

PPPL	PRINCETON PLASMA PHYSICS LABORATORY	PROCEDURE	No.EWM-001 Rev 2 Page 1 of 4
	Subject: Hazardous Waste Management	Effective Date: May 22, 2002	Initiated by: ER/WM Head
		Supersedes: Rev 1, dated 9/1/95 and TCR-EWM- 001,R1-001	Approved: Director

1.0 Applicability

This procedure is applicable to all of the DOE Princeton Plasma Physics Laboratory (DOE-PPPL) activities that generate hazardous waste.

2.0 Introduction

Hazardous Waste Management is the responsibility of all employees, subcontractors, students, collaborators, and visitors of PPPL. This procedure is designed to ensure PPPL compliance with Federal, State, and local laws. In addition, this procedure meets the requirements of DOE orders that affect hazardous waste management. Finally, this procedure implements best management practices that are designed to ensure that future liabilities from the improper disposal of hazardous waste are minimized.

3.0 Reference Documents

- 3.1 Title 40 Code of Federal Regulations
- 3.2 Title 49 Code of Federal Regulations
- 3.3 Title 7 of New Jersey Administrative Code, Chapter 26
- 3.4 DOE Order 460.2, "Departmental Materials Transportation and Packaging Management"
- 3.5 P-047, "Employee Area Housekeeping"
- 3.6 EWM-004, "Satellite Accumulation Areas"
- 3.7 EM-OP-04, "On-Site Collection and Transfer of Hazardous Waste"
- 3.8 ES&HD 5008, "PPPL Environment, Safety, and Health Directives"

4.0 Definitions

- 4.1 **Direct Disposal:** The disposal of individual containers of hazardous waste as they are generated. The process is initiated through the use of Hazardous Waste Identification Tag (HWID Tag).
- 4.2 **Disposal:** The discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on air, land, or water.
- 4.3 **Drum:** Any container designed to hold more than five (5) gallons of a hazardous material or hazardous waste.

- 4.4 **Generator:** A person, division, or shop generating a hazardous waste.
- 4.5 **Hazardous Material or Chemical:** Any substance that has the capability of producing adverse effects on the health and safety of humans or the environment. This may be defined by relative measures of toxicity, corrosiveness, flammability, or reactivity. A material shall be considered hazardous if it is deemed so by any regulatory or recognized advisory agency (e.g., NFPA, OSHA, NJ Department of Health, ACGIH, NIOSH, etc.)
- 4.6 **Hazardous Waste:** A solid, liquid, or gas which, because of its physical, chemical, or infectious characteristics, may pose a fire, safety, health, or environmental hazard when disposed of improperly. This includes any material so designated by federal or state authorities.
- 4.7 **Hazardous Waste Identification Tag (HWID Tag):** A three-part carbonless, sequentially numbered tag used for identifying and disposing of hazardous wastes (Attachment I). The forms are available in the C-site Stockroom.
- 4.8 **Incompatible:** Materials, which when combined cause an adverse reaction, complicate disposal, or alter the nature of the materials.
- 4.9 **Mixed Waste:** Waste containing both radioactive and hazardous components as defined by the Atomic Energy Act and the Resource Conservation and Recovery Act, respectively.
- 4.10 **Regulated Empty Container:** Any container of 5 gallons or more which has contained hazardous material, has been emptied to the extent that is possible, and contains 1 inch or less of material on the bottom.
- 4.11 **Radiological Controlled Area (RCA):** Any area that meets the definition found in ES&HD 5008, Section 10.
- 4.12 **Satellite Accumulation:** The practice of collecting up to 55 gallons of compatible hazardous waste at or near the waste generating process and under the control of one cognizant person for subsequent disposal.
- 4.13 **Satellite Accumulation Area (SAA):** An area at which satellite accumulation occurs.
- 4.14 **Waste Management:** The Waste Management Branch of the Environmental Restoration/ Waste Management Division (ER/WM) of the Environmental, Safety, and Health / Infrastructure Department (ES&H/IS).

5.0 Procedure

5.1 General Hazardous Waste Management Procedure

<u>Responsibility</u>	<u>Action</u>
Department and Division Head	5.1.1 Maintains awareness of the hazardous wastes generated by their organizations and works with Waste Management to minimize waste generation and assure waste is properly cared for until it is turned over to Waste Management.
Generator	5.1.2 Notifies, immediately, the Emergency Services Unit of any hazardous waste spills by calling extension 3333.
Emergency Services Unit	5.1.3 Responds to hazardous wastes spills and advises Waste Management when hazardous waste clean up is required.
Generator	5.1.4 Labels hazardous waste containers identifying their contents and stores all hazardous chemicals/wastes in accordance with ES&HD 5008, Section 8, Chapter 1. Maintains good housekeeping in all hazardous waste storage areas.
	5.1.5 Disposes of all regulated empty containers through Waste Management of the Environmental Restoration/Waste Management Division.
Waste Management Branch	5.1.6 Ensures on-site hazardous waste management and off-site disposal is performed properly and in accordance with applicable requirements.
	5.1.7 Provides assistance to hazardous waste generators in complying with this procedure and advises of methods to minimize wastes and of substitutes for using hazardous materials.
Human Resources	5.1.8 Establishes and manages a hazardous waste generator training program.
Quality Assurance	5.1.9 Provides oversight of hazardous waste management activities via assessments (e.g., audits, surveillances, surveys, or inspections).

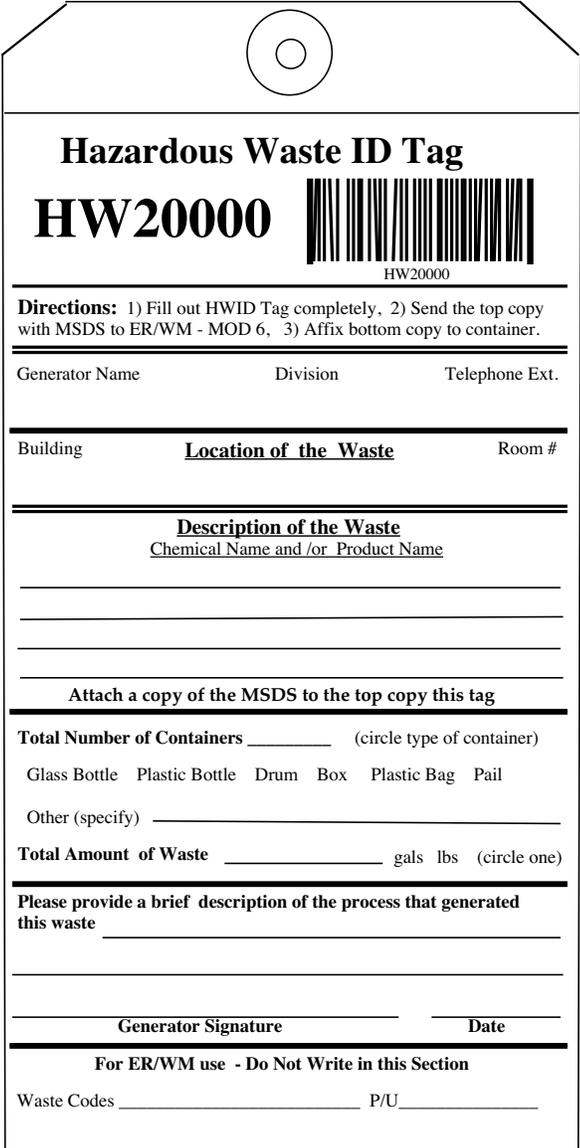
5.2 Direct Disposal or Satellite Accumulation

<u>Responsibility</u>	<u>Action</u>
Generator	5.2.1 Determines when the material has become a waste. Note: USEPA guidelines indicate if a material has not been used for one year, it should be considered a waste. 5.2.2 Determines if the waste was generated within a Radiological Controlled Area. Note: If a hazardous waste is generated within a Radiological Controlled Area (RCA), the waste is to be transferred immediately to the Health Physics Branch where a determination will be made as to whether the material is a mixed waste. 5.2.3 Identifies the material as completely as possible; Material Safety Data Sheets (MSDS) must be supplied. MSDS forms are located throughout the Laboratory and can be obtained through Industrial Hygiene. 5.2.4 Ensures that the material is packaged in a container suitable for on-site transportation. 5.2.5 Completes a HWID Tag including the certification (Attachment 1). Sends the top copies of the HWID Tag to Waste Management and attaches the bottom copy of the HWID Tag to the waste container.
Waste Management	5.2.6 Receives and logs the HWID Tag. Schedules the pickup of the hazardous waste in accordance with ER/WM Procedure EM-OP-04, On-Site Collection and Transfer of Hazardous Waste.
QA	5.2.7 Performs surveillance of SAA to ensure compliance with requirements.

Attachments

1. Hazardous Waste Identification Tag and Filling Instructions

Hazardous Waste Identification Tag (HWID Tag) and Filling Instructions

		
<p>Hazardous Waste ID Tag</p> <p>HW20000 </p> <p style="text-align: center; font-size: small;">HW20000</p>		
<p>Directions: 1) Fill out HWID Tag completely, 2) Send the top copy with MSDS to ER/WM - MOD 6, 3) Affix bottom copy to container.</p>		
Generator Name _____	Division _____	Telephone Ext. _____
Building _____	<u>Location of the Waste</u>	Room # _____
<p><u>Description of the Waste</u> Chemical Name and /or Product Name</p> <p>_____</p> <p>_____</p> <p>_____</p>		
<p>Attach a copy of the MSDS to the top copy this tag</p>		
<p>Total Number of Containers _____ (circle type of container)</p> <p style="text-align: center;">Glass Bottle Plastic Bottle Drum Box Plastic Bag Pail</p> <p>Other (specify) _____</p>		
<p>Total Amount of Waste _____ gals lbs (circle one)</p>		
<p>Please provide a brief description of the process that generated this waste _____</p> <p>_____</p>		
<p>_____ Generator Signature</p>		<p>_____ Date</p>
<p>For ER/WM use - Do Not Write in this Section</p>		
<p>Waste Codes _____ P/U _____</p>		

Hazardous Waste Identification TAG (HWID Tag) and Filling Instructions

Generators of hazardous waste are required to provide the information below when completing an HWID Tag. Please attach a Material Safety Data Sheet (MSDS) to the HWID Tag.

- Generator Name** Name of generator
- Division** Generator's division
- Telephone Ext.** Generator's telephone extension number.
- Building & Room #** Specific location of the hazardous waste
- Chemical Name or Product Name** Enter the product or chemical name here. If the hazardous waste is a mixture, enter the product or chemical names present in the mixture. If the relative percentage is known, enter that information as well.
- Total Number of Containers** Fill in the number of containers, circle the type of container. Fill in the blank, if the container is not listed.
- Total Amount of Waste** *Approximate* total amount of hazardous waste covered by this HWID Tag for all containers (10 five gallon drums = 50 gals.). Circle pounds or gallons.
- Provide a brief description of the process that generated this waste** Describe how the hazardous waste was generated. The following is a list of common waste generating processes found at PPPL:
- Solvent use
 - Solvent used as a degreaser
 - Excess commercial product
 - Excess laboratory chemical
 - Commercial product-contaminated
 - Spill debris
 - Solvent-contaminated rags
 - Oil-contaminated rags
- Signature and Date** Generator's signature and date tag is filled out

If you have any questions, contact Waste Management at x3380 or x2213.