchy: "pollution should be prevented or reduced at the source whenever feasible; pollution that cannot be prevented should be recycled in an environmentally safe manner, whenever feasible; pollution that cannot be prevented or recycled should be treated in an environmentally safe manner whenever feasible; and disposal or other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner." Executive Order 13101 of September 14, 1998 entitled, "Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition," was signed by the President in order to improve the Federal Government's use of recycled products and environmentally preferable products and services.

(1) Consistent with the demands of efficiency and cost effectiveness, the head of each executive agency will incorporate waste prevention and recycling in the agency's daily operations and work to increase and expand markets for recovered materials through greater Federal Government preference and demand for such products. It is the national policy to prefer pollution prevention, whenever feasible. Pollution that cannot be prevented should be recycled; pollution that cannot be

prevented or recycled should be treated in an environmentally safe manner. Disposal should be employed only as a last resort.

(2) Consistent with policies established by the Office of Federal Procurement Policy (OFPP) Policy Letter 92-4, agencies will comply with executive branch policies for the acquisition and use of environmentally preferable products and services and implement cost-effective procurement preference programs favoring the purchase of these products and services.

(3) This order creates a Steering Committee, a Federal Environmental Executive (FEE), and a task Force, and establishes Agency Environmental Executive (AEE) positions within each agency, to be responsible for ensuring the implementation of this order. The FEE, AEEs, and members of the Steering Committee and Task Force will be full-time Federal Government employees.

c. Army Regulations 200-1 and 420-49 emphasize source reduction, reuse, recycling, and disposal of nonhazardous solid waste. Aberdeen Proving Ground's solid waste program is consistent with the Army guidance and has established an integrated solid waste management plan. Aberdeen Proving Ground's Integrated Solid Waste Management Plan incorporates waste prevention and recycling in the daily operation of the base and insures compliance with the policies that require the acquisition and use of environmentally preferable products and services.

d. The receipt of any nonhazardous solid waste or special medical waste generated outside of Aberdeen Proving Ground is strictly prohibited unless directed otherwise by the Installation Environmental Quality Coordinator.

e. A solid waste generator is responsible for funding disposal of their waste in accordance with environmental laws and regulations and Army requirements. The generator is also responsible for transportation and handling costs associated with their waste.

f. If the waste is suspected of being hazardous, it is the generator's responsibility to properly characterize the waste prior to disposal. Aberdeen Proving Ground Regulation 200-60 describes hazardous/nonhazardous waste characterization.

g. Portions of the Edgewood and Aberdeen Area's special medical waste will be incinerated at the U.S. Army Medical Research Institute of Chemical Defense's special medical waste incinerator. This incinerator is used for the disposal of animal bedding and carcasses, animal and human blood soaked material, anatomical material, and nonhazardous expired pharmaceuticals, which are generated on-post. Special medical wastes which are not included in these categories will be transported off-post to a licensed medical waste incinerator.

h. Aberdeen Proving Ground will maximize the use of off-post facilities for disposal of solid waste generated from in-house projects in accordance with guidance contained in AR 420-49. Building demolition, renovation, and abatement contractors will use off-post permitted facilities for proper disposal of solid waste in accordance with this regulation. Contractors will utilize all applicable disposal forms found in appendix B of this regulation.

i. This regulation emphasizes pollution prevention (also known as source reduction or waste minimization), reuse, recycling and resource recovery through an integrated solid waste management program.

1-6. REGULATORY REQUIREMENTS. The relevant regulations and guidelines relevant to solid waste management are outlined in the following sections.

a. The Resource Conservation and Recovery Act of 1976 (amended in 1980 and 1984) provides federal guidelines and standards for the environmentally sound reuse, handling and disposal of solid waste. In addition, this act requires states to incorporate these guidelines into their solid waste management programs. This act provides standards and guidelines for environmentally safe handling and disposal of both hazardous and nonhazardous solid waste. One of the objectives of the act is to encourage waste minimization activities through source reduction and the promotion of recycling and reuse of recoverable materials in solid waste, and/or conversion of waste to energy.

b. Federal regulations, laws and implementing regulations, establish overall regulatory direction and establish minimum nationwide standards for protecting human health and the environment. Title 40 of the Code of Federal Regulations,

entitled "Protection of the Environment," includes Subchapter I Solid Wastes. These regulations are set forth by the U.S. Environmental Protection Agency. The following laws and implementing regulations impact the disposal of solid waste or the siting of disposal facilities:

(1) The Comprehensive Environmental Response, Compensation and Liability Act was designed to address situations involving the past disposal of hazardous substances. It details the procedures and standards to be followed in remediating these sites. In addition, it provides a mechanism for assigning liability for environmental contamination. Portions of the Edgewood and Aberdeen Areas of Aberdeen Proving Ground are currently subject to the Comprehensive Environmental Response, Compensation and Liability Act.

(2) The Clean Air Act was passed to address the problem of controlling sources of air pollution. Although solid waste itself is not governed by this act, many energy recovery and disposal facilities are subject to the requirements of the act. Emissions from waste-to-energy facilities, landfill gases, and emissions from solid waste incinerators are all subject to at least some of the requirements of the Clean Air Act.

(3) The National Pollutant Discharge Elimination System program was established under the Clean Water Act. This program manages effluent limitations for the discharge of wastewater and runoff from solid waste management facilities into bodies of water.

(4) The Safe Drinking Water Act establishes maximum contaminant levels for the parameters included in groundwater monitoring wells.

(5) The Federal Emergency Management Act prohibits the siting of facilities within the 100-year floodplain.

(6) The Endangered Species Act affects Aberdeen Proving Ground with regards to the bald eagle population and their habitat. It forbids construction and operation of a facility that will result in the "taking" of an endangered or threatened species, or in the destruction of their habitat.

(7) The National Environmental Policy Act requires federal agencies to consider environmental factors just as they would other factors in the decision-making process. One of the key developments of the National Environmental Policy Act is the environmental impact statement that must be performed on all major actions that significantly affect the quality of the human environment. At the U.S. Army Garrison, Aberdeen Proving Ground, environmental impact statements have been performed on the Westwood and Phillips Army Airfield Rubble Landfills.

(8) Executive Order 12856, "Federal Compliance with Right-To-Know Laws and Pollution Prevention Requirements," requires each Federal agency to take all necessary actions to prevent pollution including complying with the provisions and regulations of the Pollution Prevention Act (PPA) of 1990 and the Emergency Planning and Community Right-to-know Act (EPCRA) of 1986. Each Federal installation must develop a facility-wide pollution prevention plan which outlines how the installation contribute to the agency's goal of reducing the total releases of toxic chemicals to the environment by 50 percent by December 31, 1999. To the maximum extent practicable, such reductions will be achieved through the implementation of source reduction practices.

(9) Executive Order 13101, "Greening the Government through Waste Prevention, Recycling and Federal Acquisition," establishes a national policy to prefer pollution prevention, whenever feasible, recycling when pollution can not be prevented and disposal as a last resort. Federal agencies are required to comply with executive branch policies for the implementation of procurement preference programs for the acquisition and use of environmentally preferable products and services. The Executive Order also requires each agency to initiate a program in all facilities to promote cost-effective waste prevention and recycling, and to designate a recycling coordinator for each facility or installation. The recycling coordinator will implement or maintain waste prevention and recycling programs in the agencies' action plans.

(10) Part 40, Title 40, Code of Federal Regulations (40 CFR 240). "Guidelines for the Thermal Processing of Solid Wastes," establishes minimum performance levels for any solid waste processing operation.

(11) Part 240, Title 40, Code of Federal Regulations (40 CFR 240). "Guidelines for the Land Disposal of Solid Wastes," establishes minimum performance levels for any solid waste land disposal operation.

(12) Part 243, Title 40, Code of Federal Regulations (40 CFR 243). "Guidelines for the Storage and Collection of Residential, Commercial, and Institutional Solid Waste," establishes minimum performance levels for solid waste collection operations, including storage, safety, equipment, frequency and management.

(13) Part 240, Title 40, Code of Federal Regulations (40 CFR 245). "Promulgation Resource Recovery Facilities Guidelines," provides guidelines for the recovery of resources from residential, commercial, and institutional solid wastes, including regionalization and planning techniques.

(14) Part 246, title 40, Code of Federal Regulations (40 CFR 246). "Source Separation for Materials Recovery Guidelines," establishes minimum actions for the recovery of resources from solid wastes, including high-grade paper, residential materials, and corrugated containers.

(15) Part 247, title 40, Code of Federal Regulations (40 CFR 247). "Guidelines for Procurement of Products that Contain Recycled Material," specifies recommended guidelines for procurement procedures which will bring about an increase in the use of products containing recycled materials.

(16) Part 257, Title 40, Code of Federal Regulations (40 CFR 257). "Criteria for Classification of Solid Waste Disposal Facilities and Practices," outlines criteria to determine which solid waste disposal facilities and practices pose a reasonable probability of adverse effects on health or the environment. These criteria do not apply to municipal landfills (part 258) or sewage sludge application managed in accordance with part 503. Facilities which do not meet the stated criteria are considered open dumps.

(17) Part 258, Title 40, Code of Federal Regulations (40 CFR 258). "Criteria for Municipal Solid Waste Landfills," (Subtitle D Regulations), establishes minimum national criteria for the design and operation of municipal solid waste landfills; includes location restrictions, operating criteria, design

criteria, groundwater monitoring and corrective action, closure and post-closure, and financial assurance criteria. These regulations apply to new landfills and lateral expansions of existing facilities.

(18) Part 272, Title 40, Code of Federal Regulations (40 CFR 260). "Hazardous Waste Regulations," explains all aspects of hazardous waste management including: identification; generator, transporter and treatment storage and disposal standards; land disposal restrictions; and permit requirements.

(19) Part 503, Title 40, Code of Federal Regulations (40 CFR 503). "Sewage Sludge Regulations," establishes requirements and standards for the treatment, land application, surface disposal, and incineration of sewage sludge.

c. The State of Maryland has adopted a number of laws that have a direct or indirect impact on the management of solid waste. These laws are codified under the Articles of the Annotated Code of Maryland. In response to these laws, state agencies develop administrative rules and regulations. These administrative rules and regulations are compiled as part of the Code of Maryland Regulations and are available for review at the Environmental Compliance Division, Directorate of Safety, Health, and Environment, USAGAPG. Title 8 of the Code of Maryland Regulations contains regulations of the Maryland Department of Natural Resources, which must be considered when citing and permitting a solid waste management facility. Title 8 contains regulations regarding wetlands and threatened and endangered species. The administrative rules and regulations for the Maryland Department of the Environment are contained in Title 26 of the Code of Maryland Regulations. Included under this title are the regulations governing solid waste management.

The following sections highlight some of the Code of Maryland Regulations.

(1) The Chesapeake Bay Critical Area Protection Program (1984) governs human intervention in the Chesapeake Bay drainage region.

(2) The Maryland Recycling Act (1988) established the requirement for all Maryland counties, including Harford County, to implement a recycling program by 1994 to reduce the county's solid waste stream by twenty percent. A waiver from twenty to fifteen percent will be granted to those counties that have and use resource recovery facilities.

(3) The Asbestos Hazard Emergency Response Act (1990) addresses asbestos controls and mandates the completion of a training program for individuals performing asbestos-related work within schools.

(4) Land Clearing Debris Landfills-Amount of Security (1990) establishes security requirements for each acre of land clearing debris landfills.

(5) The Natural Wood Waste Recycling Facilities (1991), establishes permitting, operating and acceptance criteria for wood waste recycling facilities.

(6) Scrap Tires Recycling Fees (1991) prohibits land disposal of scrap tires after January 1, 1994, regulates the storage of scrap tires, and establishes a tire recycling fee on new tires sold in Maryland.

(7) Composting Act (1992), prohibits the disposal of yard waste into landfills and requires counties to address composting issues in their recycling plans.

(8) Mercury Oxide Battery Act (1992), requires battery manufacturers to be responsible for collection, transportation, and recycling or disposal of batteries sold or offered for promotional purposes in the state.

(9) Code of Maryland Regulations 26.03.03, "Development of County Comprehensive Solid Waste Management Plans," requires that each county maintain a current, comprehensive solid waste plan covering the ensuing 10 year period and establishes the format for the plan.

(10) Code of Maryland Regulations 26.04.06, "Sewage Sludge Management," governs the collection, handling, burning, storage, treatment, land application, disposal, or

transportation of sewage sludge, treated sewage sludge, septage, or any product containing these materials.

(11) Code of Maryland Regulations 26.04.07, "Solid Waste Management," specifies permit, design, construction, operating, closure requirements for municipal, land clearing debris, rubble, and industrial waste landfills; processing facilities; transfer stations; and incinerators.

(12) Code of Maryland Regulations 26.04.08, "Storage, Collection, Transferring, Hauling, Recycling, and Processing of Scrap Tires," details licensing and operation requirements for scrap tire haulers, collection facilities, and recyclers.

(13) Code of Maryland Regulations 26.04.09, "Natural Wood Waste Recycling Facilities", defines natural wood waste and sets forth permit, operational, and reporting requirements for natural wood waste recycling facilities.

(14) Code of Maryland Regulations 26.09.02, "Stormwater Management," defines when stormwater management is required and details minimum control requirements, stormwater management design and inspection requirements.

(15) Code of Maryland Regulations 26.10, "Oil Pollution and Tank Management," specifies requirements for the permitting, management, handling, and reporting of oil and used oil. In addition, this section regulates above-ground storage tanks and underground storage tanks.

(16) Code of Maryland Regulations 26.11, "Air Quality," specifies air quality permitting and emission requirements, including requirements for incinerators, energy facilities, and asbestos.

(17) Code of Maryland Regulations 26.13, "Disposal of Controlled Hazardous Substances," governs hazardous and special medical waste including definitions, permitting requirements, and standards for generators, transporters, and treatment storage and disposal facilities.

d. Harford County regulates solid waste management activities through several mechanisms: the Harford County Code, the Harford County Zoning Code, and ordinances adopted by the County Council and the County Executive. Most of the ordinances

and regulations pertain to land use and zoning restrictions for solid waste facilities, disposal fees, and/or recycling plans for the county. Although they do not directly address Aberdeen Proving Ground, they impact the proving ground, since much of the solid waste generated there is recycled or disposed of through Harford County facilities. Harford County adopted Aberdeen Proving Ground's Solid Waste Management Plan into their 1994 plan. The Code of Maryland Regulations allow a county to incorporate subsidiary solid waste plans into its solid waste plan. It is the intent that the Aberdeen Proving Ground Integrated Solid Waste Management Plan remain consistent with and be incorporated into the Harford County Plan.

e. Of particular note is Bill No. 91-10 (as amended), which was introduced by the Harford County Council on February 12, 1991 and became law on March 27, 1991. This bill repealed and reenacted definitions, added general provisions for rubble landfill operations, eliminated any past exceptions extended to Aberdeen Proving Ground regarding solid waste, and added zoning standards to the district regulations.

f. Harford County Bill Number 92-94 (as amended) was introduced by the Harford County Council on December 1, 1992 and became law on January 25, 1993. This Bill amended the Harford County Solid Waste Management Plan to include Westwood Rubble Landfill, Phillips Army Airfield Rubble Landfill, and the Medical Research Institute of Chemical Defense Incinerator into this plan. The Bill also established operating conditions and reporting requirements for each of the facilities

g. The U.S. Government sets forth regulations to ensure that military activities, training centers, and operations are conducted in a manner to conserve natural resources and minimize impact to human health and the environment. Department of Defense (DOD) and Army regulations are as stringent or more stringent than federal and state regulations and often address components unique to the military environment. Some of the Army regulations influencing solid waste management and the contents of this regulation include:

(1) DOD Directive 4715.4, "Pollution Prevention," states that it is DOD policy to use an environmental management approach that "Emphasizes pollution prevention, including improvements in energy and resource utilization, as the alternative or 'first choice' in achieving compliance with

applicable environmental requirements and Executive Orders." The Directive includes the following Pollution Prevention Measures of Merit, 1) "By the end of CY 1999, reduce the disposal of non-hazardous solid waste 50% from the 1992 baseline. The amount of solid waste disposal will be measured and reported in pounds," and 2) "By the end of CY 1999, ensure that 50% of non-hazardous solid waste generated will be recycled."

(2) Army Regulation 200-1, "Environmental Quality," prescribes Department of the Army responsibilities, policies, and procedures to preserve, protect, and restore the quality of the environment. This regulation incorporates the requirement of the Federal Insecticide, Fungicide, and Rodenticide Act. The AR 200-1 includes the goals of recycling 50 percent of non-hazardous solid waste from a 1992 baseline by 1999, and reducing the disposal of non-hazardous solid waste by 50 percent from a 1992 baseline by 1999.

(3) Army Regulation 420-49, "Utility Services," includes Chapter 3 "Solid Waste Management" that establishes policy and criteria for the operations, maintenance, repair, and construction of facilities and systems for efficient and economical solid (non-hazardous) waste management including source reduction, re-use, recycling, composting, collection, transport, storage, and treatment of solid waste. This regulation requires the implementation of an installation "Integrated Solid Waste Management Plan" (ISWM) that includes:

(a) Source reduction programs to reduce the initial amount of material coming onto the installation or generated by the installation.

(b) Qualifying recycling programs (QRPs) in accordance with Military Construction Codification Act (Public Law 97-214, 10 U.S.C. 2577).

(c) Yard waste management programs encompassing minimum lawn maintenance, native planting, and organic composting.

(4) Army Regulation 420-76, "Pesticide Container Disposal," prescribes policies, responsibilities, and procedures for the handling and management of pesticide containers.

(5) Aberdeen Proving Ground Guidance for Recycling, Reuse, or Disposal of Solid Waste provides methods for recycling, reuse and/or disposal for specific nonhazardous solid wastes and some hazardous solid waste.

(6) Aberdeen Proving Ground Regulation 200-60 prescribes policies, assigns responsibilities, and establishes procedures for the management and disposal of various types of hazardous waste at Aberdeen Proving Ground.

1-7. RESPONSIBILITIES.

a. Environmental compliance is a command responsibility. Each commander will comply with all applicable environmental laws and regulations within his/her organization. Commanders/directors of tenant organizations and USAGAPG activities on Aberdeen Proving Ground will ensure environmental compliance within their commands. The installation's role is to assist the tenant organizations and other activities in achieving and maintaining compliance. The commander of the U.S. Army Soldier and Biological Chemical Command is the Installation Commander and is responsible for environmental compliance on the entire installation.

b. The Deputy Installation Commander, U.S. Army Garrison, Aberdeen Proving Ground is designated as the post's Environmental Quality Control Committee Chairperson. The Environmental Quality Control Committee's responsibility is documented in AR 200-1.

c. The Director, Safety, Health and Environment is the Installation Environmental Quality Coordinator, as defined in AR 200-1. The Director, Safety, Health and Environment, as the Installation Environmental Quality Coordinator, will:

(1) Serve as the Installation Commander's central point of contact for implementing the installation's solid waste management program and will provide the Installation Commander, Deputy Installation Commander, and Aberdeen Proving Ground staff personnel advice and assistance on all solid waste issues.

(2) Suspend, under authority granted by the Installation Commander, any project, program, test, etc. for any Aberdeen Proving Ground activity that poses a direct and

immediate threat to the environment until such threat is properly corrected.

(3) Represent Aberdeen Proving Ground in contacts with other government agencies on major policies and regulatory issues affecting installation solid waste management.

(4) Ensure that the management and disposal of solid waste meets all federal, state, local, and Army requirements and provides enforcement authority to correct all noncompliance issues at Aberdeen Proving Ground.

d. The Chief, Environmental Conservation and Restoration Division, Directorate of Safety, Health and Environment, USAGAPG, will:

(1) Assume the responsibility for compliance with all applicable environmental laws (Clean Air Act, Clean Water Act, Resource Conservation and Recovery Act, Comprehensive Environmental Response, Compensation and Liability Act) for disposal of solid waste generated from the Comprehensive Environmental Response, Compensation and Liability Act projects.

(2) Ensure that all investigation derived materials and remediation derived wastes are managed and disposed of in accordance with applicable federal, state, local and Army regulations (see chapter 7).

e. The Chief, Installation Safety Division, Directorate of Safety, Health and Environment, USAGAPG, will provide safety standards for disposing of certain solid wastes on-post as needed.

f. The Solid Waste Program Manager within the Environmental Engineering Branch, Directorate of Safety, Health and Environment, USAGAPG, will:

(1) Oversee the administration of the integrated solid waste management program as well as provide a unified prioritization of problems.

(2) Ensure that the Solid Waste Management Plan and this regulation are prepared, implemented, and updated on a biennial basis or as significant changes occur in federal, state, local or Army regulations.

(3) Represent the installation to all federal, state, Army, and local environmental officials regarding solid waste issues.

(4) Advise and assist key operating officials concerning policies and principles to promote understanding, acceptance, and efficiency of solid waste management at Aberdeen Proving Ground. Maintain nonhazardous waste disposal records as required in AR 420-49 and in this regulation.

(5) Provide proper handling and disposal guidance to activities who generate solid waste.

(6) Maintain all of Aberdeen Proving Ground's solid waste permits and ensure that all reporting requirements for regulatory agencies are performed.

(7) Ensure that adequate waste disposal facilities are available to satisfy current and future post needs.

(8) Serve as the installation's designated recycling coordinator and implement or maintain waste prevention and recycling programs as required by Executive Order 13101 of 16 September 1998.

g. The Chief, , Hazardous Waste Branch, Environmental Compliance Division, Directorate of Safety, Health and Environment, USAGAPG, will:

(1) Ensure that all solid waste which is also hazardous waste or which must be disposed of through the hazardous waste disposal contractor is managed in accordance with APG Regulation 200-60.

(2) Manage the analytical services contract to ensure the contractor maintains all state and Environmental Protection Agency certifications.

(3) Ensure that all aspects of the special medical waste packaging, transportation and disposal program are executed in accordance with this document.

(4) Advise and assist key operating officials concerning policies and principles to promote understanding, acceptance, and efficiency of hazardous waste management at

Aberdeen Proving Ground. If the waste is disposed of in an off-post disposal facility, ensure the accepting facility and transporting company have appropriate permit(s) for the type of hazardous waste and are operating in accordance with this permit(s). Maintain hazardous waste disposal records as required in AR 200-1 and in this regulation.

h. The Director, Public Works, USAGAPG, will:

(1) Ensure the proper operation and maintenance of any facility or function under their control which is operated under a solid waste permit.

(2) Coordinate with Directorate of Safety, Health and Environment on arrangements for the disposal of municipal wastes. If the waste is disposed of in any of the post solid waste disposal facilities, all waste characterization reports/results must be provided to the Environmental Compliance Division for concurrence and compliance requirements.

(3) Coordinate with the Directorate of Safety, Health and Environment, Environmental Engineering Branch for the proper off-site disposal of nonhazardous industrial wastes not handled through the Directorate of Safety, Health and Environment hazardous waste contract.

(4) Ensure the proper disposal of rubble debris and asbestos waste (Westwood Rubble Landfill) at Aberdeen Proving Ground Rubble landfills.

(5) Administer Aberdeen Proving Ground's recycling program (glass, paper, plastics, aluminum cans, etc.) in compliance with all state and county practices.

(6) Coordinate with the Defense Reutilization and Marketing Office's used oil contractor on the scheduling and pickups of used oil at Aberdeen Proving Ground.

(7) Coordinate with the Directorate of Safety, Health and Environment's hazardous waste contractor on the pick-up and disposal of oil contaminated soil.

(8) Inform the Directorate of Safety, Health and Environment of any event which could jeopardize compliance with federal, state, local, or Army regulations.

i. The Director, Logistics, USAGAPG, will:

(1) Provide policy guidance concerning logistical support for the installation and manage directorate resources allocated for the performance of all logistical functions.

(2) Provide all logistics necessary to maintain U.S. Army Garrison, Aberdeen Proving Ground's solid waste programs and, when required will provide the resources necessary to maintain those logistics.

j. The Chief, Defense Reutilization and Marketing Office, will:

(1) Investigate available recycling/reuse markets for the majority of on-post recyclable materials wherever possible. Manage the sale of collected recyclable materials. Provide feedback to the installation for additional commodities that can be included in the recycling program.

(2) Ensure that the Defense Reutilization and Marketing Office program is in support of the Aberdeen Proving Ground overall reuse and recycling requirements.

(3) Manage the used oil contract to ensure contractor recycling/disposal practices are in compliance with all federal, state, local, and Army regulations.

k. Chief, Preventive Medicine and Wellness, Preventive Medicine Services, Kirk U.S. Army Health Clinic, will:

(1) Monitor the management of the installation's solid waste, including segregation, storage, transportation, and disposal and/or sale.

(2) Evaluate community complaints and provide health and welfare recommendations to the facility's engineers.

l. Tenant commanders/directors will:

(1) Ensure that all policies contained herein are carried out and that all personnel within their organization, including contractors, are following the requirements.

(2) Ensure that all procedures established in this regulation and the post Integrated Solid Waste Management Plan are carried out and that all personnel within their organization are aware that the program is fully implemented in all activities on-post.

(3) If waste is disposed of in any of the on-post solid waste disposal facilities, all waste characterization reports/results must be provided to the Environmental Compliance Division for concurrence and compliance requirements.

m. All government contractors must comply with all applicable federal, state, and local regulations as well as this Aberdeen Proving Ground regulation.

CHAPTER 2

SOLID WASTE MANAGEMENT

2-1. GENERAL. This chapter establishes policies and assigns responsibilities for the management of solid waste. This program is based on an integrated approach to solid waste management and follows the preferred hierarchy of waste minimization through source reduction, reuse, recycling, resource recovery, and disposal.

2-2. POLICIES.

a. General Guidance.

(1) The U.S. Army Garrison, Aberdeen Proving Ground, tenant organizations, and government contractors will manage their solid waste by waste minimization (i.e., pollution prevention, recycling, or resource recovery). The Directorate of Safety, Health and Environment's Office of Pollution Prevention has prepared an installation-wide pollution prevention plan and implemented a program to integrate pollution prevention into installation procurement, maintenance, operations and training activities. The Defense Reutilization Marketing Office and the Directorate of Public Works both have aggressive programs in place which can recycle much of the waste generated on-post. While utilization of the Harford County Resource Recovery facility is representative of resource recovery, waste minimization must be accomplished at the waste source. If waste minimization is impractical, disposal in permitted solid waste facilities will be the last resort. Disposal must be conducted in accordance with all federal, state, local, and Army solid waste disposal regulations.

(2) Whenever feasible, Aberdeen Proving Ground will select pollution prevention alternatives in its procurement, maintenance and operations activities. Characteristics of pollution prevention products and processes include the minimization and use of hazardous materials, low toxicity or non-toxic products, longer-life and low maintenance products. Since many source reduction opportunities are dependent on purchasing decisions, Aberdeen Proving Ground will educate purchasers about pollution prevention alternatives that will

result in reduced solid waste discards. Purchasers will determine if pollution prevention products and services are available and will consult with pollution prevention purchasing guides such as the General Services Administration's Environmental Products Guide. Purchasers will consider leasing equipment which may become obsolete in a relatively short period of time, or renting any equipment which will be used infrequently. Aberdeen Proving Ground will consider products which provide extended warranty or a guaranteed buy-back for broken or obsolete equipment.

(3) All municipal waste (materials that cannot be reclaimed, reused, or recycled) will be properly managed and stored in appropriate containers (e.g., dumpsters, trash receptacles, etc.). Only acceptable municipal waste, as defined in appendix C, may be placed in approved municipal waste containers. Disposal of unauthorized waste into municipal solid waste dumpsters is prohibited.

(4) On-post solid waste acceptance facilities will only accept waste listed in the refuse disposal permits from in-house projects. Contractors are required to use off-post disposal facilities for all rubble wastes generated on-post. The Environmental Engineering Branch will approve permitted disposal facilities (i.e., landfills) for contractor use following a successful inspection. All waste minimization facilities requiring environmental permitting (i.e., re-use/recycling, scrap tire, composting facilities, etc.) will be approved by the Environmental Engineering Branch, prior to committing any Aberdeen Proving Ground waste to these facilities.

(5) The post will increase the use of off-post solid waste accepting facilities such as municipal solid waste disposal facilities, private landfills and resource recovery facilities.

(6) Generators of solid waste on-post must follow established internal turn-in procedures.

b. Integrated Solid Waste Management.

(1) Aberdeen Proving Ground will implement AR 420-49, Army policy for solid waste management, and AR 200-1 for solid

waste management, disposition, source reduction, recycling, and resource recovery.

(a) Aberdeen Proving Ground will perform source reduction, recycling, composting, resource recovery, and/or other means to reduce the volume of solid waste generated.

(b) Aberdeen Proving Ground will increase the use of off-post disposal facilities, either municipal or private.

(2) The Defense Reutilization and Marketing Office will be responsible for the sale and reutilization of recyclable solid waste materials as prescribed in DOD 4160.21-M. This regulation excludes materials such as municipal-type garbage, trash, and refuse resulting from residential, institutional, commercial, agricultural, and community activities which can be disposed of in a state or locally permitted sanitary landfill.

(3) The Directorate of Public Works is currently operating the post's residential and office building recycling programs. The Directorate of Public Works is recycling materials such as paper, cardboard, glass, plastics, various scrap metal which is not recycled through Defense Reutilization and Marketing Office, aluminum and other metal cans, etc.

(4) The Directorate of Safety, Health and Environment will provide environmental support in the management of the post solid waste program.

2-3. POLLUTION PREVENTION/SOURCE REDUCTION. A successful pollution prevention/source reduction program reduces the strain on all other solid waste management activities. Smaller and less toxic waste streams reduce the resources required to carry out recycling, reuse, resource recovery and disposal programs; thereby conserving Aberdeen Proving Ground resources, reducing long-term pollution liability, conserving natural resources, and meeting waste reduction goals. The following list details pollution prevention alternatives for individual waste streams:

a. Excess Equipment. Excess equipment will be returned to the Defense Reutilization and Marketing Office for reuse and/or resale. Equipment which will be returned to the Defense Reutilization and Marketing Office includes, but is not limited

to, personal computers, office furniture, office equipment, tires, vehicles, vehicle batteries, and computer diskettes.

b. Toner Cartridges. Aberdeen Proving Ground will give preference to purchasing remanufactured toner cartridges for computer printers, facsimile machines and photocopiers. Remanufactured toner cartridges are repackaged in their original box and shipped to the vendor for service. Remanufactured toner cartridges are disassembled, inspected, repaired or refilled with toner and reassembled.

c. Office Papers. Aberdeen Proving Ground will minimize the generation and ultimate disposal of office papers by educating workers to use paper more efficiently, utilizing alternative communication methods, and utilizing computer-based presentations for lectures, seminars and briefings. Waste paper can be minimized by such actions as using e-mail to replace paper memos; distributing electronic copies of reports instead of paper copies; placing information on announcement boards; circulating memos, newspapers, magazines and newsletters; updating distribution/ mailing lists frequently and remove those who no longer need the information; making two-sided copies whenever possible; and reusing waste paper as scratch paper or for recording phone messages. Aberdeen Proving Ground will only purchase or lease photocopy machines capable of making double-sided copies and where double-sided is the default setting.

d. Vehicle Oil and/or Fuel Filters. Reusable vehicle oil filters utilizing stainless steel screen-type filter elements can replace conventional disposable filters in military armored vehicles and humvees used in training, transport and heavy equipment vehicles such as 5-ton trucks, and smaller motor pool cars and trucks. Reusable fuel and oil filters are available for most vehicles used at Aberdeen Proving Ground and will be used whenever feasible.

e. Oil Contaminated Soil. Oil/petroleum spills and accidental releases result in oil contaminated soil which requires containment, testing and disposal. Aberdeen Proving Ground will implement an aggressive spill prevention awareness and training program to reduce the number of spills and leaks that result in contaminated soils.

f. Wood Pallets. Unserviceable wood pallets are turned in to the Defense Reutilization and Marketing Office. Pallets are considered to be unserviceable when several of the slats are broken. Whenever feasible, Aberdeen Proving Ground will give preference to utilizing off-post vendors who will refurbish broken pallets.

g. Polystyrene Foam Packing Material (Dunnage). Aberdeen Proving Ground receives product shipments which utilize polystyrene foam packing as dunnage to cushion and protect the product from damage during shipping. The packing material is typically discarded after the product box is opened, either by the end user or by Aberdeen Proving Ground shipping and receiving warehouse staff. This packing material is inert and can be stored and reused in off-post shipments by Aberdeen Proving Ground personnel. Aberdeen Proving Ground should implement a program to reuse this packing material in off-post shipments, to the maximum extent feasible. Material that cannot be used on-post may be recycled off-post.

h. Water Treatment Plant Sludge and Sediments. Aberdeen Proving Ground will optimize equipment utilization and sludge processing to reduce the volume of sludge and sediments produced by Aberdeen Proving Ground's water and wastewater treatment plants (WWTPs). Sewage sludge production at the Aberdeen Area WWTP can be significantly reduced (by as much as 50 percent) by process optimization and replacing the present vacuum filter method of dewatering with a high solids centrifuge. Since sludge produced at the WWTP is anaerobically digested, proper operation of the digester produces sludge that meets 40 CFR 503 requirements for disposal without lime stabilization.

i. Wiping Rags. Some Aberdeen Proving Ground activities, such as the Defense Automated Printing Service Office - Aberdeen, utilize a service which provides clean 100 percent cotton wiping rags, fire proof collection containers, and collects and cleans the rags. Whenever feasible, Aberdeen Proving Ground will give preference to the use of reusable cloth wiping rags over disposable cloth rags or paper towels.

j. Construction and Demolition Debris. Construction and demolition debris is generated when a new structure is constructed, remodeled or demolished. To the maximum extent

feasible, Aberdeen Proving Ground will utilize and support the activities of organizations which dismantle buildings designated for demolition and reuse or recycle the building materials. Aberdeen Proving Ground will also separate concrete and asphalt for recycling and segregate wood waste for resource recovery. In an effort to minimize the generation of building renovation debris, Aberdeen Proving Ground will integrate "green building" design concepts into installation construction projects to maximize pollution prevention and minimize future remodeling or construction and demolition debris. Key elements of green building design are the use of a flexible, future-oriented design that includes HVAC, lighting, electrical and cable systems, placement of private work spaces and service areas that can be altered without extensive remodeling, and the grouping of service areas together to reduce whole building conditioning. Green building design also includes use of recycled content construction materials, such as durable, non-toxic interior materials, and ceiling tiles and drywall with recycled content, efficient use of shade trees, and buffers to minimize storm water runoff. Green buildings can also have lower energy and water usage, and lower operating costs.

k. Lumber Used for Landscaping and Recreation Facilities. Aberdeen Proving Ground will give preference to durable, non-toxic lumber products that are manufactured from recycled plastic in place of treated wood lumber in road signs, benches, landscape lumber, fence posts and boat docks.

2-4. RECYCLING AND DISPOSAL. One of the goals of Aberdeen Proving Ground is to protect public health and the environment through the proper management of solid waste generated by various activities. In an effort to conserve landfill capacity, solid waste will be minimized, recycled and/or incinerated for energy recovery whenever possible. Aberdeen Proving Ground currently sends its municipal solid waste to the Harford County Resource Recovery facility, while other waste streams are handled on an individual basis. Appendix B lists the wastes that are considered acceptable and unacceptable at the Resource Recovery facility. The following list details recycling and disposal alternatives for individual waste streams:

a. Glass, Plastic, Metal, and Paper. All nonhazardous glass, plastic, metal, and paper will be recycled to the greatest extent practicable through the Directorate of Public Works or Defense Reutilization and Marketing Office. If contaminated with hazardous materials, dispose of through the Hazardous Waste Tracking System.

b. Batteries. All batteries should be recycled whenever possible. If they cannot be recycled, dispose of in accordance with the following guidance:

(1) Alkaline and carbon-zinc batteries may be disposed of through the municipal solid waste stream.

(2) Lead-acid batteries are recycled through the Defense Reutilization and Marketing Office. If these batteries cannot be recycled, they will be disposed of as hazardous waste through Aberdeen Proving Ground's Hazardous Waste Tracking System.

(3) Lithium-manganese dioxide batteries will be disposed of as nonhazardous waste through the municipal waste stream. Lithium-sulfur dioxide batteries, type BA 556/u can also be disposed of as nonhazardous waste through the municipal waste stream. Lithium-sulfur dioxide batteries type BA5000, can be disposed of as nonhazardous waste through the municipal waste stream if completely discharged. If not completely discharged, type BA5000 lithium-sulfur dioxide batteries must be disposed of as hazardous waste through the Hazardous Waste Tracking System. Lithium-thionyl chloride batteries will be disposed of as hazardous waste through the Hazardous Waste Tracking System.

(4) Nickel-cadmium, mercury, silver, magnesium, thermal, and other electrolyte batteries will be disposed of as hazardous waste through the Hazardous Waste Tracking System in accordance with APG Regulation 200-60.

c. Recyclable Wood Waste.

(1) Scrap Pallets. Use post guidance for the disposal of pallets. Turn in all serviceable pallets to the General Supply and Storage Division, Directorate of Logistics. If the Directorate of Logistics cannot utilize the pallets, they are to be turned in to Defense Reutilization and Marketing Office. All

pallets will be disposed of at Harford County's Resource Recovery facility through the Directorate of Public Works. Unserviceable pallets that have been treated with preservatives will not be sent to the Harford County Resource Recovery facility and must be disposed of through Hazardous Waste Tracking System.

(2) Wood waste such as brush and limbs, logs, vegetation, grass, and yard waste will be accepted by Harford County for the production of compost or mulch.

(3) Nonhazardous railroad ties and utility poles can be chipped by the Directorate of Public Works and incinerated for energy recovery at the Harford County Resource Recovery facility.

d. Oil Contaminated Soils. Disposal of oil contaminated soils will be accomplished in accordance with Code of Maryland Regulation 26.10.13. Soils contaminated or suspected of being contaminated with oil will be handled by the Directorate of Public Works and the Directorate of Safety, Health and Environment. The Directorate of Safety, Health and Environment will provide sampling, analysis and disposal support. Soils pending analysis for ultimate disposal will be held at the oil contaminated soil storage facility located in the 3600 block of the Aberdeen Area. The Directorate of Public Works operates this facility and all arrangements must be made with the Directorate of Public Works prior to sending soils to this site. The following are categories of oil/fuel contaminated soils commonly found at the Aberdeen Proving Ground:

(1) Washrack Soils. Washrack soils will be sent through the Directorate of Public Works to the 3600 block storage area where they will be dewatered, tested, and disposed of in accordance with chapter 5 of this document.

(2) Spill Clean-Up. Soils and any other materials collected from spills are to be managed in accordance with the Installation Spill Contingency Plan. Waste disposal will be performed in accordance with this regulation, the Resource Conservation and Recovery Act, APG Regulation 200-60, the Code of Maryland Regulations, and any additional post guidance.

(3) Underground Storage Tank Petroleum Contaminated Soils. Return soil to the underground storage tank pit if total petroleum hydrocarbons is less than 100 parts per million as determined by the Environmental Protection Agency's 8015 modified analytical method. If soil is moved off site, it is regulated as oil contaminated soil unless Total Petroleum Hydrocarbons are less than 10 parts per million. Treatment/disposal facilities have specific analytical requirements that must be met prior to excepting petroleum contaminated soil at their facility. These requirements include the measurement of benzene, toluene, ethylene and xylene, total volatile organic compounds, polychlorinated biphenols, and Toxicity Characteristic Leachate Procedure, which are usually analyzed in addition to total petroleum hydrocarbons to ensure that the soil is nonhazardous. Otherwise, soils collected from underground storage tank operations must be entered into the Hazardous Waste Tracking System for disposal. Disposal will be based on the laboratory results and requirements in Code of Maryland Regulation 26.10.09 to .10 and Code of Maryland Regulation 26.10.13.

e. Used Oil. All used oil generated on-post is collected by generators in drums or tanks. Arrangements for used oil pickups must be made through the Directorate of Public Works who will coordinate the recycling/disposal of the used oil through the Defense Reutilization and Marketing Office contractor. Disposal of used oil through the sanitary or stormwater sewer system or in a municipal solid waste refuse container is not permitted. Currently, the Directorate of Public Works is implementing a program to strategically locate tanks on-post for the collection of used oil. These tanks will serve as central locations for the Directorate of Public Works' contractor to remove all used oil generated on-post.

f. Waste Fuel Oils, Solvents and Chemicals. If unable to recycle, dispose of through the Hazardous Waste Tracking System. Procedures for the disposal of these items are outlined in APG Regulation 200-60.

g. Oily Rags and Oil Contaminated Materials. Nonhazardous oil contaminated rags, sorptive minerals, absorbent materials, and oil contaminated scrap metals will be disposed of in the

following manner. The generator must determine if materials containing used oil exhibit characteristics of hazardous waste. If hazardous, manage the materials in accordance with existing Resource Conservation and Recovery Act controls. If the material does not exhibit a hazardous characteristic and is not mixed with a listed hazardous waste, then it is nonhazardous. Upon determination that the waste is nonhazardous and does not contain free liquids, enclose in a polyethylene bag with a small amount of absorbent material and dispose of in the municipal solid waste stream all volumes less than two 30 gallon bags. All volumes greater than two 30 gallon bags will be disposed of through the Hazardous Waste Tracking System as nonhazardous solid waste.

h. Non-terneplated Oil Filters. Non-terneplated oil filters which meet the non-terneplated oil filter exemption, as defined in the glossary, are recycled through the Defense Reutilization and Marketing Office or disposed through the municipal solid waste stream enclosed in a polyethylene bag with a small amount of absorbent. Any filter which does not meet the non-terneplated oil filter exemption will be disposed of through the Hazardous Waste Tracking System.

i. Used Fuel Filters and Terneplated Oil Filters. These materials do not meet the criteria for the non-terneplated used oil filter exemption found in the glossary and must be handled as hazardous waste. Also, materials contaminated with gasoline, solvents, and aircraft fuel must be handled as hazardous waste and entered into the Hazardous Waste Tracking System.

j. Used Antifreeze. All antifreeze (ethylene glycol) generated by U.S. Army Garrison, Aberdeen Proving Ground vehicles will be reprocessed by the Directorate of Logistics maintenance contractor, except the General Services Administration which handles their own contract on-post. The U.S. Army Ordnance Center and School and U.S. Army Aberdeen Test Center operate antifreeze recycling units within their respective organizations. If recycling is not feasible due to contamination, antifreeze must be disposed of through the Hazardous Waste Tracking System. Disposal of antifreeze by use of the sanitary or stormwater sewer system and/or a municipal solid waste refuse container is not permitted.

k. Antifreeze Absorbent Material. The generator must determine if the absorbent material used to clean up antifreeze exhibits a hazardous characteristic either through testing or generator knowledge. Generally, if virgin antifreeze is being cleaned up and the absorbent material does not contain free flowing liquid, the material can be disposed of at a sanitary landfill with prior permission or through the resource recovery facility if a non-clay absorbent is used. However, absorbent material used for cleaning up any antifreeze spilled from equipment, will need to be evaluated for hazardous characteristics through analysis or generator knowledge. If the clean-up material is hazardous, it must be managed through the Hazardous Waste Tracking System. If nonhazardous, it can be handled according to the virgin antifreeze procedure explained above.

l. Sand Blasting Material. If the waste is nonhazardous and meets the requirements of Resource Conservation and Recovery Act, Subtitle D, it may be disposed at a sanitary landfill with prior permission. If hazardous, the waste must be disposed of through the Hazardous Waste Tracking System.

m. Railroad Ties and Utility Poles. Nonhazardous railroad ties and utility poles can be chipped by the Directorate of Public Works and burned at the Harford County Resource Recovery facility for energy recovery.

n. Concrete and Asphalt. Every effort will be made to reuse concrete or asphalt from the demolition of buildings or other structures. In the Aberdeen Area, contact the Directorate of Public Works, Buildings, Grounds and Utilities Division, Aberdeen Area Maintenance Branch, Conservation Section at 410-278-4085, for reuse possibilities. In the Edgewood Area, contact the Directorate of Public Works, Buildings, Grounds and Utilities Division, Edgewood Area Maintenance Branch, Conservation Section at 410-436-2066 for reuse possibilities. If no other alternative exists, the waste may be disposed in either of the post landfills. Post contractors are responsible for recycling or disposal of their waste off-post.

o. Land Clearing Debris. Any land clearing debris such as trees, large tree limbs, etc., will be placed near Phillips Army Airfield Rubble Landfill or the Westwood Rubble Landfill. The

debris will be transported as is, or pre-shredded, to the Harford Waste Disposal Center where it will be mulched. The Harford Waste Disposal Center will accept Aberdeen Proving Ground land clearing debris free of charge.

p. Fiberglass, Construction Debris, and Wood Waste Disposal. Prior to disposal as nonhazardous waste, all construction debris suspected of lead contamination must be tested for lead. If the material is nonhazardous, re-use the framing wood if possible and dispose of the remainder as ordinary debris. If the waste fails hazardous waste characterization, it must be disposed of as hazardous waste in accordance with APG Regulation 200-60. Nonhazardous construction/demolition debris from in-house projects will be disposed of at either the Westwood Rubble Landfill in the Edgewood Area or the Phillips Army Airfield Rubble Landfill in the Aberdeen Area. Post contractors will utilize off-post permitted facilities for disposal of waste generated from government projects.

q. Asbestos. Asbestos can be disposed of at the Westwood Rubble Landfill or off-post in permitted rubble or industrial waste landfills set up for asbestos waste operations. Disposal will be in accordance with Code of Maryland Regulations 26.11.15.04 and 26.04.07.13.

r. Full Containers. Full, unopened excess containers will be turned into the Defense Reutilization and Marketing Office or reused through Aberdeen Proving Ground's Hazardous Material Minimization Program in accordance with the nonhazardous waste disposal guidance.

s. Empty Containers:

(1) Glass or plastic containers (marked 1 or 2) that have held nonhazardous materials will be recycled via the Directorate of Public Works's Recycling Program.

(2) Metal, fiber, and plastic drums that have held nonhazardous materials will be recycled through the Defense Reutilization Marketing Office.

(3) Containers that have held hazardous materials or hazardous waste are prohibited from disposal into Aberdeen

Proving Ground's municipal solid waste dumpsters. Containers that have held hazardous waste and have residual waste will be disposed of through Aberdeen Proving Ground's Treatment, Storage, and Disposal Facility. The recommended best management practice calls for reusing these non-empty containers for storage of compatible hazardous waste provided they are not transported off-post in a reused container. Containers that have held non-compressed gas or non-acute hazardous waste and are empty as defined in the glossary may be recycled through the Defense Reutilization and Marketing Office or the Directorate of Public Works. Empty containers that have held acute hazardous waste will be disposed of through the Hazardous Waste Tracking System.

(4) Empty, non-aerosol paint, caulk, or glaze containers can be disposed of at either the Westwood or Phillips Army Airfield Rubble landfills provided no free liquids remain.

(5) Aerosol cans which are considered empty, in accordance with the glossary definition, and did not contain a product which would be an acutely hazardous waste upon disposal can be disposed of through the municipal solid waste stream. An acutely hazardous waste is one which is P-listed and found in Code of Maryland Regulation 26.13.02.19. Any aerosol cans not meeting the above conditions will be disposed of in accordance with APG Regulation 200-60.

t. White Goods. White goods (major appliances such as refrigerators, stoves, etc.) in working condition will be reused. Inoperable white goods will be recycled through the Defense Reutilization and Marketing Office. However, freon and capacitors must be removed prior to turning white goods into the Defense Reutilization and Marketing Office. A statement in the turn-in document will be included to certify that the freon and capacitors have been removed.

u. Wastewater Treatment Plant Sludges. Sludges produced from the operation of either the Edgewood Area or Aberdeen Area Wastewater Treatment Plant facilities will be land applied at Aberdeen Proving Ground in accordance with the Aberdeen Proving Ground sewage sludge utilization permit.

v. Water Treatment Plant Sediments. Dewatered sediments from the post's water treatment plants can be used as fill

material at the post landfills in accordance with the refuse disposal permits.

w. Maintenance Generated Water Treatment Plant Sediments. Sediments produced through maintenance activities at the post water treatment plants

will be land applied at Aberdeen Proving Ground disposal sites in accordance with best management practices.

x. Nonhazardous Municipal, Commercial, and Industrial Solid Waste. All municipal solid waste produced at Aberdeen Proving Ground which is otherwise not reusable or recyclable, will be disposed of through a private contractor who will utilize the Harford County Resource Recovery facility.

y. Toner Cartridges. Empty toner cartridges from laser printers, copy machines, and any other device will be recycled through the manufacturer, a contractor, or the Defense Reutilization and Marketing Office. If turned into the Defense Reutilization and Marketing Office, a statement will be included in the turn-in document to certify that the toner cartridges are empty. If there are no recycling options, then the cartridges considered empty in accordance with Code of Maryland Regulation 26.13.02.07(B) will be disposed of through the municipal solid waste stream. Non-empty toner cartridges should be characterized and sent through the Hazardous Waste Tracking System, if determined to be hazardous. If these cartridges are not hazardous, dispose of through the municipal solid waste stream.

z. Circuit Boards. Recycle all circuit boards through the Defense Reutilization and Marketing Office. The material must be turned into Defense Reutilization and Marketing Office in boxes or containers.

aa. Storage Media. All computer software, films, microfiche, audio and video tapes must be properly decoded before recycling or disposal. Refer to AR 380-19, paragraph 2-21 for security issues. Recycle computer software through the Directorate of Public Works. All other storage media can be disposed of in municipal dumpsters.

bb. Paints, Chemicals, Solvents, and Metals. Unused and unopened products must be turned into the Defense Reutilization and Marketing Office for resale. Non-dried partially used latex based paints and petroleum based paints will be disposed of through the Hazardous Waste Tracking System. Dried latex paint can be disposed of through the municipal solid waste stream. Dried petroleum based paints must be evaluated for hazardous characteristics. If hazardous, the paint must be disposed of through the Hazardous Waste Tracking System. If nonhazardous, the paint may be disposed of through the municipal solid waste stream. Paint cans which are considered empty, in accordance with Code of Maryland Regulation 26.13.02.07(B), can be disposed of through the municipal solid waste stream or placed in the on-post rubble landfills.

cc. Cleaning Solutions for Painting Accessories. Dispose of petroleum based cleaning solvents through the Hazardous Waste Tracking System. Dispose of water used as a cleaning solvent through the sanitary sewer system provided the waste is not a hazardous waste and meets the requirements of APG Regulation 200-41.

dd. Fluorescent Light Bulbs. Fluorescent light bulbs are hazardous waste and will not be disposed of in municipal receptacles. All fluorescent bulbs must be recycled through the Directorate of Safety, Health and Environment, Hazardous Waste Branch, except those from residents in the Military Family Housing Areas which may be disposed of with their ordinary household trash.

ee. Munitions Tested Plastics, Metals, and Kevlar. All munitions tested material must be rendered safe prior to recycling or disposal. Recycle plastics and metals through the Defense Reutilization and Marketing Office or the Directorate of Public Works. Kevlar and material unable to be recycled can be disposed of at a sanitary landfill with prior permission. Coordinate through Directorate of Safety, Health and Environment, Environmental Engineering Branch (Point of Contact: Hazoor Khan, 410-278-4256).

ff. Scrap Tires. Scrap tires will be staged at the Secondary Scrap Tire Storage Facility (building 3558) for pickup by Defense Reutilization and Marketing Office's recycling

contractor. Large equipment tires and tires not able to be recycled must be cut into pieces or shredded and disposed of through the Harford County Resource Recovery facility. Prior arrangements with Directorate of Public Works must be made to haul the scrap tires. The Directorate of Public Works has obtained a Scrap Tire Hauler License.

2-5. RESPONSIBILITIES.

a. The Chief, Environmental Engineering Branch, Environmental Compliance Division Directorate of Safety, Health and Environment, , USAGAPG, will:

(1) Ensure that all solid waste is managed and disposed of in a manner that protects human health and the environment. Ensure that the management and disposal of solid waste fulfills all federal, state, local and Army regulations, and that the policies set forth in this regulation are maintained. The solid waste program will be managed in accordance with federal regulations, state requirements, and Army guidance.

(2) Provide post activities with the necessary guidance on solid waste issues.

b. The Director, Public Works will:

(1) Provide adequate manpower and resources necessary to maintain solid waste disposal and facility management.

(2) Remove and dispose of nonhazardous waste in an environmentally safe manner.

(3) Operate and maintain Aberdeen Proving Ground's recycling program.

c. The Chief, Defense Reutilization and Marketing Office will, in support of the Post's recycling program, locate markets for the majority of the U.S. Army Garrison, Aberdeen Proving Ground's recyclable and reusable materials wherever possible.

d. Tenant commanders/directors will ensure that all policies contained herein are carried out and that solid waste is managed in accordance with federal, state, local, and Army regulations.

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e. All government contractors must comply with all applicable federal, state, and local regulations as well as this Aberdeen Proving Ground regulation.



CHAPTER 3

SOLID WASTE TREATMENT, STORAGE OR DISPOSAL FACILITIES

3-1. GENERAL. This chapter prescribes policies, provides guidance and assigns responsibilities for the management and operation of Aberdeen Proving Ground's permitted solid waste disposal facilities. The permitted facilities include Westwood Rubble Landfill, Phillips Army Airfield Rubble Landfill, U.S. Army Medical Research Institute for Chemical Defense special medical waste incinerator, the Defense Reutilization and Marketing Office secondary scrap tire collection facility, and the sewage sludge land application sites managed in accordance with the Sewage Sludge Utilization Permit.

3-2. POLICIES.

a. The solid waste disposal facilities must comply with their respective operating permits issued by the Maryland Department of the Environment.

b. Aberdeen Proving Ground must also comply with any applicable federal, state, local, and Army regulations in the operation and maintenance of each facility.

3-3. SOLID WASTE DISPOSAL FACILITIES.

a. Rubble Debris/Land Clearing Debris/Construction Debris.

(1) Aberdeen Proving Ground's rubble waste landfills will be operated in accordance with the solid waste management provisions found in the Code of Maryland Regulation 26.04.07. Aberdeen Proving Ground landfill operations are also subject to the Westwood and Phillips Army Airfield Rubble Landfill refuse disposal permits.

(2) Both facilities will only be used for the disposal of demolition debris, land-clearing debris, and other materials specifically stated in their respective refuse disposal permits.

(3) These facilities will only be used for disposal of waste from in-house projects. Post contractors will use off-site permitted facilities for the disposal of waste unless contracted to dispose of waste on-post.

(4) All construction, demolition and renovation debris generated in-house or by a post contractor suspected of lead contamination must be analyzed for leachable lead utilizing the Toxicity Characteristic Leachate Procedure as stated in 40 CFR 261. Waste exceeding the Toxicity Characteristic Leachate Procedure limit for lead may not be disposed of at either landfill and must be turned in to the post through the Hazardous Waste Tracking System as stated in APG Regulation 200-60. All nonhazardous lead abatement waste must be disposed of in a lined landfill.

(5) The Westwood Rubble Landfill is the only facility permitted to accept asbestos on-post. Advance notification is required. Asbestos disposal must follow the guidelines established in Code of Maryland Regulation 26.11.15.04C(2).

(6) Acceptable wastes are defined in the appropriate landfill permits. Table 3-1 lists the wastes that may be placed in either landfill.

(7) Records must be maintained at each landfill. The records must show the date of waste retrieval, type, quantity, and location of origin.

(8) Periodic inspection of each landfill will be conducted to ensure compliance with permit stipulations.

(9) Sediment and erosion controls must be constructed and maintained for each facility in accordance with their respective Sediment and Erosion Control Plans.

b. Sewage Sludge.

(1) Land application of sewage sludge must be in accordance with Aberdeen Proving Ground's Sewage Sludge Utilization Permit issued by the Maryland Department of the Environment. Presently, Aberdeen Proving Ground holds permits for the land application of wastewater treatment plant sludges and for the transportation of such sludge from the Aberdeen Area to the Edgewood Area and vice-versa.

(2) Sludge from a wastewater treatment plant will be tested in accordance with the Code of Maryland Regulation

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26.04.06. Sludge that does not meet "Class 1 sewage sludge" limits may not be land-applied.

(3) Sludge may only be stored in the wastewater treatment plant sludge holding areas that have been approved by the state.

(4) In accordance with the Sewage Sludge Utilization Permit and state requirements, the Directorate of Safety, Health and Environment will submit to the Maryland Department of the Environment semi-annual test results, pH of application sites, and the quantity of sludge disposed of during the preceding six month period. An annual report of sewage sludge generation will also be submitted for each wastewater treatment plant.

(5) Sewage sludge analysis, disposal, record keeping, and reporting will be in compliance with 40 CFR 503.

c. Medical Waste.

(1) Operation and maintenance of the U.S. Army Medical Research Institute of Chemical Defense's special medical waste incinerator will be in accordance with federal and state regulations and any applicable permits.

(2) Acceptable wastes are defined in the refuse disposal permit Phase Three report. The following is a summary of wastes permitted for burning in the incinerator:

(a) Animal carcasses.

(b) Animal bedding.

(c) Special medical waste as defined in Code of Maryland Regulation 26.13.11.

(d) Nonhazardous expired pharmaceutical waste.

(e) General hospital waste as stated in Code of Maryland Regulation 26.11.08.01.H.

(3) The quantity of special medical waste incinerated per year will not exceed permit limits.

(4) The ash from this facility will be tested on an annual basis using the Toxicity Characteristic Leachate Procedure methods found in 40 CFR 261. If the ash does not exceed the Toxicity Characteristic Leachate Procedure metals limits, it can be disposed of at the Harford County landfill. Harford County has also requested that the government verify that the ash is free of radiological contamination. If the ash exceeds Toxicity Characteristic Leachate Procedure or radiation limits it will be disposed of in accordance with APG Regulation 200-60.

(5) The Environmental Engineering Branch, will manage all permitting requirements and offer technical support for all special medical waste. The Installation Safety Division will manage medical waste safety related issues (i.e., bio-hazard safety, bloodborne pathogen information, etc.).

d. Scrap Tires.

(1) Operation of the Scrap Tire Storage Facility must be in accordance with Code of Maryland Regulations 26.04.08 and Aberdeen Proving Ground's Secondary Scrap Tire Collection Facility Permit.

(2) Salvageable tires will be turned in to the Defense Reutilization and Marketing Office to be retread or for reuse. Unserviceable scrap tires will be disposed of at the Resource Recovery facility through the Directorate of Public Works. Large unserviceable scrap tires must be cut up or shredded prior to disposal at the Harford County Resource Recovery facility.

(3) The secondary scrap tire storage facility is located in the warehouse storage area of Aberdeen Area building 3558. This area may not contain more than 1500 tires at any one time in accordance with the current license.

3-4. RESPONSIBILITIES.

a. U.S. Army Garrison, Aberdeen Proving Ground directors, tenant commanders/directors, and contractors will:

(1) In accordance with the AR 420-49, prepare Department of the Army Forms 3916 and 3917 (appendix B) to track disposal of solid waste. These forms will be used to track

quantities and dispositions of all nonhazardous solid waste at post landfills, off-post landfills, the resource recovery facility, and all other non-hazardous solid waste disposal facilities.

(2) Submit these waste tracking forms to the Environmental Engineering Branch (STEAP-SH-EE) of the Directorate of Safety, Health and Environment on a quarterly basis. A sample copy of these forms are included in appendix B. Any analytical record and reason for treating the material as nonhazardous will also be submitted to the Directorate of Safety, Health and Environment.

(3) Inspect their operations to ensure compliance with federal, state and Army regulations concerning the management of solid waste.

(4) Ensure that all nonhazardous solid waste is disposed of at permitted facilities and in compliance with federal and state regulations.

b. The Chief, Environmental Compliance Division, Directorate of Safety, Health and Environment, , USAGAPG, will:

(1) Ensure that all solid waste permits are managed and maintained; all federal, state, local and Army regulations are satisfied; and policies set forth in this regulation are implemented.

(2) Review all requests for disposal of non-rubble debris solid waste at the rubble landfills. Provide the Directorate of Public Works with guidance sufficient to successfully maintain the landfills.

(3) Ensure all disposal procedures for water and wastewater treatment plant sludges are in accordance with federal, state, local, and Army environmental regulations.

(4) Coordinate any necessary changes in operation or maintenance of the permitted facilities with appropriate federal, state, local, and Army officials.

(5) Periodically inspect all solid waste facilities to ensure compliance with the applicable facility permits. The

Installation Environmental Quality Coordinator will also be the primary post representative during any state inspection.

(6) Ensure adequate facilities are available to satisfy the nonhazardous waste disposal needs of the installation.

(7) Obtain and maintain a State of Maryland special medical waste identification number.

(8) Ensure off-post waste disposal facilities used by Directorate of Public Works' contractors are in compliance and have appropriate permits.

c. The Director, Public Works, USAGAPG, will:

(1) Operate the rubble landfills in compliance with the facility Refuse Disposal Permits, Code of Maryland Regulations, and county regulations.

(2) Provide adequate support to maintain compliance of all permitted facilities.

(3) Coordinate with the Directorate of Safety, Health and Environment for disposal of questionable wastes into the landfills.

(4) Provide, on an annual basis, verification that the established slope, height, and boundary is maintained for each facility as specified in the respective landfill operation manuals, refuse disposal permits, and Code of Maryland Regulation 26.04.07.

(5) Ensure that sediment and erosion controls are constructed and maintained at both rubble landfills.

(6) Comply with the Aberdeen Proving Ground sewage sludge utilization permit for the handling, storage and ultimate disposal of Wastewater Treatment Plant sludges.

(7) Ensure waste transporting companies have appropriate licenses and permits.

(8) Conduct all tire hauling operations and maintain records in accordance with Aberdeen Proving Ground's Scrap Tire

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Hauler License. All necessary records required to be maintained by the permit must be submitted to the Directorate of Safety, Health and Environment on a semi-annual basis.

d. The Chief, Defense Reutilization and Marketing Office, will:

(1) Operate and maintain Aberdeen Proving Ground's secondary scrap tire storage facility.

(2) Provide all necessary manpower and logistics to support the scrap tire storage facility.

(3) Ensure that scrap tire storage practices comply with Code of Maryland Regulation 26.04.08. Inform the Directorate of Safety, Health and Environment of any event which would jeopardize compliance with state regulations.

(4) Maintain all necessary operational logs and submit this information to the Directorate of Safety, Health and Environment on a semi-annual basis. All necessary logs and records required by the storage permit, must be maintained on-site at all times.

e. The Commander, U.S. Army Medical Research Institute of Chemical Defense, will:

(1) Maintain and operate the special medical waste incinerator in accordance with the Refuse Disposal Permit.

(2) Review operational practices of the pathological incinerator and advise the Installation Environmental Quality Coordinator of any necessary changes.

(3) Maintain all necessary operational logs and submit this information to the Directorate of Safety, Health and Environment on an annual basis in the form of a report. The report will be submitted on 1 Jun of each year and list the amount of animal waste, special medical waste, nonhazardous expired pharmaceutical waste, any other special medical waste and other general hospital waste incinerated at the facility, and all other information as specified in the operating permit for the preceding calendar year.

f. Commanders, staff officers, and heads of all other post activities will:

(1) Ensure that all policies contained herein are carried out and that all personnel within their organization are following these requirements.

(2) Ensure that all requirements established in the Aberdeen Proving Ground Solid Waste Permits (Westwood Rubble Landfill, Phillips Army Airfield Rubble Landfill, U.S. Army Medical Research Institute of Chemical Defense special medical waste incinerator, Sewage Sludge Utilization Permit, and the Scrap Tire Storage License) are met.

(3) Ensure that contractors adhere to the requirements specified in this regulation when performing any work for the post. Ensure off-post waste disposal facilities used by the installation contractors are in compliance and have appropriate permits. Ensure waste transporting companies have appropriate licenses.

g. All government contractors must comply with all applicable federal, state, and local regulations as well as this Aberdeen Proving Ground regulation.

TABLE 3-1

Acceptable Solid Wastes For Disposition Into The Post's Rubble Landfills			
Land Clearing Wastes	Demolition Debris	Construction Debris	Other
<ul style="list-style-type: none"> • Brush • Earthen materials (clays, sands, gravel, and silts) • Logs • Rocks • Root mats • Topsoil • Tree limbs • Tree stumps 	<ul style="list-style-type: none"> • Asphalt • Bricks (excluding refractory type) • Cement • Concrete • Floor and wall tile* • Insulation material • Lumber • Pipes and wires • Plaster and Plasterboard • Shingles & roofing material • Structural steel 	<ul style="list-style-type: none"> • Bricks (excluding refractory type) • Carpet • Cement • Concrete • Felt • Floor, wall & ceiling tiles* • Glass • Insulation • Lumber • Pipes • Plaster and plasterboard • Roofing • Shingles • Wallpaper • Wires • Other structural fabrics • Paper or cardboard packaging, spacing or building materials • Paint, caulk or glaze containers 	<ul style="list-style-type: none"> • Dewatered mud • Household appliances and white goods (written approval by Environmental Engineering Branch required) • Asbestos (Westwood Landfill only)

* Tiles containing asbestos must be disposed of in the Westwood Rubble Landfill. Contractors are required to use off-post disposal facilities for all rubble wastes generated on-post.

CHAPTER 4

USED OIL MANAGEMENT

4-1. GENERAL.

a. This chapter specifies policies, establishes procedures, and assigns responsibilities for the management and recycling/disposal of nonhazardous used oil generated at Aberdeen Proving Ground.

b. Currently, used oil generated on-post is collected and stored at generator sites in drums or storage tanks. When a used oil pick-up is needed, generators, via their activity environmental coordinator, contact the Directorate of Public Works, who schedules the pick-up with the Defense Reutilization and Marketing Office used oil disposal contractor.

4-2. POLICIES.

a. Aberdeen Proving Ground will comply with all used oil provisions set forth in 40 Code of Federal Regulations parts 261, 279 and 761; Code of Maryland Regulation 26.10; Oil Operations Permit No. 95-OP-0743; and any applicable provisions of APG Regulation 200-60. Each tenant organization or other activity generating used oil is considered a generator for the purpose of this regulation. The generator will properly characterize the used oil, complete a "Certificate of Nonhazardous Used Oil" (appendix D), and implement the applicable regulations.

b. All used oil will be properly managed and stored in appropriate containers (drums, storage tanks, etc.). Storage containers will be secured to prevent unauthorized access and/or contamination. Disposal of unauthorized materials into used oil storage containers is prohibited.

c. Used oil will be recycled/disposed of off-post by the Defense Reutilization and Marketing Office's used oil contractor. The used oil contractor will manage the used oil in accordance with all applicable federal, state, local and Army regulations.

4-3. USED OIL DISPOSAL PROCEDURES.

a. Used Oil Determination. A person who generates a solid waste containing petroleum products will determine if it is a used oil by the following method:

(1) The waste must satisfy the definition of used oil as stated in the glossary.

(2) The used oil must not be subject to the used oil exceptions listed in the glossary to be classified as used oil.

b. Used Oil Collection. A custodian will be assigned for each used oil collection center. The custodian will be responsible for ensuring that only used oil of known origin is placed in a used oil storage container. A log book will be maintained to record each addition of used oil to the storage container.

c. Storage. Used oil will be stored only in above ground storage tanks or in metal drums. All used oil storage containers will be clearly marked with the words "USED OIL" in letters at least 3 inches high and visible colors which contrast with the color of the container.

(1) Generators of more than 100 gallons per year are required to use low profile aboveground storage tanks of sizes 250, 500, or 1000 gallons. The above ground storage tank will have secondary containment and will be Underwriters Laboratories 142 listed. The tank will be equipped with emergency vent, level gauge, manhole access/handhole, built-in funnel with screen, and locking fill cap. All tanks will be installed on a concrete floor or slab.

(2) Generators of less than 100 gallons and more than 20 gallons of used oil per year can use metal 55 gallon drums or smaller for storage. The drum must be equipped with a spill pan under the container and drip funnel at the top to minimize spills from leakage or overflow. The drum must be in good condition and must also be covered or placed under a shelter to prevent rainwater entry or other infiltration.

(3) Generators of less than 20 gallons of used oil per year can make arrangements to transfer the oil to the nearest

used oil tank. A second option is to transport and transfer the used oil to a Directorate of Public Works used oil collection tank. This option requires prior coordination with the Directorate of Public Works, Quality Assurance Branch and a completed "Certificate of Nonhazardous Used Oil" form (appendix D).

d. Used Oil Characteristics. Used oil for disposal through the Defense Reutilization and Marketing Office's contractor will be maintained free of contamination with any hazardous material/waste. Used oil must be certified as nonhazardous based on generator knowledge, field test, and/or laboratory analysis.

(1) Generator knowledge may be based on process, usage, and/or a Material Safety Data Sheet.

(2) Used oil is considered hazardous waste if one of the following conditions apply:

(a) It is mixed with a hazardous waste that is listed in Title 40 Code of Federal Regulations part 261 subpart D.

(b) Used oil containing greater than 1000 parts per million total halogens is presumed to be a hazardous waste because it has been mixed with halogenated waste listed in 40 Code of Federal Regulations part 261 subpart D. This presumption may be rebutted by demonstrating that the used oil does not contain hazardous waste (i.e., through analysis or a material safety data sheet). The rebuttable presumption does not apply to certain metalworking oils/fluids and certain used oils removed from refrigeration units as noted in the glossary (Used Oil Exceptions) and 40 Code of Federal Regulations part 279.10.

(c) Used oil mixed with hazardous waste identified in 40 Code of Federal Regulations part 261 subpart C is considered hazardous waste if the mixture exhibits any characteristic of hazardous waste identified in subpart C of part 261.

(d) Used oil containing any quantifiable level of polychlorinated biphenyls (two parts per million) must be managed in accordance with 40 Code of Federal Regulations part 761.20. In addition, used oil containing greater than fifty

parts per million polychlorinated biphenyls is considered hazardous waste under Code of Maryland Regulation 26.13. Therefore, used oil containing any quantifiable level of polychlorinated biphenyls should be disposed of through the Hazardous Waste Tracking System in accordance with APG Regulation 200-60.

(e) Used oil subject to management as a hazardous waste can not be disposed of through the Defense Reutilization and Marketing Office's contractor. All hazardous waste will be disposed of through the Hazardous Waste Tracking System in accordance with APG Regulation 200-60.

(f) The generator will be responsible for the recycling/disposal of used oil containing more than 20 percent water through the Directorate of Public Works Services Branch (410-278-5510) or their own contract.

e. Used oil pickup. Upon receipt of documents, the Defense Reutilization and Marketing Office's contractor will pickup used oil from all locations on an established schedule or within 5 to 7 days for large generators.

(1) Generators will submit the "Certificate of Nonhazardous Used Oil" (appendix D) to the Defense Reutilization and Marketing Office for pickup.

(2) The generator will unlock the used oil container and submit the "Certificate of Nonhazardous Used Oil" to the contractor.

(a) The contractor will not pickup used oil containing greater than 1000 parts per million total halogens.

(b) The contractor will not pickup used oil containing greater than 20 percent water.

(3) The quantity of used oil removed, oil level, date and contractor name will be recorded in the generator logbook.

f. Spill response. In the event of a spill, the following measures should be taken immediately to minimize impact on human health and the environment.

(1) Stop the release and contain the used oil to the greatest extent possible while ensuring personal safety.

(2) Dial "911" to report the spill to the Emergency Operations Center. The Emergency Operations Center will notify the Directorate of Safety, Health and Environment spill response personnel.

g. Household Used Oil Generators. Household, do-it-yourself used oil generators are not subject to federal or state regulations. However, best management practices should be employed to prevent a release to the environment. Aberdeen Proving Ground employees (civilian/military) who are members of the Auto-Craft shop may bring their self-changed crankcase oil to the shop for collection and recycling/disposal.

4-4. RESPONSIBILITIES.

a. The Chief, Environmental Compliance Division, Directorate of Safety, Health and Environment, USAGAPG, will:

(1) Provide environmental compliance support and coordinate with federal, state and local authorities.

(2) Perform bi-monthly inspections of used oil collection facilities to ensure compliance with applicable laws and this regulation.

(3) Respond to all U.S. Army Garrison, Aberdeen Proving Ground reported spills.

(4) Maintain records of used oil collection and submit a semi-annual report to Maryland Department of the Environment as required by Oil Operations Permit No. 95-OP-0743.

(5) Maintain and update the Oil Operations Permit.

(6) Provide generators with Maryland Department of the Environment approved used oil tanks in capacities of 250, 500, and 1000 gallons upon approval by the Directorate of Safety, Health and Environment.

b: The Director, Public Works, USAGAPG, will:

- (1) Schedule used oil pickup through the Defense Reutilization and Marketing Office.
- (2) Provide for the pickup and disposal of oil with greater than 20 percent water upon generator request.
- (3) Install and repair used oil tanks on the basis of a work request (DA Form 4283, Facilities Engineering Work Request) submitted by the generator.
- (4) Accept used oil from small quantity generators (less than 20 gallons per year) for storage in the Directorate of Public Works collection tanks, after receipt of the "Certificate of Nonhazardous Used Oil" form (appendix D).
- (5) Provide "emergency" used oil pickups greater than 500 gallons from large generators after receipt of "Certificate of Nonhazardous Used Oil" form (appendix D).
- (6) Submit "Certificate of Nonhazardous Used Oil" to the Defense Reutilization and Marketing Office to indicate the total quantity of used oil picked up by the contractor at the end of each shipment.
- (7) Submit "Certificate of Nonhazardous Used Oil" (appendix D) to the Defense Reutilization and Marketing Office for each tenant that required used oil pickup.

c. The Chief, Defense Reutilization and Marketing Office, will:

- (1) Establish and maintain a contract for recycling and disposal of used oil which meets the requirements of this regulation.
- (2) Ensure that the contractor picks up the used oil from all locations on an established schedule. For large generators, used oil will be picked up within 5 to 7 days after receipt of notification from the generator via the Directorate of Public Works.
- (3) Approve nonhazardous used oil collections by the contractor on basis of the documents provided by the generator.

(4) Maintain contractor used oil collection records (Certificate of Nonhazardous Used Oil (appendix D), disposal manifests, contractor agreement) for a minimum of 3 years. Provide copies of these documents to Directorate of Safety, Health and Environment on a semi-annual basis. The point of contact is Dr. Nanda Mukherjee, STEAP-SH-EE, 410-278-6982.

d. Commanders/directors, staff officers, and heads of post activities that generate used oil will:

(1) Ensure personnel store used oil in approved collection tanks and appropriate containers, and maintain the used oil collection centers in accordance with 40 Code of Federal Regulations parts 112, 279, Code of Maryland Regulation 26.10, and Aberdeen Proving Ground's Oil Operations Permit Number 95-OP-0743.

(2) Assign a custodian for each used oil collection center.

(3) Maintain a logbook at each used oil collection center.

(4) Provide funding for: used oil containers other than aboveground storage tanks; sampling and analysis of the used oil as required; disposal of any sludge, water or contaminated oil from used oil collection tanks; and the cost of cleaning/disposal of contaminated tanks.

(5) Provide "Certificate of Nonhazardous Used Oil" (appendix D) to Defense Reutilization and Marketing Office prior to pickup by the contractor.

(6) Contact Directorate of Public Works Services Branch for disposal of used oil wastewater remaining in tanks.

e. All government contractors must comply with all applicable federal, state, and local regulations as well as this APG regulation.



CHAPTER 5

OIL CONTAMINATED SOIL MANAGEMENT

5-1. GENERAL. This chapter prescribes policies, establishes procedures, and assigns responsibilities for the management and disposal of oil contaminated soil generated at Aberdeen Proving Ground.

5-2. POLICIES.

a. U.S. Army Garrison, Aberdeen Proving Ground tenant organizations, and government contractors will manage their oil contaminated soil in accordance with 40 Code of Federal Regulations parts 261, 280 and 302, and Code of Maryland Regulation 26.10.13. Each tenant organization, activity, of the U.S. Army Garrison, Aberdeen Proving Ground, generating oil contaminated soil is considered a generator for the purpose of this regulation. The generator will properly characterize the oil contaminated soil, interpret oil contaminated soil regulations, and implement all applicable regulations.

b. Oil contaminated soil will be disposed of off-post through the Directorate of Safety, Health and Environment's hazardous waste disposal contractor. The Hazardous Waste Branch will ensure that the transporter and final disposal site have all appropriate licenses and permits. Oil contaminated soil will be hauled to a soil recycling treatment facility when possible.

5-3. PROCEDURES.

a. Identification and Removal. When oil contaminated soil is suspected or found, immediate action will be taken to prevent further release to the environment and further migration of the released material into surrounding soils and groundwater. All oil contaminated soil resulting from spills will be removed as soon as possible. Upon request from the Directorate of Safety, Health and Environment or the generator, the Directorate of Public Works will respond to spills/clean-ups beyond the capability of the generator.

b. Storage.

(1) The proper storage and disposal of oil contaminated soil requires an operating knowledge of the various regulations governing contaminated soil.

(2) Soil removed from any source and pending analysis is to be staged in drums, bins or piles in accordance with Code of Maryland Regulation 26.10.13 and disposed of within 100 days from the date of generation. Soil can be stored in 55 gallon drums to prevent hydrocarbon emissions and rainwater run-off to the ground. Bulk soil is to be stored on an impermeable base and covered to prevent rainwater infiltration. The preferred method of staging is a shelter that includes a roof or equivalent protection. However, bulk oil contaminated soil can be piled on plastic liners and covered at the site or stored in a covered roll-off container. Bulk storage sites must be inspected periodically by the generator to ensure plastic coverings remain in place.

(3) Washrack soils will be staged in bins at the 3600 block staging area. The bins are designed for staging oil contaminated soil generated from washrack sediment basins and oil-water separators.

(4) Underground storage tank soils will be staged in the west end of the 3600 block or on-site and covered with plastic. Oil contaminated soil is to be piled on a concrete slab or on the ground with a plastic liner underneath.

(5) Hazardous Material bar codes and Non-Regulated labels (EAP label 1007), available from Activity Environmental Coordinators, will be affixed to drums, or to tags or signs of bins and piles of oil contaminated soil. The waste items will be identified and tracked by the hazardous material inventory number. The label will indicate the source of the soil (underground storage tank/above ground storage tank, washrack or spill), location, date of generation, turn-in document identification number and generator point of contact.

(6) The 3600 block storage area is to be secured to prohibit entry by any unauthorized persons or vehicles, or dumping of drums/containers without prior knowledge of the

Directorate of Public Works. A sign indicating "Oil Contaminated Soil" is to be posted in the secured area. All temporary staging areas must be protected to prevent disturbance of soil or protective coverings.

c. Sampling and Analytical Background. The requirements for soil sampling and analysis are based on the soil source, suspected contaminant(s), and soil treatment facility requirements. Sampling and analysis will be performed in accordance with Environmental Protection Agency SW-846. Analysis will be performed through the Directorate of Safety, Health and Environment's analytical services contract. This contract is managed by the Hazardous Waste Branch, Mr. Roger Calvert, STEAP-SH-EW, 410-436-2754. Upon request, the Directorate of Safety, Health and Environment, Environmental Engineering Branch, will perform the soil sampling (Point of Contact: Dr. Nanda Mukherjee, STEAP-SH-EE, 410-278-6982).

d. Evaluation. Analytical reports are to be submitted to Dr. Nanda Mukherjee, STEAP-SH-EE, Directorate of Safety, Health and Environment, Environmental Engineering Branch, for evaluation of hazardous or nonhazardous characteristics and parameter levels as required by the oil contaminated soil treatment facility. Following evaluation, the analysis reports will be returned to the generator with any applicable Environmental Protection Agency hazardous waste codes and special handling instructions.

e. Hazardous Waste Tracking System. After evaluation, the Directorate of Public Works or the generator will create a turn-in document on the Hazardous Waste Tracking System for the oil contaminated soil. The turn-in document will include the generation date and the 100 day limit date in the generator comments section. The waste item will be identified by the hazardous material inventory number. The Directorate of Safety, Health and Environment, Hazardous Waste Branch will review the turn-in document and if correct, approve the waste for disposal. Upon treatment storage and disposal facility approval, the generator will call, FAX, or e-mail the treatment storage and disposal facility requesting that the oil contaminated soil be placed on a delivery order for removal.

f. Disposal of Oil Contaminated Soil. Currently, the Hazardous Waste Branch's hazardous waste disposal contractor disposes of contaminated soil for Aberdeen Proving Ground. The contractor has 50 days from the date the delivery order is accepted to remove the soil off-post. The generator is responsible for ensuring that oil contaminated soil is disposed of within the 100 day limit prescribed by Maryland Department of the Environment. For spill soils moved to the 3600 block storage area the generator will remain responsible for ensuring that the oil contaminated soil is shipped off-site within the 100 day limit. Information on the status of soil in storage areas can be obtained from the Directorate of Public Works, Services Branch, STEAP-FE-GS, 410-278-4915, fax 410-278-9839 or from the Directorate of Safety, Health and Environment, Hazardous Waste Branch, 410-436-2157.

5-4. RESPONSIBILITIES.

a. The Chief, Environmental Compliance Division, Directorate of Safety, Health and Environment, USAGAPG, , will:

(1) Provide environmental compliance support for the storage and disposal of oil contaminated soil.

(2) Evaluate the analytical results of oil contaminated soil within 2 working days upon their receipt to determine the hazardous/nonhazardous classification based on current regulations and disposal facility requirements.

(3) Inspect the oil contaminated soil staging areas to ensure staging compliance with Code of Maryland Regulation 26.10.13 and standard operating procedures.

(4) Monitor oil contaminated soil storage areas to ensure disposal of soil within the Maryland Department of the Environment permitted time limit.

(5) Obtain Maryland Department of the Environment permits/approvals as needed.

(6) Provide guidance to generators concerning clean-up and disposal of oil contaminated soil.

b. The Chief, Hazardous Waste Branch, Environmental Compliance Division, Directorate of Safety, Health and Environment, USAGAPG, will:

- (1) Maintain the Hazardous Waste Tracking System.
- (2) Approve disposal and ensure the hazardous waste contractor picks up oil contaminated soil within 50 days after acceptance of delivery order from treatment storage and disposal facility/Hazardous Waste Branch in accordance with the following timeline.
- (3) This is to remain in effect when and if the Directorate of Public Works contract is established.
- (4) Timeline and Operations for oil contaminated soil Disposal.

<u>CALENDAR DAYS</u>	<u>OPERATION</u>	<u>RESPONSIBLE ORGANIZATION(S)</u>
0	Soil generation and staging	Generator and Directorate of Public Works
1	Soil sampling and preservation	Generator or Directorate of Safety, Health and Environment
7	Samples to laboratory for analysis	Contractor
37	Analysis and reporting	Contractor
39	Review of analysis	Directorate of Safety, Health and Environment
41	Enter into Hazardous Waste Tracking System and fax to Treatment, Storage, and Disposal Facility	Directorate of Public Works or Generator
45	Approval for disposal	Directorate of Safety, Health and Environment
51	Acceptance of delivery order	Contractor
100	Disposal of soil	Contractor

c. The Director, Public Works, USAGAPG, will:

- (1) Operate, maintain, and control access to the oil contaminated soil staging area in the 3600 block for soils from washracks, underground storage tanks, aboveground storage tanks and spills.
- (2) Maintain log books and records of analysis, storage and disposal of all Directorate of Public Works generated oil contaminated soil and provide monthly soil tracking reports to Directorate of Safety, Health and Environment, Environmental Engineering Branch. Point of contact is Dr. Nanda Mukherjee, STEAP-SH-EE, 410-278-6982, FAX 410-278-4291.
- (3) At the request of the generator, transport drums of oil contaminated soil from spill sites to the 3600 block for staging. Log the incoming and disposal dates of these drums.
- (4) Perform generator responsibilities for oil contaminated soils from washracks, underground storage tanks, aboveground storage tanks, and Directorate of Public Works spills.
- (5) Provide assistance to generators with the clean up of spills on a reimbursable basis.
- (6) As appropriate, establish a disposal contract for oil contaminated soil to be used in place of the Directorate of Safety, Health and Environment hazardous waste contract. Serve as the contracting officer's representative and establish turn-in procedures once a contract is in place.

d. Commanders/directors, staff officers, and heads of post activities that generate oil contaminated soil will:

- (1) Report any incident of soil contamination to the Directorate of Safety, Health and Environment within 24 hours of identification. All spills of petroleum hydrocarbons are to be reported immediately with on-post telephones by dialing "911."
- (2) Ensure oil contaminated soil is handled in accordance with the federal, state and Aberdeen Proving Ground regulations and disposed of within 100 days of generation.

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(3) Provide funding for sampling and analysis, clean-up, transportation, storage, and disposal of oil contaminated soil.

(4) Ensure that analytical results of oil contaminated soil are reviewed by Directorate of Safety, Health and Environment, Environmental Engineering Branch, initialed, and returned to the generator. Point of contact is Dr. Nanda Mukherjee, STEAP-SH-EE, 410-278-6982, FAX 410-278-4291.

(5) Enter data, including the date of generation and analytical evaluation of soil and 100 day limit date, into the Hazardous Waste Tracking System.

(6) Properly store and label all drums, bins or on-site piles of oil contaminated soil.

(7) Ensure that hazardous soil is not transported or staged at the staging area in the 3600 block.

(8) Ensure removal of oil contaminated soil staged at the 3600 block is completed within the allotted time frame.

(9) Maintain records of oil contaminated soil. Point of contact is Dr. Nanda Mukherjee, STEAP-SH-EE, 410-278-6982, FAX 410-278-4291.

e. All government contractors must comply with all applicable federal, state, and local regulations as well as this Aberdeen Proving Ground regulation.



CHAPTER 6

SPECIAL MEDICAL WASTE MANAGEMENT

6-1. GENERAL.

a. This chapter addresses the management of special medical waste generated by each of the following Aberdeen Proving Ground tenants: Kirk U.S. Army Health Clinics (Aberdeen and Edgewood), Aberdeen Area Dental Clinic, Aberdeen Area Veterinary Clinic, U.S. Army Medical Research Institute of Chemical Defense, Edgewood Research, Development and Engineering Center, the Maryland Army National Guard, and the U.S. Army Center for Health Promotion and Preventive Medicine.

b. This chapter also provides guidance on the handling and disposal of expired shelf-life pharmaceuticals, treated special medical waste, and other non-special medical waste items at the U.S. Army Medical Research Institute of Chemical Defense incinerator. This guidance considers public concerns, government regulations, and facility aesthetics. Concurrent guidance related to biosafety (i.e., bloodborne pathogen standards, universal precautions, etc.) is included in APG Regulation 385-4, The APG Safety and Occupational Health Program. The APG Regulation 385-4 guidance includes individual facility exposure control plans, infection control plans and similar documents required by the Occupational Safety and Health Administration and the Department of Health and Human Services.

6-2. POLICY. Aberdeen Proving Ground will comply with applicable federal (29 Code of Federal Regulations) part 1910.1030, 42 Code of Federal Regulations 72, and 49 Code of Federal Regulations 173), state (Code of Maryland Regulations 26.13.11-13, 26.13.02.02A, 26.13.01, and 10.06.06), Army (Army regulations 40-5, 40-61, 50-61, 200-1, Health Services Command Regulation 40-35), and local requirements related to the handling, transport, and disposal of special medical waste.

6-3. PROCEDURES.

a. Special Medical Waste Determination. Each waste generating facility will determine whether their wastes are special medical waste or require handling under the special

medical waste program through application of the following criteria:

(1) Special Medical Wastes are wastes generated in the course of clinical health care activities, medical research, toxicological and microbiological studies, etc., that are in one of the following categories:

(a) "Anatomical material" consisting of human or animal parts, including tissues and organs.

(b) "Blood" from human or animal sources.

(c) "Blood-soiled articles" or items that contain blood in any form as a result of contact with blood. (NOTE: The State of Maryland's definition does not exempt dried blood from this category.)

(d) "Contaminated material" including microbiological laboratory waste (i.e., infectious cultures and stocks), feces or feces-soiled items from an individual diagnosed as having a fecally transmitted disease, and any article that has contacted a known infectious agent (Code of Maryland Regulation 10.06.02 defines infectious agents as organisms; including viral, rickettsial, bacterial, fungal, protozoal, or helminthic that are capable of producing infection or infectious disease in humans).

(e) "Sharps" include but are not limited to; used and unused syringes, needles, surgical instruments, blood vials, Pasteur pipettes, and other articles capable of cutting or puncturing human skin used during the care of animal or human patients, medical research, and clinical laboratories.

(2) Other waste streams that are handled as special medical waste because of local municipal waste disposal regulations include the following categories:

(a) Animal bedding not exposed to an infectious agent and exempt from regulation as a special medical waste is disposed of at the U.S. Army Medical Research Institute of Chemical Defense incinerator. Local municipal waste disposal facilities will only accept small quantities (typically no more than one or two bags per dumpster).

(b) Euthanized, non-infectious research animal carcasses, and domestic animals from the Post Veterinary Clinic are incinerated at the U.S. Army Medical Research Institute of Chemical Defense facility due to off-site disposal regulations and facility aesthetics. (NOTE: Road-killed animals and non-infectious wildlife that die of natural causes are usually buried, or placed in wooded areas on post for natural decomposition or consumption by other wildlife.)

(c) Sterilized/treated special medical waste (i.e., autoclaved, irradiated, or disinfected) although excluded in part from Maryland special medical waste regulation, is handled as special medical waste due to restrictions imposed by the local waste-to-energy incinerator that processes Aberdeen Proving Ground's municipal solid waste.

(d) Expired shelf-life pharmaceuticals not authorized for disposal via the sanitary sewer (i.e., controlled substances requiring witnessed destruction). NOTE: Pharmaceuticals regulated as hazardous wastes require disposal under the Directorate of Safety, Health and Environment hazardous waste disposal contract.

b. Maryland special medical waste Identification Numbers. Special medical waste generators may not treat, store, dispose, transport, or offer for transportation, their special medical waste without receiving a special medical waste identification number. The Aberdeen Proving Ground generator, treatment/disposal facility identification number is "SMW000000618."

c. Special Medical Waste Collection, Packaging, and Storage.

(1) Collection of special medical waste will provide for the segregation of special medical waste from general waste at its point of origin, in packaging containers as described below:

(2) Packaging.

(a) Special Medical Waste, animal carcasses and bedding, and nonhazardous pharmaceuticals transported on post

for disposal at the U.S. Army Medical Research Institute of Chemical Defense incinerator will be packaged as follows:

1. Blood, blood-soiled wastes, and non-sharp, infectious or suspect infectious waste will be collected in leak-resistant, waterproof, non-chlorine containing, 4 mil thick, red bags. Prior to transport to the U.S. Army Medical Research Institute of Chemical Defense, bags will be placed in rigid containers to protect them from possible puncture. If rigid containers are to be reutilized, they will be disinfected. Non-reusable, rigid containers will be made of combustible material. The containers will be labeled with the words SPECIAL MEDICAL WASTE, a brief waste description and the identity and telephone number of generator.

2. Sharps will be collected in combustible, impervious, leak-resistant, and puncture-proof containers. Non red-colored containers will be labeled with the universal biohazard symbol. The containers will be labeled with the words SPECIAL MEDICAL WASTE, a brief waste description and the identity and telephone number of generator.

3. Non-infectious animal carcasses and bedding, and treated special medical waste that does not contain sharps will be packaged in leakproof, 4 mil thick, non-chlorine containing bags. The bags will be labeled with a brief waste description and the identity and telephone number of the generator.

4. Expired shelf-life pharmaceuticals will be packaged in original, individual containers to allow for easy separation and handling at the incinerator. The containers will be labeled with a brief waste description and the identity and telephone number of the generator.

(b) Special Medical Waste destined for off post disposal will be packaged and labeled in accordance with the Departments of Transportation and Health and Human Services' requirements specified in 49 Code of Federal Regulations 172, 173 and 42 Code of Federal Regulations 72; respectively. These requirements, as supplemented by Code of Maryland Regulations 26.13.11, are as follows:

1. Special Medical Waste, other than sharps, will be packaged in leak-resistant, waterproof, 4 mil thick, non-

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chlorine red bags enclosed in rigid containers to protect them from puncture. Containers of fluids will be break-resistant and tightly lidded.

2. Sharps will be packaged in leakproof, puncture-resistant, combustible containers, and enclosed in rigid containers.

3. All special medical waste will be labeled SPECIAL MEDICAL WASTE and include the Aberdeen Proving Ground special medical waste I.D. number (SMW000000618), generator's address, telephone number, contents (e.g., sharps, microbiological waste), and the universal biohazard symbol or the word "biohazard."

4. Treated special medical waste shipped off post will be packaged as special medical waste.

5. Non-infectious animal bedding in municipal waste collection dumpsters for off-site disposal will be contained in sturdy, opaque, non-chlorine, unmarked, non-red/non-orange 30 gallon bags. No more than two 30 gallon bags of non-infectious animal bedding may be in the dumpster at any time.

(3) Storage.

(a) Special Medical Waste storage areas will be secure, pest-free, and identified with signs and biohazard symbols.

(b) Putrescible special medical waste and non-infectious animal carcasses will be refrigerated if stored more than 2 days.

(c) On-site storage at facilities other than the U.S. Army Medical Research Institute of Chemical Defense will not exceed 30 days. Maximum storage time at the U.S. Army Medical Research Institute of Chemical Defense for wastes awaiting incineration is 7 days unless an extension is granted by the Directorate of Safety, Health and Environment.

d. Waste Transport.

(1) On-site transportation will be in fully enclosed, Government vehicles.

(2) Off-site Transportation.

(a) Authorized special medical waste Transporter. Off-site special medical waste transport will be by a fully licensed and State of Maryland permitted hauler having a valid special medical waste transporter identification number.

(b) Manifest. All special medical waste off-site shipments will be accompanied by a completed State of Maryland special medical waste Manifest (see appendix E).

1. The manifest (form MDE 181) is available through the Maryland Department of the Environment.

2. The certified special medical waste transporter or designated special medical waste disposal facility will be contacted to determine the status of any manifest that has not been returned within 20 days of initial transport from the generator's site.

3. The transporter will be instructed to return the waste if the transporter is unable to deliver the special medical waste to the designated or alternate facility.

4. The Directorate of Safety, Health and Environment, Hazardous Waste Branch (410-278-9023/4; STEAP-SH-EW, building 3520, AA) will be immediately notified when a manifest for shipment has not been returned within 30 days of initial transport. The Directorate of Safety, Health and Environment will then file an exception report with the Maryland Department of the Environment.

5. Required Information. The special medical waste manifest will contain all of the following information:

- A manifest document number (normally preprinted on the manifest);
- The generator's name and mailing address, telephone number, and identification number (SMW000000618);
- The name and Maryland identification number of each transporter (provided by the transporter);

- The name, address and Maryland identification number (if any) of the designated disposal facility and an alternate facility, if any;
- The description of the waste; and
- The total quantity of each special medical waste by units of weight or volume, and the type and number of containers loaded onto the transport vehicle.

6. Use of the Manifest. At pickup time, the generator will:

- Sign the manifest certification by hand;
- Obtain the handwritten signature of the initial transporter and date of acceptance on the manifest;
- Retain Copy 8 of each manifest. Send Copy 6 and copy 7 to the disposal state and the generator state listed on top of the manifest form; and
- Give the transporter the remaining copies of the manifest (Copies 1, 2, 3, 4, and 5).

e. On-Site Predisposal Treatment and Final Disposal.

(1) Predisposal Treatment. Generators that treat special medical waste on-site in order to mitigate infectious hazards must comply with the following:

(a) Blood and blood-soiled articles. Small volumes (i.e., 1-2 liters) of non-toxic blood in liquid form may be treated/disposed of through the sanitary sewer with the prior approval of the Directorate of Safety, Health and Environment, Environmental Engineering Branch (410-278-7002). Blood-soiled articles may be treated via autoclaving, chemical or microwave disinfection.

(b) Sharps. Autoclaving, chemical disinfection, or microwaving.

(c) Contaminated Materials. Autoclaving, chemical or microwave disinfection.

(d) Anatomical Materials. Incineration.

(2) Disposal. Except for blood disposed into the sanitary sewer, all treated and untreated special medical waste and waste streams handled as special medical waste (i.e., animal carcasses, bulk quantities of bedding, and expired non-hazardous pharmaceuticals) will be disposed of at appropriate medical waste disposal facilities, on, or off post. The U.S. Army Medical Research Institute of Chemical Defense incinerator located on post at building E3081 is a permitted special medical waste incinerator handling animal carcasses and bedding, as well as microbiological lab wastes, necropsy wastes, blood-soaked articles, sharps, non-hazardous expired pharmaceuticals and other infectious or suspect infectious items. The U.S. Army Medical Research Institute of Chemical Defense reserves the right to refuse waste streams containing large quantities of metal, plastic, glass and other materials identified as high slag generators, or as having extremely high or low british thermal unit content.

f. Recordkeeping and Reporting.

(1) Recordkeeping.

(a) Generators that ship special medical waste off post will retain Copy 8 of each manifest for 3 years or until the generator receives Copy 3, signed by the designated disposal facility that received the waste. The generator will retain Copy 3 for at least 3 years from the date the waste was accepted by the initial transporter.

(b) Generators will keep a copy of each annual report and exception report for a period of at least 3 years from the date of the report.

(c) Generators will keep records of any test results, waste analyses, or similar documents related to special medical waste determinations for at least 3 years from the date that the waste was sent to a disposal facility.

(d) The periods of retention referred to in this section are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Maryland Department of the Environment.

(2) Reporting.

(a) All special medical waste generators will prepare and submit an annual report to the Directorate of Safety, Health and Environment, Hazardous Waste Branch (STEAP-SH-EW) no later than 1 February. The report will include the monthly quantity (pounds) and disposition of each category of special medical waste and waste streams handled as special medical waste generated during the previous calendar year.

(b) The U.S. Army Medical Research Institute of Chemical Defense will be responsible for providing the Directorate of Safety, Health and Environment, Environmental Engineering Branch (STEAP-SH-EE) with incinerated special medical waste/solid waste quantities and disposition data, ash testing results, facility shutdown periods, and contingency data as required to meet the special conditions provisions of the facility's refuse disposal permit.

g. Training. All special medical waste-generating activity employees will receive the following training, as applicable:

(1) Facility employees who handle special medical waste will receive general initial and annual refresher/update instruction in the safe handling of infectious materials, facility policies, and infection control procedures. Training documentation will include topics covered, date, name of trainer, number of hours, and signature of attendee(s). Documentation will be maintained for 3 years.

(2) Employees with an occupational exposure to blood, potentially infectious body fluids, or other media contaminated with human immunodeficiency virus or hepatitis B virus will receive bloodborne pathogen training in accordance with 29 Code of Federal Regulations, 1910.1030 and APG Regulation 385-4, chapter 23. Bloodborne pathogen training is required upon initial assignment and updated annually thereafter. Training documentation and record disposition is detailed in 29 Code of Federal Regulations 1910.1030.

(3) Employees involved with the pre-transport packaging, and manifesting of off-site special medical waste shipments will receive Department of Transportation training in accordance with 49 Code of Federal Regulations, 172 Subpart H. This training will be repeated every 3 years and updated as regulations change. Documentation and record disposition will be as described at subparagraph (1) above.

(4) All U.S. Army Medical Research Institute of Chemical Defense incinerator operators will complete initial and update operator training in accordance with Code of Maryland Regulations 26.11.08.09.C.

h. Contingencies.

(1) Each special medical waste generator will develop contingency plans for the containment, clean-up and disinfection required in the case of special medical waste spills or leakage.

(2) The U.S. Army Medical Research Institute of Chemical Defense and generators that use the U.S. Army Medical Research Institute of Chemical Defense incinerator for disposal will have a contingency plan for the alternate disposal of special medical wastes, animal carcasses and bedding in the case of an extended incinerator shutdown.

6-4. RESPONSIBILITIES.

a. The Chief, Environmental Compliance Division, Directorate of Safety, Health and Environment, USAGAPG, will:

(1) Provide necessary guidance to all generators, to assure consistent and uniform compliance with this chapter's stated special medical waste policies and procedures.

(2) Perform semi-annual inspections of all special medical waste generators.

(3) Update generators on regulatory changes that may affect their special medical waste operations.

(4) Assist generators with required State permit applications, related reports, and required operational notifications with tenant-provided data.

(5) Identify and direct generators that improperly dispose of special medical wastes in dumpsters destined for the Harford County Waste-to-Energy incinerator to retrieve the items for proper disposal.

(6) Approve acceptable special medical waste disposal facilities.

b. The Director, Public Works, USAGAPG, will assist the Directorate of Safety, Health and Environment in determining the origin of special medical waste and waste streams handled as special medical waste improperly disposed of with municipal solid waste.

c. The Commander, U.S. Army Medical Research Institute of Chemical Defense will ensure that incinerator operations comply with State of Maryland solid waste and air permits.

d. Commanders/directors, staff officers, and heads of activities that generate special medical waste will:

(1) Ensure personnel comply with this chapter's stated policies and procedures.

(2) Develop and implement specific procedures to incorporate the regulatory requirements of this chapter into daily operations.

(3) Provide the necessary supplies and equipment, such as carts, plastic bags, rigid containers, and personal protective equipment, to comply with the requirements of this chapter.

(4) Prepare, submit and maintain manifests, exception reports, analytical data, required reporting information, and other documents in accordance with this chapter.

(5) Ensure personnel involved in special medical waste and related operations receive training covering assigned duties and the safe handling of infectious substances.

(6) If using the U.S. Army Medical Research Institute of Chemical Defense for incineration, develop contingency plans for use during U.S. Army Medical Research Institute of Chemical Defense incinerator down periods of more than 7 days.

(7) At the direction of the Directorate of Safety, Health and Environment, immediately retrieve improperly handled special medical waste or waste streams handled as special medical waste delivered to the Harford County Waste-to-Energy incinerator, or deposited in general refuse dumpsters.

CHAPTER 7

INSTALLATION RESTORATION PROGRAM ACTIVITIES

7-1. GENERAL.

a. This chapter specifies policies, establishes procedures, and assigns responsibilities for the management and disposal of solid waste, referred to in this chapter as investigation derived materials and remediation derived wastes, generated during field activities supporting the Installation Restoration Program at Aberdeen Proving Ground.

b. For the purpose of this regulation, investigation derived material includes wastes generated in association with the study and investigation phase of a site prior to the site's remediation. These wastes may include, but are not limited to, soil cuttings, drilling mud, purged groundwater, decontamination fluids, and disposable personal protective equipment.

c. For the purpose of this regulation, remediation derived wastes includes the wastes generated during the site remediation phase and may include, but are not limited to, materials such as soil, demolition debris, refuse like materials (i.e., drums, trash, discarded materials), and unexploded ordinance.

7-2. POLICIES.

a. Investigation Derived Materials. The actions associated with the Aberdeen Proving Ground Installation Restoration Program are governed by the Comprehensive Environmental Restoration, Compensation and Liability Act through a set of U.S. Army Garrison, Aberdeen Proving Ground, Installation Restoration Program Standard Operating Procedures approved by the U.S. Environmental Protection Agency and the Maryland Department of the Environment. The standard operating procedure for investigation derived materials is entitled, Standard Operating Procedure 042, "Disposal of Investigation Derived Materials (IDM)." These procedures adequately address the handling and disposal of investigation derived materials and are therefore recognized by this regulation as the disposal requirements. The disposal requirements contained in Standard Operating Procedure 042 are consistent with the intent of major environmental laws such as the Clean Water Act, the Safe

Drinking Water Act, and the Resource Conservation and Recovery Act.

b. Remediation Derived Wastes. The disposal of remediation derived wastes will vary depending upon site specific factors. The procedures for disposal of these wastes will be detailed in site work plans but will be consistent with the following requirements.

(1) Hazardous Wastes.

(a) Remediation derived wastes which meet the characteristics of hazardous wastes will be disposed in a manner which meets the purpose and intent of the Resource Conservation and Recovery Act. Disposal will be accomplished through the Hazardous Waste Tracking System in accordance with the requirements of APG Regulation 200-60. Facilities chosen for disposal of these materials will possess an active permit and will be operating in accordance with the requirements of the permit.

(b) All wastes will be tracked through the Hazardous Waste Tracking System.

(2) Nonhazardous Wastes.

(a) All remediation derived wastes which do not meet the hazardous waste characteristics and which are not being disposed through the Hazardous Waste Tracking System, will be disposed in either off-post or on-post facilities permitted to accept the type of waste requiring disposal. Facilities chosen for disposal of these materials will possess an active permit and will be operating in accordance with the requirements of the permit.

(b) Disposal sites will be approved by the Maryland Department of the Environment prior to any material leaving the remediation work site.

(c) Utilizing the reporting forms found in appendix B, the Installation Restoration Program project manager will provide all pertinent information including the type, quantity, source of generation, method of disposal, disposal facility's

name, and location. Reports will be provided on a quarterly basis. Reports are required for all remediation derived wastes which are disposed in either on-post or off-post facilities. Any material disposed through the Hazardous Waste Tracking System or through Aberdeen Proving Ground's municipal solid waste stream (i.e., materials placed in regular trash dumpsters) need not be reported separately using appendix B forms.

7-3. RESPONSIBILITIES.

a. The Chief, Environmental Conservation and Restoration Division, Directorate of Safety, Health and Environment, USAGAPG, will:

(1) Ensure that all investigation derived material and remediation derived wastes are managed and disposed of in accordance with applicable federal, state, local and Army regulations as well as the requirements of applicable Record of Decisions.

(2) Ensure that project managers and contractors follow the requirements of this chapter.

(3) Select the disposal sites for all nonhazardous remediation derived wastes and obtain concurrence from the Environmental Restoration and Redevelopment Program, Waste Management Administration, Maryland Department of the Environment.

(4) Coordinate with appropriate Aberdeen Proving Ground or contracted resources for the transportation of the waste to the disposal site.

b. The Chief, Hazardous Waste Branch, Environmental Compliance Division, Directorate of Safety, Health and Environment, USAGAPG, will:

(1) Maintain the Hazardous Waste Tracking System.

(2) Approve disposal method and location for all hazardous wastes.

(3) Ensure the hazardous waste contractor picks up the hazardous investigation derived material and/or remediation

derived wastes no later than 50 days from the disposal decision date.

c. The Chief, Environmental Engineering Branch, Environmental Compliance Division, Directorate of Safety, Health and Environment, USAGAPG, will report quantities of waste disposed in annual reports to appropriate agencies.

d. The Director, Public Works, USAGAPG, will operate the Westwood and Phillips Army Airfield Rubble Landfills which may be utilized for the disposal of demolition debris.

e. All government contractors will comply with all applicable federal, state and local regulations as well as this Aberdeen Proving Ground regulation.

APPENDIX A

REFERENCES

Section I. Required Publications.

Public Law 91-190,
National Environmental Policy Act of 1969, as amended.

Public Law 92-500,
Federal Water Pollution Control Act (Clean Water Act), as
amended in 1989.

Public Law 94-469,
Toxic Substances Control Act, as amended in 1989.

Public Law 94-580,
Resource Conservation and Recovery Act of 1976, as amended.

Public Law 96-510,
Comprehensive Environmental Response, Compensation, and
Liability Act of 1980, as amended.

Executive Order 12088,
Federal Compliance with Pollution Control Standards, October 13,
1978.

Executive Order 12780,
Federal Agency Recycling and the Council on Federal Recycling
and Procurement Policy. November 4, 1991.

Executive Order 13101,
Greening the Government Through Waste Prevention, Recycling, and
Federal Acquisition, 16 September 1998.

Title 10, Code of Federal Regulations, Energy.
Parts 100-149, Title 40, Code of Federal Regulations, Protection
of the Environment, Water Programs.

Parts 260-280, Title 40, Code of Federal Regulations,
Hazardous Waste Management.

Part 261, Title 40, Code of Federal Regulations; 57 Federal Register 21524, 20 May 92 Hazardous Waste Management System; General; Identification and Listing of Hazardous Waste; Used Oil, Final Rule.

Parts 260, 261, 266, 271 and 279, Title 40, Code of Federal Regulations; 57 Federal Register 41566, 10 September 92, Recycled Used Oil Management Standard; Final rule.

Parts 261, 264, 265, 271, and 279, Title 40, Code of Federal Regulations; 58 Federal Register 26420, 3 May 93, Final rule-technical amendments and corrections.

Parts 257, 403, and 503, Title 40, Code of Federal Regulations; February 19, 1993, Standards for the Use or Disposal of Sewage Sludge.

Part 302, Title 40, Code of Federal Regulations, List of Comprehensive Environmental Response, Compensation and Liability Act Hazardous Substances Part 761, Title 40, Code of Federal Regulations, Polychlorinated Biphenyl Management and Disposal.

Parts 100-199, Title 49, Code of Federal Regulations, Transportation.

Annotated Code of Maryland,
Environmental Articles.

Title 10, Subtitle 6, Section .06, Code of Maryland Regulations, Communicable Disease Prevention - Handling, Treatment, and Disposal of Special Medical Waste.

Title 26 Subtitle 4, Code of Maryland Regulations, Regulation of Water Supply, Sewage Disposal, and Solid Waste.

Title 26, Subtitle 8, Code of Maryland Regulations, Water Pollution.

Title 26, Subtitle 9, Code of Maryland Regulations, Water Management.

Title 26, Subtitle 10, Code of Maryland Regulations, Oil Pollution and Tank Management.

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Title 26, Subtitle 11, Code of Maryland Regulations, Air Quality.

Title 26, Subtitle 12, Code of Maryland Regulations, Radiation Management.

Title 26, Subtitle 13, Code of Maryland Regulations, Disposal of Controlled Hazardous Substances.

HSCR 40-35, Medical Services-Management of Regulated Medical Waste, 27 December 1993.

DOD 4160.21-M,
Defense Materiel Disposition Manual.

AR 40-5,
Preventive Medicine.

AR 40-61,
Medical Logistics Policies and Procedures.

AR 75-15,
Responsibilities and Procedures for Explosive Ordnance Disposal.

AR 190-59,
Chemical Agent Security Program.

AR 200-1,
Environmental Protection and Enhancement.

AR 200-2,
Environmental Effects of Army Actions.

AR 385-11,
Ionizing Radiation Protection (Licensing, Control,
Transportation, Disposal, and Radiation Safety).

AR 420-49,
Utility Services.

AR 710-2,
Supply Policy Below the Wholesale Level.

AMC-R 385-100,
Safety Manual.

APG-R 40-5,
APG Preventive Medicine Program.

APG-R 200-1,
Environmental Quality Control (EQC) at APG.

APG-R 200-2,
Waste Management at Aberdeen Proving Ground.

APG-R 200-41,
Wastewater Discharge Management.

APG-R 200-60,
Hazardous Waste Management.

APG-R 385-3,
Radiation Protection.

APG-R 385-4,
The APG Safety and Occupational Health Program.

APG-R 710-2,
Supply Management for Using/Support Units Disposition of
Property.

APG-R 715-1,
Purchase Procedures.

APG-R 725-3,
Requesting, Receiving, Turn-in, and Delivery of Supplies and
Equipment.

U.S. Army Environmental Hygiene Agency Resource Conservation
Recovery Act Facility Assessment, Aberdeen Proving Ground No.
39-26-0490-90.

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Section II. Related Publications

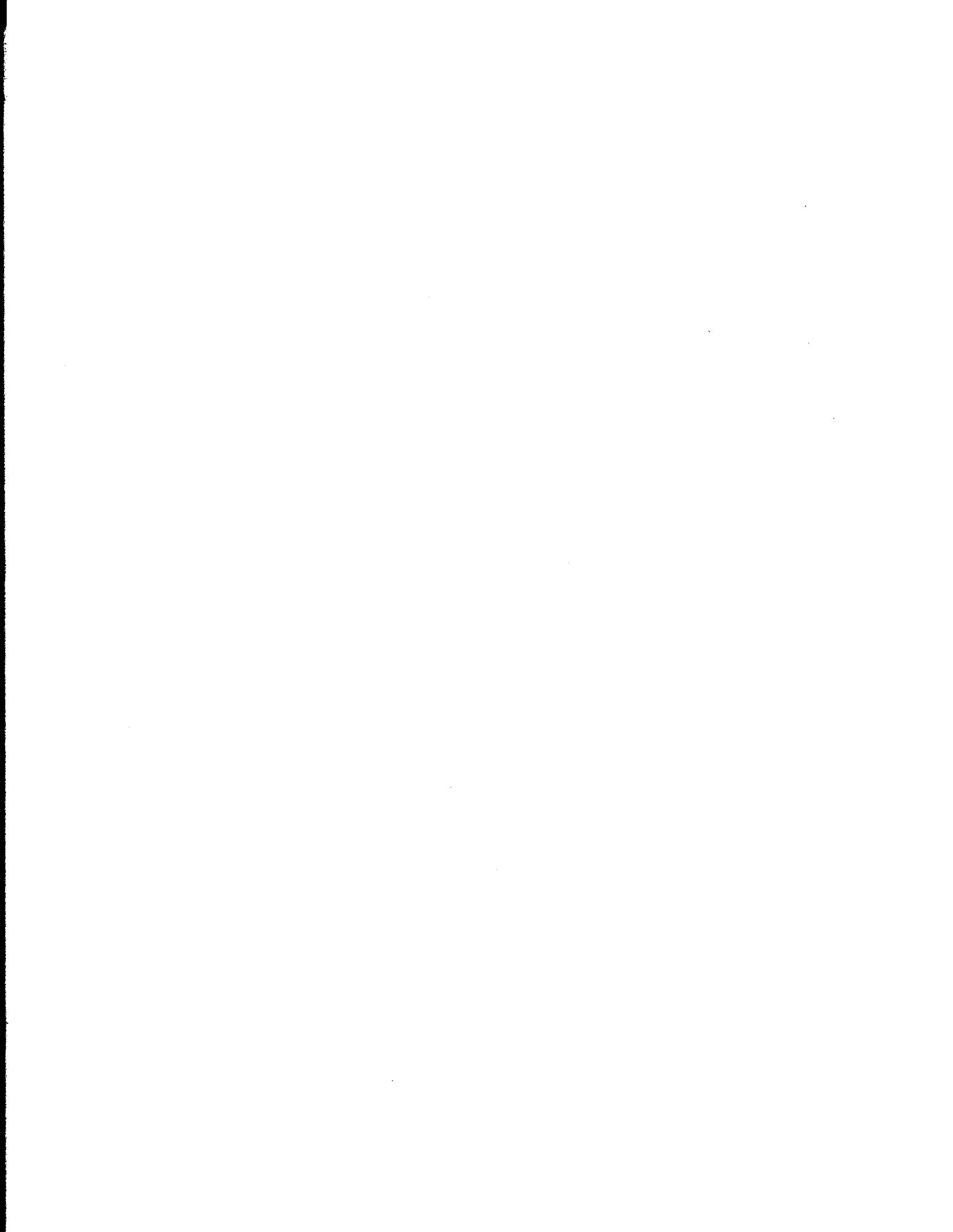
Environmental Protection Agency SW 846, Test Methods for Evaluating Solid Waste.

U.S. Department of Health and Human Services - The Public Health Implications of Medical Waste: A Report to Congress, September 1990.

Aberdeen Proving Ground Solid Waste Management Plan.

Aberdeen Proving Ground Disaster Control Plan.

Management of Investigation-Derived Wastes During Site Inspections PB91-921331, OERR Directive 9345.3-02, May 1991, Office of Emergency and Remedial Response U.S. Environmental Agency, Washington, D.C.



APPENDIX B

SOLID WASTE DISPOSAL FORMS

DAILY LOG OF TRUCK TRIPS FOR REFUSE COLLECTION AND DISPOSAL For use of this form, see AR 420-47; the proponent agency is the Office of the Chief of Engineers.				DATE 10 Feb 1999		
OUT	TIME	SPEEDOMETER READING	TRUCK DRIVER/CONTRACTOR NAME Harford Sanitation			
	0800	45,153	TRUCK NO. 21	TRUCK VOLUME 15 cu yd		
IN	1430	45,293	TOTAL MILES 140	AREA SERVED EA		
CUBIC YARDS DELIVERED TO -						
TRIP NO.	SANITARY LANDFILL M2211	INCINERATOR M2212	RESOURCE RECOVERY/ RECYC. M2213	SOURCE SEPARATION M2214	OTHER M2215	CONTRACT OR M2220
1	SAMPLE					
2						
3						
4						
5						
6						
7						
8						
TOTAL YARDS			57			

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EDITION OF 1 SEP 72 MAY
BE USED

*U.S. Government
Printing Office 1989-
261-871/025272

REFUSE COLLECTION AND DISPOSAL For use of this form, see AR 420-47; the Proponent agency is the Office of the Chief of Engineers									Month February 1999	
DATE	MILES	LABOR HOURS	NO. OF TRIPS	SANITARY LANDFILL M2211	INCINERATOR M2212	RESOURCE RECOVERY/RECYCLE M2213	SOURCE SEPARATION M2214	OTHER M2215	CONTRACTOR M2220	TOTAL
1										
2										
3										
4										
5										
6										
7										
8										
9										
10	140	6.5	4			57				57
11										
12										
13										
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24										
25										
26										
27										
28										
29										
30										
31										
TOTAL						57				57

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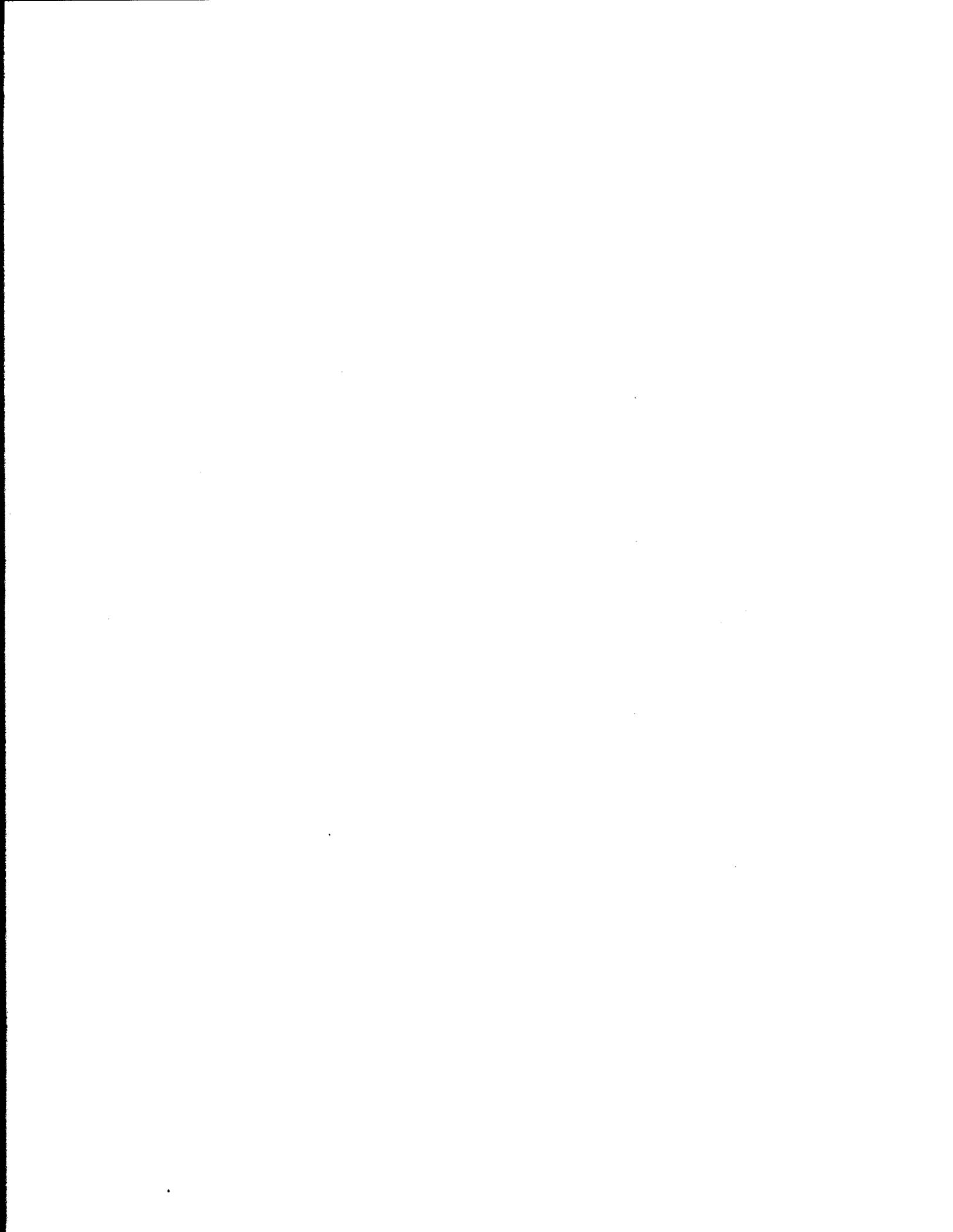
GRAND TOTAL CUBIC YARDS, INCLUDING CANS (8 Cans-1 Cu. Yd.			
PREPARED BY George Jones	DATE 2/28/99	APPROVED BY	DATE
REMARKS			

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EDITION OF 1 SEP 72
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SAMPLE



APPENDIX C

HARFORD COUNTY
RESOURCE RECOVERY FACILITY DEFINITIONS

C-1. ACCEPTABLE WASTE.

a. Household garbage, trash, rubbish and refuse of the kinds now normally collected or disposed of, or caused to be collected or disposed of, in the county as a result of residential waste collection; and

b. Such types of commercial and light industrial waste as are now normally collected or disposed of, or caused to be collected or disposed of, in the county; provided, however, that

(1) Bulk loads of branches will be tied in bundles of not more than 12 inches in diameter and no individual branch will be longer than 4 feet in length and will be in compliance with county law, and

(2) Tree logs and wood products will not be more than 4 inches in diameter, 4 feet in length and will be in compliance with county law;

c. Bulk loads of tires delivered to the facility provided that the maximum diameter of any tires delivered will not exceed 40 inches.

d. In no event will acceptable waste include any materials defined herein as unacceptable waste.

C-2. UNACCEPTABLE WASTE.

a. Group 1 consists of oil sludge, flammable, petroleum products, large concentrations of plastics, cesspool or other human waste, human and animal remains, non-burnable street sweepings, large automobile and vehicular parts (except tires), trailers, agricultural equipment, marine vessels, or similar items, farm and other large machinery, wire, cable and/or any other metal products, tree logs and wood products greater than 4 inches in diameter and 4 feet in length, tree stumps, liquid wastes, construction material or demolition debris (except wood products).

b. Group 2 consists of explosives (including ammunition and firearms), chemicals (including any empty containers thereof), radioactive materials, pathological and biological waste with Army markings on them.

c. Group 3 consists of hazardous waste (including any empty containers thereof), such as acids, caustics, pesticides, insecticides, poisons, drugs, or Group 2 without Army markings on them.

d. Any other materials which would be likely to cause the Facility to violate an air or water quality effluent standard or to pose a threat to health or safety or which may cause damage to or adversely affect the operation of the Facility. Any acceptable waste (see paragraph C-1b (1)) that is contaminated by one or more of the unacceptable wastes listed in paragraph C-2a. If any governmental agency or unit having appropriate jurisdiction determines that any substance which is not, as of the date of this Agreement, considered harmful or of a toxic nature or dangerous, is harmful, toxic or dangerous, such substance will thereafter be deemed unacceptable waste.

APPENDIX D

CERTIFICATE OF NONHAZARDOUS USED OIL

This is to certify that to the best of my knowledge the used oil of approximately 200 gallons, collected in the tank at building

E4300 organization ATC is nonhazardous on the basis of (check all that apply);

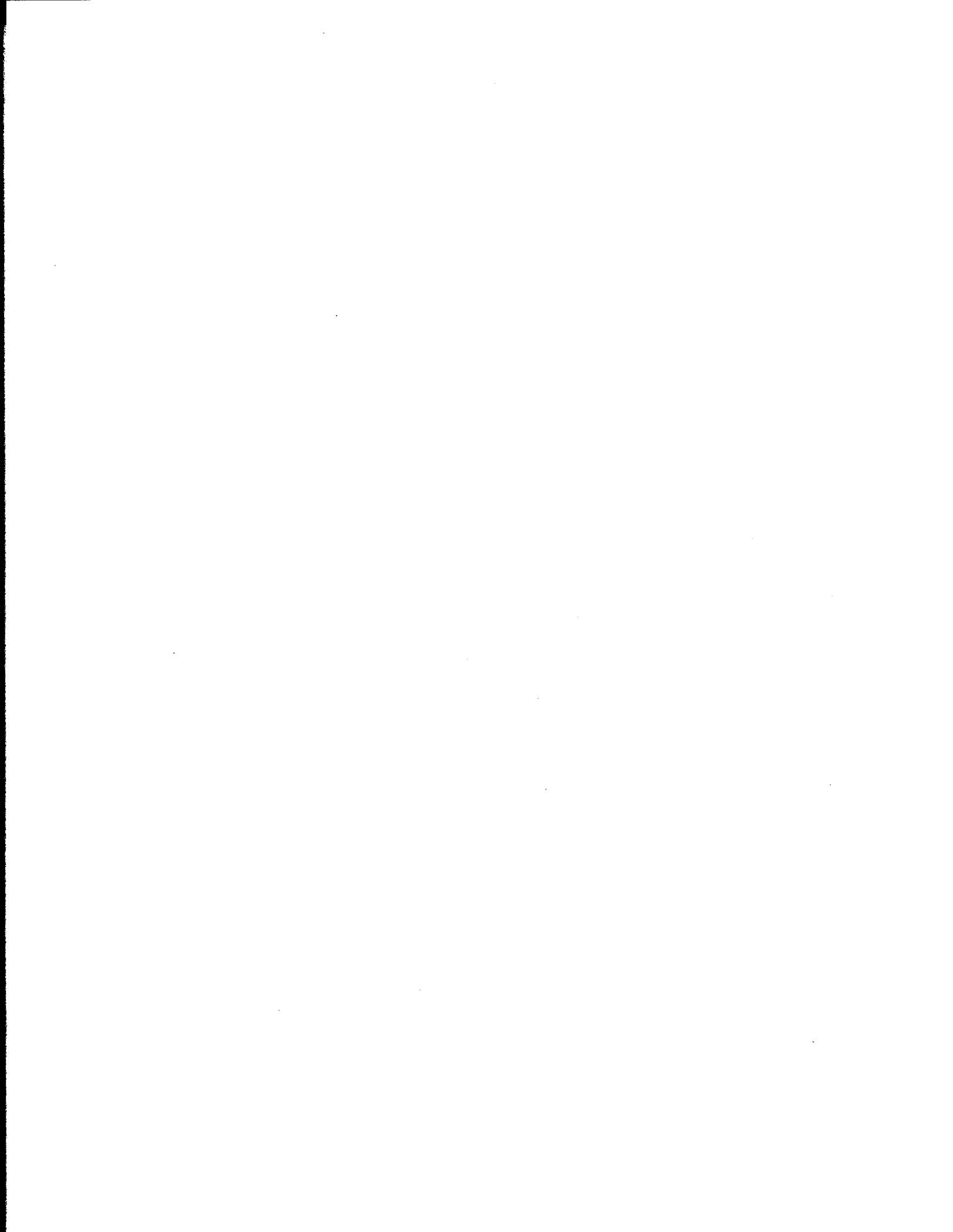
Generator knowledge (X), MSDS (), or analysis for: flashpoint (), total halogens () PCB's ()

In accordance with 40 CFR 279 and COMAR 26.10.

Name (print) George Jones Title Manager

Signature _____ Date 2/10/99

SAMPLE



GLOSSARY

Section I:
Abbreviations

This section contains no entries.

Section II.
Terms

This section contains no entries.

Section III.
Special Abbreviation and Terms.

Abandoned Waste

Waste is classified as abandoned if the waste has been disposed; burned or incinerated; or accumulated, stored, or treated (but not recycled) before or in lieu of being abandoned by being disposed of by burning or incineration.

Acquisition

The acquiring by contract with appropriated funds for supplies or services (including construction) by and for the use of the federal government through purchase or lease, whether the supplies or services are already in existence or must be created, developed, demonstrated and evaluated. Acquisition begins at the point which agency needs are established and includes the description of requirements to satisfy agency needs, solicitation and selection of sources, award of contracts, contract financing, contract performance, contract administration and those technical and management functions directly related to the process of fulfilling agency needs by contract.

Anatomical Material

Human or animal body parts, including tissues and organs.

Blood-Soiled Article

Any article that contains blood in any form as a result of contact with blood.

Bulk Waste

A quantity of solid/hazardous waste greater than 5 gallons and in a single container.

Construction Debris

Includes items such as waste wood, brick, concrete, asphalt, and roofing material. Construction debris does not include paper, cardboard, or pallets.

Container

Any portable device in which material is stored, transported, treated, disposed of, or otherwise handled. The container must be properly labeled as solid/nonhazardous waste.

Contaminated Material

a. Microbiological laboratory waste

b. The feces of an individual diagnosed as having a disease that may be transmitted to another human being through the feces

c. An article soiled with the feces of an individual diagnosed as having a disease that may be transmitted to another human being through the feces

d. An article that has come into contact with a known infectious agent.

Decontamination Fluids: These solutions from the installation restoration program activities include catch water from steam-cleaning operations on large sampling equipment, drill rigs, and drums, as well as smaller quantities of soapy water and rinse solutions used in decontaminating field sampling equipment. The former are considered potentially contaminated by virtue of the fact that they are used intrusively on a Comprehensive Environmental Response, Compensation and Liability Act site. The latter solutions are by definition, contaminated with low levels of acids and organics used in various rinses.

Demolition Debris

Wastes (wood, brick, concrete, asphalt, etc.) created from the demolition or renovation of structures.

Discarded Material

A discarded material is any material which is abandoned, recycled, or considered inherently waste-like.

Discharge

The accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of solid waste into the environment.

Disposal

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

Empty Container

a. A container or an inner liner removed from a container that has held any hazardous waste, except a waste that is compressed gas or an acute hazardous waste is empty if:

(1) All wastes have been removed that can be removed using the practices commonly employed to remove materials from that type of container, such as pouring, pumping, and aspirating;

(2) Not more than 2.5 centimeters (1 inch) of residue remain on the bottom of the container or inner liner;

(3) Not more than 3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to 110 gallons in size; or

(4) Not more than 0.3 percent by weight of the total capacity of the container or inner liner remains in the container or inner liner if the container is greater than 110 gallons in size.

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

c. A container or an inner liner removed from a container that has held an acute hazardous waste is empty if:

(1) The container or inner liner has been triple rinsed using a solvent capable of removing the hazardous waste;

(2) The container or inner liner has been cleaned by another method that has been shown in the scientific literature, or by tests conducted by the generator, to achieve equivalent removal; or

(3) In the case of a container, the inner liner that prevented contact of the hazardous waste with the container has been removed.

Environmentally Preferable

Products or services that have a lesser effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, or disposal of the product or service.

Generator:

A tenant or activity on Aberdeen Proving Ground who generates solid waste.

Incompatible Waste

A solid waste which is unsuitable for

- a: Placement in a particular device or facility because it may cause corrosion or decay of containment materials (e.g., container inner liners or tank walls) or
- b: Commingling with another waste or material under uncontrolled conditions because the commingling might produce heat or pressure, fire or explosion, violent reaction, toxic dusts, mists, fumes, or gases, or flammable fumes or gases.

Infectious Waste

- a: Equipment, instruments, utensils, and fomites (any substance that may harbor or transmit pathogenic organisms) of a disposable nature from the rooms of patients who are suspected to have or have been diagnosed as having a communicable disease and must, therefore, be isolated as required by public health agencies, or
- b: Laboratory wastes, such as pathological specimens (e.g., all tissues, specimens of blood elements, excreta, and secretions obtained from patients or laboratory animals) and disposable fomites attendant thereto, or c: Surgical operating room pathological specimens and disposable fomites attendant thereto and similar disposable materials from outpatient areas and emergency rooms.

Inherently Waste-Like Materials

a: Hazardous Waste Nos. F020 and F021, unless otherwise used as an ingredient to make a product at the site of generation, and F022, F023, F026, and F028 are solid wastes when recycled.

b: The Maryland Secretary of the Environment will use the following criteria to identify inherently waste like materials:

(1) The materials are ordinarily disposed of, burned, or incinerated; or the materials contain toxic constituents and these constituents are not ordinarily found in raw materials or products for which the materials substitute, or are found in raw materials or products in smaller concentrations, and are not used or reused during the recycling process; or

(2) The material may pose a substantial hazard to human health and the environment when recycled.

Integrated Solid Waste Program

A solid waste program, as defined in AR 200-1 and AR 420-47, in which the overall solid waste practices are unified into a consolidated program.

Microbiological Laboratory Waste

Waste from a microbiological laboratory that contains an infectious agent and includes cultures and stocks of infectious waste.

Non-terneplated Used Oil Filter Exemption

In accordance with, Code of Maryland Regulation 26.13.02.04-1(A)(14), the following requirements must be met for a non-terneplated used oil filter to be exempt from federal, state, and local hazardous waste regulations:

a. The filter has not been mixed with any waste listed in the Code of Maryland Regulation 26.13.02.15-.19;

b. The filter has been drained by initiating the draining with the oil near operating temperature and conducting the draining in an environment warmer than 60F;

c. One of the following alternatives has been used in conjunction with draining as described above to remove oil from the filter;

(1) Puncturing the filter anti-drain back valve or the filter dome end, and draining,

- (2) Draining, followed by crushing the filter,
- (3) Dismantling the filter and draining, or
- (4) Using an alternative technique in conjunction with draining which will remove oil from the filter at least as well as the techniques described above; and

d. In complying with part c of this definition, the filter has been allowed to drain under the influence of gravity for at least 12 hours.

Point of Generation

The location where the solid waste initially accumulates.

Pollution Prevention

The mitigation of pollution by source reduction and other practices that reduce or eliminate the creation of pollutants through a: Increased efficiency in the use of raw materials, energy, water, or other resources; or b. Protection of natural resources by conservation.

Recycled Materials That Are Solid Wastes

Materials are solid wastes if the materials are used in a manner constituting disposal, or used to produce products that are applied to the land; burned for energy recovery used to produce a fuel, or contained in fuels; accumulate speculatively; or are inherently waste-like materials.

Recycled Materials That Are Not Solid Wastes

Materials are not solid wastes when they can be shown to be recycled by being, used or reused as ingredients in an industrial process to make a product, provided the materials are not being reclaimed; or used or reused as effective substitutes for commercial products; or returned to the original process from which they are generated, without first being reclaimed. All material must be returned as a substitute for raw material feedstock, and the process must use raw materials as principal feedstock.

Recycling

The series of activities, including collection, separation, and processing, by which products or other materials are recovered from the solid waste stream for use in the form of raw materials

in the manufacture of new products other than fuel for producing heat or power by combustion.

Resource Recovery

The process of obtaining matter or energy from materials formerly discarded as waste.

Reuse material

Material that is used in a particular function or application as an effective substitute.

Sharps

A syringe, needle, surgical instrument, or other article that is capable of cutting or puncturing human skin.

Sludge

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

Solid Waste

a: Any discarded material that is not excluded by 40 Code of Federal Regulations part 261.4(a) or that is not excluded by variance granted under 40 Code of Federal Regulations part 260.3 and 260.31. b: Any discarded material that is not excluded by Code of Maryland Regulation 26.13.02.04A(1) or that is not excluded by a variance granted under Code of Maryland

Regulation 26.13.01.04D through 26.13.01.04E. c: Materials are solid wastes if they are recycled, accumulated, stored, or treated prior to recycling, as follows:

- (1) Used in a manner constituting disposal.
- (2) Materials burned for energy recovery:
 - (a) Burned to recover energy.
 - (b) Used to produce a fuel.
 - (c) Contained in fuels, in which case the fuel itself remains a solid waste.
 - (d) Commercial chemical products are not solid wastes

if they are themselves fuels.

(3) Materials reclaimed.

(4) Materials accumulated speculatively.

Solid Waste Handler

a: An activity environmental coordinator who manages solid waste.

b: An individual whose duties include the generation, determination, designation, accumulation, storage, packaging, marking, labeling, dating, and/or movement of solid waste. c: A supervisor of individual(s) described above.

Source Reduction

Any change in the design, manufacturing, purchase or use of materials or products (including packaging) to reduce their amount or toxicity before they become municipal solid waste. Source reduction also refers to the reuse of products or materials.

Spill

The accidental spilling, leaking, pumping, pouring, emitting, or dumping of hazardous materials or hazardous wastes which, when discharged, poses a threat to human health or the environment.

Storage

The holding of solid waste for a temporary period, at the end of which the solid waste is treated, disposed of, or stored elsewhere.

Transport Vehicle

A motor vehicle, vessel, or rail car used for the transportation of hazardous material by any mode. Each cargo-carrying body (trailer, railroad car, etc.) is a separate transport vehicle.

Used Oil

Any oil that has been refined from crude oil, or any synthetic oil that has been used and as a result of such use is contaminated by physical or chemical impurities. Typical used oil sources on Aberdeen Proving Ground include: crankcase oil, cutting oil, hydraulic oil, pump oil, lube oil and refrigerant oil.

Used Oil Exceptions

Some materials are not subject to used oil regulations when mixed with or contaminated with other materials.

a. Mixtures of used oil and hazardous waste.

(1) Used oil mixed with hazardous waste listed in 40 Code of Federal Regulations part 261 subpart D is subject to regulation as hazardous waste and should be managed in accordance with APG Regulation 200-60.

(2) Used oil containing greater than 1000 parts per million total halogens is presumed to be a hazardous waste because it has been mixed with a halogenated hazardous waste listed in 40 Code of Federal Regulations part 261. This presumption may be rebutted by demonstrating that the used oil does not contain hazardous waste. If the presumption is not rebutted, the used oil must be managed as a hazardous waste as specified in APG Regulation 200-60.

(a) The rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated paraffins if the fluids are processed for reclamation through a tolling arranged as described in 40 Code of Federal Regulations part 279.24(c).

(b) The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons removed from refrigeration units where the chlorofluorocarbons are destined for reclamation. However, if the used oil contaminated with chlorofluorocarbons is mixed with used oil from sources other than refrigeration units, then the rebuttable presumption does apply.

(3) Used oil mixed with hazardous waste that is hazardous because it exhibits one or more of the characteristics identified in 40 Code of Federal Regulations part 260 subpart C is considered a hazardous waste if the resultant mixture exhibits one or more of the characteristics of hazardous waste identified in the subpart.

b. Used oil containing any quantifiable levels of polychlorinated biphenyls is also subject to the requirements found in 40 Code of Federal Regulations part 761.20(e) and should be handled in accordance with APG Regulation 200-60.

Used Oil Generator

A person whose act or process produces used oil or whose act first causes used oil to become subject to regulation.

Waste Minimization

Any source reduction which prevents or decreases the amount of waste generated through waste prevention, recycling, or purchasing recyclable and environmentally preferable products.

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