Dickinson

Comprehensive Waste Management Plan

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Review/Revision Summary

Below is a summary of reviews and revisions made to this document:

Review/ Revision Date	Major Changes	Reviewed/ Revised By:
3/10/2008	Original Document	Bill Shoemaker, EHS Director
3/15/2017	• Changed Titles • Updated Waste Oil Procedures (outside of Facilities Management) • Replaced Yellow Accumulation Card (Appendix A) with "How to fill out a waste label" • Added Appendix B – Disposal Guidance Posters • Removed EPA List of Listed Wastes – link provided to list on EHS Website	Steph Koser, WasteStrategies
11/29/2017	Annual Review • Changed Geology to Earth Sciences • Added 717 area code to phone numbers	Steph Koser, WasteStrategies
1/22/2021	Review: Comprehensive document update	Daniel Berndt

Abbreviations

DNA: Deoxyribonucleic acid

EPA: Environmental Protection Agency

NIH: National Institutes of Health

PCB: Polychlorinated Biphenyl

RCRA: Resource Conservation and Recovery Act

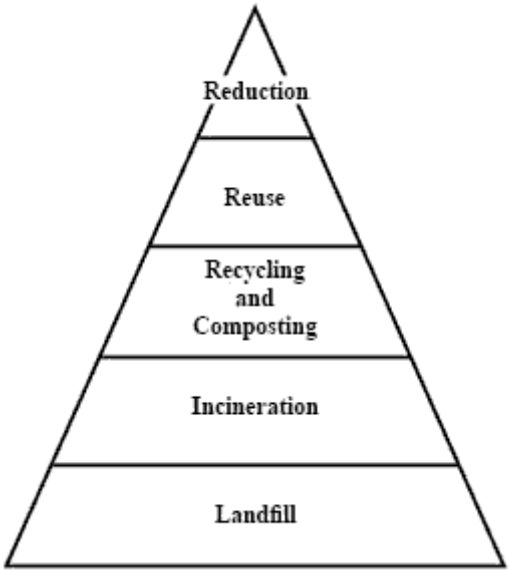
RNA: Ribonucleic acid

SQG: Small Quantity Generator

TSDF: Treatment, Storage, and Disposal Facility

Introduction

According to the United States Environmental Protection Agency (EPA), during the past 35 years, the amount of waste each person creates has doubled from 2.7 to 4.4 pounds per day. While most solid waste professionals agree that disposal to landfills will always be needed, they also realize that reductions in waste generation must occur. Modern waste management programs encourage use of reduction, reuse, and recovery strategies before disposal to landfills.



The strategy used to develop a Comprehensive Waste Management Plan is to identify the level or levels at which the highest values of individual and collective materials can be recovered. For this reason, the list starts with reduction—using less, thereby saving material production, resource cost, and energy. Examples of reduction at Dickinson College (hereby referred to as, the college) include the use of Energy Star compliant computer systems where possible; energy star appliances in student rooms; lower winter temperature and higher summer temperature set points; limiting free paper use for students and implementing a print management system for employees; water saving wash machines and urinals; shuttle services; and the Dickinson Red Bike program.

Reuse is using a product more than once, either for the same purpose or for an alternate purpose. Reuse does not require reprocessing and, therefore, has lower energy requirements than recycling. Examples of reuse at the college include donations of college furniture to local organizations, reusing ink and toner cartridges, reusable Ecotainers, and the U-Turn Program which collects used items from students at the end of the academic year and auctions them to residents.

Recovery is recapturing the material or energy of the item at its highest point. Recovery includes recycling, composting, and incineration. In recycling, waste materials are processed industrially and then reformed into new or similar product. Although recycling is often viewed as a resource conservation activity, it may offer greater return for many products in terms of energy savings. The college has an extensive and growing recycling program. This program includes recycling of plastics (#1-7), aluminum cans, glass, paper, paperboard, cardboard, batteries, printer cartridges, tires, motor oil, fluorescent lights, scrap metal, computers and other electronics. The college also produces biodiesel from used cooking oil and soap from the glycerin byproduct in its biodiesel production facility. In order to make recycling economically feasible, the college uses green and recycled materials when possible.

Composting recaptures value through the natural biodegradation process. The predominant use of composting programs in the United States is for food and yard wastes. The college composts yard wastes and organic materials collected from Dining Services and glycerin from its biodiesel production facility.

The third approach to recovery is to incinerate waste and use the heat for energy. Incineration reduces the volume of waste by up to 90 percent, leaving behind only ash, and resulting in less need for landfill space. Examples at the college include incineration of flammable liquids at TSDFs and incineration of waste oil in furnaces for heating on premises.

The last option is disposal. Given current technology, there are residuals from the previous processes, and some materials are simply not recoverable and must go somewhere. Currently in the United States, 32% is recovered and recycled or composted, 14% is incinerated, and the remaining 54% is disposed of in landfills. As society moves waste to the forefront of public policy, it is more apparent that what we discard annually contains a multitude of valuable and recoverable materials. This plan will assist in the careful analysis of what is in the waste stream and offer ways to recover materials and energy at the point of highest value.

Purpose

The purpose of this program is to assure that all waste generated on campus is properly managed with the least impact on environmental resources. This includes:

1. Identifying the source of all waste streams and assigning a responsible person to manage each waste stream.
2. Evaluating all waste streams to determine their proper characterization
3. Establishing waste management procedures for each waste stream, and
4. Developing waste minimization strategies, thereby saving matter and energy

Responsibility

A. This program is administered jointly under the authority of the **Associate VP for Facilities Management** and the **Director of Compliance & Enterprise Risk Management**.

B. The **Department of Compliance & Enterprise Risk Management** is responsible for ensuring that all hazardous and universal wastes and waste oil are managed in accordance with federal, state, and local regulations. Additionally, the Department provides technical assistance and guidance to the College community on proper handling, storage, and disposal of these wastes.

C. The **Department of Grounds & Landscaping** is responsible for ensuring that all non-hazardous municipal and residual wastes are managed in accordance with federal, state, and local regulations. Additionally, the Department provides technical assistance and guidance to the College community on proper handling, storage, and disposal of these wastes.

D. The **Department of Library and Information Services** is responsible for ensuring that all E-wastes are managed in accordance with federal, state, and local regulations. Additionally, the Department provides technical assistance and guidance to the College community on proper handling, storage, and disposal of these wastes.

E. **All Employees** are responsible for ensuring that waste is properly managed in accordance with this plan. Failure to follow procedures and practices outlined in the Comprehensive Waste Management Plan is a serious breach of college policy and subject to disciplinary action that might include termination of employment at the college. The procedures to be followed in the event of such action shall be in keeping with existing guidelines as stated in the appropriate handbook for faculty, administration, or staff.

Availability

The Dickinson College Comprehensive Waste Management Plan must be readily available to all employees through their supervisor. Employees are to be advised of the availability of the plan during their education/training sessions. Although it is not necessary for each employee to have an individual copy, an electronic copy can be found on the Environmental Health & Safety website.

Plan Review

The Dickinson College Comprehensive Waste Management Plan will be reviewed and updated:

1. Periodically by the Director of Compliance & Enterprise Risk Management to assure that departments are complying with the requirements of the existing program and that all existing programs are adequate based on current laws.
2. When new waste streams are created.
3. To reflect changes in technology that reduce, reuse, or recover materials or energy.

Applicability

Currently regulated wastes are generated in the following areas The responsible person shall have the authority to manage and handle the waste from generation to removal by the Department of Compliance & Enterprise Risk Management or an external vendor.

Department	Responsible Person	Chemical	Biological	Radiological	Controlled Substances	Universal Waste	Waste Oil	Scrap Electronics
Art & Art History	Technicians	X						
Athletics	AT's?	X	X					
Biology	Technician	X	X	X	X	X	X	
Chemistry	Technician	X	X	X		X	X	
Dining	Director	X	X				X	
Environmental Sciences/Studies	Technicians	X	X					
Facilities – Trades	Dir. of Trades	X	X			X	X	
Facilities - Grounds	Dir. of Grounds					X		
Facilities – Housekeeping	Dir of Housekeeping		X					
Farm	Director	X				X	X	
Earth Sciences	Technician	X						
Wellness Center	Executive Director	X	X		X			
Library & Information Services	Director of User Services							X
Physics	Technician	X		X			X	
Psychology	Psychology or Animal/Neuroscience Tech	X	X		X			
Public Safety	Officer		X					
Theatre Arts	Tech Director	X						

Hazardous Wastes

A. Identification

The following are the identified waste streams at the college:

- Batteries
- Lamps
- Oil
- Controlled Substances
- Radiological Waste
- Biohazardous Waste
- Paint
- Pesticides
- Used laboratory chemicals
- Mercury-containing equipment
- Electronics

In addition to these wastes, some hazardous wastes may possess additional characteristics which, when present in a waste, indicates that the waste poses a sufficient threat to merit regulation as hazardous. The four established hazardous waste characteristics include: ignitability, corrosivity, reactivity, and toxicity.

Wastes that are hazardous due to the corrosivity characteristic include aqueous wastes with a pH of less than or equal to 2, a pH greater than or equal to 12.5 or based on the liquids ability to corrode steel. EPA assigned D002 as the waste code for corrosive hazardous wastes.

Wastes that are hazardous due to the reactivity characteristic may be unstable under normal conditions, may react with water, may give off toxic gases and may be capable of detonation or explosion under normal conditions or when heated. EPA assigned D003 as the waste code for reactive hazardous wastes.

Wastes that are hazardous due to the toxicity characteristic are harmful when ingested or absorbed. Toxic wastes present a concern as they may be able to leach from waste and pollute groundwater. The toxicity of a waste is determined by the Toxicity Characteristic Leaching Procedure (TCLP) (SW-846 Test Method 1311). EPA assigned wastes codes D004 through D043 that correspond to a contaminant and its associated TCLP concentration.

B. Generation

A generator is any person who produces a hazardous waste as listed or characterized in part 261 of title 40 of the Code of Federal Regulations (CFR). Recognizing that generators produce waste in different quantities, EPA established three categories of generators in the regulations:

- very small quantity generators,
- small quantity generators, and
- large quantity generators.

The volume of hazardous waste each generator produces in a calendar month determines which regulations apply to that generator. The college falls under the Small Quantity Generator (SQG) category.

1. Small Quantity Generator

Small Quantity Generators (SQGs) generate more than 100 kilograms, but less than 1,000 kilograms of hazardous waste per month. Monthly generation tracking records will be compiled and managed by the Department of Compliance & Enterprise Risk Management and/or the waste management vendor (e.g., ACV Enviro) to determine the monthly amount accumulated to verify and demonstrate generator status. Major requirements for SQGs include:

- SQGs may accumulate hazardous waste on-site for 180 days without a permit (or 270 days if shipping a distance greater than 200 miles).
- The quantity of hazardous on-site waste must never exceed 6,000 kilograms.
- SQGs must comply with the hazardous waste manifest requirements at 40 CFR part 262, subpart B and the pre-transport requirements at 40 CFR sections 262.30 through 262.33.
- SQGs must manage hazardous waste in tanks or containers subject to the requirements found at 40 CFR sections 262.16(b)(2) and (3).
- SQGs must comply with the preparedness and prevention requirements at 40 CFR sections 262.16(b)(8) and (9), and the land disposal restriction requirements at 40 CFR part 268.
- There must always be at least one employee available to respond to an emergency. This employee is the emergency coordinator responsible for coordinating all emergency response measures. SQGs are not required to have detailed, written contingency plans.

Requirement	Small Quantity Generators
Quantity Limits The amount of hazardous waste generated per month determines how a generator is categorized and what regulations must be complied with.	>100 and <1,000 kg/month §260.10
EPA ID Number Acquire a unique EPA identification number that identifies generators by site.	Required §262.18
On-Site Accumulation Quantity Determine amount of hazardous waste generators can "accumulate" on site without a permit.	≤6,000 kg §262.16(b)(1)
Accumulation Time Limits Determine amount of time hazardous waste can accumulate on site.	≤180 days or ≤270 days (if transporting greater than 200 miles) §§262.16(b)-(d)
Accumulation Requirements Manage hazardous waste in compliance with certain technical standards.	Basic requirements with technical standards for containers, tanks, drip pads or containment buildings

	§§262.16(b)(2)-(5)
Personnel Training Ensure appropriate personnel complete classroom or on-the-job training to become familiar with proper hazardous waste management and emergency procedures for the wastes handled at the facility.	Basic training required §262.16(b)(9)(iii)
Contingency Plan and Emergency Procedures Develop procedures to follow during an unplanned major event.	Basic planning required §§262.16(b)(9)
Preparedness and Prevention Develop procedures to follow in the event of an emergency.	Required §262.16(b)(8)-(9)
Air Emissions Control hazardous air emissions from tanks and containers	Not required
Land Disposal Restrictions Meet standards for placing on the land and associated requirements for certifications, notifications, and waste analysis plans	Required Part 268 from §262.16(b)(7)
Manifest Tracking hazardous waste shipments using the multiple-copy manifest - required by the Department of Transportation (DOT) and EPA	Required Part 262 subpart B
Waste Minimization Certify steps taken to reduce or eliminate the generation of hazardous waste	Good faith effort required §262.27
Pre-Transport Requirements Package and label hazardous waste for shipment off site to a RCRA facility for treatment, storage, or disposal	Required §§262.30-262.33
Biennial Report Report data from off-site shipments of waste during the previous calendar year	Not required
Exception and Additional Reporting Report if any required copies of signed manifests are not received back Provide information on quantities and disposition of wastes upon request	Required §§262.42(b) and 262.43
Recordkeeping Maintain records of waste testing, manifests, biennial reports and exception reports	Required (except biennial reports) §262.11(f) and §262.40(a) and (d)
Facility Type Send off-site shipments to appropriate facilities for management	RCRA permitted/interim status facility Parts 264/265, 266/267 and 270

Closure Close equipment, structures, soils and units by meeting specified performance standards and disposal and decontamination requirements	Required for tanks, drip pads and containment buildings - Tanks only §262.16(b)(3)(vi) Unit specific Part 265, subpart W and DD for drip pads and containment buildings

2. Episodic Generation

The provision in Part 262 Subpart L allows SQGs to remain classified at their existing generator category when they temporarily generate additional volumes of hazardous waste because of an episodic event. Under the new Generator Improvement Rule, if generators satisfy specific conditions, they can remain in their current generator category. The relief for an episodic event is only allowed once per calendar year. To take advantage of the episodic generation provision, the following conditions must be met, including but not limited to:

- The EPA must be notified using form 8700-12 (see **Appendix D: EPA Form 8700-12**) no later than 30 days before a planned episodic event or within 72 hours after an unplanned event.
- Hazardous waste generated during an episodic event must be manifested to an offsite RCRA-designated facility within 60 days after the start of an event.
- Records of the event must be kept for three years from the end date of the episodic event.

C. Characterization

Proper hazardous waste identification is essential to the success of the hazardous waste management program. The RCRA regulations at 40 CFR §262.11 require that any person who produces or generates a waste must determine if that waste is hazardous. In doing so, §262.11 presents the steps in the hazardous waste identification process:

- Is the waste a "solid waste"?
- Is the waste specifically excluded from the RCRA regulations?
- Is the waste a "listed" hazardous waste?
- Does the waste exhibit a characteristic of hazardous waste?

The waste classification profiles for each shipped waste is produced by the college's hazardous waste vendor prior to each off-site shipment. Additionally, a product's safety data sheet in conjunction with the table in **Appendix E: Typical Wastes Generated by**

Large and Small Quantity Generators will assist with the identification and classification of the various wastes generated.

The regulations in 40 CFR Part 261 include a two-pronged approach to determine if a material qualifies as a hazardous waste: 1) the material must first qualify as a solid waste, 2) then as a hazardous waste. A solid waste is any solid, liquid or contained gaseous material that is discarded by being abandoned (e.g., disposed of or incinerated), recycled in specified ways or is inherently waste-like. (Note: This definition of solid waste is applicable only for determining if a material is a hazardous waste. In all other situations, the statutory definition of solid waste applies.) In general, a solid waste qualifies as hazardous if it satisfies one or both of the following criteria:

It appears on one of four lists published by EPA in 40 CFR Part 261, Subpart D:

- Non-specific source wastes (40 CFR 261.31, "F-List") include generic wastes commonly produced by industry. Examples include spent halogenated solvents used in degreasing and wastewater treatment sludge from electroplating processes, as well as dioxin wastes, most of which are "acutely hazardous" wastes due to the risks they pose to human health and the environment.
- Specific source wastes (40 CFR 261.32, "K-List") include wastes from specifically identified industries, such as wood preserving, petroleum refining and organic chemical manufacturing. Examples include sludges, still bottoms, wastewaters, spent catalysts and residues.
- Commercial chemical products acute or extremely hazardous (40 CFR 261.33(e), "P-List") include discarded commercial chemical products, off-specification commercial chemical products, manufacturing chemical intermediates and container residues and spills of these materials. This list includes those identified as acute or extremely hazardous. Examples include tetraethyl lead, soluble cyanide salts, phosgene, and acrolein.
- Commercial chemical products toxic (40 CFR 261.33 (f), "U-List") include discarded commercial chemical products, off-specification commercial chemical products, manufacturing chemical intermediates and container residues and spills of these materials. This list includes those identified as toxic. Examples include chemicals such as chloroform and creosote; acids such as hydrofluoric acid and sulfuric acid; and pesticides, such as DDT and ketone.

It exhibits a hazardous characteristic specified in 40 CFR Part 261, Subpart C. EPA has identified four hazardous characteristics:

- Ignitability (40 CFR 261.21) is the ability of wastes to catch fire under certain conditions. Examples are paints, certain degreasers and solvents. Ignitable wastes have an EPA waste code D001.
- Corrosivity (40 CFR 261.22) is the ability of wastes to corrode metals or wastes that have a very high or low pH. Examples are rust removers, acid or alkaline

cleaning fluids and battery acid. Corrosive wastes have an EPA waste code D002.

- Reactivity (40 CFR 261.23) means wastes are unstable and explode or produce toxic fumes, gases and vapors when mixed with water or when subjected to heat or pressure. Examples include certain cyanides or sulfide-bearing wastes. Reactive wastes have an EPA waste code D003.
- Toxicity (40 CFR 261.24) includes wastes that are harmful or fatal when ingested or absorbed or leach toxic chemicals into the soil or groundwater when disposed on land. Examples include wastes that contain high concentrations of heavy metals, such as cadmium, lead or mercury. EPA waste codes for toxic wastes range from D004 to D043.

TABLE 1—MAXIMUM CONCENTRATION OF CONTAMINANTS FOR THE TOXICITY CHARACTERISTIC

EPA HW No.[1]	Contaminant	CAS No.[2]	Regulatory Level (mg/L)
D004	Arsenic	7440-38-2	5.0
D005	Barium	7440-39-3	100.0
D018	Benzene	71-43-2	0.5
D006	Cadmium	7440-43-9	1.0
D019	Carbon tetrachloride	56-23-5	0.5
D020	Chlordane	57-74-9	0.03
D021	Chlorobenzene	108-90-7	100.0
D022	Chloroform	67-66-3	6.0
D007	Chromium	7440-47-3	5.0
D023	o-Cresol	95-48-7	[4]200.0
D024	m-Cresol	108-39-4	[4]200.0
D025	p-Cresol	106-44-5	[4]200.0
D026	Cresol		[4]200.0
D016	2,4-D	94-75-7	10.0
D027	1,4-Dichlorobenzene	106-46-7	7.5
D028	1,2-Dichloroethane	107-06-2	0.5
D029	1,1-Dichloroethylene	75-35-4	0.7
D030	2,4-Dinitrotoluene	121-14-2	[3]0.13
D012	Endrin	72-20-8	0.02
D031	Heptachlor (and its epoxide)	76-44-8	0.008
D032	Hexachlorobenzene	118-74-1	[3]0.13

D033	Hexachlorobutadiene	87-68-3	0.5
D034	Hexachloroethane	67-72-1	3.0
D008	Lead	7439-92-1	5.0
D013	Lindane	58-89-9	0.4
D009	Mercury	7439-97-6	0.2
D014	Methoxychlor	72-43-5	10.0
D035	Methyl ethyl ketone	78-93-3	200.0
D036	Nitrobenzene	98-95-3	2.0
D037	Pentachlorophenol	87-86-5	100.0
D038	Pyridine	110-86-1	[3]5.0
D010	Selenium	7782-49-2	1.0
D011	Silver	7440-22-4	5.0
D039	Tetrachloroethylene	127-18-4	0.7
D015	Toxaphene	8001-35-2	0.5
D040	Trichloroethylene	79-01-6	0.5
D041	2,4,5-Trichlorophenol	95-95-4	400.0
D042	2,4,6-Trichlorophenol	88-06-2	2.0
D017	2,4,5-TP (Silvex)	93-72-1	1.0
D043	Vinyl chloride	75-01-4	0.2

D. Management, Storage and Disposal

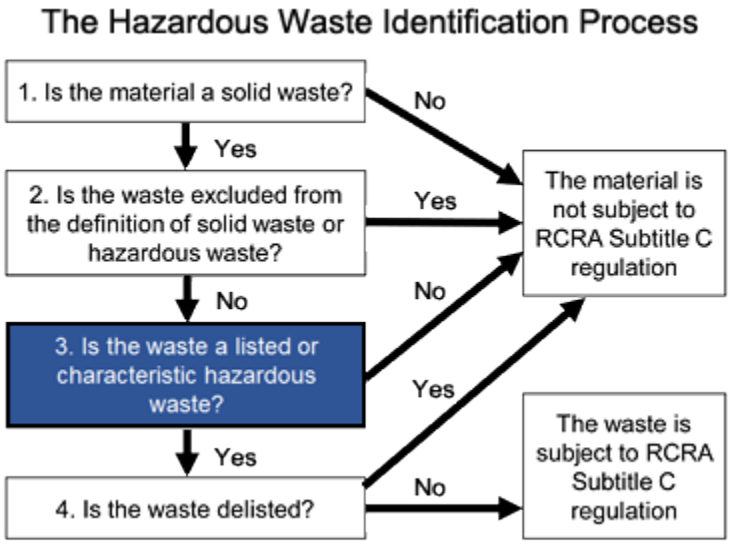
The hazardous waste identification (HWID) process is the crucial first step in the hazardous waste management system. Correctly determining whether a waste meets the RCRA definition of hazardous waste is essential to determining how the waste must be managed. The waste generator has responsibility for determining if a waste is a RCRA hazardous waste. (See: 40 CFR 262.11)

See also Appendix B, Part C: EPA Waste Determination Chart

The HWID process consists of four questions:

1. Is the material a solid waste? (See: 40 CFR Part 261.2)
2. Is the waste specifically excluded from RCRA? (See: 40 CFR Part 261.4)
3. Is the waste a listed hazardous waste? (See: 40 CFR Part 261.30)
4. Does the waste exhibit a characteristic of hazardous waste? (See: 40 CFR Part 261.20)

A material must be identified and determined as a hazardous waste to be managed as such. Further, a material cannot be a hazardous waste if it does not meet the definition of solid waste. A solid waste is a hazardous waste if it is specifically listed as a known hazardous waste or meets the characteristics of a hazardous waste. Listed wastes are wastes from common manufacturing and industrial processes, specific industries and can be generated from discarded commercial products. Characteristic wastes are wastes that exhibit any one or more of the following characteristic properties: ignitability, corrosivity, reactivity or toxicity. Wastes that are excluded from the definition of solid waste are not subject to RCRA subtitle C hazardous waste regulation. A waste that has a hazardous component and a radioactive component is called a mixed waste and is regulated under both the Resource Conservation and Recovery Act (RCRA) and the Atomic Energy Act.



It is important to note that the definition of solid waste is not limited to wastes that are physically solid. Many solid wastes are liquid, semi-solid, or contained gaseous material.

A solid waste is any material that is discarded by being:

- Abandoned**:** The term abandoned means thrown away. A material is abandoned if it is disposed of, burned, incinerated, or sham recycled.
- Inherently Waste-Like**:** Some materials pose such a threat to human health and the environment that they are always considered solid wastes; these materials are considered to be inherently waste-like. Examples of inherently waste-like materials include certain dioxin-containing wastes.
- A Discarded Military Munition**:** Military munitions are all ammunition products and components produced for or used by the U.S. Department of Defense (DOD) or U.S. Armed Services for national defense and security. Unused or defective munitions are solid wastes when:
- abandoned (i.e., disposed of, burned, incinerated) or treated prior to disposal;
- rendered nonrecyclable or nonusable through deterioration; or

- declared a waste by an authorized military official.
  Used (i.e., fired or detonated) munitions may also be solid wastes if collected for storage, recycling, treatment, or disposal.
- Recycled in Certain Ways: A material is recycled if it is used or reused (e.g., as an ingredient in a process), reclaimed, or used in certain ways (used in or on the land in a manner constituting disposal, burned for energy recovery, or accumulated speculatively). Specific exclusions to the definition of solid waste are listed in the Code of Federal Regulations (CFR) at 40 CFR section 261.4(a). Many of these exclusions are related to recycling.

Materials that do not meet this definition are not solid wastes and are not subject to RCRA regulation

1. Satellite Accumulation Areas

   Up to 55 gallons of non-acute hazardous waste and/or either one quart of liquid acute hazardous waste (F-list, P-list) or 1 kg (2.2 lbs) of solid acutely hazardous waste (F-list, P-list) may accumulate in containers at or near any point of generation where wastes initially accumulate If a container holding hazardous waste is not in good condition, or if it begins to leak, the generator must immediately transfer the hazardous waste from the container to a container that is in good condition and does not leak, or immediately transfer and manage the waste in a central accumulation area.

   The generator must use a container made of or lined with materials that will not react with, and are otherwise compatible with, the hazardous waste to be accumulated, so that the ability of the container to contain the waste is not impaired.

   Incompatible wastes must not be placed in the same container or an unwashed container that previously held an incompatible waste or material (see Appendix C: Appendix V to Part 265 – Examples of Potentially Incompatible Waste)

   A container holding hazardous waste must be closed at all times during accumulation, except:

   - When adding, removing, or consolidating waste; or
   - When temporary venting of a container is necessary

   The container must be marked or labeled with the words “Hazardous Waste” and an indication of the hazards of the contents (e.g., the hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the DOT requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704).

If at any point the amount of acutely hazardous waste (see F and P lists) or non-acutely hazardous waste exceeds the previously listed amounts, the excess must be removed from the satellite accumulation area within three consecutive calendar days to the Central Accumulation Area (Rector 1255).

The following is a list of each designated satellite accumulation across campus:

Building	Room Number	No.	Notes
Goodyear	2nd Floor Hallway	1	Flammables cabinet near studios
	Parking Lot Entrance	1	Flammables Cabinet Near Door
	Senior Studio Space	1	Flammables Cabinet Outside Studio 6
Holland Union Building (HUB)	Theatre Scene Shop	1	Waste solvents
	Loading Dock	1	Biohazardous waste (picked up by Facilities)
Kaufman	109	1	
	113	1	
	116	1	
	116A	1	
	116B	1	
	124C	1	
	136A	1	
	136B	1	
Rector Science Center	1105	4	
	1118	2	
	1121	1	
	1122	1	
	1202	1	
	1206	1	
	1218	1	
	1224	1	
	1228	2	
	1231	1	
	1260	1	
	1305	1	
	1316	1	
	1317	1	
	2101	3	
	2104	5	
	2105	2	
	2112	1	
	2117	2	

	2118	1	
	2206	1	
	2217	1	Mainly Bio Waste
	2218	1	
	2224	1	
	2228	2	
	2229	1	
	2233	1	
	2305	1	
	2306	2	
	2307	1	Mainly Bio Waste
	2317	1	
	2319	1	
	1105A	1	
	2122A	1	Mainly Bio Waste
	B213	1	
	B219	1	
Weiss Center for the Arts	Paint Studio	1	Room 342
	Photography Studio	1	Room 327
	Printmaking Studio	1	Room 340
Facilities Management	Outside Housekeeping Supply Cage	1	

2. Central Accumulation Area

40 CFR 262.16(b) and 262.17(a) establish the basic procedures that generators must follow to accumulate their hazardous waste onsite before shipment to a TSDF. SQGs can accumulate their hazardous waste onsite for 180 days or less, provided the quantity of waste accumulated onsite never exceeds 6,000 kilograms and the SQGs meet the other requirements of 40 CFR 262.16(b). SQGs who must transport their waste, or offer their waste for transportation, over 200 miles or more for offsite treatment, storage or disposal may accumulate hazardous waste onsite for 270 days or less, as provided by 40 CFR 262.16(c).

Central accumulation areas require the following elements:

- Containers must be labeled with “Hazardous Waste”
- Containers must be labeled with the accumulation start date
- Containers must be compatible with the stored substance and in good condition
- Weekly inspections must occur
- Containers must be placed in secondary containment

- Containers must be closed at all times except when adding or removing wastes
- Emergency preparedness, prevention, and contingency plans must be developed.

3. Universal Waste

Universal wastes are certain hazardous wastes that are generated by a large cross section of the regulated community. Universal wastes are generally more innocuous than other hazardous wastes and management of these wastes as universal wastes is less onerous than normal hazardous waste management and facilitates the increased recycling of these wastes. Universal waste management does not require the use of a manifest or a licensed transporter to transport the waste to a permitted TSDF. Additionally, universal wastes do not carry a federal waste code, meaning these wastes do not count against the maximum allowable hazardous waste shipment volumes per year based on the college's generator status. More importantly, management as universal waste allows facilities that meet "universal waste handler" requirements to accumulate these wastes without a full hazardous waste storage permit. Pennsylvania has incorporated the following designated by EPA as universal waste—

- hazardous waste lamps
- mercury thermostats
- Pesticides under a manufacturer recall or collection program
- batteries.
- Mercury-containing devices
- Oil-based finishes
- Photographic Solutions

Management of hazardous wastes under the universal waste program is less costly than management under full hazardous waste regulation. Lower transportation and accumulation costs help to increase the recycling of universal wastes and helps to divert them from unlawful disposal in non-hazardous waste landfills. Not all batteries, lamps, or pesticides are hazardous waste and therefore may not have to be treated as universal waste.

a) Batteries

Batteries, or devices consisting of one or more electrically connected electrochemical cells designed to receive, store and deliver electric energy are eligible for universal waste management. Examples include:

- Alkaline
- Mercuric oxide
- Alkaline manganese
- Zinc carbon nickel cadmium (Ni-Cad)
- Button cell

- Silver oxide
- Lithium ion (Li-Ion)

Lead acid batteries that can be managed by 40 CFR 266 (spent automotive batteries that are going to be reclaimed) are ineligible. Lead acid batteries can be collected, transported, and stored prior to shipping off-site for reclamation without regulation. They can also be managed as Universal Waste. Batteries should be sorted by type according to the list below for disposal and shipping by the Hazardous Waste Vendor:

- Alkaline
- Lithium Ion
- Lead Acid
- Nickel Cadmium
- All others

Battery collections sites can be found in the Holland Union Building (HUB) and the central accumulation area for these can be found at Facilities Management.

Any damaged or leaking lead acid or lithium ion batteries (exhibiting a characteristic of hazardous waste) no longer meet the Universal Waste rules and must be shipped as hazardous waste with a waste code for the lead, acid, and/or lithium as it is subject to all applicable requirements of 40 CFR parts 260 through 272. Batteries must be stored in an appropriate container (e.g., plastic 5-gallon bucket) such that it contains any leaks, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container must be labeled or marked clearly with any one of the following phrases: “Universal Waste – Battery(ies),” or “Waste Battery(ies),” or “Used Battery(ies)”.

b) Pesticides

Waste pesticides that are classified as hazardous waste can be collected under the streamlined collection standards for universal waste. Pesticide means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or desiccant, other than any article that:

- Is a new animal drug under FFDCA section 201(w), or
- Is an animal drug that has been determined by regulation of the Secretary of Health and Human Services not to be a new animal drug, or
- Is an animal feed under FFDCA section 201(x) that bears or contains any substances described by paragraph (a) or (b) of this section.

Examples include:

- Recalled pesticides that are:
    - Stocks of a suspended and canceled pesticide that are part of a voluntary or mandatory recall under FIFRA Section 19(b), including, but not limited to those owned by the registrant responsible for conducting the recall; or
    - Stocks of a suspended or canceled pesticide, or a pesticide that is not in compliance with FIFRA, that are part of a voluntary recall by the registrant.
    - Stocks of other unused pesticide products that are collected and managed as part of a waste pesticide collection program.

The universal waste pesticides must be contained in one or more of the following:

- A container that remains closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions; or
- A container that does not meet the requirements of paragraph (b)(1) of this Section, provided that the unacceptable container is overpacked in a container that does meet the requirements of paragraph (b)(1) of this Section; or
- A tank that meets the requirements of 40 CFR part 265 subpart J, except for 40 CFR 265.197(c), 265.200, and 265.201; or
- A transport vehicle or vessel that is closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

Waste pesticides can be treated as "Universal Waste – Pesticides" when they are recalled or when they are unused pesticides to be disposed of. Pesticides must contain the original label supplied by the manufacturer, an appropriate DOT label, or a label approved by the pesticide collection program.

c) Mercury-Containing Equipment

Mercury-containing equipment means a device or part of a device (including thermostats but excluding batteries and lamps) that contains elemental mercury integral to its function.

Examples include:

- Thermostats
- Thermometers

- Mercury switches
- Ballasts
- Barometers
- Manometers

A small quantity handler of universal waste must place in a container any universal waste mercury-containing equipment with non-contained elemental mercury or that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The container must be closed, structurally sound, compatible with the contents of the device, must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions, and must be reasonably designed to prevent the escape of mercury into the environment by volatilization or any other means.

The Pennsylvania Department of Environmental Protection (DEP) allows all mercury-containing devices to be treated as universal waste—not just lamps and thermostats. This would include thermometers, manometers, elemental mercury, etc. …But NOT Mercury debris.

1) Do not remove mercury ampules from thermostats.
2) Excludes mercury containing batteries.
3) Any broken thermostat or other mercury-containing device must be shipped as hazardous waste instead of universal waste.

d) Lamps

Lamp, also referred to as "universal waste lamp" is defined as the bulb or tube portion of an electric lighting device. A lamp is specifically designed to produce radiant energy, most often in the ultraviolet, visible, and infra-red regions of the electromagnetic spectrum. Examples include:

- Fluorescent (including CFLs)
- High Intensity Discharge
- Neon
- Mercury vapor
- High pressure sodium
- Metal halide lamps

Lamps no longer functioning should be collected using efforts to mitigate breaking of the bulb(s). Each lamp or a container or package in which such lamps are contained must be labeled or marked clearly with one of the following phrases: "Universal Waste—Lamp(s)," or "Waste Lamp(s)," or "Used Lamp(s)"

Broken lamps no longer classify as universal waste and must instead be disposed of as mercury debris which carries a hazardous waste code.

e) Oil-Based Finishes

An oil based finish is any paint or other finish that may exhibit, or is known to exhibit, a hazardous waste characteristic as specified in 40 CFR Part 261, Subpart C (relating to characteristics of hazardous waste), or which contains a listed hazardous waste as specified in 40 CFR Part 261 Subpart D (relating to lists of hazardous wastes), and is in original packaging, or otherwise appropriate contained and clearly labeled. In other words, any paint, in any form, if it first meets the definition of a hazardous waste (characteristic or listed), it can be managed as a Universal Waste in Pennsylvania.

Examples of oil-based finishes include, but are not limited to, oil-based paints, lacquers, stains and aerosol paint cans.

Please note an oil-based finish is a hazardous waste if it exhibits one or more of the characteristics identified in 40 CFR Part 261, Subpart C**)**.

The following paints must be placed in the nearest Satellite Accumulation Area for collection and disposal by the college's Hazardous Waste Vendor:

- Oil-Based Paints
- Paint Thinners
- Aerosol Cans

f) Photographic Solutions

Described as Silver-bearing waste streams resulting from photographic processing solutions or rinse water and applies to persons managing photographic solutions. A silver recovery vessel exists outside the photography making lab in Weiss.

g) General Storage Considerations:

1. Containers must be kept closed, remain structurally sound, and be compatible with the contents.
2. Containers must be properly labeled and should read:
   - "Universal Waste – Battery(ies)"
   - "Universal Waste – Pesticide(s)"
   - "Universal Waste – Mercury Thermostat(s)"
   - "Universal Waste – Lamp(s)"
   - "Universal Waste – Mercury Containing Device(s)"
3. Waste must contain an accumulation start date and be removed from campus within one year.
4. Waste may be sent to a TSDF, another handler of universal waste, or a recycler.

5. Employees must be informed by training of their responsibilities for managing the waste and how to respond to a release.
6. Waste can be stored at satellite or accumulation areas for the entire time. It is recommended to store it in the accumulation area for the purpose of dating and removal within one year.
7. Lamps MAY NOT be crushed.
8. Lamps must be contained in packages that are adequate to prevent breakage (use shipping carton).
9. Some manufacturers make fluorescent lamps that contain less than the regulated level of mercury. You may want to check out our current supplier. Get manufacturer confirmation **in writing** before discarding as non-hazardous solid waste.

4. Chemical, Biological, Radiological

Disposal requests for chemical, biological wastes, and radiological waste can be made by contacting the Director of Compliance & Enterprise Risk Management at 717-245-1495. Please be prepared to provide information on the type and amount of waste, location of waste, department, and contact name/phone number of the waste generator. This can best be accomplished by completing a yellow waste accumulation label (Appendix A).

a) Chemical Waste
Chemical waste includes a wide range of materials including discarded chemical products and process wastes. Some chemicals are hazardous because they are specifically listed by the EPA while others are not listed by the EPA but contain one or more of the EPA's four (4) hazardous characteristics (see Hazardous Wastes, Section E: **Characteristics**): ignitability, corrosivity, reactivity, and toxicity. The following briefly describes the storage and disposal process for chemical waste:

1. Individual generators are responsible for the safe collection and storage of hazardous waste at their site. These satellite storage sites may accumulate up to 55 gallons of hazardous waste (U-list) or one quart of acutely hazardous waste (P-list) in compatible containers provided.
2. The container must be marked with an accumulation start date, the words "Hazardous Waste", and with the contents of the container identified.
3. Hazardous wastes are segregated into waste streams using waste accumulation labels (See Appendix A & B).

4. Waste stored at the point of generation should be kept to a minimum. Containers must be kept closed and dated when they become full and moved to the hazardous waste accumulation area. The waste accumulation area must be inspected weekly and waste must be removed from the accumulation area at least every 180 days.

5. No quantity of hazardous chemicals may be transported over public highways without proper packaging, classification, labeling, and documentation. Consequently, hazardous waste will be transported from the college for treatment or disposal only by licensed hazardous waste transporters.

b) Biohazardous Waste

According to the Fred Hutchinson Cancer Research Center, biohazardous waste is "any waste containing infectious materials or potentially infectious substances such as blood. Of special concern are sharp wastes such as needles, blades, glass pipettes, and other wastes that can cause injury during handling." Biohazardous wastes may contain bloodborne pathogens (see Exposure Control Plan for further information). Biohazardous waste describes different types of waste that might include infectious agents. To be considered biohazardous waste, items contaminated with blood or OPIM must be in pourable, drippable amounts.

Biohazardous waste includes the following materials:

1. Human blood and blood products: All human blood, blood products (such as serum, plasma, and other blood components) in liquid or semi-liquid form. Items contaminated with blood that, if compressed, would release blood in a liquid or semi-liquid form, or items caked with dried blood capable of being released during handling. Other body fluids or tissues containing visible blood.
2. Human Body Fluids: Human body fluids in a liquid or semi-liquid state, including semen, vaginal secretions, cerebral spinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, and saliva from dental procedures. Also includes any other human body fluids visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids.
3. Microbiological Wastes: Laboratory wastes containing or contaminated with concentrated forms of infectious agents. Such waste includes discarded specimen cultures, stocks of etiologic agents, discarded live and attenuated viruses, blood or body fluids known to contain infectious pathogens, wastes from the production

of biologicals and serums, disposable culture dishes, and devices used to transfer, inoculate and mix cultures (BSL-1 through BSL-4 etiologic agents as designated by NIH Guidelines/BSC).

4. Pathological waste: All human tissues, organs, and body parts, including waste biopsy materials, tissues, and anatomical parts from surgery, procedures, or autopsy. Any unfixed human tissue, except skin.
5. Animal waste: All animal carcasses, body parts, and any bedding material from animals known to be infected with, or that have been inoculated with human pathogenic microorganisms infectious to humans.
6. Sharps waste: Sharps include:
    a. Needles (whether or not attached to a syringe or covered by a plastic guard);
    b. IV tubing with needle attached;
    c. Glass Pasteur pipettes;
    d. Disposable glass pipettes;
    e. Scalpels, razor blades, and lancets; and
    f. Broken glass and splintered plastic, when contaminated with blood or other potentially infectious material.

    Sharps must be treated, packaged, labeled, and transported as described in the following sections. Sharps waste categories include:

    a) Sharps, which are either contaminated or not contaminated with biological material;
    b) Radioactive sharps, which are sharps contaminated with radioactive material; and
    c) Chemical sharps (e.g. broken mercury thermometers, or syringes contaminated with chemotherapy drugs).

    Laboratory glassware is not considered sharps waste for disposal purposes but may be sharp enough to puncture normal garbage bags and endanger waste handlers. Lab glass includes items such as broken glass beakers or bottles, plastic pipettes and pipette tips.

    Sharps must be disposed of via appropriate sharps containers. Once the container is ¾ full, secure the lid and

7. Recombinant DNA and RNA: As defined in the NIH Guidelines. These wastes must be treated, packaged, labeled, and transported as described in the following sections or as determined appropriate on the EMUA and approved by the Institutional Biosafety Committee.

Although biohazard waste bags and bins are often conveniently located near potential sources, it is important to remember that these are

for biohazard and contaminated wastes only and are not to be used for regular trash. Disposal of non-biohazard waste in a biohazard waste container adds significant costs to waste management.

The following are examples of items that do not need to be disposed as biohazard waste:

- Gloves used to handle containers of blood or body fluids;
- Paper towels or bench paper on which containers of blood or body fluids may have been placed but did not spill; and
- Any other material used to handle blood indirectly but that did not come into direct contact with the blood.

The following briefly describes the storage and disposal process for biohazardous waste:

1) Animal parts or whole animals should be placed in biohazard waste bags for incineration.

2) If animal tissue is held in liquid preservative, the tissue and liquid preservative should be separated. The animal tissue should be placed in biohazard waste bags for incineration. The preservative should be disposed of as a chemical waste.

3) Liquid culture waste can be decontaminated using an autoclave. If the material cannot be decontaminated, it should be placed in biohazard waste bags for incineration.

4) All other medical/pathological/regulated waste should be placed in biohazardous waste bags for disposal.

Biohazardous wastes, once cleaned up and packaged for disposal, are collected monthly by ACV Enviro or by the Housekeeping Supervisor upon request via work order submission (for Dining Services and Athletics) and brought to the Central Accumulation Area in Rector (Room 1255). Bags of biohazardous waste MUST NOT be stored directly on floors.

c) Radioactive Waste

i. Short-lived RAM Solid Waste

Short-lived RAM solid waste shall be segregated by isotope and placed into a labeled suitably shielded compatible container for decay-in-storage. After the activity decays to background levels as determined by survey with a meter (at least 10 half-lives), the decayed waste may be disposed of as regular trash after all labels denoting radioactivity have been removed.

ii. Long-lived RAM Solid Waste

Long-lived RAM solid waste shall be segregated by isotope and placed into a labeled suitably shielded compatible container. Disposal of this low-level radioactive waste will be contracted through a qualified vendor.

iii. Short-lived RAM Liquid Waste

Aqueous liquids containing RAM shall be disposed of down a dedicated sink with a large volume of water sufficient to keep the sink drain flushed clean of RAM. The quantity disposed shall not exceed 1 mCi/day and 5 mCi/quarter.

Compliance with NRC release limits is monitored on a college level using RAM inventory and sewer release volume.

Non-aqueous/hazardous chemical liquids containing short-lived RAM (half-life <120 days) must be held until after the activity decays to background levels as determined by survey with a meter (at least 10 half-lives). The decayed waste shall then be disposed of as chemical waste after all labels denoting radioactivity have been removed.

iv. Long-lived RAM Liquid Waste

Non-aqueous/hazardous chemical liquids containing long-lived RAM (half-life > 120 days) are known as "mixed" waste. If your research will produce this kind of waste, you should discuss this with the RSO immediately.

v. Preparing Radioactive Waste for Disposal

The generator shall provide the following information on each container of radioactive waste:

- Label reading, "Radioactive Waste"
- Authorized User's name
- Generation Date
- Isotope
- Reference Date
- Activity (μCi or mCi)
- Survey Instrument Used
- Chemical Names/Hazards

vi. Low Level Mixed Hazardous Waste

The EPA is exempting low-level mixed waste from RCRA storage and treatment requirements as long as the waste is

generated under a single NRC license, meets the conditions specified, and is stored and treated in a tank or container. In addition, LLMW and NARM, which meet applicable treatment standards, may be conditionally exempt from RCRA transportation and disposal requirements. This waste may be disposed of at low-level radioactive waste disposal facilities which are licensed by NRC. The rule also provides additional flexibility for manifesting these wastes when they are destined for disposal at such facilities. Although mixed waste meeting the applicable conditions is exempt from certain RCRA requirements, it must still be managed as radioactive waste according to NRC regulations. Note that DOE disposal facilities are not eligible to accept the exempt waste since they are not subject to NRC regulation.

5. Controlled Substances

The United States Drug Enforcement Agency (DEA) issues permits for controlled substances. The following briefly describes the storage and disposal of controlled substances.

- Abandonment of a controlled substance is a violation of the DEA permit under which it is held.
- Permission to transfer ownership of a controlled substance must be received from the DEA.
- Controlled substances being held by a licensed individual and to be surrendered for destruction must be inventoried on DEA Form 41 and mailed to the Drug Enforcement Administration.

6. Used/Waste Oil

Used oil includes any petroleum-based or synthetic oil that has been used. It may contain brake fluid, transmission fluid, or power steering fluid but not antifreeze or windshield washing fluid. The following briefly describes the storage and disposal process for universal waste:

a) EPA and DEP presume that used oil is to be recycled.

"Off-Spec" USED OIL – Can be recycled as a fuel if it has not been mixed with a listed or characteristic waste, even if the oil itself has a hazardous waste characteristic as a result of use in a process (except for having As, Cd, Cr, Pb, flash point < 100F, Total halogens > 1000 ppm).

b) Used oil to be burned for energy recovery must have at least 8000 Btus per pound.

c) Containers storing used oil must be marked "WASTE OIL" according to PA DEP.

d) Dickinson College as a generator may transport no more than 54 gallons of used oil in a company owned vehicle to an aggregation point. It can; however, offer that oil to transporters who have notified the EPA of their used oil management activities, have an EPA ID#, and will burn the oil in an industrial furnace, industrial or utility boiler, or a permitted incinerator.

e) If a transporter is used, they must have a logbook or a bill of lading with the used oil shipment. It must include:

Name, address, EPA ID# of Dickinson College

Quantity of used oil accepted

Date of acceptance

Signature of Dickinson College representative

Requirements for Storing Used Oil:

Label all containers and tanks as Used Oil.

Keep containers and tanks in good condition. Don't allow tanks to rust, leak, or deteriorate. Fix structural defects immediately.

Used oil generators shall not store used oil in units other than tanks, containers, or units subject to regulation under parts 264 or 265 of chapter I, Subchapter I.

Requirements for Oil Leaks and Spills:

Please refer to the specific steps outlined in the Spill Prevention, Control and Countermeasures (SPCC) plan requirements (40 CFR part 112).

Used Oil Filters – Must be treated as hazardous waste unless they have been gravity hot drained (in which case they can be recycled or discarded) and are NOT terne plated.

- Terne is a mixture of tin and lead. In the past, the disposal of terne plated oil filters in landfills has been a concern due to the potential lead contamination of the soil and/or groundwater. Lead is a hazardous waste and disposing of a filter with lead plating is prohibit in most solid waste landfills [EPA 305-f-98-403, Jan 7,1998 – Doc. No.:1304].

Oily Rags – Materials from which used oil has been drained to the extent possible and from which no free-flowing oil remains, provided they are not burned for energy recovery are not regulated. This means oily rags can be treated as solid waste if no free-flowing oil remains.

Disposal requests for waste oil outside of Facilities Management can be made by contacting the Department of Compliance & Enterprise Risk Management. When contacting The Department of Compliance & Enterprise Risk Management, be prepared to provide information on the type and amount of waste oil, location of waste oil, department, and contact name/phone number of the waste generator.

7. Solvent-Contaminated Wipes

The Federal Solvent-Contaminated Wipes Final Rule was published on July 31, 2013 and became effective January 30, 2014. Pennsylvania incorporates this rule by reference at 25 Pa. Code § 260a.3 (e).

Highlights of the solvent-contaminated wipe rule include:

- A definition of "wipe" at 40 CFR § 260.10 stating that the term means a woven or non-woven shop towel, rag, pad, or swab made of wood pulp, fabric, cotton, polyester blends, or other material.
- A definition of "solvent-contaminated wipe" at 40 CFR § 260.10 establishing that the term refers to a wipe that, after use or after cleaning up a spill, either: 1) contains one or more F001 – F005 solvent or the corresponding P- or U-listed solvent; 2) exhibits a hazardous characteristic when that characteristic results from a listed solvent; or 3) exhibits only the hazardous characteristic of ignitability due to the presence of one or more non-listed solvents.
- A definition of "No free liquids" at 40 CFR § 260.10 establishing that, in the context of the solvent-contaminated wipe provisions, "no free liquids" means that wipes may not contain free liquids as determined by the SW-846 Paint Filters Liquids Test and that there is no free liquid in the container holding the wipes.
- Adds a conditional exclusion from classification as solid waste at 40 CFR § 261.4(a)(26) for solvent-contaminated wipes that are sent for cleaning and reuse (note that these wipes will not be further subject to Pennsylvania residual or municipal waste regulations since the only hazardous waste exclusions and exemptions subject to further solid waste regulation in Pennsylvania are those at 40 CFR § 260.2 [see 25 Pa. Code § 260a.2]). Conditions which must be met in order to be eligible for this solid waste exclusion include:
    - When accumulated, stored, and transported, the wipes must be contained in non-leaking, closed containers that are labeled "Excluded Solvent-Contaminated Wipes" (more detail regarding the term "closed" is in the rule at 261.4(a)(26)(i));
    - Wipes may be accumulated by the generator for up to 180 days from the accumulation start date prior to being sent for cleaning;

- At the point of being sent for cleaning on-site or at the point of being transported off-site for cleaning, the wipes must contain "no free liquids" as defined at 40 CFR § 260.10;
- Free liquids removed from the wipes or the container holding the wipes must be managed according to applicable regulations;
- Generators must maintain documentation regarding the receiving laundry or dry cleaner, documentation demonstrating that the 180-day accumulation time limit is being met, and documentation describing the process used to ensure the wipes contain no free liquids; and
- Wipes must be sent to a laundry or dry cleaner whose discharge, if any, is regulated under NPDES or pretreatment water program provisions.
- Adds a conditional exclusion from classification as hazardous waste at 40 CFR § 261.4(b)(18) for solvent-contaminated wipes that are sent for disposal (note that these wipes will be further subject to Pennsylvania residual or municipal waste regulations since the exclusion is only from classification as hazardous waste and not from classification as solid waste). This hazardous waste exclusion is NOT available for wipes that are hazardous due to the presence of trichloroethylene. Conditions which must be met in order to be eligible for this hazardous waste exclusion include:
- When accumulated, stored, and transported, the wipes must be contained in non-leaking, closed containers that are labeled "Excluded Solvent-Contaminated Wipes" (more detail regarding the term "closed" is in the rule at 261.4(b)(18)(i));
- Wipes may be accumulated by the generator for up to 180 days from the accumulation start date prior to being sent for disposal;
- At the point of being transported for disposal, the wipes the wipes must contain "no free liquids" as defined at 40 CFR § 260.10;
- Free liquids removed from the wipes or the container holding the wipes must be managed according to applicable regulations;
- Generators must maintain documentation regarding the receiving landfill or combustor, documentation demonstrating that the 180 day accumulation time limit is being met, and documentation describing the process used to ensure the wipes contain no free liquids; and
- Wipes must be sent for disposal at a regulated solid or hazardous waste landfill, to a regulated municipal waste or other combustion facility, to a regulated hazardous waste combustion

facility, or to a regulated hazardous waste boiler or industrial furnace.

8. Municipal and Residential Waste

Non-hazardous solid waste is regulated under Subtitle D of RCRA.

Disposal requests for municipal and residual wastes can be made by contacting Facilities Management through the work order system. When contacting facilities, be prepared to provide information on the type and amount of waste, location of waste, department, and contact name/phone number of the waste generator.

Municipal wastes—more commonly known as trash or garbage—consist of everyday items such as product packaging, grass clippings, furniture, clothing, bottles, food scraps, newspapers, and appliances. Under RCRA, landfills that accept municipal waste are primarily regulated by state, tribal, and local governments. EPA, however, has established national standards these landfills must meet in order to stay open. Municipal landfills can, however, accept household hazardous waste.

Household hazardous wastes include many commonly discarded items such as paint, cleaners, oils, batteries, and pesticides that contain hazardous components. These products, if mishandled, can be dangerous to your health and the environment. Dickinson College through its sustainability programs tries to remove these materials from municipal waste generated by its residents.

Residual wastes are non-hazardous industrial waste including contaminated soil, ceramics, gypsum board, linoleum, leather, rubber, textiles, glass, industrial equipment, electronics, pumps, piping, storage tanks, filters, fertilizers, pesticides, detergents and cleaners, photographic film and paper; wastes containing asbestos, oil and PCBs; metal containing wastes such as foundry sands, slags, grindings and shavings; and residues such as sludge from treatment of public water supplies, emission control, lime-stabilized pickle liquor, paints, electroplating, and waste from the manufacture of lime and cement. As the examples indicate, residual waste is highly diversified, both in type and in its potential to harm public health and the environment when improperly managed. Some residual waste components, such as food processing wastes, present relatively little risk. Others, such as some metal-containing wastes, present a high degree of risk. Residual waste does not include materials defined by law as hazardous. However, it does include “near hazardous” wastes that are not covered by hazardous waste regulations. If not processed and/or disposed of properly, these wastes can cause significant environmental harm and health problems. Over 900 facilities in Pennsylvania have permits to process, beneficially use, or dispose of residual waste. In addition, almost all municipal waste landfills and resource recovery facilities accept residual waste. When

possible, the college sends its residual waste to facilities where it can be processed, beneficially used, or disposed of rather than to a municipal waste landfill.

9. Scrap Electronics

Scrap electronics includes CPUs, monitors, keyboards, mice, printers, televisions, telephones, or other electronic devices that contain a circuit board. These items are not specifically required to be managed as regulated waste; however, due to the lead content of printed circuitry, and the potential for other hazardous materials in electronics devices, scrap electronics must not be disposed in the municipal waste stream.

The Covered Device Recycling Act (CDRA), Act 108 of 2010, requires manufacturers to provide recycling programs for desktop computers, laptop computers, computer monitors, computer peripherals and televisions sold to consumers in Pennsylvania. Desktop computers, laptop computers, computer monitors, computer peripherals, televisions, and any components of such devices may no longer be disposed in Pennsylvania with municipal waste. All these devices are required to be properly recycled. "Covered device." A covered computer device and covered television device marketed and intended for use by a consumer.

Covered computer device - A desktop or notebook computer or computer monitor or peripheral, marketed and intended for use by a consumer.

Covered television device - An electronic device that contains a tuner that locks on to a selected carrier frequency and is capable of receiving and displaying television or video programming via broadcast, cable or satellite, including, without limitation, any direct view or projection television with a viewable screen of four inches or larger whose display technology is based on cathode ray tube, plasma, liquid crystal, digital light processing, liquid crystal on silicon, silicon crystal reflective display, light emitting diode or similar technology marketed and intended for use by a consumer primarily for personal purposes.

Peripheral - A keyboard, printer or any other device sold exclusively for external use with a computer that provides input into or output from the computer.

Electronics that no longer serve a use or are broken should be discarded by submitting a work order to Facilities Management who manages the disposal of scrap electronics for the College.

E. Laboratory Hazardous Wastes

Eligible academic entities have the option of complying with 40 CFR 262 Subpart K with respect to its laboratories, as an alternative to complying with the requirements of §§262.11 and 262.15. State adoption of the 2008 Academic Laboratories final rule is strongly encouraged. However, it is optional because the rule is neither more nor less

stringent than the pre-existing regulations under RCRA. As of this plan's 2020 update, Pennsylvania has adopted the rule but is not authorized for the rule.

Designated Employer Representative (DER)

Non-RCRA Municipal Wastes are generated by the college and its constituents on an ongoing basis that includes ordinary refuse disposed of in the area landfill. Wastes of this nature are placed into toters then wheeled to the curb for collection by the Facilities Management Waste/Recycle Transporter, or other designated Grounds staff certified to operate the vehicle and with a current CDL, using the college's trash truck.

As defined in 49 CFR Part 40, the college is required to conduct random drug and alcohol screening to these CDL-licensed operators in compliance with the college's workplace drug and alcohol policy. In addition, as of January 6, 2020, the college, as an employer of CDL drivers, is now required to report violations of the Department of Transportation (DOT) drug and alcohol testing program for their current drivers as well as query current and prospective drivers on an annual basis.

This affects all CDL drivers who operate commercial motor vehicles on public roads and their employers. This includes, but is not limited to:

- Interstate and intrastate motor carriers, including passenger carriers
- School bus drivers
- Construction equipment operators
- Limousine drivers
- Municipal vehicle drivers (e.g., waste management vehicles)
- Federal and other organizations that employ drivers subject to FMCSA drug and alcohol testing regulations (e.g., Department of Defense, municipalities, school districts)

The college must conduct a limited or full query at least once every year for all drivers.

- Limited Queries: Limited queries check for the presence of information in the clearinghouse.
- Full Queries: An employer must conduct a pre-employment query in the Clearinghouse for a prospective driver, prior to hiring the driver for a position requiring him or her to perform safety-sensitive functions, such as operating a commercial motor vehicle (CMV). They must also conduct a full query if a limited query returns any results.

The college must use the Clearinghouse to:

- Conduct a full query as part of each pre-employment driver investigation process.
- Conduct limited queries **at least annually** for every driver they employ.
- Request electronic consent from the driver for a full query, including pre-employment queries.
- Report drug and alcohol program violations.

- Record the negative return-to-duty (RTD) test results and the date of successful completion of a follow-up testing plan for any driver they employ with unresolved drug and alcohol program violations.

The college must report the following information to the Clearinghouse:

- An alcohol confirmation test result with an alcohol concentration of 0.04 or greater.
- A CDL driver's refusal to submit to a Department of Transportation (DOT) test for drug or alcohol use.
- Actual knowledge, as defined in § 382.107.
- The negative RTD test results.
- The date the driver successfully completed all follow-up tests as ordered by the substance abuse professional (SAP).

Designated employer representative (DER): An employee authorized by the college to take immediate action(s) to remove employees from safety-sensitive duties, or cause employees to be removed from these covered duties, and to make required decisions in the testing and evaluation processes. The DER also receives test results and other communications for the college, consistent with the requirements of this part. Service agents cannot act as DERs.

The college has identified the Safety & Emergency Management Specialist as the DER. The DER shall also oversee the quarterly DOT random drug testing for all employees with a CDL. During the random selection process, a witness shall be present to verify the results of the randomized selection.

US DOT Number: 2118033

The DER overall responsibilities:

- Responsible for administering the Drug and Alcohol Program.
- The Liaison with drug and alcohol testing service agents.
- The DER is informed of every test and its result.
- The DER performs the functions necessary according to the results of the tests and are authorized by employer to take immediate action(s)
  - To remove employees from safety sensitive duties with assistance from the Director of Human Resource Services and the employee's supervisor
  - To make necessary decisions in the testing and evaluation process
  - Receives test results and other communications for the college. Records shall be filed in the employee's file in Content 7 (HRS Document Repository)

CDL Employees as of this plan updated: Select Grounds and Trades staff

Training

All employees with regulated waste management responsibilities will be provided training by the Department of Compliance & Enterprise Risk Management in accordance with federal, state, and local laws. Refresher training will be provided as required by law or as indicated by plan review.

Emergency Procedures

A. General

To satisfy the requirements of 40 CFR §262.16(b)(8)(ii), the college has equipped the areas where hazardous waste is generated or accumulated with the following features:

A. An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel. The building's fire alarm satisfies this requirement.
B. A device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or State or local emergency response teams. Corded telephones are installed throughout Rector Science Complex, and most employees have cellphones available on their person to call for emergency assistance (via 911 or DPS) if needed. Further, DPS Officers carry radios that can communicate with Cumberland County Dispatch.
C. Portable fire extinguisher, fire control equipment (including special extinguisher equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment. Fire extinguishers are placed according to NFPA 74 standards and at the discretion of the managing vendor, Department of Compliance & Enterprise Risk Management, and Facilities Management Director of Trades in appropriate locations.
D. Water at adequate volume and pressure to supply water hose streams, foam producing equipment, automatic sprinklers, or water spray systems.

All communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required is tested and maintained as necessary to assure its proper operation in time of emergency.

Employees have immediate access to an internal alarm or emergency communication device via the fire alarm and by calling 717-245-1111 (x1111).

The College has made arrangements with the local emergency response agencies and facilitates close working relationships through periodic meetings and exercises, as well as through the provision of a Building Emergency Guide to the Carlisle Borough Fire Chief and Cumberland County Department of Public Safety Planning Coordinator which highlights all college facility floorplans and known hazards including satellite accumulation areas, pesticide storage cabinets, and more.

To satisfy the requirements of 40 CFR §262.16(b)(9), the college has designated the Department of Public Safety (DPS), who is available to respond to an emergency by reaching the facility within a short period of time, with the responsibility for coordinating all emergency response measures, in conjunction with the college's Emergency Response Core Team specified below and in paragraph (b)(9)(iv) of the aforementioned section. The DPS responding Officer will serve as the designated "emergency coordinator."

The emergency coordinator or their designee must respond to any emergencies that arise. The applicable responses are as follows:

A. In the event of a fire, call the fire department or attempt to extinguish it using a fire extinguisher;
B. In the event of a spill, the small quantity generator is responsible for containing the flow of hazardous waste to the extent possible, and as soon as is practicable, cleaning up the hazardous waste and any contaminated materials or soil. Such containment and cleanup can be conducted either by the small quantity generator or by a contractor on behalf of the small quantity generator;
C. In the event of a fire, explosion, or other release that could threaten human health outside the facility or when the small quantity generator has knowledge that a spill has reached surface water, the small quantity generator must immediately notify the National Response Center (using their 24-hour toll free number 800/424-8802). The report must include the following information:
    1. The name, address, and U.S. EPA identification number (PAD003029253) of the small quantity generator;
    2. Date, time, and type of incident (*e.g.,* spill or fire);
    3. Quantity and type of hazardous waste involved in the incident;
    4. Extent of injuries, if any; and
    5. Estimated quantity and disposition of recovered materials, if any.

In the event of a fire: Call 911

In the event of a spill: Call DPS at 717-245-1111 and contain the flow of hazardous waste if safe to do so.

For other emergencies, call DPS at 717-245-1111, or x1111 from any campus phone

For chemical, biological or radiological incidents that do not pose a life-threatening emergency, contact:

Department of Compliance & Enterprise Risk Management
Daniel Berndt, Safety & Emergency Management Specialist
berndtd@dickinson.edu
717-245-1597

If the incident involves the spill of a small quantity of a chemical, biological or radioactive material that you are familiar with and you have been trained in proper clean-up procedures, follow those instructions.

B. Broken Fluorescent Bulb

CFLs contain mercury – a potent neurotoxin that, in small amounts, can cause serious health problems. At room temperature, mercury is a liquid and can readily evaporate into the air. The EPA recommends following these steps:

Before cleanup:

- Air out the room for five to 10 minutes by opening a window or door to the outdoor environment.
- Shut off the central forced air heating/air conditioning system to the room or close the damper.
- Collect materials needed to clean up the broken bulb: stiff paper or cardboard, sticky tape, damp paper towels or disposable wet wipes (for hard surfaces), and a glass jar with a metal lid or a sealable plastic bag.

During cleanup:

- Don't vacuum. Doing so could spread mercury-containing powder or mercury vapor.
- Be thorough in collecting broken glass and visible powder.
- Place materials in a sealable container.

After cleanup:

- Place all bulb debris and cleanup materials outdoors in a trash container or protected area.
- If allowed to do so (check with your local government), dispose of the materials with your trash.
- Continue to air out the room where the bulb was broken and leave the heating/air conditioning system shut off for several hours, if possible.

Recordkeeping

As a generator, Dickinson is required to keep records of its hazardous waste characterization (e.g., testing) and shipping activities onsite per 40 CFR Part 262, Subpart D and 25 Pa. Code Chapter 262a, Subchapter D. These records help to demonstrate regulatory compliance during an onsite inspection.

A. Hazardous Waste Characterizations, Tests, and Analysis

Waste characterizations, test results, and waste analyses must be retained for three years from the date the waste was sent to the TSDF.

B. Hazardous Waste Manifests and Land Disposal Restrictions

Hazardous waste manifests and land disposal restrictions must be retained for three years from the date the waste was transported to the TSDF.

C. Non-Hazardous Bills of Lading

Universal and residual wastes, unless managed as hazardous waste, do not require a manifest under 40 CFR Part 262. Bills of lading should be retained for three years from the date the waste was transported off-site.

D. Accumulation Area Inspections

Accumulation site inspection logs must be retained for three years from the date waste was transported off-site.

E. Daily Operational Records

Daily operation records including waste origin, transporter, transfer facility, final waste destination, weight or volume of waste, any handling problems, and emergency disposal activities must be retained for three years.

F. Training Records

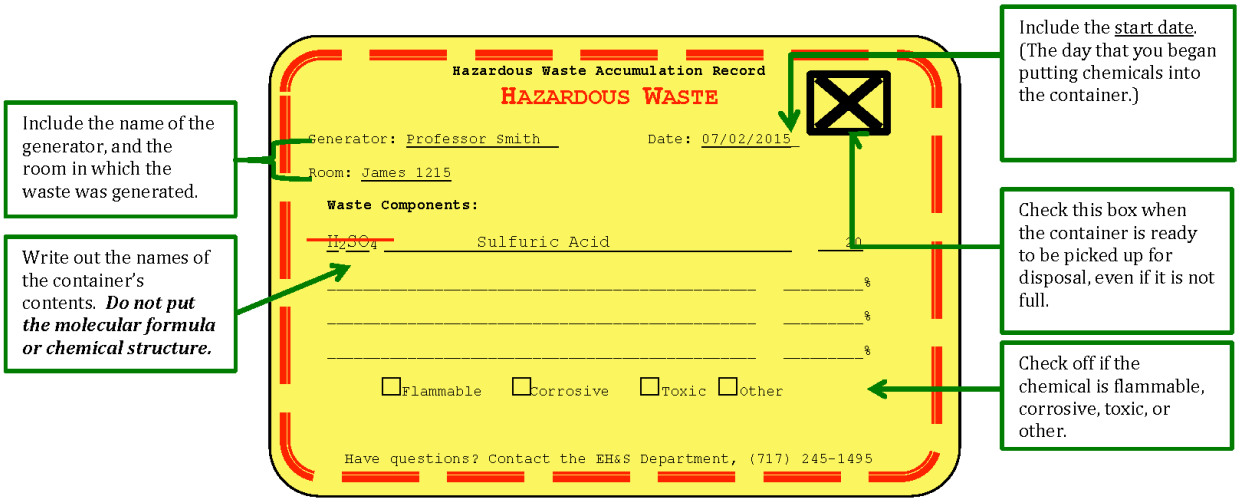
Dickinson College shall retain a record of each employee's training for the duration of the employee's employment.

G. Medical Records

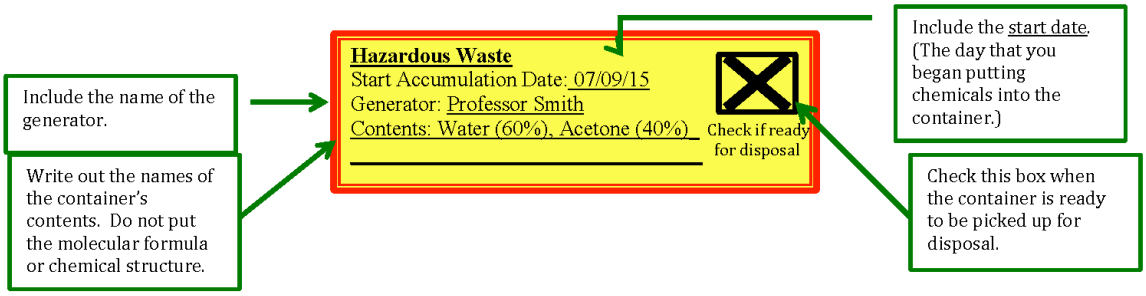
Medical certifications of CDL drivers must be retained for at least 30 years after termination of employment from the College

Appendix A: How to Fill Out Hazardous Waste Labels

How to Fill out Hazardous Waste Labels

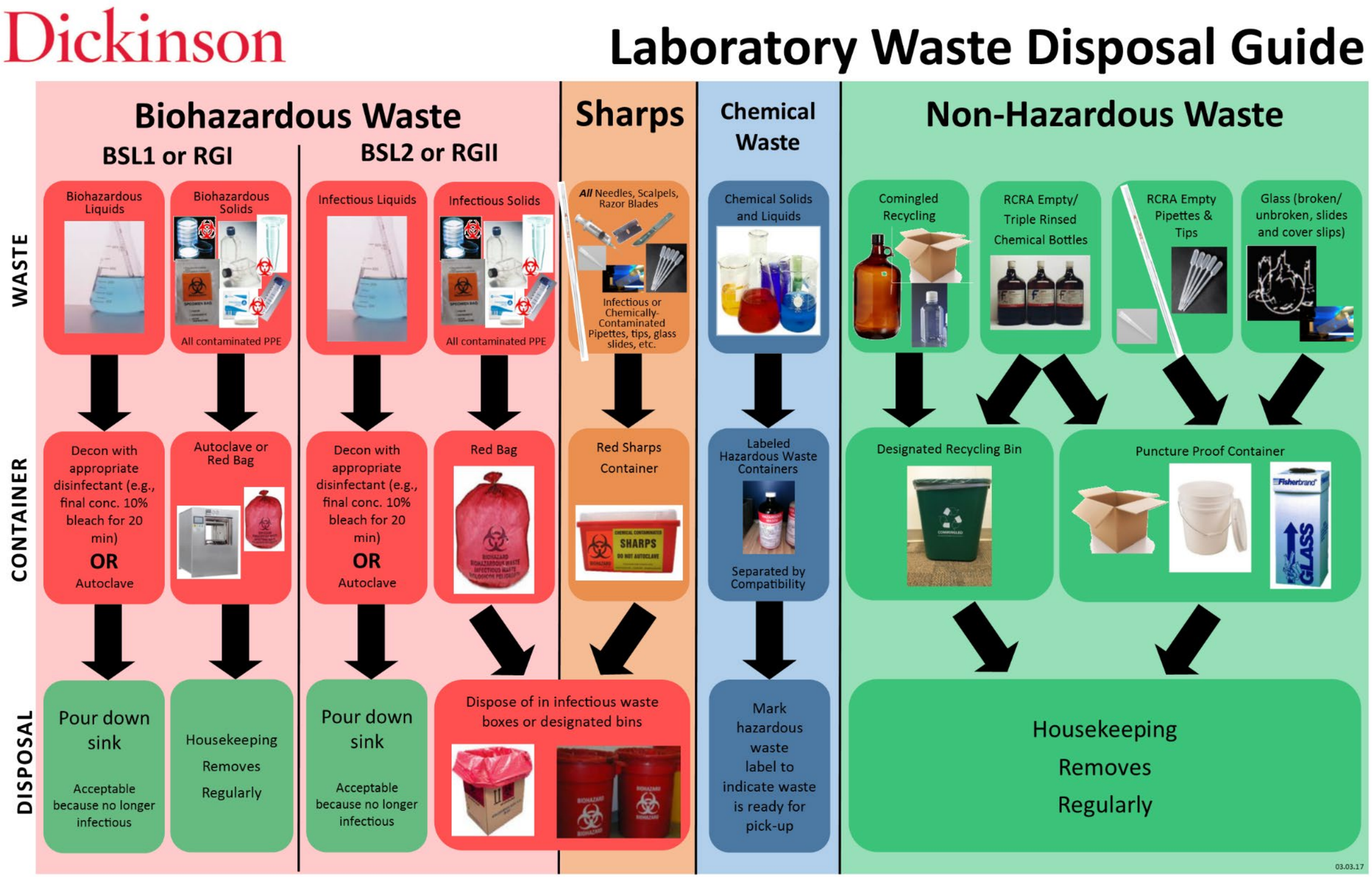


There are two different sizes of hazardous waste labels. The small waste labels (below) should be used when the larger size is too big to fit on the chemical container.



Appendix B: Waste Guidance Posters

A. Lab Waste Disposal



Chemical Waste Classes

Do NOT Mix Classes—Keep each category separate

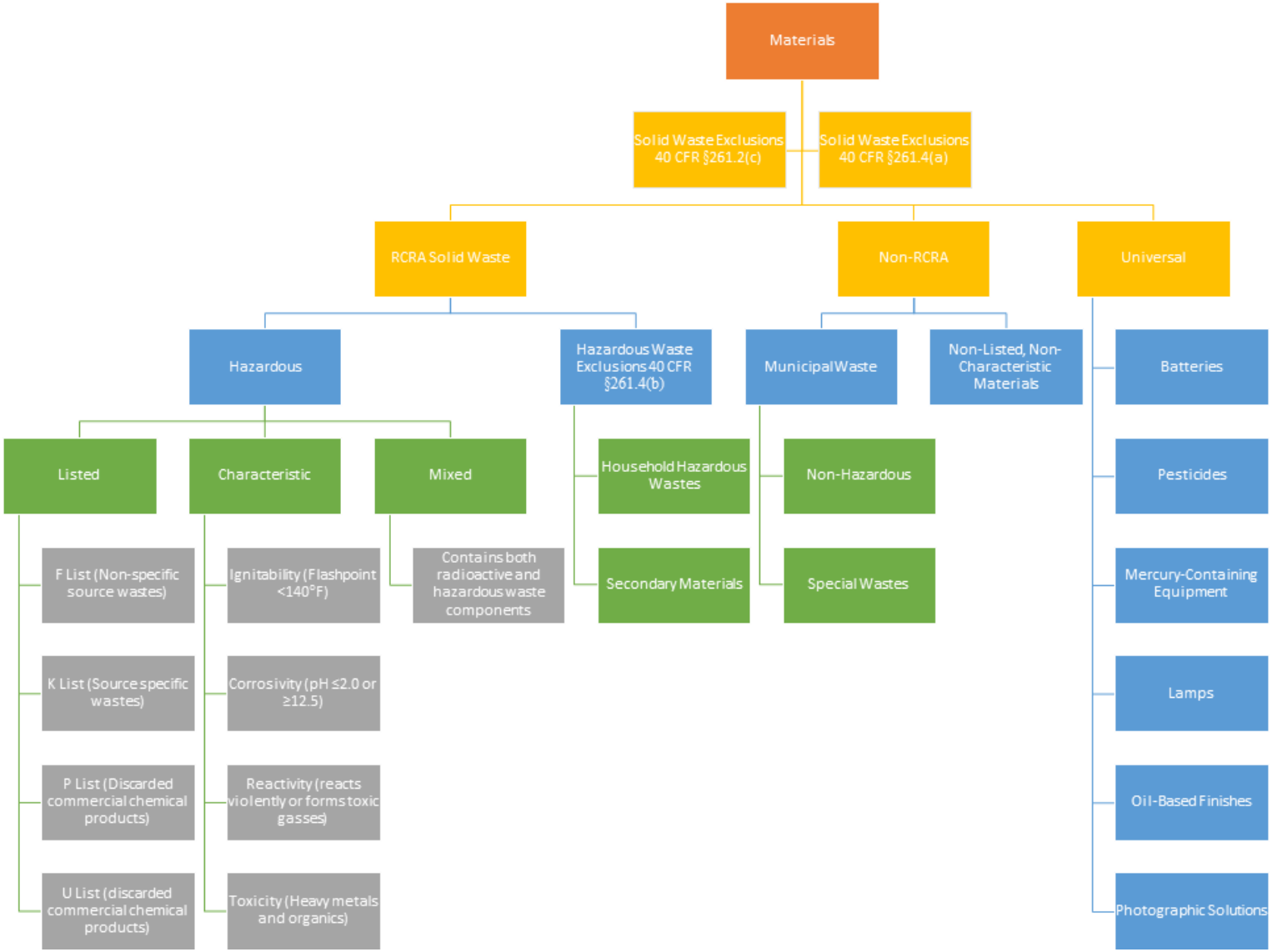
Inorganic Acids Examples: Hydrochloric Acid (HCl) Sulfuric Acid (H_2SO_4) Ferric Chloride ($FeCl_3$) Copper Sulfate ($CuSO_4$)	**Organic Acids** Examples: Acetic Formic Trichloroacetic Acetic Anhydride	**Oxidizing Acids** Examples: Perchloric Nitric Chromic
Bases, liquids and solids Examples: Hydroxides Phosphates Ammonia (NH_3)	**Flammable Bases** Examples: Trimethylamine Trimethylchlorosilane	**Flammable Liquids** Examples: Acetone Toluene Acetonitrile Methanol Ethyl Acetate Heptane Hexane Oil based paint
Compressed Gas and Aerosols Examples: Compressed gas cylinders Aerosol Cans	**Toxic Organic** Examples: Non-flammable chlorinated solvents Pesticides Ethidium Bromide Acrylamide Chloroform Methylene Chloride Formaldehyde Phenol	**Toxic Inorganic** Examples: Mercury Lead Zinc Sodium Azide
Air/Water Reactive Examples: Grignard reagents Alkali metals Reactive halides (acetyl chloride) Sodium borohydride	**Oxidizers** Examples: All nitrates Potassium Dichromate Metal Peroxides	**Organic Peroxides** Examples: Benzoyl peroxide Methyl Ethyl Ketone peroxide
High Hazards Peroxide Formers Examples: Aged Ether Tetrahydrofuran 1,4-dioxane Di– and tri-nitro compounds	**Nonhazardous Waste**	See ***How to Fill out Hazardous Waste Labels*** poster for instructions on how to fill out the hazardous waste label Have questions? Need labels? Contact the Dept. of Compliance & Enterprise Risk Management at 717-245-1495

Helpful Advice:

- Enter information on tag as waste is added to the container.
- Keep waste in closed (sealed) containers.
- Do not put solid waste material (paper, plastic, etc…) into liquid waste containers.
- Do not mix incompatible chemicals in the same container.
- Do not put corrosive chemicals in metal containers.
- Do not overfill containers. Prevent leakage by leaving empty space at the top of the container.
- Clean visible contamination from the outside of the container.
- Place leaking waste containers in a secondary container and contact Compliance & Enterprise Risk Management as soon as possible for disposal.
- Leave tagged containers in a visible place.
- Refer to the Dickinson College Chemical Hygiene Plan and Comprehensive Waste Management Plan for further guidance.

08.08.17

C. EPA Waste Determination Chart



Appendix C: Appendix V to Part 265 – Examples of Potentially Incompatible Waste

Many hazardous wastes, when mixed with other waste or materials at a hazardous waste facility, can produce effects which are harmful to human health and the environment, such as (1) heat or pressure, (2) fire or explosion, (3) violent reaction, (4) toxic dusts, mists, fumes, or gases, or (5) flammable fumes or gases.

Below are examples of potentially incompatible wastes, waste components, and materials, along with the harmful consequences which result from mixing materials in one group with materials in another group. The list is intended as a guide to owners or operators of treatment, storage, and disposal facilities, and to enforcement and permit granting officials, to indicate the need for special precautions when managing these potentially incompatible waste materials or components.

This list is not intended to be exhaustive. An owner or operator must, as the regulations require, adequately analyze his wastes so that he can avoid creating uncontrolled substances or reactions of the type listed below, whether they are listed below or not.

It is possible for potentially incompatible wastes to be mixed in a way that precludes a reaction (e.g., adding acid to water rather than water to acid) or that neutralizes them (e.g., a strong acid mixed with a strong base), or that controls substances produced (e.g., by generating flammable gases in a closed tank equipped so that ignition cannot occur, and burning the gases in an incinerator).

In the lists below, the mixing of a Group A material with a Group B material may have the potential consequence as noted.

Group 1-A	Group 1-B
Acetylene sludge	Acid sludge
Alkaline caustic liquids	Acid and water
Alkaline cleaner	Battery acid
Alkaline corrosive liquids	Chemical cleaners
Alkaline corrosive battery fluid	Electrolyte, acid
Caustic wastewater	Etching acid liquid or solvent
Lime sludge and other corrosive alkalies	
Lime wastewater	Pickling liquor and other corrosive acids
Lime and water	Spent acid
Spent caustic	Spent mixed acid
	Spent sulfuric acid

Potential consequences: Heat generation; violent reaction.

Group 2-A	Group 2-B
Aluminum	Any waste in Group 1-A or 1-B
Beryllium	
Calcium	
Lithium	
Magnesium	
Potassium	
Sodium	
Zinc powder	
Other reactive metals and metal hydrides	

Potential consequences: Fire or explosion; generation of flammable hydrogen gas.

Group 3-A	Group 3-B
Alcohols	Any concentrated waste in Groups 1-A or 1-B
Water	Calcium
	Lithium
	Metal hydrides
	Potassium
	SO_2Cl_2, $SOCl_2$, PCl_3, CH_3SiCl_3
	Other water-reactive waste

Potential consequences: Fire, explosion, or heat generation; generation of flammable or toxic gases.

Group 4-A	Group 4-B
Alcohols	Concentrated Group 1-A or 1-B wastes
Aldehydes	Group 2-A wastes
Halogenated hydrocarbons	
Nitrated hydrocarbons	
Unsaturated hydrocarbons	
Other reactive organic compounds and solvents	

Potential consequences: Fire, explosion, or violent reaction.

Group 5-A	Group 5-B
Spent cyanide and sulfide solutions	Group 1-B wastes

Potential consequences: Generation of toxic hydrogen cyanide or hydrogen sulfide gas.

Group 6-A	Group 6-B
Chlorates	Acetic acid and other organic acids
Chlorine	Concentrated mineral acids
Chlorites	Group 2-A wastes
Chromic acid	Group 4-A wastes
Hyphochlorites	Other flammable and combustible wastes
Nitrates	
Nitric acid, fuming	
Perchlorates	
Permanganates	
Peroxides	
Other strong oxidizers	

Potential consequences: Fire, explosion, or violent reaction.

SOURCE: "Law, Regulations, and Guidelines for Handling of Hazardous Waste." California Department of Health, February 1975.
[45 FR 33232, May 19, 1980, as amended at 71 FR 40276, July 14, 2006]

Appendix D: Typical Wastes Generated by Large and Small Quantity Generators

From the 2019 Pennsylvania Hazardous Waste Regulation Compliance Guide

Business Type	Generation Method	Types of Waste	Waste Codes
Dry Cleaning and Laundry Facilities	Commercial dry-cleaning processes	Still residues from solvent distillation, spent filter cartridges and cooked powder residue	D001, D039, F002
Furniture/Wood Manufacturing and Refinishing	Wood cleaning and wax removal, refinishing/stripping, staining, painting, finishing, brush cleaning and spray brush cleaning	Ignitable wastes, toxic wastes, solvent wastes and paint wastes	D001, F001-F005
Construction	Paint preparation and painting, carpentry and floor work, other specialty contracting activities, heavy construction, wrecking and demolition, vehicle and equipment maintenance for construction activity	Ignitable wastes, toxic wastes, solvent wastes, paint wastes, used oil and acids/bases	D001, D002, F001-F005
Laboratories	Diagnostic and other laboratory testing	Spent solvents, unused reagents, reaction products, testing samples and contaminated material	D001-D003, F001-F005, U211
Vehicle Maintenance	Degreasing, rust removal, paint preparation, spray booth, spray guns, brush cleaning, paint removal, tank cleanout and installing lead acid batteries	Acid/bases, solvents, ignitable wastes, toxic wastes, paint wastes and batteries	D001, D002, D006, D008, F001-F005
Printing and Allied Industries	Plate preparation, stencil preparation for screen printing, photo processing, printing and cleanup	Acid/bases, heavy metal wastes, solvents, toxic wastes and ink	D002, D006, D008, F001-F005
Equipment Repair	Degreasing, equipment cleaning, rust removal, paint preparation, painting, paint removal, spray booth, spray guns and brush cleaning	Acid/bases, toxic wastes, ignitable wastes, paint wastes and solvents	D001, D002, D006, D008, F001-F005
Pesticide End Users/Application Services	Pesticide application and cleanup	Used/unused pesticides, solvent wastes, ignitable wastes, contaminated soil (from spills), contaminated rinse water and empty containers	D001, F001-F005, U129, U136, P094, P123
Educational and Vocational Shops	Automobile engine and body repair, metal working, graphic arts – plate preparation and woodworking	Ignitable wastes, solvent wastes, acids/bases and paint wastes	D001, D002, F001-F005