



# 99 CES Hazardous Waste Training



**99 CES/CEIEC**

This Briefing is:  
**UNCLASSIFIED**

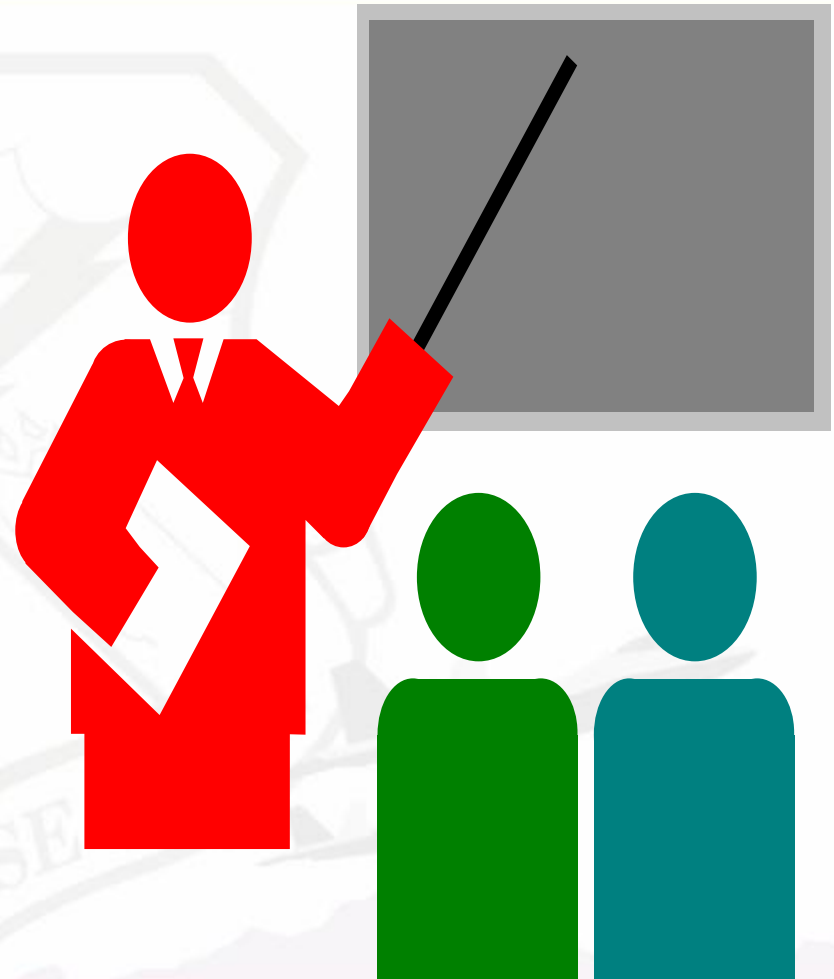
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# Hazardous Waste - Agenda

## Class Structure AGENDA

- ➡ Laws/Regulations
- ➡ RCRA overview
- ➡ Waste Management
- ➡ IAP Management
- ➡ Universal Waste
- ➡ Container Management
- ➡ Waste Turn-in Procedures
- ➡ Records Management
- ➡ P2/Waste Minimization
- ➡ Spill Response
- ➡ Reclaimable/Recyclable Materials



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# Hazardous Waste - Goals

## Why we are here:

- ☞ ESOHTN is down
- ☞ Annual training required for IAP/UWCC Managers

There are three (3) required training modules:

- 1) Hazardous Waste Initial Accumulation Point Manager
- 2) Hazardous Waste Management
- 3) Waste Management Guidelines





# Federal and State Hazardous Waste Laws

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- On the federal level, hazardous waste is managed under the Resource Conservation and Recovery Act (RCRA)
- Nevada Division of Environmental Protection (NDEP) Bureau of Waste Management is responsible for enforcing hazardous waste laws in Nevada
  - Nevada adopts by reference, with certain modifications, Federal hazardous waste regulations
  - To remain authorized, the hazardous waste program must periodically update the existing state regulations to reflect changes approved by the USEPA



# Federal and State Laws/Regulations

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- **Regulatory Guidance:**

- Title 40 of the Code of Federal Regulations (CFR), Parts 260 through 299
- Nevada Revised Statute (NRS) 459.400



# Local Regulations

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- **Regulatory Guidance:**

- AFI 32-7042, Waste Management
- NAFB Plan 12, Hazardous Waste Management Plan
- NAFB Plan 19-1, Facility Response Plan
- NAFB Plan 19-14, Petroleum Product Management Plan

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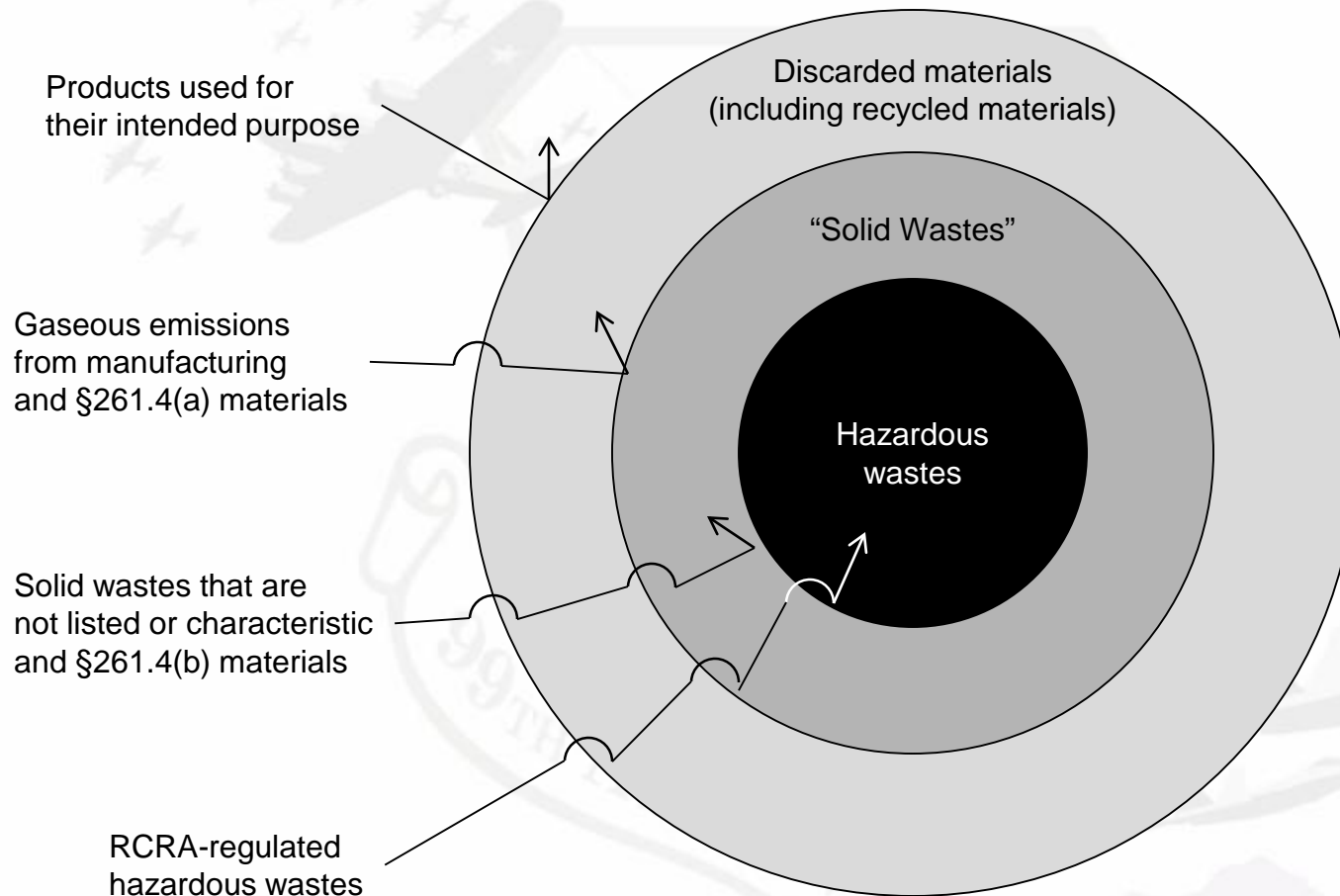
# General Hazardous Waste Requirements

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- The hazardous waste regulations require you to determine if something you throw away is hazardous. This is known as doing a hazardous waste determination
- ***Hazardous waste CANNOT be disposed of in the following ways:***
  - on or in the ground
  - in local landfills
  - in septic tanks or injection wells
  - down the sink or drains
- The generator of hazardous waste (the base) is ultimately responsible for the waste from "cradle to grave," and can be held liable for improper management of hazardous waste



# Universe of Wastes



Source: McCoy and Associates, Inc.

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# Hazardous Wastes

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- **Discarded Material** – Abandoned, Recycled, Inherently waste-like, or Military Munitions
- **Solid Waste** – A Discarded Material.
  - Can be solid, liquid or gas
- **Hazardous Wastes** – some paints, solvents, rags, filters



# Hazardous Wastes (con't)

## ■ “Listed” Hazardous Wastes

- Non-specific (F) –solvent rags
- Specific waste streams (K)
- Commercial chemical (P,U)
- Off-spec materials (P,U)



# Hazardous Wastes (con't)

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## ■ “Characteristic” Hazardous Wastes

- Ignitable (D001) Flash point 140° or below-one drop of liquid
- Corrosive (D002) < 2 ph or > 12.5 ph
- Reactive (D003) DOT explosive, Aerosol cans
- Toxicity (D004-D043) Rags, filters, MEK , Metals

## ■ Non-Empty Containers

## ■ Spill Residue



# Hazardous Waste Exemptions

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- **Recyclable Materials** – Anti-freeze, used oils, scrap metal
- **Universal Wastes** – batteries, fluorescent lamps, pesticides, mercury thermostats



# Documentation

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- **Testing (Laboratory analysis)**
  - Permanent record
  - Annually
- **Product Knowledge**
  - Material Safety Data Sheets (MSDS)
  - Process certification (logbook) paint shop
  - Process control
- **Mixture of Listed hazardous waste and solid waste is always hazardous**
  - Spill residue (soil, rags, etc) from Brake Kleen (Toluene), Camel tire patch (Methylene Chloride)



# Waste Management

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## Option #1

- Immediately turn in wastes to 90/180-day yard.

## Option #2

- Manage onsite: UWCC, IAP



# Initial Accumulation Point (IAP)

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**What's a IAP?**  
**a.k.a. Satellite Accumulation**

- **Allowed by RCRA**
- **A collection point for hazardous waste at or near the point of waste generation**
- **Collect up to 55-gallons of waste**



# IAP (con't)

- **Continuity Binder**
- **Authorization Form**
- **Appointment Letter**
- **Manager and Alternate(s) Training**
- **Signs – “Initial Accumulation Point”, “Hazardous Waste”, “No Smoking”**
- **Weekly Inspections**
- **No limit on accumulation time**





# IAP Container Management

- **Container closed except when adding waste.**
- **Container Labeling:**
  - ✓ The words “HAZARDOUS WASTE”
  - ✓ A brief, generic description of the waste (i.e., “Sandblast Media”)

A rectangular label with a thick red border. At the top, the words "HAZARDOUS WASTE" are printed in large, bold, white capital letters. Below this, the word "ACCUMULATION" is printed in bold black capital letters. Underneath "ACCUMULATION", the words "START DATE" are printed in bold black capital letters, followed by a horizontal line for writing. Below the "START DATE" line, the word "CONTENTS" is printed in bold black capital letters, followed by a horizontal line for writing. In the center of the label, the words "HANDLE WITH CARE!" are printed in bold black capital letters. Below this, the words "CONTAINS HAZARDOUS OR TOXIC WASTES" are printed in bold black capital letters. At the bottom left of the label, the text "Lab Safety Supply Inc." is printed in small black font. At the bottom right of the label, the text "Reorder No. 620" is printed in small black font.

- **No date until full.**



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# Universal Waste Collection Center (UWCC)

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- **Lamps**
- **Batteries (NiCad, Lithium, etc.)**
  - NOT Alkaline
- **Mercury Containing Manufactured Articles**
- **Certain Pesticides**

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# Universal Waste Collection Center (UWCC)

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- **UWCC Authorization Form**
- **Appointment Letter**
- **Manager and Alternate(s) Trained (annually)**
- **Sign – “Universal Waste Collection Center”**
- **Cannot store for more than nine (9) months**
- **No weekly inspections**



# UWCC Container Management

- Closed, non-leaking containers
- Containers must be labeled correctly
  - e.g., “Universal Waste – Batteries, “Waste Lamps”
- **The date that the first waste went into the box must be on the container**

A purple rectangular label with white text. The top half has the words "UNIVERSAL WASTE" in large, bold, white capital letters. Below this, there are five lines of text, each followed by a horizontal line for writing: "CONTENTS", "ACCUMULATION START DATE", "SHIPPER", "ADDRESS", and "CITY, STATE, ZIP". At the bottom left, in small white text, is "Lab Safety Supply Inc.". At the bottom right, in small white text, is "Reorder No. 42109".

**UNIVERSAL  
WASTE**

CONTENTS \_\_\_\_\_

ACCUMULATION START DATE \_\_\_\_\_

SHIPPER \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY, STATE, ZIP \_\_\_\_\_

Lab Safety Supply Inc. Reorder No. 42109

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# Fluorescent Lamps

## Fluorescent Lamps:

- Mandatory policy to purchase low-mercury fluorescent lamps; green tipped and/or green writing (US manufacture)
- High-mercury lamps; silver tipped
- **BEWARE of foreign-made green tips!** Manage as silver tipped.

## Disposal:

- Green Tip lamps should be discarded in the dumpsters as normal waste
- Silver Tip lamps are managed as universal waste
- Mismanagement of disposing high-mercury fluorescent lamps can result in EPA fines of up to \$37,500 per day for each violation



# Broken Fluorescent Lamps

## Broken Fluorescent Lamps:

- Ventilate the area.
- Wear appropriate PPE. e.g., gloves, safety glasses
- On hard surfaces wipe the area with a damp cloth, place that in the plastic bag and seal it.
- Sticky tape (e.g. duct tape or similar) can be used to pick up small residual pieces or powder from soft furnishings and then placed in a sealed plastic bag.
- The plastic bag doesn't need to be air tight, but should be reasonably sturdy. Place it in another, similar bag and seal that one as well (again, this minimizes cuts from broken glass).

## Disposal:

- Dispose broken lamps at the local CAP.



- 652-xxxx – Nellis
- 404-xxxx – Creech
- ✓ Complete AF 2005
- ✓ MSDS

AF 2005, 20080828, V4

PREVIOUS EDITION WILL BE USED





# Records Management

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- **Keep all records for at least three (3) years. Even after the IAP/UWCC is closed.**
- **AF 2005**
- **Weekly inspections**
- **Training certificates**



# P2/Waste Minimization

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- Fill the containers before calling for pickup.
- Question Hazardous Waste personnel on validity of accumulation.
- **YOU are responsible for the contents of your waste containers!**



# Sampling

**Notify HW personnel if there is a change:**

- **Material**
- or**
- **Processes**

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# Spill Equipment

**Appropriate for types of waste managed.**

- **Liquid or Solid?**
- **Mercury cleanup kit**
- **Absorbent material e.g., booms/pads**
- **Dust broom**



# Personal Protective Equipment (PPE)

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**Appropriate for types of wastes managed.**

- **Gloves**
- **Face shield**



# Spill Response

**➡ See NAFB Plan 19-1 ⬅**

- Use PPE
- Contain/Clean up if safe.

**DO NOT WASH DOWN SEWER/DRAIN  
WITHOUT PERMISSION OF 99 CES/CEIE!**

- Contact Fire Department for Emergency Response.
- **911 or 652-xxxx**



# Spill Response (con't)

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- **Notify HW personnel of all HW spills.**
  - 90/180 Site
  - Spill Phone: **702-277-xxxx**
- **Replace used Spill Kit materials**
- **See NAFB Plan 19-1**



# Reclaimable /Recyclable Materials

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- **USED OIL**
- **Lead-Acid Batteries**
- **Scrap Metal-Fuel filters**
- **Antifreeze**
- **Reclaimable Fuels**
- **Aerosol Cans**

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# Used Oil

- **Approved containers?**
- **Labeled “USED OIL”**
- **Do not mix with Hazardous Waste**
- **Weekly inspections**
- **Sampled**
- **90/180 day site for Recycling**



# Lead-Acid Batteries

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- **Exemption for Hazardous Waste**
- **Taped terminals**
- **No cracked or broken batteries**
- **Recycle at Nellis Recycle Center**
  - B-461
  - 652-xxxx



# Scrap Metal

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- **Label container “Scrap Metal”**
- **Used fuel filters - scrap if all metal**
- **Used ether cylinders**
- **Used lead tire weights**
- **Soldering wastes**



# Antifreeze

- **Stored in approved containers**
- **Labeled as “USED ANTIFREEZE”**
- **DO NOT mix with hazardous waste**
- **Weekly inspections documented?**
- **Recycling Log**



# Aerosol Cans

- **Accumulate in closed-top container**
- **Evaluate at 90/180 day site**
- **Puncture and recycle cans**





# Questions/Issues?



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# Environmental Training

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- **Please use the information we provided you during this training session to comply with environmental issues that you deal with on a daily basis!**

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