

TEMPORARY CHANGE REQUEST

TCR NO. **TCR-EWM-001,R3-003**

(e.g., TCR-ENG-021,R0-001)

The Temporary Change Request (TCR) Form is to be used to process urgent or minor changes for PPPL Policies, Organization/Mission Statements and Procedures. The TCR should be used when changes are:
1) urgent, and can not wait the 2-4 week period for Department Head review/comment, or
2) minor, and do not warrant Department Head review.

Person Requesting Change: **Rob Sheneman** _____ Phone Ext: **3392** _____

Department Name: **Environmental Services Division** _____

Document Number: **EWM-001** _____ Revision No.: **3** _____

Document Title: **Hazardous Waste Management** _____

Reason for change:

Updated DOE Order revision numbers, added Management System information, Training information and Records Retention information.

Change description: (Summarize and attach changed pages, with changes clearly indicated)

1. Updated reference DOE Order 460.2A and DOE Order 460.1C.
2. Added Management System information
3. Added Training information
4. Added Records Retention information

1. Does this TCR significantly alter the intent or scope of the document? YES: _____ NO: **X** _____

2. Does this TCR significantly impact **ES&H**? YES: _____ NO: **X** _____

If 1 or 2 is **YES**, Explain why the changes should not be routed for Department Head review:

Robert Sheneman _____
Department/Division Head Approval

12/8/14 _____
Date

John DeLooper _____
Head, Best Practices and Outreach/designee

12/8/14 _____
Date

Release/Effective date of this TCR: **12/8/2014**

Incorporate this TCR into next revision of this document? YES: **X** _____ NO: _____

PPPL	PRINCETON PLASMA PHYSICS LABORATORY	PROCEDURE	No.EWM-001 Rev 3 Page 1 of 5
Subject: Hazardous Waste Management		Effective Date: December 6, 2005	Initiated by: Head Environmental Services Div.
		Supersedes: Rev 2, dated 5/22/02	Approved: Director

Management System (Primary): 09.00 ESH and Integrated Safety Management
Management System Owner: Head, Environment, Health, Safety & Security
Management Process: 09.11 ES&H – Waste Management
Process Owners: Head, Environment, Health, Safety & Security; Head,
Environmental Services Division
Subject Matter Expert (SME): Head, Environmental Services Division; and
Environmental Compliance Manager, Environmental
Services Division

1.0 Applicability

This procedure is applicable to all on-site DOE Princeton Plasma Physics Laboratory (DOE-PPPL) activities that generate hazardous waste. DOE-PPPL activities at collaborative host institutions (e.g. other DOE labs) are governed by the host institution's policies and procedures.

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 460.2A, "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"
- 3.9 DOE Order 460.1C "Packaging and Transportation Safety"

- 3.10 P-014 "Radioactive & Hazardous Waste Minimization"

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, project 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 Group of the Environmental Services Division (ES) 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. Encourages employees to reduce the generation of hazardous waste through product substitution, good management practices, and other means.
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 the Waste Management Group.
Waste Management Group	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.
Quality Assurance	5.1.8 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	<p>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.</p> <p>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.</p> <p>5.2.3 Identifies the material as completely as possible; Material Safety Data Sheets (MSDS) must be supplied. MSDS information for most chemicals used at the Laboratory are available via the Industrial Hygiene web page.</p> <p>5.2.4 Ensures that the material is packaged in a container suitable for on-site transportation.</p> <p>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.</p>
Waste Management Group	<p>5.2.6 Receives and logs the HWID Tag. Schedules the pickup of the hazardous waste in accordance with M&ES Procedure EM-OP-04, On-Site Collection and Transfer of Hazardous Waste.</p>
QA	<p>5.2.7 Performs surveillance of SAA to ensure compliance with requirements.</p>

6.0 Training Section

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Management System Owner or Designee	<p>1. Specifies the appropriate training methods and means (below) and obtains concurrence of the Management System Owner and the Management Process Owner.</p> <p>A. Target Audience: Waste Management Engineers and Technicians, PPPL personnel who routinely generate hazardous waste</p> <p>Training Method:</p> <p style="padding-left: 20px;"><u>X</u> Read only or small-group briefing</p> <p>Frequency:</p> <p style="padding-left: 20px;"><u>X</u> Once only</p> <p style="padding-left: 20px;"><u>X</u> Other: upon revision of procedure</p>
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Management System Owner or Designee 2. Notifies the Human Resources Training Office of the training so that they will be aware of the training requirements and be able to provide assistance and guidance in the course development, implementation, tracking, and maintenance.

7.0 Records Requirements Specific to This Procedure **TCR-EWM-001,R3-003**

Records Custodians must assure records are maintained as follows:

Record	Record Custodian	Location	Retention Time
Hazardous Waste Identification Tag	Environmental Compliance Manager, Environmental Services Division	Waste Management	Temporary, destroy after information is logged
Hazardous Waste Identification Tag Log	Environmental Compliance Manager, Environmental Services Division	Waste Management	Destroy when related records are destroyed, or 75 years from creation, whichever occurs later. <i>Reference: Environmental Records Schedule (1.g.3.a)</i>

Attachments

1. Hazardous Waste Identification Tag and Completion Instructions

PPPL	PRINCETON PLASMA PHYSICS LABORATORY	PROCEDURE	No. EWM-001 Rev 3 Attachment 1
Hazardous Waste Identification Tag (HWID Tag)			Page 1 of 2

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Hazardous Waste Identification Tag (HWID Tag) and Completion Instructions



Hazardous Waste ID Tag

HW20000



HW20000

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.

Generator Name	Division	Telephone Ext.
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Building	Location of the Waste	Room #
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Description of the Waste

Chemical Name and /or Product Name

Attach a copy of the MSDS to the top copy this tag

Total Number of Containers _____ (circle type of container)

Glass Bottle Plastic Bottle Drum Box Plastic Bag Pail

Other (specify) _____

Total Amount of Waste _____ gals lbs (circle one)

Please provide a brief description of the process that generated this waste _____

Generator Signature	Date
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For ER/WM use - Do Not Write in this Section

Waste Codes _____ P/U _____

PPPL	PRINCETON PLASMA PHYSICS LABORATORY	PROCEDURE	No. EWM-001 Rev 3 Attachment 1
Hazardous Waste Identification Tag (HWID Tag)			Page 2 of 2

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Hazardous Waste Identification TAG (HWID Tag) and Completion 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.