



ENVIRONMENTAL HEALTH AND SAFETY
STANDARD OPERATING PROCEDURES

SOP No. 24.01.01.W1.05AR Satellite Waste Accumulation Procedure

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Environmental Health and Safety at WTAMU is composed of two distinct but integrated environmental safety departments that report to the Vice President of Research and Compliance. Academic and Research Environmental Health and Safety (AR-EHS) is responsible for research and academic related compliance, which includes laboratory and academic research and the associated compliance committees. Fire and Life Safety (FLS-EHS) is responsible for fire related compliance and conducts fire and life safety inspections of campus buildings and assists with the testing all fire detection and suppression systems.

Supplements TAMUS Regulation 24.01.01

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1. Purpose

Under the Resource Conservation and Recovery Act (RCRA) regulated generators of hazardous waste are required to accumulate those hazardous wastes in designated facility “hazardous waste accumulation areas”. The degree to which a generator is regulated is determined by the total monthly volumes of waste generated or accumulated by the facility. The “facility” for West Texas A&M University (WTAMU) is defined as the entire contiguous WTAMU campus. The primary accumulation area for WTAMU is operated by Environmental Health and Safety (EHS). In many cases, operations conducted on the campus may generate small quantities of hazardous wastes over a period of time, and it may not be feasible to immediately transfer these hazardous wastes to the primary accumulation area. For example, a laboratory may generate small quantities of hazardous waste, an art lab may generate small quantities of paint cleaning solvents, the theatre scene shop may generate small quantities of solvents

NOTE: Some wastes, such as paint and paint cleaning solvents, are considered as “Universal Wastes” and are not considered as “Hazardous Wastes” if managed properly and are discussed in the Universal Waste Procedure 24.01.01.W1.08AR.

RCRA includes provisions for accumulating these wastes at the site of generation in a process called “satellite accumulation.” These secondary accumulation areas are called Satellite Accumulation Areas (SAAs). Hazardous wastes require special handling and reporting procedures. This document outlines the requirements and best management practices (BMP) for operating a SAA.

2. Scope

This procedure applies to all departments and laboratories at West Texas A & M University (WTAMU). Any questions about the application of this procedure should be referred to WTAMU Environmental Health and Safety (EHS).

- WTAMU is part of the Texas A & M University System, (TAMUS) and is governed by TAMUS policies and directives. TAMUS has an Environmental Health and Safety (EH&S) program and office. This procedure is intended to meet the Texas A&M University System Environmental Health and Safety Standards 24.02.03
- The WTAMU EHS is responsible for writing and maintaining the WTAMU Hazardous Waste (Hazwaste) Satellite Accumulation procedure. EHS is responsible for implementing this procedure.
 - EHS will
 - Maintain a master list of all authorized SAAs on WTAMU grounds.
 - Pick up hazwaste from SAA when requested.
 - Perform inspections and audits of SAAs at least annually.
 - The departments will

- Determine the need for an SAA.
 - Assign a primary operator for each SAA in the department.
 - The department will keep a list of all SAAs in that department.
- The primary operator will
 - Register the SAA with EHS.
 - Designate any secondary operators.
 - Insure the SAA is operated in accordance with (IAW) these procedures.
 - Ensure EHS is notified when pickup of hazwaste is required.
 - Ensure that weekly inspections of the SAA are accomplished.
- The secondary operator will assist the primary operator in the operation of the SAA.

3. Procedure

3.1. Quantities

- The Primary operator will ensure that a SAA accumulates no more than 55 gallons of hazardous waste or 1 quart of acutely hazardous waste at any single SAA. Smaller containers may be used and are advisable to reduce potential spills and health hazards.

3.2. Location

- A SAA must be located at or near the site of the waste stream generation. A SAA may not be located across the hall or in any publicly accessible space.
- The SAA should be in a controlled access location.
- All entrances to the SAA should have the names of the primary operators and secondary operators posted.

3.3. Containers

- Must be compatible with the waste being stored. Unbreakable or shatter resistant containers should be used.
- All waste containers should be in good condition.
- Caps should be a screw top (or similar) and not a cork or stopper, which can separate from the container should it tip or fall.
- Must be labeled (see appendix D)
 - As a hazardous waste.
 - By type of waste. Compatible wastes may be stored in the same container; however, the percentage of each waste should be on the label.
 - The type of hazard(s) associated with the waste (e.g., ignitable, dangerous when wet, toxic).
 - Date waste first started being accumulated.

- These labels must be placed on the containers so that they are readily seen for inspection.
 - The date the container is full.
 - If you are reusing a container to accumulate waste, destroy the original product label.
- Must be sealed, except during transfer of waste to and from the container. Funnels MUST not be used as lids or stored in the opening of the container.
 - Must be stored separate from incompatible wastes.
 - Keep solids and liquids separate. Separate the following classes of chemical waste from each other: acids, bases, halogenated, non-halogenated, oxidizers, and reactives.
 - Reactive and flammable waste should be physically separated by distance or physical barriers, or both from other wastes.
 - Flammable wastes should be accumulated in a flammable storage locker or equivalent storage facility.
 - Volumes of flammable waste accumulation should be carefully controlled. A maximum volume of 2.5 gallons of flammable waste should be set for each SAA. A best management practice (BMP) of reducing the flammable waste stored should be set by each department head. Exceptions requiring exceeding the 2.5 gallon limit should be worked out with EHS. Such exceptions may require extra fire precautions or other safeguards.
 - Containers are considered full when the volume in the container is 3 inches from the top. Containers with a total height of 8 inches or less can be filled to within 1 inch from the top. The minimum free space of any container will NEVER be less than 1 inch.
 - A full container should be picked up for transport to the WTAMU primary waste accumulation area as soon as practicable. Contact EHS to arrange for pickup.
 - Only one container per hazardous waste should be used. As an example, if the same hazardous waste is produced by five different waste streams, the waste should be stored in a single container, rather than five different containers.
 - Containers should be stored in a secondary containment system, sized to hold the maximum amount of waste that may leak from any one container.
 - Secondary containment may be in the form of trays, tubs, or lined boxes or pallets with containerized bases.
 - Secondary containment must be able to keep potential spills away from drains.
 - Secondary containment must be made of material that is compatible with the materials stored within it.
 - No treatment of hazardous waste is allowed while being accumulated under the satellite accumulation regulation.

3.4. Safety equipment

- Each SAA will have an appropriate spill kit on hand. This includes proper absorbents and neutralizing materials in sufficient quantities for the amounts of waste on hand at the SAA. The spill kit should include any required personnel protective equipment (PPE) that may be

needed to clean up a small spill. A notice of the location of the spill kit and a plan for how to use them will be mounted in an easily accessible location.

- SAAs that accumulate flammable waste shall have a fire extinguisher located in a manner that is readily accessible. The fire extinguisher will be of a size and type appropriate for the hazardous waste being accumulated.
- Emergency numbers will be posted. Numbers such as the fire department, Environmental Health and Safety, and primary operator of the SAA will be posted. At a minimum, the emergency numbers should be at each entrance to the SAA.
- An emergency plan will be posted in the vicinity of the spill kit. See Appendix E for a sample emergency plan.

3.5. Administration

- Each department is responsible for designating in writing the primary operator of each SAA in each department.
 - The primary operator may designate secondary operators to assist in the operation of each SAA.
 - The primary and secondary operators must have access to the SAA.
- The primary operator is responsible for registration of the SAA with the department and EHS. (See the form in Appendix A.) This form should be kept in a binder with the department and with EHS.
 - The primary operator is responsible for ensuring that information is kept current.
 - The following is the minimum information that must be reported for registration.
 - Location of SAA.
 - Primary operator.
 - Type of waste being accumulated.
 - Special precautions that may be required. For example, water reactive or peroxide forming wastes.
 - Estimates of the total volume of hazardous waste accumulated in one month. If operational experience proves that the amount of waste produced was consistently above or below the estimate filed, the estimate should be changed to reflect actual experience.
 - The primary operator is responsible for filing a form with the department and EHS listing the primary and secondary operators and 24-hour contact information. (See Appendix B.) The primary operator is responsible for ensuring that this form remains up to date.
 - The primary operator is responsible for ensuring that a weekly inspection of the SAA is performed. (See Appendix C.) The results of the inspection shall be kept on file for a minimum of three years. At a minimum the following must be checked.
 - All containers correctly labeled and in good shape.
 - Estimated volume in the SAA.
 - All containers sealed and safely stowed.

- Spill kit and fire extinguisher available.
- Spill and emergency response plans and numbers posted.
- Any full containers.
- The primary operator is responsible for ensuring that any secondary operator is trained in these standards and in the requirements for operation of the SAA.
- If a weekly inspection **cannot** be performed by a primary or secondary operator, the primary operator is responsible for ensuring that **all** hazardous waste is removed from the SAA.
- Examples when this might be required include semester breaks, summer sessions or other times when the facility might be closed.
- Coordination with EHS for hazardous waste pickup is important. EHS must be given sufficient time to arrange for pickup of any hazardous wastes.

4. **Governing documents**

- 30 TAC 335
- 40 CFR 261 – 265
- Texas A&M University System Environmental Health and Safety Standards 24.02.03
- WTAMU Environmental Health, Safety, and Waste Management Program, 24.01.01.W1.01AR
- WTAMU CESQG and SQG Accumulation Procedure, 24.01.01.W1.10AR

5. **Record Retention**

No official state records may be destroyed without permission from the Texas State Library as outlined in [Texas Government Code, Section 441.187](#) and [13 Texas Administrative Code, Title 13, Part 1, Chapter 6, Subchapter A, Rule 6.7](#). The Texas State Library certifies Agency retention schedules as a means of granting permission to destroy official state records.

West Texas A&M University Records Retention Schedule is certified by the Texas State Library and Archives Commission. West Texas A & M University Environmental Health and Safety will follow [Texas A & M University Records Retention Schedule](#) as stated in the Standard Operating Procedure [61.99.01.W0.01 Records Management](#). All official state records (paper, microform, electronic, or any other media) must be retained for the minimum period designated.

6. **Training**

West Texas A&M University Environmental Health and Safety will follow the Texas A & M University System Policy [33.05.02 Required Employee Training](#). Staff and faculty whose required training is delinquent more than 90 days will have their access to the Internet terminated until all trainings are completed. Only Blackboard and Single Sign-on will be accessible. Internet access will be restored once training has been completed. Student workers whose required training is delinquent more than 90 days will need to be terminated by their manager through Student Employment.

7. **Definitions**

Acutely hazardous wastes: A subset of listed hazardous wastes that carry the TCEQ "H" code; they are considered very harmful to human health and the environment. EPA listed "P" wastes.

BMP (Best Management Practice): A practice or procedure, which, while not specifically required by law, provides an extra safeguard or other benefit.

CFR: Code of Federal Regulations

Characteristically hazardous waste: Any waste that exhibits the characteristics of ignitability, corrosivity, reactivity, and/or toxicity as defined by the EPA in 40 CFR Part 261 Subpart C. These are often referred to as the "D" wastes.

EPA: The Federal Environmental Protection Agency

AR-EHS: Academic and Research Environmental Health and Safety

EHS: Environmental Health and Safety

Hazardous waste: The EPA defines a waste as hazardous if it exhibits one or more of four hazardous "characteristics," or if it is a "listed" waste (see 40 CFR Part 261 Subpart D).

Flammable: Capable of easily igniting and burning rapidly.

Listed hazardous wastes: Specific wastes that have been identified by the EPA as hazardous. These are often referred to as the "F" wastes (waste from nonspecific sources), "K" wastes (wastes from specific sources), "P" wastes (acutely hazardous off-specification materials, container residues, and spill residues of these materials), and "U" wastes (toxic, hazardous off-specification materials, container residues, and spill residues). A waste is considered hazardous if (a) it is listed in 40 CFR Part 261 Subpart D, or (b) is mixed with or derived from a waste listed there, and (c) has not been provided a particular exclusion from the definition of hazardous as provided in 40 CFR Sections 261.3 - 261.4.

Primary operator: The person designated in writing by the Department to be responsible for the operation of a SAA.

SAA: Satellite Accumulation area: An SAA is defined in 40 CFR 262.34 but is interpreted differently by each of the 10 EPA regions in the U.S. It allows for accumulation of up to 55 gallons of hazardous waste or one quart of acute hazardous waste (P-listed) "...at or near any point of generation where wastes initially accumulate." The term "at or near" means that the process generating the waste and the "satellite" accumulation point must be in the same or adjacent room or work area.

TAC: Texas Administrative Code. Title 30 of TAC contains TCEQ rules on industrial solid waste and municipal hazardous waste, among other subjects.

TSDF: Treatment, storage, and disposal facility; also called designated facility.

Related Statutes, Policies, or Requirements

Contact Office

WTAMU Environmental Health and Safety
(806) 651-2270

SAA Registration Form

Date:

TO: Environmental Health and Safety

Killgore Research Center Rm 184
E-mail: AR-EHS@wtamu.edu

Telephone: (806) 651-2270 Fax: (806) 651-2733

From: _____

Telephone: _____

Dept: _____

Fax: _____

Ref: 24.01.01.W1.05AR Satellite Accumulation Procedures

1. Location of SAA: (BLDG & RM.) _____

2. Primary Operator: _____

3. Type of waste being accumulated:

4. Special precautions that may be required:

5. Estimates of the total volume of hazardous waste accumulated in one month:

SAA Primary and Secondary Operator Contact Information Form

:

TO: Environmental Health and Safety
Killgore Research Center Rm 106
E-mail: AR-EHS@wtamu.edu

Telephone: (806) 651-2270 Fax: (806) 651-2733

From: _____

Telephone: _____

Dept: _____

Fax: _____

Ref: 24.01.01.W1.05AR Satellite Accumulation Procedures

1. Location of SAA: (BLDG & RM.). _____

2. Primary Operator (24 hour contact information):

Name: _____

Daytime Telephone: _____

Nighttime Telephone: _____

3. Secondary Operator(s) (24 hour contact information)

Name: _____

Daytime Telephone: _____

Nighttime Telephone: _____

Name: _____

Daytime Telephone: _____

Nighttime Telephone: _____

Name: _____

Daytime Telephone: _____

Nighttime Telephone: _____

SAA Weekly Inspection Form

Ref: 24.01.01.W1.05AR Satellite Accumulation Procedures

SAA Location: _____

The following checks are the minimum required each week:

Name of Inspector and Date of Inspection.

All containers correctly labeled and in good shape?

- If no, has corrective action been taken?

Estimated total volume of waste in the SAA (in gallons)?

- If volume is 50 gallons or greater, IMMEDIATELY contact EHS for pickup!

All containers sealed and safely stowed? With spill kit and fire extinguisher available and charged?

Spill and emergency response plans and numbers posted?

Any full containers?

- If yes, has EHS been contacted for pickup?

Date	Inspector Name	Labeling & Containers (Yes/No)	Containers Safely stowed? (Yes/No)	Spill Kit (Y/N)	Fire Extinguisher (Yes/No)	Emergency Plan & #'s Posted? (Yes/No)	Estimated Volume on Hand? (gallons)	Any Full Containers (Yes/No)	Comments?

Any questions or concerns about this form or inspection requirements please contact EHS.

Appendix D

Sample Emergency Plans

Ref: 24.01.01.W1.05AR Satellite Accumulation Procedures

1. Fire

- Sound the alarm!
 - Use installed alarm system.
 - Call 911 or campus emergency system 651-2300.
- If the fire is small, attempt to put the fire out using the right type of fire extinguisher.
- If the fire is large, close access doors to isolate the fire and smoke and ensure building is evacuated.

2. Spill

- Contain the flow of hazmat or hazwaste as much as possible.
 - Use absorbents such as powders and pillows to block the flow.
 - If possible, stop the source of the spill (note, USE PPE).
 - Close or block drains to prevent flow into the drain.
- If possible, neutralize the spilled material using the appropriate neutralization material from the spill kit.
- Clean up the spill and absorbents, working from outside in.
 - Handle the spill cleanup residues from a hazardous waste as hazardous waste.
 - The spill cleanup residues from a hazardous material may need to be handled as hazardous waste, consult the Primary Operator or EHS.
- Contact the Primary Operator.
- If the spill is 2.5 gallons or greater or for assistance contact EHS.
- If any part of the spill leaves the facility premises, contact EHS.

For any other emergency or for any questions contact EHS at 651-2270.