Hazardous Waste Management Plan

Attachment 3

Hazardous Waste Management Plan

for

Insert Name of Facility

Table of Contents

You will need to adjust this Table of Contents to reflect the composition of your final document.

1.0 Introduction

Safe and environmentally sound management of hazardous waste is an integral part of the Smithsonian Institution (SI) mission. _***Insert name of facility***____ is committed to meeting the stringent federal, state, and local regulations pertaining to the management of hazardous waste. The SI has developed this Hazardous Waste Management Plan to communicate the methods _***Insert name of facility***____ will use to properly manage hazardous waste and has committed the resources necessary to ensure compliance with this plan and applicable regulations.

____***Insert name of HW Coordinator***_____ is responsible for directing Hazardous Waste Management activities at _***Insert name of facility***_____. Their responsibilities include managing the collection, processing, and disposal of chemical waste and providing assistance for other hazardous waste and environmental compliance responsibilities. For the purposes of this program, the term *waste* refers to chemical material that is unusable or unwanted by the person controlling the material. Determinations of whether a material *is* hazardous waste, reusable material, recyclable material, or any one of several regulatory defined materials or processes, will be made by trained personnel under the direction of the Hazardous Waste Coordinator. Whenever there is a question about the regulatory status of a material it will be handled and managed as if it were a hazardous waste.

The purpose of this HWMP is to provide information and guidance on hazardous waste generation, storage, packaging, record development/maintenance and general management of hazardous and non-hazardous chemical wastes. To assist _***Insert name of facility***____in providing a safe and environmentally sound operation, each department within a facility is expected to review and comply with this plan. For further information or for guidance in complying with this document, please contact, ____***Insert name of HW Coordinator***_____ at ____***Insert phone number***___, or the OSHEM, Environmental Management Division at (202) 633-2530.

2.0 Regulatory Authority

Management of hazardous waste is regulated by the United States Environmental Protection Agency (USEPA) and by the ***Insert name of State/Local Environmental Regulatory Agency***. The respective regulations can be found in 40 CFR 260-268 and ***Insert State/Local Code*** The State of ***Insert name of State*** is an authorized state, meaning the State of ***Insert name of State*** has been given authority by the USEPA to administer hazardous waste regulations. State regulations may be more stringent than the requirements set out by the USEPA, therefore it shall be the policy of this facility to comply with the most stringent regulations in effect.

3.0 Hazardous Waste Management Plan Organization

A Hazardous Waste Management Plan (HWMP) provides overall guidance for the safe and compliant management of hazardous wastes at ***Insert name of facility***. Additional guidance may be provided by State and Local Environmental Regulatory Agencies, OSHEM, or the facility Hazardous Waste Coordinator. Reviewing the HWMP is the first step in understanding methods to minimize potential liabilities associated with the handling of hazardous waste and for ensuring compliance with applicable hazardous waste regulations. Additional information and guidance is provided through training and access to internal as well as external contractor-provided resources. Please contact , ***Insert name of HW Coordinator*** the Hazardous Waste Coordinator, at ***Insert phone number of HW Coordinator*** if your responsibilities involve generation, handling, or other hazardous waste management activities.

4.0 Plan Introduction

This Hazardous Waste Management Plan summarizes the processes and steps ***Insert name of facility*** follows to effectively, efficiently and safely manage hazardous wastes, and comply with applicable regulations. Each section presented below outlines the basic actions necessary to comply with general hazardous waste management regulatory principles and manage hazardous waste to minimize liabilities

and prevent releases to the environment. Please contact ***Insert name of HW Coordinator*** for guidance with implementing these guidelines or for additional information.

5.0 Hazardous Waste Determination

The first step in the management of hazardous waste is to determine whether a material is a waste and if it should be regulated as hazardous. Subsequent steps, normally performed by an outside contractor, are used to properly classify the waste and determine the action necessary for proper management of the waste.

Materials are usually considered "waste" when the generator has determined that the material has no further use and will be discarded. Hazardous waste regulations apply to **any** material that will be discarded, or is likely to be discarded. (The latter point is important because materials that have no further use and will eventually be discarded may be considered hazardous waste by regulatory agencies even though there are no current plans to discard the material. Therefore, it is imperative that the appropriate supervisor or Hazardous Waste Coordinator be consulted if materials will be stored for long periods without use or if the use of a material is not anticipated for extended periods.)

Waste materials can be solid, liquid, semi-solid or compressed gas. All such materials must be evaluated to determine if the hazardous waste regulations apply.

5.1 Determination Process

Simply defined, a hazardous waste is a material with properties that make it dangerous or capable of harming humans or the environment if not properly managed. Making the determination of whether a waste is hazardous is complicated and requires an extensive understanding of such information as the waste constituents, how it was generated, the material's chemical and physical characteristics, an understanding of USEPA and State regulations and experience in classifying waste products.

A material is considered to be a hazardous waste if the USEPA or the State specifically lists it as a hazardous waste or if it exhibits a hazardous characteristic. Two methods are used to determine if a waste exhibits hazardous characteristics; testing or applying generator knowledge.

- Testing must be done following strict regulatory protocols established by the USEPA.
- Generator knowledge involves applying an understanding of the hazardous nature or characteristics of the waste based on the materials or processes used to generate the waste.

This facility is required to have written documentation regardless of which method is used. Final determination of whether a waste is hazardous or non hazardous will be made by the Hazardous Waste Coordinator or a contracted Hazardous Waste Specialist.

5.2 Non-Hazardous Waste

If a waste is not listed as a USEPA or State hazardous waste or does not exhibit any of the hazardous waste characteristics, it is a non-hazardous waste. Please contact the Hazardous Waste Coordinator, OSHEM or the contracted Hazardous Waste Specialist for guidance in disposal of non-hazardous chemical wastes. Remember that many so called non-hazardous wastes may still cause harm to the body or the environmental if improperly handled, stored, or discarded. Non-hazardous does not necessarily mean non-regulated or safe to put in the regular trash. Empty gas cylinders and bulk liquids are examples of materials that are prohibited at regular trash facilities.

5.3 Universal Waste

Universal waste (UW) is a category of hazardous waste that is deemed to pose less of a risk to human health and the environment if managed according to guidelines. According to Federal regulatory requirements, universal wastes may include lamps, batteries, intact mercury containing devices, and some pesticides. Federal regulatory requirements are based on the total amount of all types of

universal waste that is accumulated at a given facility however ***Insert name of facility*** will use the following guidelines to manage universal waste:

5.3.1 UW may be accumulated for up to year from the date the universal waste became a waste. The amount of time that a universal waste has been accumulated must be demonstrated, in one of the following ways:

1. direct marking of the universal waste with the date that the universal waste became a waste;
2. marking the container the waste is in with the earliest date that waste began accumulating in that container;
3. marking a designated accumulation area with the earliest date that waste began accumulating in that area;
4. keeping an inventory that identifies the date that each universal waste became waste or
5. keeping an inventory that identifies the earliest date that a universal waste became waste in a designated accumulation area.

5.3.2 UW may be accumulated for longer than a year from the date that the universal waste became a waste, provided the sole purpose of accumulation of such quantities is necessary to facilitate proper recovery, treatment, or disposal. If this is the case, ***Insert name of facility*** must provide proof from the destination facility, through a letter or contract, confirming that accumulation beyond a year is necessary.

5.3.3 General Requirements for All UW Types

1. Universal Waste Handlers will not dispose of universal waste;
2. Universal Waste Handlers will not dilute or treat universal waste, except when responding to releases;
3. UW will be managed in a way that prevents a release of any component of the universal waste;
4. If containment of a UW is required, the container will be (a) closed at all times except when adding or removing waste (b) compatible with the universal waste and it's contents, and (c) free of defects, design characteristics or damage that would lead to leakage, spillage or other environmental releases;
5. UW stored outside must be covered, to prevent precipitation from coming into contact with the waste.
6. EPA requires large quantity handlers of UW to obtain an identification number. A facility that does not already have an EPA identification number must notify the USEPA or State Environmental Agency prior to accumulating more than 5,000 kilograms of universal waste.

5.3.4 Requirements for UW Batteries

A battery becomes universal waste on the date that it is removed from service, either because it is no longer operable or because it is no longer wanted or needed. The following management activities are allowed, provided the individual battery cases are not breached, are intact, are closed, except to remove electrolyte, and are immediately closed after electrolyte is removed:

- Battery sorting
- Mixing battery types in one container
- Removing the electric charge by discharging
- Regenerating used batteries
- Disassembling battery packs into individual batteries or cells

- Removing batteries from consumer products
- Removing electrolyte from batteries

Each battery or container of batteries must be labeled with one of the following: *Universal Waste – Battery, Waste Batteries,* or *Used Battery(ies).*

5.3.5 Requirements for UW Mercury Containing Devices

Any used or unused mercury containing device becomes a waste on the date that it is no longer operable or on the date that the handler decides to discard it. To manage a mercury containing device as a universal waste, the following requirements must be met:

1. Mercury containing devices that show any sign of leaking, spilling, or damage that could cause spillage must be stored in a container that is closed, compatible with the waste, and free of defects that could cause leakage.
2. Ampules containing mercury may be removed from a mercury containing device if:
   - The ampule is removed such that breakage does not occur;
   - The ampule is only removed over a containment device
   - A Mercury clean-up system is readily available
   - Any spilled mercury from a broken ampule is immediately transferred to containment
   - The area where the ampule is removed is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury
   - Employees removing ampules are familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate container
   - Empty ampules are collected and stored in appropriate containers.
3. If any waste is generated from breaking a mercury-containing device or emptying ampules, the waste handler must determine if the device, ampule, or spill clean-up debris, exhibits the characteristic of hazardous waste for mercury. If the waste meets the characteristic, it must be managed as a hazardous waste.

Mercury containing devices, or mercury device storage areas, must be labeled with one of the following: *Universal Waste – Mercury Containing Device(s), Waste Mercury-Containing Device(s),* or *Used Mercury-Containing Device(s).*

5.3.6 Requirements for UW Lamps

A lamp becomes a waste on the day that it is removed from service, either because it is burned out or is no longer wanted or needed.

Lamps may not be intentionally crushed or dismantled unless the State or local environmental agency permits such activity. Many States require air quality monitoring and other controls to crush lamps. If lamps are unintentionally broken, the broken lamp and residue must be cleaned up and the area decontaminated. The broken lamps and clean-up debris must be managed as hazardous waste (Refer to State or local regulations).

Lamps or lamp accumulation areas must be marked with the date the lamp is removed from service or the date the first lamp was placed in the storage accumulation area **and** one of the following: *Universal Waste – Lamp(s), Waste Lamp(s),* or *Used Lamp(s).*

5.3.7 Requirements for Pesticides

A recalled pesticide will become waste on (a) the date that the manufacturer of the recalled pesticide agrees to participate in the recall ***and*** the person conducting the recall decides to discard the pesticide, or (b) when the handler decides to discard the unused pesticide.
Universal waste pesticides must be containerized in a container compatible with the waste, or over-packed in a waste container that is compatible.
Universal waste pesticides must be labeled with the original label that accompanied the pesticide at the time of sale or distribution and the words *Universal Waste-Pesticide(s)* or *Waste-Pesticide(s).*

5.3.7.1 Storage requirements for universal waste pesticides are as follows:

1. Universal waste pesticides must be stored on an impervious surface. An impervious surface may be concrete or asphalt (without cracks or holes). Earth, wood, and gravel surfaces are not considered impervious surfaces.
2. Waste pesticides that contain free liquid may not be stored in an area with functional floor drains or manholes unless secondary containment is present. If secondary containment is necessary, it must be sufficient to contain a spill from the largest container in the secondary containment. Containment is not required in areas with functional floor drains or manholes, provided:
   - The waste pesticide contains no free liquid **and**
   - The area is sloped or drained to remove precipitated liquid or containers are elevated or otherwise protected from accumulated precipitation

5.3.7.2 Security Measures

The following security measures must be provided at all outdoor storage areas for universal waste pesticide:

- An artificial or natural barrier that completely surrounds the universal waste pesticide storage area to prevent unauthorized entry by people or livestock
- An entry that is controlled at all times (e.g., a keyed lock or camera surveillance)
- A sign at all entries to the storage area with the legend *Danger – Unauthorized Personnel Keep Out* or other words indicating that only authorized personnel are allowed entry and that the area is potentially dangerous.

5.4 Used Oil

Used oil is defined as any oil that has been refined from crude oil or any synthetic oil that is used, and as a result of such use, is contaminated by physical or chemical impurities. In general, this includes engine crankcase oil, machine lubricating oil, cutting oil, hydraulic oil, heat treating oil, and compressor oil. "Waste oil" is not the same as used oil. The RCRA Part 279 standards established for used oil management operate under the presumption that used oil will be recycled. Used oil that is not Hazardous Waste, but cannot be managed for recycling under Part 279, must be managed in accordance with 40 CFR Parts 257 and 258.

- Used oil mixed with a listed HW must be managed as a listed hazardous waste.
- Used oil mixed with a characteristic HW is a HW if the mixture exhibits a characteristic.
- Used oil with >1000 ppm halogens is always presumed to be a HW. This is a rebuttable presumption!
- Oily wastewater - If contaminated with de minimis amounts of oil and managed in units regulated under CWA 307 or 402, oily wastewaters are not subject to Part 279

5.4.1 On-site used oil storage

Under 40 CFR 279.22, generators must:

- Store oil in tanks or containers (or units subject to RCRA standards)

- Provide secondary containment for all tanks and containers
- Maintain containers and tanks in good condition, no leaks
- Label containers and tanks with the words "Used Oil" (label fill pipes for USTs)
- Use a transporter with an EPA ID number
- Establish a Spill Prevention, Control and Countermeasures (SPCC) plan if greater than 1,320 gallons are stored aboveground or greater than 42,000 below ground.

5.4.2 Used oil filters - 40 CFR Part 261.4(b)(13)

Used oil filters are NOT regulated as a hazardous waste by federal regulations if managed by one of the following methods:

- Puncturing the filter anti-drain back valve or the filter dome end and hot-draining
- Hot draining and crushing
- Dismantling and hot draining; or
- Any other equivalent hot-draining method which will remove used oil

Since these are Federal regulations some states may not recognize this exemption. Also, filters managed by these methods are still regulated as a solid waste and subject to solid waste management regulations; alternatively, they may be managed for scrap metal reclamation. {NOTE: Gasoline, diesel, air, transmission or other type filters are NOT included in the used oil filter exclusion. They may be excluded from potential HW regulation only if being recycled as scrap metal. Otherwise, the generator must determine if they meet a HW characteristic}.

5.5 Waste Code Designation

Hazardous wastes are required to be identified by an EPA designated code prior to shipment off site. To minimize errors in designating hazardous waste codes, the classification process is managed by an outside contractor.

6.0 Facility Generator Status

Concurrent with determining whether a regulated hazardous waste is being generated, the facility's generator classification must be determined. The generator classification is based on the total amount of waste generated throughout the entire facility. Knowledge of the facility's generator status is important because regulatory compliance is based on the quantity of waste generated. Each generator category has specific generation, accumulation and storage requirements and corresponding time limits that the waste can be kept on site.

Facilities are generally on either a 90-day or 180-day disposal cycle. However, during any given time period, the facility's generator status may change, causing a corresponding change in the requirements that must be met. It is therefore important to strictly adhere to time limits established by the HWC.

Note: Some states require the generator to notify the State when waste generation or accumulation totals exceed the Small Quantity Generator monthly limitations. The facility must begin to comply with Large Quantity Generator requirements regardless of any requirement to notify.

7.0 USEPA Identification Numbers

USEPA requires all hazardous waste generators to register their generator status by obtaining a USEPA Identification Number. This number is used to track waste from generation to ultimate disposal, and establish a historical record in the event of future unforeseen environmental impacts that result from the management of that waste. SI facilities are required to obtain a USEPA ID number *before* treating, storing, disposing, recycling, transporting, or offering for transport, regulated quantities of hazardous waste. USEPA ID numbers are site-specific numbers assigned to generators, transporters, and treatment,

storage, disposal or recycling facilities (TSDRF), and need only be obtained once. The numbers are specific to the physical location.

8.0 Accumulation Requirements

The term "accumulation" refers to the time during which waste is held at the facility prior to shipment off site. The term "storage" is not used because the word storage has a specific meaning in RCRA and is an activity that requires that the facility obtain a permit. The hazardous waste accumulation guidelines presented in this document are designed to ensure hazardous wastes are accumulated safely to minimize risks to human health or the environmental from releases, regulatory requirements are met, and accumulation time limits are not exceeded. To accomplish these objectives the SI will utilize designated central accumulation areas (CAA) where wastes from several generation points are held, and temporary areas where waste is held near the point of generation. Temporary areas are referred to as satellite accumulation areas (SAA). Both CAAs and SAAs are explained further below.

Regulatory requirements for hazardous waste accumulation involve the selection of proper waste containers, waste identification and labeling, establishment of designated locations (SAA or CAA), meeting specified time limits, and movement from an SAA to the CAA pending shipment off-site to a TSDRF. Proper accumulation of hazardous waste is critical to ensuring personnel safety and regulatory compliance.

8.1 Generator Accumulation

8.1.1 Satellite Accumulation Areas (SAA)

Temporarily keeping containers at or near the point of generation until they are full is known as satellite accumulation. The wastes must be under the direct control, and in the line of sight, of the person and process producing the wastes. The area where this activity occurs is known as a satellite accumulation area (SAA). Temporary accumulation allows wastes to be held at the point of generation for the purpose of minimizing handling risks, increasing disposal efficiency and controlling costs. USEPA and some State regulations permit satellite accumulation; however, the requirements may vary widely from one jurisdiction to another. By complying with the best management practices for satellite accumulation areas, SI facilities endeavor to comply with both USEPA and State regulatory requirements.

It shall be the responsibility of each generation department, section, or location to ensure that full or unneeded waste containers are moved from satellite accumulation areas to the central accumulation area or facility. The best management practice is to have the Contact Person identified on form HWMP-3 make arrangements with the HWC for pick-up.

Satellite accumulation area limits are 55 gallons of hazardous waste, or one quart of acutely hazardous waste, in containers at or near the point of generation. The following requirements must be met:

- Containers are under the control of a ""*Contact Person*"" for the process generating the waste;
- The "Contact Person" has been trained in accordance with SI hazardous waste training requirements (See Section 13.0);
- Waste is properly labeled either as "Hazardous Waste" or with the container contents;
- Waste is dated with the date that the container becomes full, this is the accumulation start date; (*Some States require dating when the first drop is placed in the container).* Full containers regardless of size, and those that reach the accumulation limits (55 gallons of hazardous waste or one (1) quart of acutely hazardous waste), are moved to the CAA immediately upon reaching the accumulation limit.
- Waste containers with free liquids are provided secondary containment;
- Routine inspections are conducted; and

Ensure full containers that have been relocated to the CAA are shipped off-site within 90/180 days of the accumulation start date. Failure to comply with these provisions may result in a violation of USEPA and State requirements and could result in substantial fines and penalties.

8.1.1.2 SAA Inspections

Satellite Accumulation Areas must be inspected monthly at a minimum. See HWMP-3, Satellite Accumulation Inspection Checklist, to view the SAA inspection criteria. The *"Contact Person""* or designee will inspect each SAA under their control. Copies of the completed SSA inspection checklists shall be maintained by the Supervisor for areas under their authority. Records shall be retained for a minimum of three years.

8.1.2 Central Accumulation Area (CAA)

The establishment and management of the Central Accumulation Area (CAA) is a vital component of the facility compliance strategy. Close scrutiny of this area is important because it is the location where waste from throughout the facility may be held awaiting transportation to a commercial hazardous waste TSDRF. Container management standards are more stringent in CAA than in SAA. Once waste accumulation containers in the SAA are filled, the "Contact Person" identified on form HWMP-3, must immediately arrange for transport to the CAA for subsequent holding time and eventual removal from the facility. There are two allowable holding times for CAA based on the total quantity of waste generated throughout the entire facility. The maximum allowable holding times may be either 90 or 180 days. Wastes stored by the facility in the CAA, or any other location, for periods exceeding the 90 or 180 day limits (other than in a properly established and managed SAA) can result in substantial fines and penalties by either the USEPA or the State, or both.

A generator may accumulate waste in a central accumulation area up to the specified time period (90/180 days) provided all of the following requirements are met:

- All hazardous waste must be placed in appropriate containers or tanks and must remain closed at all times except when adding or removing waste;
- All containers must be labeled with the words "Hazardous Waste";
- All containers must be labeled with an accumulation start date;
- Secondary Containment must be provided for containers holding free liquids;
- All hazardous wastes must be stored on impervious surfaces;
- Hazardous waste must not be stored in areas with functional floor drains, or in or near a sink with functional drains present unless adequate secondary containment is provided;
- Generators must make weekly inspections of all hazardous waste storage areas;
- Facilities must ensure training in hazardous waste management is provided to all personnel handling hazardous wastes;
- Generators must meet general requirements for storing ignitable, reactive, or incompatible wastes;
- Generators must comply with 40 CFR Part 265 Subpart C Preparedness and Prevention, including:
    a. maintaining spill control equipment and fire control equipment at or near each waste storage area;
    b. posting 'No smoking' signs near ignitable and/or reactive waste and
    c. maintaining a minimum aisle space to allow unobstructed movement of personnel, fire protection equipment, and/or spill control and decontamination equipment.
- Generators must have a current written contingency plan detailing emergency procedures;
- Generators must post a list of emergency telephone numbers, with a brief description of steps to take if an emergency occurs, at the telephone nearest to each hazardous waste accumulation area; and

- Generators must comply with 40 CFR 265 Subpart J if tanks are used for hazardous waste storage.

Additional Requirements for outside storage:

- Generators must provide an artificial or natural barrier preventing unauthorized entry;
- Generators must provide a means to control entry (e.g., a keyed lock, surveillance, or guard);
- A sign with the legend 'DANGER- UNAUTHORIZED PERSONNEL KEEP OUT' must be posted at the entrance, and
- All hazardous waste stored outside must be covered and stored at least 50 feet away from surface water.

8.1.2.1 CAA Inspections

The Central Accumulation Area must be inspected weekly. See HWMP-4, Central Accumulation Area checklist to view the CAA inspection requirements. The Hazardous Waste Coordinator or his alternate is responsible for inspecting the CAA. Copies of the CAA inspection checklists are to be maintained by the HWC for a minimum of three years.

9.0 Container Management

The selection of appropriate containers helps prevent leaks and spills that may result in human exposure or environmental releases during material handling, storage and transport. The selection of appropriate containers at the point of generation is based primarily on the chemical characteristics of the waste being contained and the waste generation rate. Select containers that are compatible with the waste being contained, have secure fitting tops, and are not easily broken. Packaging for transportation off site and final disposal is only to be completed by the Hazardous Waste Coordinator or the contracted Hazardous Waste Specialist.

10.0 Labeling

Waste containers must be properly labeled to ensure that identification of the contents is clearly documented and to communicate information concerning handling hazards. The main concern is to prevent unintentional injury to others that may come into contact with the container. Labeling must be legible and indelible or difficult to remove. Labeling requirements are based on the intended disposition of the container; whether it will be stored on-site in a satellite accumulation area (SAA), in the central accumulation area (CAA) or shipped off site for ultimate disposal at a TSDRF. The labeling requirements for waste managed on site in either SAA or CAA are found below.

10.1 Satellite Accumulation Areas (SAA)

The following label information must appear on all containers located in Satellite Accumulation Areas:

- The words "*Hazardous Waste" or w*ords that identify the contents of the container (No symbols or abbreviations).

10.2 Central Accumulation Area (CAA)

The following label information is the minimum that must appear on all containers stored in the CAA:

- The words "*Hazardous Waste"*;
- The accumulation start date for the container;

Before transporting or offering waste for transportation off site, waste in the CAA must have:

- Department of Transportation (DOT) labeling pursuant to 49 CFR Part 172.
- Words that identify the contents of the container (no symbols or abbreviations); and
- USEPA and/or State hazardous waste codes;

11.0 Transportation Protocols

Transportation is defined as moving hazardous waste containers between the following locations:

- Satellite Accumulation Area and the Central Accumulation Area; and
- Central Accumulation Area and the off-site Treatment, Storage, Disposal or Recycling facility (TSDRF);

The protocol involves the following items discussed below.

- Scheduling waste pickup and relocation from the SAA to the CAA;
- Scheduling waste pickup from the CAA and shipment to the TSDRF.
- Completion and maintenance of paperwork and records
- Management of certificates of disposal/destruction obtained

11.1 Satellite Accumulation Area

Once waste containers held in the SAA are full, reach the 55-gallon limit, or are no longer needed, they must be relocated to the CAA. This is accomplished by contacting, ***Insert name of HW Coordinator***, Hazardous Waste Coordinator at ***Insert phone number***, who will coordinate relocation of the filled container(s).

11.2 Central Accumulation Area

During weekly inspection, the Hazardous Waste Coordinator evaluates the status and amount of containers stored in the CAA. The Hazardous Waste Coordinator will arrange for a waste pick-up by a Licensed Hazardous Waste Transporter if any of the following conditions are met:

- there are a sufficient number of containers in the CAA for economic disposal of the waste;
- containers are approaching the 90/180 day storage limit; or
- the CAA area is approaching capacity.

11.3 Off-site Disposal

The HWC is responsible for scheduling off-site transportation of wastes whenever any container being held in the CAA nears the 90/180 day accumulation time limit. The HWC is to allow sufficient lead time to ensure that the pick-up will be completed within the allotted time frame.

11.4 Disposal Transportation

Regulations require that SI use approved hazardous waste transporters to transport shipments of waste to a permitted TSDRF. Transporters must possess a current, valid, hazardous waste transporter permit and/or a valid USEPA Identification Number. It is the facility HWCs responsibility to monitor shipments to assure that vehicles transporting facility wastes are placarded with appropriate warnings and otherwise comply with standard US Department of Transportation and State shipping protocols.

11.5 Disposal Facility

Liability for damages resulting from the mishandling of hazardous waste is retained by the generator of the waste. Therefore, selection of a reputable disposal company is critical. OSHEM assists the facility by evaluating and selecting an EPA permitted TSDRF. However, as the on-site SI representative, the facility HWC has oversight of container labeling, manifest documents, land disposal restriction forms, transportation placards, and other appropriate waste handling requirements prior to off site shipment.

11.6 Reporting and Record keeping

Reporting and record keeping documents are integral and vital to demonstrating compliance and limiting liability. ***Insert name of facility*** is committed to ensuring compliance by maintaining all appropriate documentation, reports and records as specified in Section 14.0, Record Keeping and Reporting. For more information contact the Hazardous Waste Coordinator, ***Insert name of HW Coordinator***, at ***Insert phone number***.

12.0 Waste Minimization

It is the policy of the SI to make every effort to minimize the generation of hazardous waste, maintain a sound environmental program, control liability, and minimize costs. To accomplish this objective, SI facilities embrace a Waste Minimization Strategy designed to identify and develop opportunities to control chemical use and reduce waste generation. Various methods have been identified and encouraged. These include such actions as:

- Purchasing control - Review of chemical purchases to ensure that appropriate materials and quantities are purchased. This helps to prevent purchasing too much of a material or material of the wrong type that could become a regulated waste.
- Periodic Inventory Evaluation - Evaluation of laboratory reagents for current use, transfer to other SI users or disposal.

As new strategies are identified, evaluated and implemented, this section will be updated to reflect methods currently available and in use. Contact the Hazardous Waste Coordinator, ***Insert name of HW Coordinator*** , ***Insert phone number,*** or OSHEM at (202) 633-2530 to provide ideas or obtain information on waste minimization strategies.

13.0 Training

13.1 Introduction

Appropriate training is provided to ensure that individuals involved in hazardous waste generation and handling understand regulatory requirements and methods to minimize hazards and risks associated with the management of hazardous waste. This training may include instruction in USEPA, OSHA and USDOT requirements.

13.2 Training Requirements - General

Due to differing hazardous waste generator status, the SI is required to provide various training programs to ensure that hazardous waste is effectively and safely managed. Therefore, SI either conducts or makes available training programs to comply with the appropriate requirements of the following regulations:

- US EPA's Resource Conservation and Recovery Act (RCRA)
- United State's Department of Transportation (USDOT) Hazardous Material Transportation Act (HMTA) HM 181/126 F
- OSHA Hazardous Waste Operations and Emergency Response, 29 CFR1910.120

13.3. Hazardous Waste Training - Resource Conservation and Recovery Act (RCRA)

13.3.1 Introduction

Under USEPA and State hazardous waste regulations, employees who handle hazardous waste must be familiar with proper waste handling and emergency procedures (including contingency plan implementation) relevant to their responsibilities. See 40 CFR 265.16. As part of this facility's Hazardous Waste Management Plan, individuals involved with handling hazardous waste will receive appropriate training to ensure compliance with RCRA requirements. The Hazardous Waste Coordinator, ***Insert HWC name***, will document the training program.
If supervisors, safety coordinators, or someone else keeps records, indicate that here.
Individuals with the following responsibilities will be included in the RCRA training program:

Add or remove job titles as appropriate!

- Art Technicians;
- Auto Repair Technicians;
- Chemists;
- Engineering Technicians;
- The Coordinator of Hazardous Waste;

- Hazardous Waste Specialists;
- Facilities Maintenance Coordinators;
- Heating Plant Maintenance Mechanics;
- HVAC Technicians;
- Horticulture Technicians
- Laboratory Technicians;
- Medical Laboratory Technicians;
- Research Associates;
- Research Scientists;
- Research Technician;
- Staff Photographers;
- Maintenance Supervisors;
- Select Graduate/Undergrad Students and
- Select Faculty

Either classroom instruction and/or on-the-job training may be provided in-house or by an outside contractor. Personnel must successfully complete the training program within six months after the date of their employment or assignment to a facility, or to a new position at a facility, whichever is later. Employees who have not received this training must not work in unsupervised positions until they have completed the training requirements of this section.

13.3.2 RCRA Training Records

Federal regulations require training records be maintained for the duration of employment and retained for a minimum of three (3) years after an employee leaves the position. (40 CFR 265.16(e)) These records include:

- The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job.
- A written job description for each job title. This description must include the requisite skill, education, and/or other qualifications, and the duties of the personnel assigned to each position.
- A written description for the type and amount of both introductory and continuing training that will be given to each person filling a position.
- Records that document that the training or job experience has been given to and completed by the facility personnel.

13.4 OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER)

SI policy is that all employees are First Responders at the Awareness Level [29 CFR 1910.120(q)] ONLY! First responders at the awareness level are individuals who are likely to witness or discover a hazardous substance release and who have been trained to initiate an emergency response sequence by notifying the proper authorities of the release. They would take no further action beyond notifying the authorities of the release. Refresher training is required annually.

14.0 Record Keeping and Reporting

14.1 Introduction

Hazardous waste generators are required to create, provide and maintain records that track waste from generation to ultimate disposal. The purpose of obtaining, maintaining and preserving these documents is to ensure that waste is properly managed and regulatory compliance requirements are met. Both USEPA and States specify record keeping requirements. These requirements include, but are not limited to:

- Copy of Notification
- Copies of Manifests including Land Disposal Restriction (LDR) Notification/Certifications (3 years)
- Universal waste or recycling shipping documentation logs, bills of lading, invoices, or certificates of recycling that verify quantity requirement to ship at least 75% of yearly generation totals
- Copies of Annual or Biennial Hazardous Waste Reports, State Self Certification Forms
- Contingency Plan or Emergency/Spill Response Plan
- Employee Training Records
- Waste accumulation area weekly inspection checklists (CAA and SAA).

14.2 Records Administration and Storage

The following outlines how ***Insert name of facility*** meets the reporting requirements as well as how records are organized and maintained. Required records and profiles are maintained by the Hazardous Waste Coordinator. Federal regulations require hazardous waste records to be kept a minimum of three years, however, a prudent management practice is to maintain records permanently, but separately, for records older than the prior three years.

The record keeping system will function in the following manner:

- Annual, Biennial Hazardous Waste Activities Reports, State Self Certifications are organized chronologically
- Waste profiles are organized by designated facility and waste profile number and kept as long as the waste stream is generated at the facility and three years following cessation of generation.
- . Manifests, Land Disposal Restrictions, and packing lists are organized chronologically in the HWC files.

14.2.1 Hazardous Waste Manifests

Handlers of waste (generators, or treatment, storage or disposal facilities) must obtain forms from a source that has been approved by the EPA Manifest Registry to print and distribute the form. A number of States have additional State requirements regarding the use of the Uniform Hazardous Waste Manifest. Some States require copies to be submitted to the State, and/or have State-specific waste codes in addition to the federal hazardous waste codes required to be entered on the manifest.

The HWC must review manifest documents to ensure receipt of the disposal facility copies of the manifests. A signed copy must be received from the designated TSDRF within 45 days from the date the initial transporter signed the manifest. If after 35 days [***Insert name of facility***] has not received the signed TSDRF copy, the HWC will contact the TSDRF to determine the status of the shipment. If the signed copy is not received within 45 days, the HWC must coordinate with OSHEM to submit an Exception Report to the State.

The SI must keep manifest copies for three (3) years from the date the waste was accepted by the initial transporter. Manifests should be kept with the applicable Land Disposal Notification/Certification forms.

14.2.2 Land Disposal Notification/Certifications

All waste streams with treatment standards indicated in 40 CFR 268.40 or 268.45 must have a one time written notification/certification sent to each treatment, storage, disposal, or recycling facility with the initial shipment of that waste stream. These forms are kept with the signed manifest copy.

14.2.3 Exception Reports

SI will contact the TSDRF to determine the status of the waste if the manifest is not received within 35 days. SI will submit an exception report to the State agency and USEPA if a signed copy

of the manifest is not received from the receiving (TSDRF) facility within 45 days from the date the waste was accepted by the initial transporter. The exception report consists of the following:

- A legible copy of the manifest for which the generator does not have confirmed delivery
- A letter indicating that the SI facility hasn't received the TSDRF facility's signed manifest, and
- A cover letter, signed by the generator explaining the efforts taken to locate the hazardous waste and the results of those efforts.

14.3.3.1 Record Retention of Exception Reports

These reports should be kept with a copy of the manifest in question.

14.2.4 Profiles/Waste Analyses Results

Each waste stream must be evaluated to determine if it is a hazardous waste as defined by 40 CFR 261 and to determine the proper waste code. A waste analysis form or waste profile (developed by the disposal facility) is used to document the hazardous waste determination.

These records should be kept separate from the Land Disposal Notification/Certifications and Manifests.

14.2.5 Satellite and Central Accumulation Area Inspections

USEPA and States require central accumulation area weekly inspections. Additionally, SI requires satellite accumulation areas to be inspected at least monthly. Refer to HWMP-3, Attachment 9 and Attachments 10 or 13, as appropriate, for copies of the inspection forms recommended for used by SI facilities. The facility may develop forms tailored to meet their specific needs provided that the regulatory requirements are met.

14.3 Reporting

Hazardous waste regulations require that reports be submitted on a periodic basis. Reporting requirements are different for each different geographical location, but may include:

- Annual Reports
- Biennial Reports (USEPA Requirement)
- Small Quantity Generator Self Certifications

Any generator who generates hazardous waste that is not exempted from reporting must complete this section to indicate their report type and frequency.

14.3.1 Biennial Reports

Biennial reports are required by the USEPA for all Large Quantity Generators. The report will be submitted by March 1 of each even numbered year on forms provided by the USEPA.

14.3.2 Small Quantity Generator Hazardous Waste Self-Certification

Some States have implemented Small Quantity and/or Conditionally Exempt Small Quantity Generator Self-Certification Program. This program requires SQG/CESQG to perform an inspection of their facility ***Insert number of years*** to determine whether it is in compliance with the applicable hazardous waste regulations. The facility must review their hazardous waste management procedures, conduct a self inspection, and provide the State with a self-certification declaration that the facility is in compliance with applicable regulations.

If it is determined that the facility is not in compliance via self-inspection, the facility must develop a Corrective Action Plan that specifies how the facility plans to come into compliance, as well as a timetable for compliance.

15.0 Emergency Preparedness and Response / Contingency Plan

15.1 Introduction

Each SI facility has separately developed and implemented a plan entitled "Hazardous Chemicals Emergency Spill and Leak Control Procedures". This plan provides information on actions SI personnel will take to minimize hazards to human health and the environment from releases of hazardous waste and identify actions and designate personnel who will respond to emergencies including hazardous material spills. However, SI policy is that all employees are First Responders on the Awareness Level and only respond to incidental releases pursuant to 29 CFR 1910.120(q). Release of a hazardous substance that is limited in quantity and poses no emergency or significant threat to the safety and health of employees in the immediate vicinity is considered an incidental release.

15.2 Emergency Coordinators

In case of a catastrophic emergency or the need to evacuate, the Office of Protection Services (OPS) must be called. They can be reached by dialing ***Insert phone number***

Insert name of primary Emergency Coordinator or his designee serves as the overall Disaster/Emergency Coordinator for all responses to emergency situations.
Insert name of secondary Emergency Coordinator , serves as the secondary Emergency Coordinator for all actions. Contact information for the Emergency Coordinators and other emergency services can be found in the document Hazardous Chemicals Emergency Spill and Leak Control Procedures which is located in ***Insert name of Appendix***
The Emergency Coordinator is responsible for the following:

- Being on the premises or on call at all times (or designee);
- Being available to respond to an emergency by reaching the site of generation or accumulation within a short period of time;
- Developing or coordinating the emergency response plans, site operations and activities;
- Being familiar with location and characteristics of waste handled by the facility, location of records, and layout of waste generation sites.

15.3 Emergency Equipment

Insert name of facility provides the following equipment to control emergencies at or near Central Accumulation Areas:

- A communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;
- A device, such as a telephone (immediately available) or a hand-held two-way radio, capable of summoning emergency assistance from the police departments, fire departments, or State or local emergency response teams;
- Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment; and
- Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.

15.4 Posted Emergency Action Information

The following information is posted at the nearest telephone to the Central Accumulation Area:

- Brief summary of emergency action steps; and
- Emergency phone numbers for:
    1. Emergency coordinator(s) (home and office)
    2. Support services (e.g., fire, police, hospital, Local Environmental Agency
- Fire extinguisher location;
- Spill control materials location; and
- Fire and internal emergency alarm locations (if present.)

15.5 Notification and Reporting

If ***Insert name of facility*** experiences an event that exceeds any Federal or State reporting threshold, the facility HWC will coordinate with OSHEM to notify the USEPA Regional Administrator, and appropriate State and local authorities. As required by regulations, a written report of the incident will be submitted to the Regional Administrator within 15 days after the incident. The report will include the following information:

- Facility name, address, and telephone number;
- The date, time, and type of incident (e.g., fire, explosion);
- The name and quantity of material(s) involved;
- The extent of injuries, if any;
- An assessment of actual or potential hazards to human health or the environment, where this is applicable; and
- Estimated quantity and disposition of recovered material that resulted from the incident.