

UNIVERSAL WASTE PROCEDURE

1. PURPOSE

The University of Notre Dame Universal Waste Procedure (UWP) establishes a formal written program for the safe and compliant collection, storage, and disposal of universal waste. Universal waste is generated in numerous locations on the Notre Dame campus and is handled by University employees. Universal waste is a subcategory of hazardous waste that poses low risk to human health when handled and transported safely. It consists of batteries, pesticides, mercury-containing equipment, lamps (light bulbs), and aerosol cans. The University recognizes that there are potential hazards associated with the use and disposal of universal waste materials.

2. SCOPE

The UWP applies to all Notre Dame facilities using, storing, or handling universal waste. It describes the proper use and handling procedures required by staff, contractors, and other personnel working with universal waste at the University of Notre Dame. Universal waste is a potentially hazardous waste that is considered "universal" to all work environments. This policy applies to all University generated universal waste. It applies to the departments who generate or handle the waste and the employees who work with it.

3. RESPONSIBILITIES

- 3.1 Area Supervisor (Maintenance, Athletics, Recycling Department, Transportation):
 - 3.1.1 Manage the universal waste program in their area of responsibility in a safe and compliant manner, consistent with regulations and this procedure.
 - 3.1.2 Ensure that responsibilities of this procedure are assigned to individuals within the department.
 - 3.1.3 Ensure all employees assigned to manage universal waste receive proper instruction and training on universal waste handling procedures.
 - 3.1.4 Collect and store universal wastes according to universal waste regulations and this policy.
 - 3.1.5 Contact the current universal waste disposal contractors to pick up and dispose of universal wastes within the one-year accumulation time limit.
- 3.2 Risk Management and Safety (RMS):
 - 3.2.1 Assist in providing guidance and monitoring for environmental, health, and safety regulatory compliance.
 - 3.2.2 Develop universal waste training and provide to affected staff.
 - 3.2.3 Provide technical support to departments and employees when questions arise concerning universal waste.

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- 3.2.4 Pick up and properly dispose of any mercury containing equipment.
- 3.2.5 Provide guidance for clean-up and disposal of mercury-containing spills.
- 3.2.6 Universal Waste Procedure review.
- 3.2.7 Conduct field audits at least annually.
- 3.3 Office of Sustainability:
 - 3.3.1 Track and maintain records for universal waste quantities for the Notre Dame campus.

4. WASTE CATEGORIES

4.1. Batteries

- 4.1.1. A device consisting of one or more electrically connected electrochemical cells which is designed to receive, store, and deliver electric energy. The term battery also includes an intact, unbroken battery from which the electrolyte has been removed. Low or non-mercury containing alkaline and carbon zinc batteries can be recycled or disposed of as non-hazardous solid wastes. Examples of universal waste batteries are:
 - Sealed lead acid
 - Nickel-cadmium
 - Lithium ion
 - Mercuric oxide
 - Silver oxide
 - Other alkaline batteries

4.2. Lamps

- 4.2.1. The bulb or tube portion of an electric lighting device. Examples of universal waste lamps are:
 - Fluorescent
 - High intensity discharge
 - Neon
 - Mercury vapor
 - High pressure sodium
 - Metal halide lamps

4.3. Pesticides

4.3.1. Unused/cancelled pesticides subject to voluntary recall under section 19(b) of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act). Section 19(b) directs the EPA to order a recall if the recall is necessary to protect health or the environment. It is not waste until the decision is made to discard it.

4.4. Aerosol Cans

- 4.4.1. Aerosol cans shall be managed as universal waste.
- 4.4.2. Aerosol cans shall not be punctured.

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- 4.4.3. Place aerosol cans in a structurally sound waste container provided by RMS. Keep the lid closed. The container shall be labeled as "Aerosol Can Universal Waste" with the start date of accumulation.
- 4.5. Mercury Containing Equipment
 - 4.5.1. A device or part of a device (excluding batteries and lamps) that contains elemental mercury integral to its function. This does not include cathode ray tubes nor mercury waste generated as a by-product. Examples of mercury containing equipment are:
 - Thermometers
 - Manometers
 - Barometers
 - Relay switches
 - Mercury reg. meters
 - Pressure gauges
 - Sprinkler system contacts

5. WASTE HANDLING

- 5.1. Universal Waste Lamps
 - 5.1.1. Lamps shall be placed in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps.
 - 5.1.2. Containers shall remain taped closed unless adding or removing lamps.
 - 5.1.3. Containers shall lack evidence of leakage or damage that could cause leakage under reasonably foreseeable conditions.
 - 5.1.4. Flaps should not be ripped off a cardboard lamp container as this makes it harder to close.
 - 5.1.5. A universal waste label shall be affixed to all waste containers and be marked with the contents of the container and the accumulation start date.
 - 5.1.6. If a lamp breaks, it is now considered hazardous waste rather than universal waste and shall be dealt with according to hazardous waste regulations and by calling RMS.
 - 5.1.7. When the waste container is full, submit an AiM work order to request a pick-up.
 - 5.1.8. Maintenance will call the current lamp disposal contractor to pick up and dispose of the waste.
 - 5.1.9. Athletics will collect their used lamps and contact the current lamp disposal contractor for pickup and disposal.
- 5.2. Universal Waste Batteries
 - 5.2.1. Universal waste batteries shall be stored in an approved plastic container with the proper universal waste label affixed and filled-out with the contents and the accumulation start date.
 - 5.2.2. Batteries may be stored individually, but if stored individually each individual

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- battery shall have a universal waste label affixed.
- 5.2.3. When batteries are stored in a container, cover positive and negative terminals using tape or similar material prior to placing in the container.
- 5.2.4. If a battery shows evidence of damage or leakage, it is considered a hazardous waste and shall be managed according to the University's <u>Hazardous Waste Procedure</u>. A <u>Chemical Discard Tag Form</u> shall be filled out to schedule a pick-up of the battery.
- 5.2.5. The Notre Dame Recycling Department will conduct weekly checks and pick-ups at the battery recycling station locations on campus. Should you need a pick-up between checks, place a work order in the AiM system requesting pick-up.
- 5.2.6. Notre Dame Recycling Department shall pick-up and properly store the batteries until they are picked up by the contractor for disposal.

5.3. Universal Waste Pesticides

- 5.3.1. Universal waste pesticides shall be stored in a container that remains closed, structurally sound, compatible with the pesticide.
- 5.3.2. The container shall lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.
- 5.3.3. The container shall be affixed with a universal waste label, the name of the pesticide product, and the date of the start of accumulation.
- 5.3.4. If the pesticide is used completely, it will not be disposed of via universal waste methods.

5.4. Universal Waste Mercury Containing Equipment

- 5.4.1. Mercury containing equipment shall be managed in a way that prevents releases of any universal waste or component of a universal waste.
- 5.4.2. Mercury containing equipment shall be properly affixed with a universal waste label and filled out with the accumulation start date.
- 5.4.3. A work order shall be placed in the AiM system to request pick-up of mercury containing equipment.
- 5.4.4. If mercury is spilled, contact shall be made to Notre Dame Police Department (NDPD) at 631-5555.

6. LABELING

- 6.1. Universal waste containers shall be labeled with the following information:
 - 6.1.1. The words "Universal Waste-(type)(s)"
 - 6.1.2. Contents of the container "Universal Waste Batteries" or "Universal Waste Bulbs"
 - 6.1.3. The date the waste was first accumulated in the container
- 6.2. Universal waste batteries are not required to be stored in a container; if they are not in a container, each individual battery shall be labeled.
- 6.3. The universal waste label used at Notre Dame:

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UNIVERSAL		
WASTE		
CONTENTS		
ACCUMULATION START DATESHIPPER		
ADDRESS		
CITY, STATE, ZIP		

7. ACCUMULATION

- 7.1. Any site where universal waste is collected is considered an accumulation site, regardless of the amount of waste collected there.
- 7.2. Universal waste may be accumulated for no longer than a year from the date the universal waste was first generated or received.
- 7.3. The handler shall demonstrate the length of time the waste has been accumulating by either writing the accumulation start date on the waste label or by keeping an inventory system.

8. WASTE HANDLER STATUS

- 8.1. In universal waste management, there are two types of handlers: small quantity waste handlers and large quantity waste handlers.
 - 8.1.1. A small quantity waste handler is generator of universal waste who does not accumulate more than 11,000 pounds of universal waste at any time.
 - 8.1.2. A large quantity waste handler is a generator of universal waste who accumulates 11,000 pounds or more of universal waste at any time. If given, this designation retained through the end of the calendar year in which the 11,000-pound limit is met or exceeded.

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8.1.3. The University of Notre Dame is considered a small quantity universal waste handler.

9. TRANSPORTATION AND SHIPPING

- 9.1. A small quantity handler of universal waste is prohibited from sending or taking universal waste to a place other than another universal waste handler, a destination facility, or a foreign destination.
- 9.2. Universal waste shall be transported by a qualified universal waste transporter. A universal waste transporter is a person engaged in the off-site transportation of universal waste by air, rail, highway, or water.
- 9.3. If a universal waste being offered for off-site transportation meets the definition of hazardous materials under 49 CFR parts 171 through 180, a small quantity handler of universal waste shall package, label, mark and placard the shipment, and prepare the proper shipping papers in accordance with the applicable Department of Transportation regulations under 49 CFR parts 172 through 180.

10. RESPONSE TO RELEASE

- 10.1. All releases and other residues from universal wastes shall be immediately contained.
- 10.2. Releases can be cleaned up by properly trained personnel using PPE and a spill kit if the spill is small enough to handle. If personnel cannot handle the spill, call 631-5555 for emergency response assistance.
 - 10.2.1. Broken mercury-containing bulbs or equipment shall be placed in a sealable plastic bag labeled with the words "Hazardous Waste Broken Mercury Bulb or Equipment". Please complete an online Chemical Discard Tag to notify RMS of a broken mercury-containing bulb or equipment for hazardous waste removal. Do not vacuum broken mercury-containing bulbs or equipment.
 - 10.2.2. Leaking batteries shall be placed in a closed, leak-proof container and labeled with the words "Hazardous Waste Leaking Battery". Please complete an online Chemical Discard Tag to notify RMS of a leaking battery for hazardous waste removal.
- 10.3. If chemical exposure to skin or eyes has occurred, the affected personnel should go to the nearest safety shower and/or eyewash station to flush skin and/or eyes for 15 minutes. If inhalation hazard, get to fresh air immediately and seek medical attention.
- 10.4. Any material from the release, including supplies such as absorbents and gloves, determined to be hazardous waste shall be managed in compliance with all applicable requirements of 40 CFR parts 260 through 272.

11. TRAINING

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- 11.1. A small quantity waste handler shall ensure that all staff who handle or are responsible for managing universal waste are informed on the proper handling and emergency procedures appropriate to the specific universal waste(s) they handle.
- 11.2. Employees whose responsibilities include universal waste shall review the Universal Waste Training PowerPoint.
- 11.3. Training shall include the following:
 - 11.3.1. Background and Procedure Information
 - 11.3.2. Waste Accumulation/ Handling Procedures
 - 11.3.3. Waste Handler Status
 - 11.3.4. Transportation and Shipping
 - 11.3.5. Waste Labeling Requirements
 - 11.3.6. Response to Release
 - 11.3.7. University Procedures for Specific Universal Wastes

12. FREQUENCY OF REVIEW

12.1. This procedure shall be reviewed at least every three years and updated as needed to meet applicable regulation changes.

13. REFERENCES

- 13.1. IDEM. Universal Waste Rule 329 IAC 3.1-16
- 13.2. US EPA. Universal Waste Regulations <u>Title 40 CFR 273</u>
- 13.3. US EPA. Overview of the Universal Waste Program
- 13.4. US DOT. Transportation Regulations <u>40 CFR 172</u>

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Revision History Table

History	Effective Date
5.2.4 Updated hyperlink	
13.1 Added IDEM reference	July 2020
9.4, 9.5, 9.6 Removed current transporters	
of Universal Waste	
Added references to universal waste aerosol cans. Updated links.	November 2021
Removed section 5.2.7 and Appendix A	July 2023

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