

Department of Environmental Health & Radiation Safety



# Drexel University Hazardous Waste Management Plan 2024

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## **I. General Policy for Managing Hazardous Waste**

## Mission Statement

The purpose of the Hazardous Waste Management Plan is to anticipate, recognize, and control environmental hazards at Drexel University while continuously striving to protect human health and the environment, and to promote a setting that is conducive to the highest standard of education and research.

## Training Initiatives

Drexel University's department of Environmental Health and Radiation Safety (EHRS) believes that training is a critical part in creating an environmentally aware and safe workplace. We have integrated our environmental policies and goals into a comprehensive training program that provides:

- Employees with information to conduct their jobs in a safe manner.
- A mechanism to elevate employees' environmental awareness.
- A mechanism to demonstrate management's commitment to improved environmental performance.
- Compliance with regulatory requirements.

## Pollution Prevention and Waste Minimization

Pollution prevention and waste minimization are terms that refer to the practices that reduce or eliminate the amount of pollutants which would enter any waste stream or that would be released into the environment prior to recycling, treatment, or disposal.

Drexel University prevents or reduces the amount and/or toxicity of hazardous waste in the laboratory by using practices and materials that avoid, reduce, and control hazardous waste generation at the source.

#### **Generator Classification**

Campus	Generator Classification	Generation Permissions
University City, Center City, and East Falls	LQG	$\geq$ 1000 kg of non-acute hazardous waste or > 1 kg of acute hazardous waste or > 100 kg of residues from cleanup of acute hazardous waste generated in one (1) calendar month.
Academy of Natural Science	SQG	> 100 kg and < 1000 kg of non-acute hazardous waste or $\leq 1$ kg of acute hazardous waste or $\leq 100$ kg of residues from cleanup of acute hazardous waste generated in one (1) calendar month.
West Reading	SQG	> 100 kg and < 1000 kg of non-acute hazardous waste or $\le 1$ kg of acute hazardous waste or $\le 100$ kg of residues from

		cleanup of acute hazardous waste generated in one (1) calendar month.
Elkins Park	VSQG	$\leq$ 100 kg of non-acute hazardous waste or $\leq$ 1 kg of acute hazardous waste or $\leq$ 100 kg of residues from cleanup of acute hazardous waste generated in one (1) calendar month.
Drexel Plasma Institute – Camden NJ	VSQG	$\leq$ 220 lbs of non-acute hazardous waste or $\leq$ 2.2 lbs of acute hazardous waste generated in one (1) calendar month

## Compliance

Drexel University will continue to comply with all federal, state, and local environmental laws and regulations.

## **II. Hazardous Waste Management Procedures in the Laboratory**

## Hazardous Waste

Hazardous waste includes solids, liquids, and gases. The EPA definition of hazardous waste incudes substances that possess a hazardous characteristic (E.g., toxic, flammable, corrosive, reactive, etc.), or substances that are listed as hazardous waste by the EPA on the basis of their usage or chemical constituents.

### Hazardous Waste Identification

Drexel EHRS will perform identification of hazardous wastes. Since most chemicals used in university facilities are reagent grade, the identification will be performed using safety data sheets, bottle labels, and 40 CFR Part 261 Subpart <u>B</u>, <u>C</u>, and <u>D</u>. A third-party contractor may test for the ignitability, corrosivity, reactivity, and toxicity of unknown hazardous wastes.

## Mixed Chemical Waste

Drexel EHRS shall require that only compatible chemical waste be combined into one waste container. Refer to a <u>chemical compatibility chart</u> and chemical <u>SDS's</u> for chemical compatibilities.

## Multi-Hazardous Waste

Multi-hazardous waste is waste that contains any combination of chemical, radioactive, or biological hazards. Any waste stream that presents more than one type of hazard will require special management consideration because the selected treatment technology appropriate for one type of waste may not be appropriate for the other types. Multi-hazardous waste will be evaluated on an individual basis and the constituent that poses the greatest hazard will be given priority.

## Sharps Waste

Sharps are defined as instruments or materials when intact or broken have the ability to cut, scratch, or pierce the skin or breach mucus membranes. Used sharps are sharps that have been in contact with hazardous chemicals or infectious agents during research or clinical activities.

Never bend, recap, or otherwise manipulate contaminated needles using both hands, and do not use any other technique that involves directing the point of a needle toward any part of the body. Recapping needles is strictly prohibited at Drexel University; instead, personnel must discard used disposable needles into an approved sharps container immediately after use and without replacing the needles cap.

All disposable used sharps must be disposed of in an approved sharps waste container. Sharps waste containers must be rigid, made of heavy-duty plastic, tightly lidded, puncture resistant, leak-resistant, upright and stable during use, and properly labeled to warn of used sharps inside the container. Sharps waste containers shall not be filled past <sup>3</sup>/<sub>4</sub> of the container's total volume. Sharps waste containers will not be removed from the laboratory if they are overfilled such that used sharps are sticking out of the opening and/or the container is unable to be securely closed. Full containers shall be removed, disposed of, and replaced by a third-party contractor on a predetermined schedule or on a as needed basis. If removal and replacement has not been performed appropriately, close the container and contact the EHRS at (215) 895-5919 or by emailing EHRS@drexel.edu.

## Regulated Medical Waste

Regulated Medical Waste (RMW) is any item that potentially has been in contact with infectious agents, or with materials such as blood, sera, excreta, tissue, etc., that may be infected. These items must be considered infectious unless they have been rendered noninfectious. Categories of infectious waste include cultures and stocks of infectious agents and associated biological materials, pathological waste, human blood and body fluid, isolation waste, and used sharps.

#### Drain Disposal

Drexel EHRS will permit drain disposal of elementary neutralized aqueous solutions which were only classified as hazardous due to the corrosive characteristic. The elementary neutralized aqueous solution must have a final pH value between 6 and 8. The limit of material that may be neutralized and disposed into a drain is 1 liter.

Drexel EHRS will also permit drain disposal of common salts, sugars, and agars in both liquid and solid form. The limit of solid material that may be drain disposed is 1 kg, and the limit of liquid material that may be drain disposed is 1 liter.

EHRS shall prohibit the drain disposal of the following:

• Flammable or explosive pollutants

- Pollutants that will cause corrosive structural damage to the Publicly Owned Treatment Works (POTW), but in no case discharges with pH lower than 5.0
- Solid or viscous pollutants that may cause an obstruction of flow in the POTW
- Pollutants capable of releasing fumes or vapors
- Pollutants, including oxygen-demanding pollutants which have a high biological oxygen demand and may cause interference with the POTW
- Wastewater with sufficient heat to inhibit biological activity in the POTW (must not exceed 104°F at the POTW)
- Petroleum, oil, non-biodegradable cutting oil or products of mineral oil origin in amounts that will cause interference or pass through the POTW
- Organic chemicals
- Heavy metal solutions
- Nitric, hydrofluoric, perchloric, sulfuric, and chromic acid
- Toxic/poisonous solids and liquids

## Satellite Accumulation Areas (40 CFR 262.15)

A satellite accumulation area is an area at or near a process that generates chemical wastes. The area must be under the control of the operator of that process.

EHRS designates each laboratory as a satellite accumulation area. The laboratory Principal Investigator is responsible for ensuring that all EHRS policies regarding satellite accumulation areas are followed.

## **Allowable Accumulation Amounts**

• Laboratories may accumulate as much as five (5) gallons of hazardous waste or one (1) quart of acute hazardous waste (immediately hazardous to life and health) in compatible containers at or near any point of generation.

## **Accumulation Time**

• There will be no limit on accumulation time, however, once a container is full or more than 5 gallons of hazardous waste or 1 quart of acute hazardous waste is accumulated, the full container of excess waste must be submitted for pickup within 72 hours.

## Labeling

- All containers must be labeled with the complete chemical name of each primary component. Formulas, acronyms, and abbreviations are not acceptable.
- If possible, the label should include the approximate percentage of each chemical.
- Do not place the date or the term "Hazardous Waste" on the container. EHRS will re-label the container during pickup as either a recyclable/re-distributable material or as hazardous

waste, when the container will be dated, labeled, and moved to the EHRS controlled temporary storage vault.

## **Storage of Incompatible Materials**

- Incompatible waste items must be separated to the greatest extent possible using storage cabinets and shelves, as well as secondary containment devices.
- Waste must be separated into six categories:
  - 1. Flammables
  - 2. Corrosive Acids
  - 3. Corrosive Bases
  - 4. Oxidizers
  - 5. Poisons
  - 6. Non-Hazardous

## **Container Types**

- All containers must be kept closed except when it is necessary to add or remove material. Evaporation of waste in fume hoods is **strictly prohibited**.
- All containers must be maintained in good condition (I.e., no rust, dents, cracks, or leaks, etc.)
- All containers must be compatible with the hazardous materials they contain. Refer to <u>safety</u> <u>data sheets</u> for container compatibility. If the SDS is not publicly available, contact EHRS:

•	Department Office:	(215) 895-5919
•	Director of EHRS:	(215) 895-5892

Department Email: <u>EHRS@drexel.edu</u>

## Inspection

• Inspection of each satellite accumulation area shall be the responsibility of the principal investigator.

## Chemical Pickup Request

EHRS has an online <u>chemical pickup request form</u>. This form should be immediately filled out when:

- Unwanted and old chemical reagents need to be removed from the laboratory.
- A waste container in the satellite accumulation area is full.
- There is more than 5 gallons of hazardous waste, or 1 quart of acutely hazardous waste accumulated.

Laboratory personnel must submit chemical pickup requests electronically to EHRS. All required fields in the request form must be filled out. Once the request is submitted, a return email is sent

to confirm receipt of the request. EHRS personnel will respond to the chemical pickup request within 72 hours of receiving a pickup request. Unknown chemicals, unlabeled containers, damaged containers, unsealed containers, or unapproved containers (e.g., Snapple bottles, soda bottles, etc.) will not be removed from the laboratory.

Emergency Spill Response Plan for Laboratories

Laboratory personnel may refer to Drexel University's <u>Hazardous Materials Emergency</u> <u>Response Plan</u> for emergency procedures and protocols for the uncontrolled release of hazardous materials in the laboratory.

## Training

Drexel EHRS will provide training to all university employees and students who handle hazardous waste in laboratories. Each employee or student shall receive training in the proper handling of chemicals and emergency response procedures. Initial training must be completed during the first two weeks of employment.

EHRS manages and tracks safety training using a third-party platform. This online safety training is required for all individuals working or learning in university laboratories and clinical/medical operations. After the first completion of the safety training courses, training must be retaken and completed annually. For more information on safety training requirements, visit the Drexel EHRS Safety Training <u>webpage</u>.

Hazardous waste training will be conducted as part of the annual laboratory safety training. Additional training sessions can be arranged by contacting EHRS by phone at (215) 895-5919 or by emailing <u>EHRS@drexel.edu</u>.

EHRS shall document all hazardous waste training. Training records will be retained for at least three (3) years from the date the employee last worked at the university.

## III. Standard Procedures for Removal of Hazardous Waste from Laboratories

Only properly trained personnel from the EHRS shall perform the removal of hazardous waste from the laboratory. EHRS reserves the right to obtain outside contractors for major waste removals from laboratory spaces.

<u>Training</u>

EHRS personnel and contractors who remove hazardous waste from laboratories shall have the OSHA 40-Hour HAZWOPER certification.

EHRS documents training of all personnel involved in hazardous waste operations. The training records will be kept for at least three years from the date the employee last worked at the university.

## Removal Procedures

### **Chemical Pickup**

- The chemical pickup request should list all the materials that need to be removed from the lab. Any materials not listed will not be removed until a chemical pickup request form is filled out for them.
- If a material submitted for pickup is improperly labeled, it will not be removed until proper labeling is present on the container.
- Open containers will not be removed from the laboratory. Only securely closed containers will be removed (e.g., an Erlenmeyer flask or volumetric flask containing waste and sealed with Parafilm or a glass/rubber/cork stopper will not be removed from the laboratory).

### Transportation

- A two-level cart with a three-inch lip on each level will be used to transport all hazardous waste from the laboratory to the temporary accumulation area.
- Liquid waste shall not be carried to the temporary accumulation area by manual means.
- Freight elevators, where possible, will be used to transport waste to the temporary accumulation area.
- Chemically incompatible materials shall be separated using the two levels on the cart.
- Spill cleanup materials will be present on the cart at all times during pickup of hazardous materials. Drip pads shall line each level of the cart to prevent any mixing of incompatible materials.
- Transportation carts shall be labeled with hazard warning signs.

#### **Personal Protection**

- Personal protective equipment will be required during hazardous waste pickups.
- EHRS personnel will determine the level of protection required to safely transport the materials.

#### Temporary Accumulation Area

The Drexel EHRS shall store all hazardous waste in a central temporary area. This temporary storage facility complies with <u>40 CFR 265 subpart DD</u>.

The professional engineer certification that the containment building complies with the design standards specified in 40 CFR 265.1101 is in the facility's operation record.

Drexel University has four temporary storage facilities. The location of each temporary storage facility is as follows:

Campus	Building Name
University City	Stratton Hall
East Falls	Queen Lane
Center City	New College Building
Academy of Natural Sciences	1976 Building

### Accumulation time - All Campuses

- Hazardous waste must be removed from the temporary accumulation area within 89 days and transported to the designated TSD facility.
- The 89-day period starts once a hazardous waste item is removed from a satellite accumulation area and delivered to the temporary accumulation area.

## Labeling

- Once a container enters the temporary accumulation area, EHRS will re-label the container with the words "Hazardous Waste" or with an EPA hazardous waste label and label the date the container was collected from the satellite accumulation area and placed in the temporary accumulation area. The new label will list the hazardous waste characteristic (corrosive, ignitable, toxic, reactive). Also, the label will contain a list all hazardous materials in the container as indicated by its original label and what was described in the chemical pickup request form for the item.
- If waste is accumulated in a drum, the drum must be labeled with the date when the accumulation began.
- Unknown waste undergoing sampling for characterization must still follow the 90-day rule. The accumulation start date is the day when the waste is placed in the temporary accumulation, not when lab results are returned.

## Allowable Amount Accumulated

- Large Quantity Generator (LQG) campuses there is no limit to the permissible amount of hazardous waste accumulated in the temporary accumulation area. However, all hazardous waste accumulated must be removed within ninety (90) days.
- Small Quantity Generator (SQG) campuses must not exceed 1000 kg of non-acute waste or 1 kg of acute hazardous waste. However, all hazardous waste accumulated must be removed within ninety (90) days. These campuses will be managed as LQG sites.
- Very Small Quantity Generator (VSQG) campus must not exceed 100 kg of non-acute waste or 1 kg of acute hazardous waste. However, all hazardous waste accumulated must be removed within ninety (90) days. These campuses will be managed as LQG sites.

## **Incompatible Storage**

- Incompatible waste will be separated to the greatest extent possible using containment cabinets and shelves.
- The waste will be separated into six categories
  - 1. Flammables
  - 2. Corrosive Acids
  - 3. Corrosive Bases
  - 4. Oxidizers
  - 5. Poisons
  - 6. Non-Hazardous

## Container

- All hazardous waste containers must be kept closed except when it is necessary to add or remove waste.
- All containers must be maintained in good condition (I.e., no rust, dents, leaks, etc.)
- All containers must be compatible with the hazardous wastes they contain. Refer to Safety Data Sheets for container compatibility.
- Documented inspections of waste containers shall be performed during chemical pickup. The condition of the containers will be documented by initialing the chemical pickup request form during the pickup.

## **Inspection of the Temporary Accumulation Area**

- The temporary accumulation areas shall be inspected weekly by EHRS to look for any signs of corrosion, dents, bulges, cracks or other signs of deterioration that could cause hazardous waste to be released.
- The weekly inspection shall be documented and retained for one year.
- The standard for containment building condition reporting (<u>40 CFR 265.1101(c)(3)</u>) shall be followed upon detection of a condition that could lead to or has caused a release of hazardous waste.

## **Preparedness and Prevention**

- The temporary accumulation area shall be maintained and operated to minimize the potential for the release of hazardous material to the environment in accordance with 40 CFR 265.31.
- The following emergency equipment and procedures shall be maintained in the temporary accumulation area and periodically tested to ensure they are in working order:
  - Fire alarms
  - Communication equipment
  - Portable fire extinguishers (including special extinguishing equipment such as foam, inert gas, or dry chemicals)

- Spill control equipment
- Decontamination equipment
- Automatic sprinklers
- A posted list of emergency contact numbers
- Refer to Appendix III for a detailed list of emergency equipment.
- All alarm systems and fire protection equipment shall be tested and maintained by Drexel's Facilities Management as necessary to ensure proper operation during an emergency.
- Spill control equipment and decontamination equipment shall be tested and maintained by EHRS as necessary to ensure proper operation during an emergency.
- Whenever hazardous waste is being handled, all personnel involved in operation shall have a two-way communication device capable of summoning external emergency assistance.
- Waste containers shall be arranged in the temporary accumulation area so that there is adequate aisle space to allow access for emergency personnel and equipment.
- Drexel EHRS shall comply with the Preparedness and Prevention Standard <u>40 CFR 265.37</u> concerning emergency arrangements with local and state authorities.

## IV. Standard Procedures for Removal of Hazardous Waste by Contracted Waste Transporters

The Drexel University Environmental Health and Radiation Safety shall require all contracted hazardous waste transporters to comply with the requirements set forth by this plan, in addition to the federal, state, and local hazardous waste regulations.

## Training

The contracted hazardous waste transporters shall comply with the training requirements listed in <u>49 CFR Part 172 Subpart H</u> and <u>49 CFR 177.816</u>. EHRS shall inform all hazardous waste contractors on the university's emergency spill response procedures.

## Packing

The contracted hazardous waste transport shall package all hazardous waste in accordance with all Department of Transportation regulations on packaging under <u>49 CFR Part 173, 173.12</u> <u>Subpart B, 178</u>, and <u>179</u>.

EHRS shall require all contracted hazardous waste transporters to carry emergency spill clean-up materials when packing hazardous materials for transportation.

## Labeling and Marking

Before transporting the hazardous waste packages, the transporter shall label each package in accordance with Department of Transportation labeling requirements (<u>49 CFR Part 172 Subpart</u> <u>D</u> and <u>E</u>).

The transporter shall mark all containers of 110 gallons or less used in transportation with the following words and information displayed in accordance with the requirements of  $\underline{49 \text{ CFR}}$ <u>172.304</u>:

## "HAZARDOUS WASTE" Federal Law Prohibits Improper Disposal If found, contact the nearest police or public safety authority or the "U.S. Environmental Protection Agency" Drexel University [Building name and address] [Manifest document number]

## Placarding

The transporter shall placard the transportation vehicle according to Department of Transportation regulations  $\underline{49 \text{ CFR Part } 172 \text{ Subpart F}}$  for hazardous materials.

## Manifest

Drexel University EHRS and hazardous waste transporters will designate on the manifest one primary facility permitted to handle the waste described on the manifest. EHRS shall require the hazardous waste transporter to complete all manifests prior to leaving the site. EHRS shall review the completed manifest prior to signing.

## Acquisition of Manifests

The transporter shall use the manifest format of the state receiving the hazardous waste. If that state does not supply the manifest, the transporter shall use the Pennsylvania manifest. If neither state supplies the manifest, then the transporter shall obtain the manifest from any source.

## Number of Copies

The manifest consists of at least the number of copies which will provide EHRS, each transporter, and the owner or operator of the designated treatment, storage and disposal facility (TSDF) with one copy each for their records and another copy to be returned to Drexel EHRS.

## Manifest Process

The manifest shall be signed and dated by the initial transporter and EHRS. EHRS shall retain one copy and give the transporter the remaining copies. A designated representative from the TSDF shall sign the manifest upon delivery and return a copy of the manifest to the Drexel EHRS within 35 days.

## V. Record Keeping

The Drexel University EHRS shall comply with the local, state, and federal record keeping requirements. In addition, EHRS shall comply with the requirements set forth by this document.

## Completed Chemical Pick-up Request Forms

Completed chemical pick-up request forms shall be kept in a temporary filing system until the end of the 89-day waste pickup period. Upon completion of the 89-day waste pickup period, the forms shall be filed in a permanent filing system and retained for three years.

## Manifest

Drexel EHRS shall keep a copy of each manifest signed in accordance with <u>40 CFR 262.23</u> for three (3) years or until EHRS receives a signed copy from the designated facility that received the waste. The signed copy from the designated facility shall be retained as a record for three years from the date the waste was accepted by the initial transporter.

## VI. Manifest Filing System

All hazardous waste manifests must be filed according to the following guidelines:

- The manifest, signed by the transporter and Drexel EHRS, and any other information will be filed in a folder.
- The folder shall be labeled with the facility name and the pickup month and year.
- A checklist must be created for each manifest. Refer to Appendix V for the manifest checklist format. The checklist information is dependent upon the state's manifest regulations.
- On the checklist, write down the manifest number and the description of work performed.
- Check off each item when the item is received.
- Place all the information in the folder.
- Once all the manifest information is received, the folder will be moved to the processed manifest storage area.
- The processed folders will be kept current for three (3) years.

## Waste

The completed chemical pickup request forms shall be used to determine the total weight of all hazardous waste generated in each quarter. EHRS shall keep a permanent database of the quarterly totals. The content of the database is as follows:

- Waste number
- DOT hazard class (number or name)
- Quantity of each EPA Listed Waste
- Total of all hazardous waste generated in a quarter

EHRS will print out each quarter's totals. This hard copy will be filed and retained for a minimum of three (3) years.

### Inspection Records

EHRS shall strictly inspect and document all areas involved in Drexel University's hazardous waste operations.

### **Container Inspection Records**

- All container inspection records shall be filed in a temporary filing system until the waste is picked up. Upon completion of the pickup, the inspection records shall be filed and retained for at least one (1) year.
- Any corrective actions pertaining to containers shall be kept with the inspection checklist in the same file.

## **Temporary Accumulation Area Inspection Records**

- EHRS shall maintain an electronic database for the weekly inspection of the temporary accumulation area.
- Any corrective actions pertaining to the temporary accumulation area shall be kept with the inspection checklist in database.

## VII. Hazardous Waste Reports

Drexel University EHRS shall file all the required hazardous waste reports to the proper regulatory agencies.

#### **Biennial Report**

Drexel University shall submit a biennial report (EPA Form 8700-13A) to the Regional Administrator or state by March 1<sup>st</sup> of each even-numbered year for all campuses. The report shall detail Drexel University's activities during the previous year. The following information shall be included in the report:

• Drexel University, building name, building EPA ID, and the building address.

- The calendar year covered by the report.
- The EPA ID number and name of each transporter used during the reporting year.
- The EPA ID number, name, and address for each off-sire TSDF and recycler to which waste was shipped during the year.
- A description, EPA hazardous waste number (<u>40 CFR Part 261 Subpart C</u> or <u>D</u>), DOT hazard class, and quantity of each hazardous waste shipped off-sire to the designated TSDF. This information must be listed by the EPA ID number of each off-sire facility to which waste was shipped.
- A description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated.
- A description of the volume and toxicity changes of waste achieved during the year compared to previous years.
- The certification signed by an authorized person.

Drexel EHRS shall retain a copy of each biennial report for a period of at least three years from the due date of the report.

## Exception Report

## **Thirty-Five Day Limit**

• If Drexel EHRS does not receive a copy of the manifest with the handwritten signature of the owner or operator of the designated TSDF within 35 days of the date the waste was accepted by the initial transporter then the transporter and/or the owner or operator of the designated TSDF shall be contacted to determine the status of the hazardous waste.

## **Forty-Five Day Limit**

- Drexel EHRS shall file an exception report to the EPA Regional Administrator if the copy of the manifest with the handwritten signature of the owner or operator of the designated TSDF is not received within 45 days of the date the waste was accepted by the initial transporter.
- The Exception Report shall include:
  - A legible copy of the manifest for which Drexel EHRS does not have confirmation of delivery.
  - A cover letter signed by the authorized representative explaining the efforts taken to locate the hazardous waste and the result of those efforts.

## Sampling Report

Drexel EHRS shall retain all records of any test results, waste analyses, or other determinations for at least three (3) years from the date the waste was last sent to off-site TSDF.

## Retention Time

The periods or retention referred to in this section may be extended automatically during the course of any unresolved enforcement action regarding the regulated activity, or as requested by the EPA Regional Administrator.

## **APPENDIX I**

**Inspection Forms** 



## **Temporary Accumulation Area Inspection Form**

Environmental Health and Radiation Safety requires the inspection of temporary accumulation areas weekly:

		Yes	No
1.	Are there any signs of corrosion along the wall?		
2.	Are there any signs of dents, bulges, or cracks in any of the storage cabinets or waste drums?		
3.	Is there a posted list of emergency contact numbers in the temporary accumulation area?		
4.	Is decontamination equipment present?		
5.	Is the spill control equipment present?		
6.	Are incompatible waste items separated from one another?		
7.	Is the access door (lock, hinges, etc.) in good condition?		
8.	Is the temperature control unit working properly?		
9.	Is there adequate aisle space to allow access for emergency personnel and equipment?		

Comments:

Printed Name & Title

Signature

Department Name

Telephone Number

Date

## **APPENDIX II**

## **Emergency Equipment List**

## All Temporary Accumulation Areas – University City, Center City, East Falls

- Fire Alarm located throughout the entire building; notifies and evacuates building occupants; notifies the fire department.
- Fire Extinguisher located in room 145 and throughout the building; ABC rating; extinguishes small fires.
- Automatic Halon System located in the temporary accumulation area; fire suppression system.
- Cell Phones all EHRS personnel involved in hazardous waste operations is required to carry a cell phone.
- Land Line Telephone Located in room 145 directly adjacent to the storage facility.
- Shovel located in the storage room and EHRS department emergency response vehicles.
- **Broom** located in the storage room and EHRS department emergency response vehicles.
- **Squeegee** Located in the storage room and EHRS department emergency response vehicles.
- Absorbent Pads located in the storage room and EHRS department emergency response vehicles; size of 1x1.5 ft; 30 pads.
- Absorbent Booms located in the storage room and EHRS department emergency response vehicles; 4 feet in length; 15 booms for containment.
- **Oil Absorbent** located in the storage room and EHRS department emergency response vehicles; 5 gallons
- **Neutralizing Agents** located in the storage room and EHRS department emergency response vehicles; powders which neutralize solvents, acids, and bases; over 30 gallons.
- **Personal Protection Equipment** located in EHRS department emergency response vehicles; respirator, gloves, goggles, Tyvek suites with booties and hood.

## **APPENDIX III**

**Manifest Checklists** 

## Pennsylvania Manifest Checklist

(Check off each item when received)

Manifest Number:

Invoice Number: \_\_\_\_\_

\_\_\_\_ Generator manifest copy signed by Drexel EHRS and the transporter

\_\_\_\_ Packing List

\_\_\_\_ Land Disposal Certification form

\_\_\_\_ Underlying Hazardous Constituents form

\_\_\_\_ Chemical pickup request

\_\_\_\_ Signed copy of the manifest from the TSDF

\_\_\_\_ Disposal Certificate

Description of work performed:

## **New Jersey Manifest Checklist**

(Check off each item when received)

Manifest Number:

Invoice Number: \_\_\_\_\_

- \_\_\_\_ Generator manifest copy signed by Drexel EHRS and the transporter
- PADEP copy of manifest signed by Drexel EHRS and the transporter
- \_\_\_\_ NJDEP copy of manifest signed by Drexel EHRS and the transporter
- \_\_\_\_ Packing List
- Land Disposal Notification and Certification form
- \_\_\_\_ Exempt Lab Pack LDR Certification Form
- \_\_\_\_ Chemical pickup request
- \_\_\_\_ Signed copy of the manifest from the TSDF
- Disposal Certificate

Description of work performed:

Notes:

4. If the manifest signed by the TSDF is not received within 35 days, the NJDEP must be contacted to inform them of the situation. An exception report must be sent to the EPA Regional Administrator.

<sup>1.</sup> The NJDEP manifest must be mailed to NJDEP hazardous waste department.

<sup>2.</sup> Copies of the manifest signed by the TSDF's owner/operator must be sent to NJDEP.

<sup>3.</sup> All manifests signed by the university department of EHRS, transporter, and TSDF must be retained for at least three years.