

Environmental Compliance Module: Waste Container Storage

Overview

Introduction This document provides guidance for your unit when handling waste and storing it properly in the container storage areas.

In this document This document covers these sections:

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Section A

Module Introduction

Overview

Scope This module outlines the compliance requirements of applicable federal and state regulations for storing *containerized* waste in *non-permitted* storage areas.

Authority This table lists the authority for this module:

Agency Authority	Law	Regulation/Permit
Environmental Protection Agency (EPA)	Resource Conservation & Recovery Act	40 CFR Part 260, 261, 262, 264, and 265
Texas Natural Resource Conservation Commission (TNRCC)	Solid Waste Disposal Act	30 Texas Administrative Code 335, Subchapter C

In this section This section covers these topics:

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Using an Environmental Compliance Module (ECM)

Introduction

This topic provides sources within this document to help you determine if this module applies to your unit.

Determining applicability

Use this table to determine the applicability of this module:

If you ...	Then review ...
Are uncertain this module applies	<ul style="list-style-type: none">• The Scope in the Module Overview to understand the module purpose• Applicability (see red tab) to determine if the module applies to your unit• Definitions and acronyms as necessary
<ul style="list-style-type: none">• Are certain this module applies• Need to know how to comply with this module	<ul style="list-style-type: none">• Scope in Module Overview to understand the module purpose• Compliance Requirements Summary (see blue tab) in Module Overview to determine the unit Environmental Compliance Chart entries• Compliance Requirements to determine: Applicability of each requirement Necessary modifications to existing compliance system

Who should receive training

The Supervisor or designee completes the Unit Specific Training Plan in Training (see section 7.0) with job titles of those who specifically should receive training on this module.

General Management of the Storage Areas

Introduction	This topic provides guidance for general management of the storage areas, based on environmental trigger events.
Environmental triggers	The ECC Owner does one or both of the following, based on the probability of occurrence: <ul style="list-style-type: none">• Determines whether the trigger event should be placed on the ECC and determine the frequency• Includes the trigger event in the Unit Environmental Training Plan
Boundary markings	Boundary markings are recommended but not required. Consider the following guidelines: <ul style="list-style-type: none">• Care must be taken not to store waste outside of the boundary.• Upon closure, it is necessary to know the boundaries where any waste has been stored.• Marking the boundaries looks well organized and neat.
Sign required	Inside the security gate for a RCRA container storage area, no sign is required. Outside the security gate, a sign is required. The sign should be legible from at least 25 feet and read "Danger – Unauthorized Personnel Keep Out."
Combined storage	If needed, you can store hazardous and non-hazardous wastes together. Requirement: You must organize the wastes and keep them clearly labeled and physically separated.

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General Management of the Storage Areas, Continued

Managing the storage areas

Use this table to manage the different types of waste storage areas, based on these triggers:

If you ...	Then ...
<i>All waste storage areas</i>	
Are placing a new container storage area into service	Notify Environmental Affairs in writing before placing a container storage area into service.
Are planning to move, modify, or close an existing container storage area	Notify Environmental Affairs in writing before moving, modifying, or closing a container storage area.
Add a new employee or change an existing employee job responsibility	Conduct and document the initial training for the <90-day container storage area.
<i>Satellite accumulation area</i>	
Maintain <55 gallons of hazardous waste or <1 quart P-listed waste	Manage the storage area as a satellite accumulation area.
Reach 55 gallons of hazardous waste or >1 quart P-listed waste	<ul style="list-style-type: none"> • Remove the excess within 3 days. • Comply with the container maintenance requirements for a satellite accumulation area.
Are opening a new satellite area	Notify Environmental Affairs in writing to open a satellite area.
<i><90-day container storage area</i>	
Store waste in a <90-day container storage area	Comply with the container maintenance requirements for a <90-day container storage area.
Spill material in/from a <90-day container storage area	Report it to Environmental Affairs and the Shift Superintendent.
<i>Non-hazardous waste storage area</i>	
Are storing non-hazardous waste	Comply with non-hazardous waste container storage requirements.

Section B

Satellite Accumulation Areas

Overview

Introduction This section provides the requirements for a satellite accumulation area for waste storage.

In this section This section covers these topics:

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Response to a Leak or Spill	18
General Description Operating Plan [NA]	20
Personnel List/Job Descriptions [NA]	21
Training Plan and Records [NA]	22
Contingency Plan [NA]	24
Inspection Schedule/Corrective Actions [NA]	27

Container Requirements

Introduction	This topic provides the requirements for containers in the satellite accumulation areas.
Waste compatibility	<p>The unit must</p> <ul style="list-style-type: none">• Ensure all waste and materials placed in a container are compatible with each other and with the container's material of construction• Confirm the absorbent material, if needed, is compatible with the waste to be absorbed
Decontamination	<p>If the container held an incompatible waste or material Hazardous waste, the container must be decontaminated before the waste can be placed in the container.</p> <p>Exceptions: The decontamination is not required if mixing and commingling does not:</p> <ul style="list-style-type: none">• Generate extreme heat or pressure, fire or explosion, or violent reaction• Produce uncontrolled toxic, mists, gases• Produce uncontrolled flammable fumes or gases• Damage structural integrity• Threaten human health or the environment by other means
Labeling	<p>The unit labels each container as follows:</p> <ul style="list-style-type: none">• The words "HAZARDOUS WASTE" or a description of the actual contents go on the outside of the container.• The words can be handwritten in permanent marker or paint pen or can be stenciled.
Condition of containers	<p>The unit must maintain the containers as follows:</p> <ul style="list-style-type: none">• The container must be<ul style="list-style-type: none">– Clean (no waste or other materials on the outside of the container or lid) and free of leaks<p>Leak or spill: For instructions, see Response to a Leak or Spill.</p>– Closed except when adding or removing waste <ul style="list-style-type: none">• If a funnel is used to add the waste, the funnel must be covered or sealed.• Lids must be in place on the containers or drums but not necessarily completely sealed.

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Container Requirements, Continued

Changing a label

Labels should not be covered with spray paint or other labels.

- The labels should be X-ed out so that it is still readable.
- Appropriate notes explaining the reason for X-ed labels should be written on the inspection form.

Reason: The use of spray paint could make it look like the waste was re-dated.

Portable container

A container would not be portable if the waste could not be transported to the treatment/disposal area in that same container.

Example: A liquid dumpster is hard-piped from the process and a fence erected so the dumpster cannot be moved. This unit would be considered a tank. Hard piping to dumpsters can be done as long as the system is designed for the routine disconnection and transport of the container.

Dating the container

Date a satellite accumulation container as follows:

- Before the container is moved to a container storage area
Example: To a <90-day, permitted
- Before it is shipped for disposal
- When 55 gallons is reached

Dating the container

Use this table to date the waste container:

If a container is moved from a satellite area ...	Then date the container ...
To a <90-day storage area before 55 gallons of hazardous waste (or 1 quart of acutely hazardous waste) is collected	Before it is moved to the <90-day container storage area
Both <ul style="list-style-type: none"> • Directly to treatment or disposal AND • 55 gallons of hazardous waste (or 1 quart of acutely hazardous waste) is not reached 	Before it is moved to the treatment or disposal facility
After the quantity (see definitions) of hazardous waste is >55 gallons (or >1 quart of acutely hazardous waste) Important: The container(s) MUST be moved to a <90-day container storage area or treatment or disposal facility within 3 days.	When 55 gallons of hazardous waste (or 1 quart of acutely hazardous waste) is reached

Response to a Leak or Spill

Introduction This topic provides the policy and procedure for responding to a leak or spill in the satellite accumulation area.

Policy All employees must comply with the requirements for responding to a leak or spill from a container.

Responding Follow these steps to respond to a leak or spill in a satellite area:

Step	Action						
1	Stop adding hazardous waste immediately.						
2	Report to the Shift Superintendent and Environmental Affairs immediately so that agency notifications can be made.						
3	Is the spill or leak less than 1 pound and immediately contained and cleaned up? <ul style="list-style-type: none"> • If yes, go to the next step. • If no, notify the owner/operator. 						
4	Conduct a visual inspection immediately to determine the cause of the release.						
5	Use this table to prevent further migration of the leak or spill and remove and dispose of any visible contamination: <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>If the release ...</th> <th>Then ...</th> </tr> </thead> <tbody> <tr> <td>Is from a container to the environment</td> <td>Within 24 hours, remove as much waste as necessary to prevent further release.</td> </tr> <tr> <td>Was to the containment system</td> <td>Remove all released materials within 24 hours to prevent harm to human health and the environment.</td> </tr> </tbody> </table>	If the release ...	Then ...	Is from a container to the environment	Within 24 hours, remove as much waste as necessary to prevent further release.	Was to the containment system	Remove all released materials within 24 hours to prevent harm to human health and the environment.
If the release ...	Then ...						
Is from a container to the environment	Within 24 hours, remove as much waste as necessary to prevent further release.						
Was to the containment system	Remove all released materials within 24 hours to prevent harm to human health and the environment.						

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Response to a Leak or Spill, Continued

Responding (continued)

Step	Action						
6	Use this table to clean up a leak or spill from a container: <table border="1"><thead><tr><th>If ...</th><th>Then ...</th></tr></thead><tbody><tr><td><ul style="list-style-type: none">• The source was a spill• The container is not damaged</td><td>Have the owner/operator return the container to service</td></tr><tr><td><ul style="list-style-type: none">• The source was a leak from the container• The material has leaked into the containment only</td><td>Repair or replace the container before returning it to service</td></tr></tbody></table>	If ...	Then ...	<ul style="list-style-type: none">• The source was a spill• The container is not damaged	Have the owner/operator return the container to service	<ul style="list-style-type: none">• The source was a leak from the container• The material has leaked into the containment only	Repair or replace the container before returning it to service
If ...	Then ...						
<ul style="list-style-type: none">• The source was a spill• The container is not damaged	Have the owner/operator return the container to service						
<ul style="list-style-type: none">• The source was a leak from the container• The material has leaked into the containment only	Repair or replace the container before returning it to service						
7	Submit a written report via Environmental Affairs to the agencies within 30 days of detecting a release if there has been a release >1 pound to the environment.						

Report contents

The report must include:

- Likely route of migration of the release
 - Characteristics of surrounding soil
 - Results of monitoring or sampling associated with the release
 - Proximity of down gradient drinking water, surface water and population areas
 - Description of response actions taken or planned
-

Section C

<90-Day Container Storage Areas

Overview

Introduction This section provides the guidelines and requirements for <90-day container storage areas.

In this section This section covers these topics:

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Closure Requirements [NA]	28

Storage at a <90-Day Container Storage Area

Purpose Waste in a satellite accumulation area must be moved to a <90-day container storage area at these times:

- The waste has been stored a maximum of 3 days.
- The quantity reaches 55 gallons of hazardous waste *without a permit*.

Within 90 days, the waste must be moved to an authorized treatment, storage, or disposal facility.

Containment requirements There are not any regulatory requirements for containment (concrete base, curb, roof, etc.) of <90-day container storage areas.

It is *recommended* that the containers be stored in areas that minimize the potential impact to soil, ground water, and surface water. Containment structures best meet this recommendation.

Area arrangement Maintain adequate aisle space for emergency response and inspection purposes.

- Maintain aisle space
 - Minimum space of 18 inches
 - Recommended space of 24 inches
- Store 4 drums per pallet with labels clearly visible.

Within 90 days Within 90 days of filling the container

- Remove containers from the storage area and keep proper documentation.
- Move containers to a permitted treatment, storage, or disposal facility.

Record retention The record retention for the inspection of safety equipment around a <90-day container storage area is three years plus current.

Quantities The total quantity of hazardous waste must always be <55 gallons (or <1 quart of a P-listed waste).

When the maximum quantity of hazardous waste is reached, the waste must be removed to a permitted treatment, storage, or disposal facility.

Keeping the area open When deciding whether to keep an area open or close it, consider the following:

- A container storage area does not always have to be storing hazardous waste, but in order to store hazardous waste, it **MUST** be on the plant-wide list.
- If there is a chance the storage area might be used in the future, do not have it removed from the list.

Setting up and Maintaining the Storage Area

Introduction This topic describes the process of setting up and maintaining a <90-day container storage area.

Unit responsibilities You have these responsibilities for the waste storage area:

- Report the total volume of hazardous waste stored in the storage area annually to Environmental Affairs by January 7 of the following year.
Result: This information is reported to TNRCC on the facility annual report.
- Inspect the storage area at least once weekly.
Reference: See [Inspection Schedule/Corrective Actions](#) for more information.
- Conduct and document required training, both introductory and annual
Reference: See [Training Plan and Records](#) for more information.

Notification Notify Environmental Affairs in writing before:

- Removing the unit
- Establishing a new satellite accumulation area
- Modifying an existing storage area, including changing
 - The container storage area dimensions
 - The location of the area
 - The waste stored in a container storage area
 - The service
- Closing an existing container storage area
Time requirement: Environmental Affairs must notify TNRCC at least 90 days before beginning the closure.
Reasons:
 - Environmental Affairs must maintain an accurate plant-wide list and make it available to the TNRCC.
 - TNRCC has specific notification requirements that must be followed before storing hazardous waste in a container storage area.

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Setting up and Maintaining the Storage Area, Continued

Requirements to close Notify Environmental Affairs in advance so that a closure procedure can be written and submitted to the TNRCC.

- There is a 10-day waiting period before the implementation of the closure procedure.
- The procedure consists of disposing of all waste, rinsing the slab, and analysis of the rinsate.
- If the area is on dirt, the dirt must be sampled.
- Documentation of the closure activities must then be sent to the TNRCC.
- The area must continue to be ***inspected weekly*** until notification is received from the TNRCC, even if no waste is present.

Documentation: unit You must prepare and maintain the following required documentation:

- General Description
- Training Plan and Records
- Inspection Schedule and Records
- Personnel List/Job Descriptions

Important: You must complete the documentation before storing the waste.

Documentation: Environmental Affairs Environmental Affairs must prepare and maintain the following required documentation:

- Contingency Plan
- Personnel Training Plan
- Closure Plan
- Inspection Schedule

Inspections Inspect the container storage area and document the inspection at least once weekly.

Reference: See the topic [Inspection Schedule and Corrective Actions](#) later in this section.

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Setting up and Maintaining the Storage Area, Continued

Process

This table describes the process of setting up and maintaining a waste storage area:

Stage	Description
1	The unit <ul style="list-style-type: none">• Notifies Environmental Affairs of the need or change for waste storage• Prepares their required documentation of the waste storage Reference: See Documentation: Unit above for the required documentation.
2	Environmental Affairs prepares required documentation of the waste storage. Reference: See Documentation: Environmental Affairs above for the required documentation.
3	The unit <ul style="list-style-type: none">• Labels the container• Collects the waste in the container
4	The unit inspects and documents the storage area each week.
5	The unit reports a total volume of hazardous waste stored in the container storage area to Environmental Affairs by January 7 of the following year.

Continued on next page

Container Requirements

Introduction This topic provides the requirements for containers in the <90-day container storage areas.

Waste compatibility You must

- Ensure all waste and materials placed in a container are compatible with each other and with the container's material of construction
- Confirm the absorbent material, if needed, is compatible with the waste to be absorbed

Decontamination If the container held an incompatible waste or material Hazardous waste, the container must be decontaminated before the waste can be placed in the container.

Exceptions: The decontamination is not required if mixing and commingling does not:

- Generate extreme heat or pressure, fire or explosion, or violent reaction
 - Produce uncontrolled toxic, mists, gases
 - Produce uncontrolled flammable fumes or gases
 - Damage structural integrity
 - Threaten human health or the environment by other means
-

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Container Requirements, Continued

Ignitable/ reactive waste storage

When storing ignitable, incompatible, or reactive wastes:

- Store or treat the wastes in such a way that they are protected from any material or conditions that may cause them to ignite or react.
 - Segregate them from materials to which they are incompatible or reactive.
 - Separate them and protect them from sources of ignition or reaction, including but not limited to:
 - Open flames
 - Smoking
 - Cutting and welding
 - Hot surfaces
 - Frictional heat
 - Sparks (static, electrical, or mechanical)
 - Spontaneous ignition
 - Example:** From heat-producing chemical reactions
 - Radiant heat
 - Confine smoking and open flame to specially designated locations.
 - Place conspicuous No Smoking signs wherever there is a hazard from ignitable or reactive waste.
 - Place containers holding ignitable or reactive waste at least 15 meters (50 feet) from the facility property lines.
-

Labeling

Label each container as follows:

- Write the words “HAZARDOUS WASTE” and the date on the outside of the container as soon as waste is placed into the container.
 - Keep the label clearly marked and visible for inspections.
-

Condition of containers

Maintain the containers as follows:

- The container must be
 - Clean with no waste or other materials on the outside of the container or lid
 - Free of leaks
 - Leak or spill:** For instructions, see [Response to a Leak or Spill](#) later in this section.
 - Closed except when adding or removing waste
 - If a funnel is used to add the waste, the funnel must be covered or sealed.
 - Lid must be in place on the container or drum but not necessarily completely sealed.
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Map not available