

Load Checking Training & Case Studies

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2007



Load Checking

- What is it?
- Why look?
- What to look for?
- What do you do with it?



Load Checking Definition

(NOT REGULATORY DEFINITION)

- A best efforts program to prevent hazardous and other prohibited materials from being accepted at a solid waste facility or operation
- Also known as
 - Waste screening
 - Hazardous waste exclusion



Load Checking Fundamentals

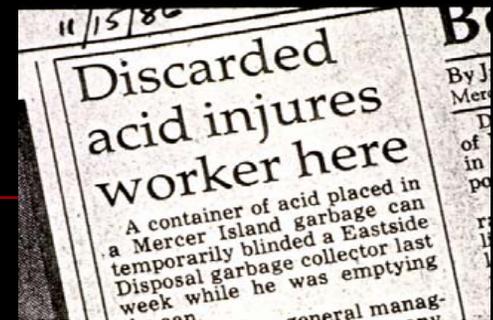
- Best efforts to prevent prohibited wastes
- Occurs throughout the facility
- Is visible to customers
- Cannot find everything
- Cannot check every load
- Inform customers of their responsibility
- Do not confront customer
- ***Ensure your safety***



Why look?

- Protect employees and public
- Environmental protection
- Protect equipment
- It's the law – RCRA, CERCLA

California



Load Checking Regulatory Requirements

- **Written program**
- **Detecting and preventing disposal**
- **Random inspection (TS need #)**
- **Records of inspection**
- **Training**
- **Notification**
- **Storage of prohibited wastes**
- **Signage (LF)**



Landfill Regulations



**RCRA 40 CFR Sec. 258.20 &
Title 27 §20870.CIWMB - Hazardous Wastes.**

“(a) Owners or operators of all MSWLF units must implement a program at the facility for detecting and preventing the disposal of regulated hazardous wastes as defined in part 261 of this chapter and polychlorinated biphenyls (PCB) wastes”

[Only RCRA and PCB = Federal Hazardous Waste
Household hazardous waste exempt in other states]

Transfer Stations

Title 14 §17409.5. Loadchecking.

“(a) The operator of an attended operation or facility shall implement a loadchecking program to prevent the acceptance of waste which is prohibited by this Article. “

Transfer Stations also need to document the number of loads checked.



Other Requirements

- CEQA
- Use permits
- Waste discharge requirements
- DTSC
 - EPA identification number
 - Universal waste handler notification
- Cal/OSHA

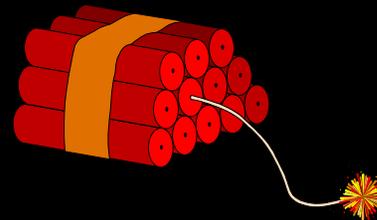
Prohibited Wastes

- Hazardous waste
- Designated waste
- Medical waste
- Radioactive
- Universal waste
- aka PROHIBITED WASTES



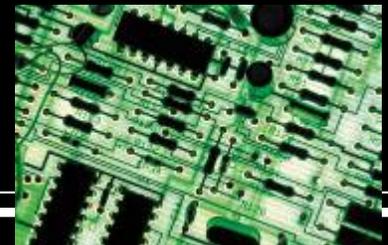
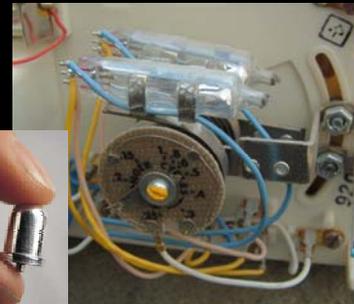
Hazardous Waste

- Flammable
- Poison/Toxic
- Corrosive
- Reactive



Universal Waste

- **"Universal waste" means a hazardous waste identified as a listed universal waste and is exempt from hazardous waste management requirements and, therefore, are not fully regulated as hazardous waste.** [Health & Safety Code → 25123.8, CCR Title 22, →66261.9]
- Fluorescent lights
- Batteries, dry cell
- CRTs
- Consumer electronic devices (CED) E-waste
- Mercury devices
- Aerosol cans



Electronics DTSC tested hazardous

- Microwave ovens,
 - VCRs,
 - Printers,
 - CPUs,
 - Cell phones,
 - Telephones, and
 - Radios
- Lead (also is an appliance)
 - Antimony, Copper, Lead
 - Antimony, Copper, Lead
 - Antimony, Copper, Lead
 - Sb, Cu, Pb, Chromium, Nickel
 - Antimony, Copper, Lead
 - Antimony, Copper, Lead



After the Sunset U-Waste Exemption Expired

- Household & Small Quantity

Temporary disposal exemption for batteries, thermostats, consumer electronic devices (CED), and lamps sunsets

Sunset 2/8/2006



Federal Prison, Texasiana, TX, UNICOR Recycling Business Group, Laptops, surge protectors, batteries, and other discarded electronic equipment.
Photo by Stephen Roland, Environmental Dynamics Ph.D. Program, University of Arkansas, July 8, 2004.

Universal Waste Concepts

- Must be sent for recycling otherwise it must be treated as hazardous waste
- Allowed exemptions from:
 - EPA Identification Number
 - Hazardous Waste Manifest
 - Hazardous Waste Transporter
 - TSDF
 - Storage
- Limitations on export – notifications and consent
- Spills require cleanup



Designated Waste

- Hazardous waste with variance
- Impacts water quality
- Waste varies by landfill
- e.g. contaminated soil,
sandblasting sand

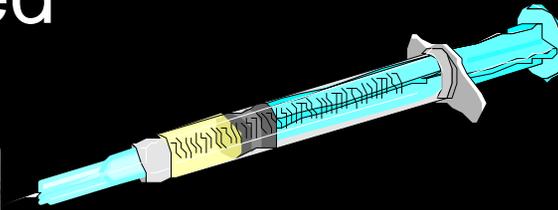


Medical Waste

- Regulated
- Non-regulated



Inside Red Bag



Radioactives



- Natural and manmade sources
- Some smoke alarms, mantles, medicine
- Photo = fiesta ware plate, radioactive rocks, heliarc welding rods, and KCl salt substitute
- Decommissioned wastes
- SWRCB landfill study - tritium



AB 2277 (Dymally)

- After January 1, 2006, a person who transports, delivers, or sells discarded major appliances to a scrap recycling facility must provide evidence that the person is a certified appliance recycler
- Also requires removal hazardous wastes from major appliances in which they are contained **before the appliance is crushed, baled, shredded, sawed or sheared apart, disposed of, or otherwise processed to prevent release**
- Removal to include:
 - Refrigerants (CFCs, HCFCs)
 - Used oil
 - Mercury switches
 - PCB or DEHP capacitors
 - Any other regulated hazardous waste





AB 1353 (Matthews) Treated Wood Ban

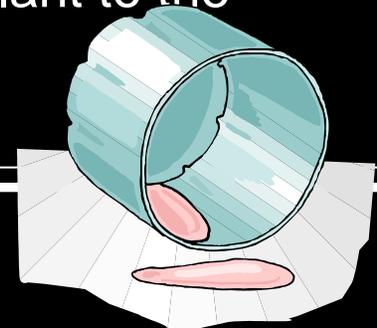
- Treated wood is wood treated with a chemical preservative to protect against attacks from insects, microorganisms, fungi, and other environmental conditions that can lead to the decay of the wood and the chemical preservative is registered under FIFRA.
- On January 1, 2005 all existing variances were inoperative.
- Emergency regulations require treated wood waste to be disposed of in either a class I hazardous waste landfill or in a composite-lined portion of a solid waste landfill unit that accepts designated wastes or treated wood is specifically listed in the WDR



“Empty” means:

- No hazardous material can be poured or drained ... when the container or inner liner is held in any orientation (e.g., tilted, inverted, etc.)
- No hazardous material remains in or on the container that can feasibly be removed by physical methods (A thin uniform layer or dried material or powder is considered acceptable)
- Emptied household hazardous material and pesticide container, of five gallon or less in capacity
(Not including used oil filters and PCB containers)
- A compressed gas cylinder is exempt from regulation ... when the pressure in the container approaches atmospheric pressure.
- Aerosol containers are exempt from regulation ... if the aerosol container was emptied of the contents and propellant to the maximum extent practical under normal use

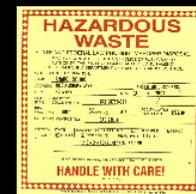
CCR Title 22, §66261.7. Contaminated Containers.



Identifying prohibited wastes

■ Labels

- D.O.T.
- Hazardous waste
- N.F.P.A.



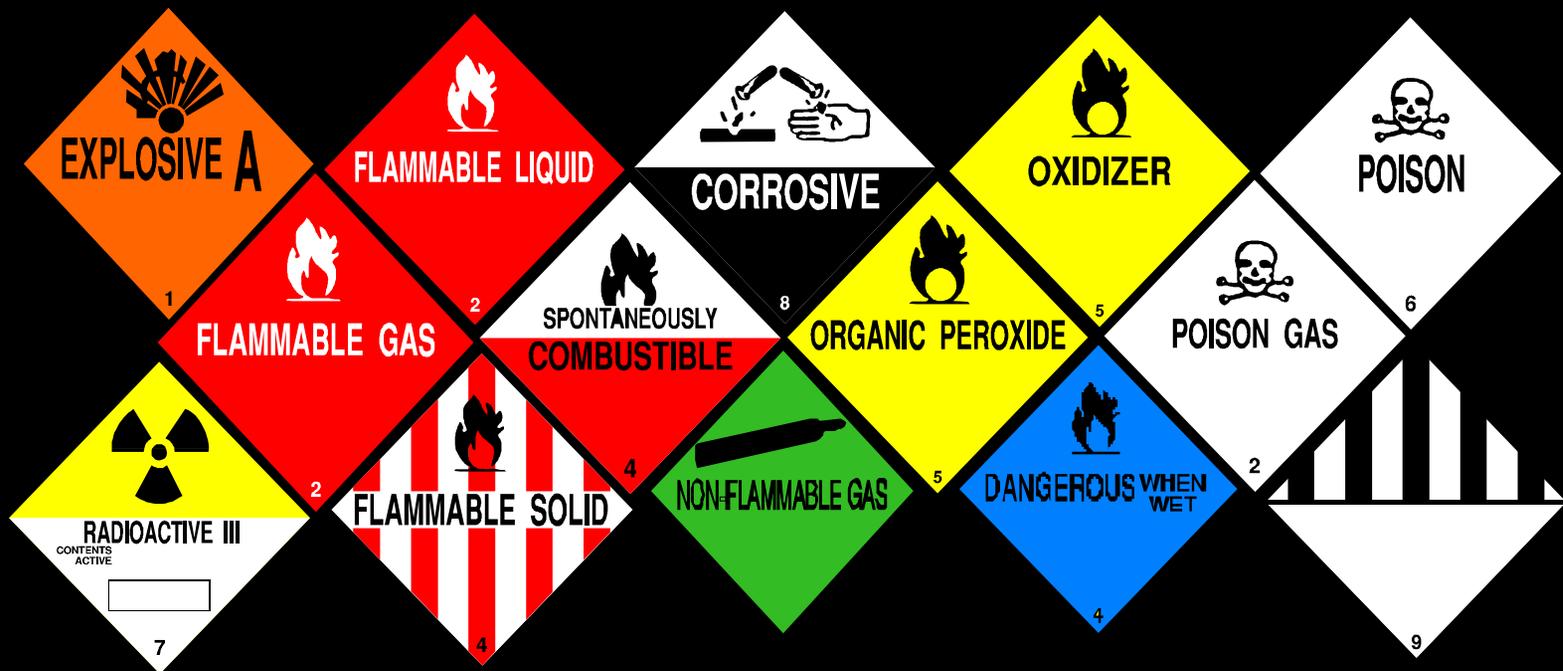
■ Signal words

■ Containers



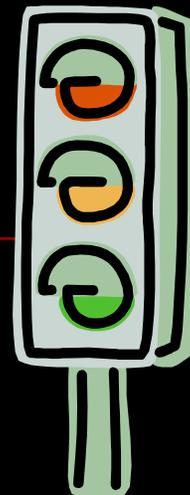
DOT Label

- The various Department of Transportation (DOT) Labels for hazardous materials shipments look like this:



Signal Words

- Signal words (warnings listed on the container label) can assist with identification of a chemical and provide important clues for compatible storage of that container.
- Common signal words include:
 - “Flammable”
 - “Keep away from flames”
 - “Causes burns”



Dangerous Containers



Picric acid crystals
Highly unstable!



Other Containers



PUTZNIK'S WORLD-FAMOUS

BULLSHIT PELLEN

TRADE
MARK



Net Contents 5 Ounces

Prevent and Cure Chronic Bullshit

- "Tail Swagging"
- Political Discussions
- Heart-Rending Speeches

CONTENTS UNDER PRESSURE. KEEP OUT OF REACH OF CHILDREN. SEE BACK PANEL.

What's in here #1?



What's in here #3?



5

What's in here #4?



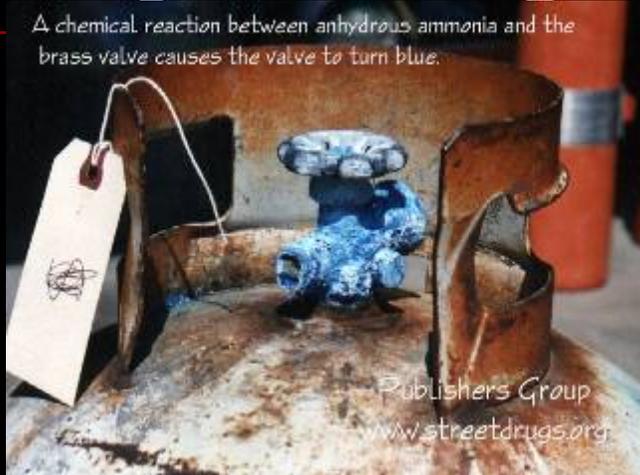


Brown Vapor



Drug Lab Equipment

A chemical reaction between anhydrous ammonia and the brass valve causes the valve to turn blue.



Publishers Group
www.streetdrugs.org

Red Phosphorus



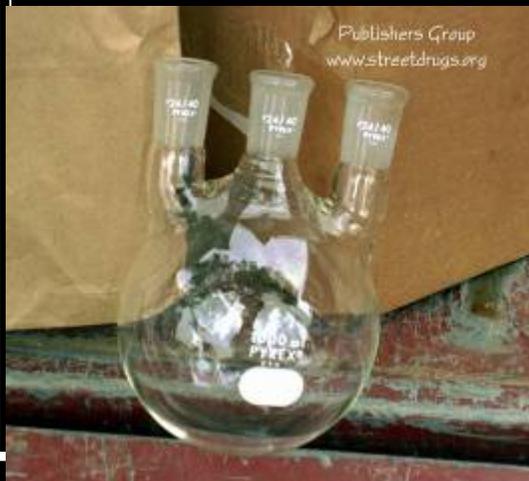
Copyright 2002 Publishers
www.streetdrugs.org

This device is used to "pin out" methamphetamine from solution, the last step in the meth production process.



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What symbol is this?



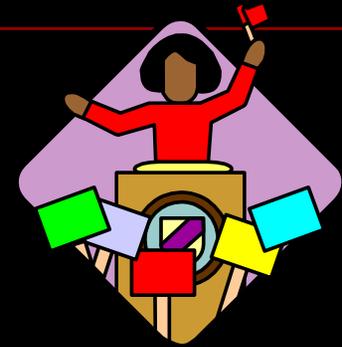
Program Components

- Customer notification/education
- Site surveillance
- Waste inspection
- Documentation
- Documentation
- Documentation



Customer Notification/Education

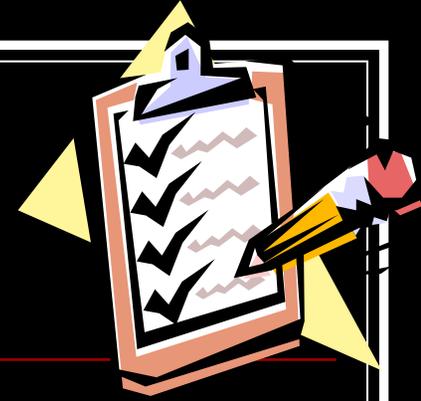
- Flyers
- Container labels
- Signs
- Assisted by household hazardous waste programs



Load Selection



- There are a variety of ways to select a load for inspection
 - Some facilities use a random number generator based on a statistically significant sampling
 - Some permits or local requirements impose a certain number of load checks per week or per ton
- The most important thing is that sufficient loads are inspected and the activity occurs in front of other customers so that they can observe the checking in process

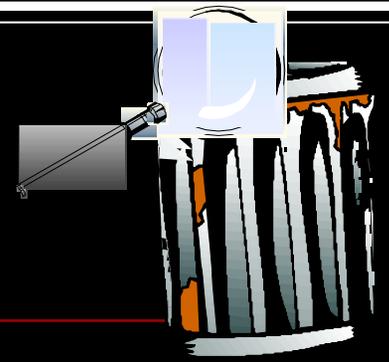


Site Surveillance

- Provides an overview of a majority of incoming wastes
 - Occurs at entrance or by equipment operator
 - Can occur at unloading area
- Only scans surface of load
- Conducted in seconds
- DOCUMENT



Waste Inspection

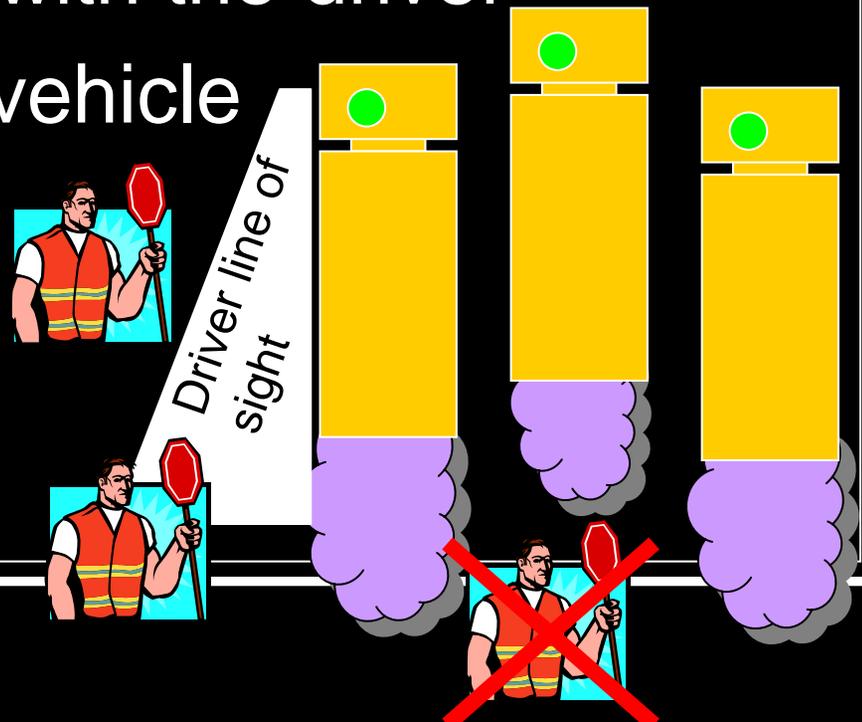


- More intense review of a select load
 - Open bags
 - Check most of load
- Frequency varies
- DOCUMENT



Inspection Location

- **SAFETY FIRST**
- Stay to the side of the vehicle
- Maintain eye contact with the driver
- Do not approach the vehicle until unloading is complete



Waste Inspection Procedures



- Watch out for vehicles moving nearby
- Stay away from the back of the vehicle when the driver opens the back
- Attempt to examine the back of the load from a safe angle before the load dumps
 - If prohibited wastes are visible, you may need to instruct the driver that the load is unacceptable



Waste Inspection Procedures

- Request the driver to assist with spreading the load in a long windrow
- An ideal windrow is below shoulder height, so the materials will not fall on you



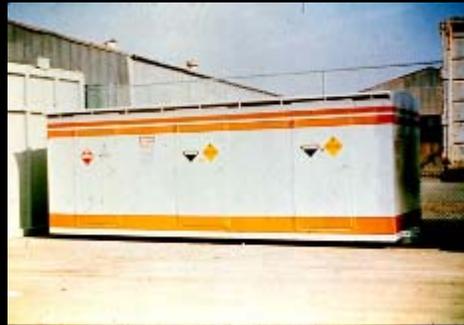
Dealing with Recalcitrant Customers

- Avoid confrontation
- Explain policy
- Document incident
- Refer to management & agency
- Establish relations with HazMat agency



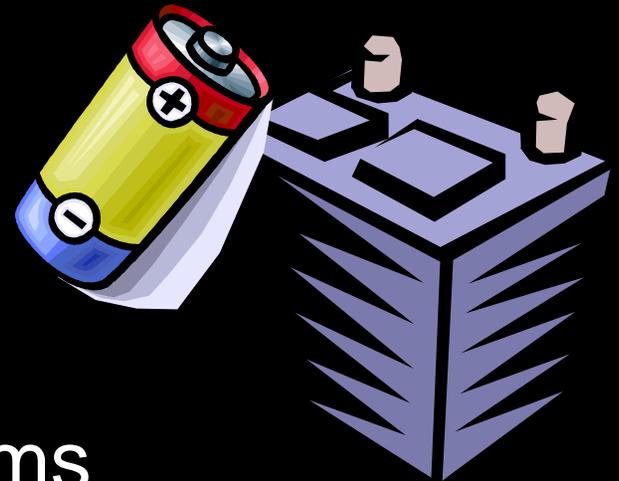
Prohibited Waste Handling Precautions

- Personal Protective Equipment
- Temporary waste holding area
- Transfer to secure storage locker
- Locker requirements



Storage Issues

- Avoid incompatible storage
 - Acid, base, flammable/neutral, oxidizer, other
- Permitting
 - Hazardous materials
 - Universal waste
- Storage time limit
- Reuse/material exchange
- Integrate with HHW programs



Record Keeping



- Documentation is a fundamental concept of an effective load checking program by demonstrating that:
 - The program actually is be implemented
 - Prohibited wastes are being directed away from the facility
 - Regulations are being followed
 - It is legally defensible
 - Liability from short and long-term incidents is being minimized

Documentation

- Permits/approvals
 - Solid waste facility permit
 - Waste discharge requirements
 - Tire program identification number
- Load checking records
- Customer notices
- Shipping records
- Incident log/records
- Training
- Copies of all documents should be available



Surveillance Form

Load Checking – Surveillance Form

Date: _____ Location _____ Load Checker _____ Page ___ of ___

	Time	Agency/Company	Vehicle/ Box #	Driver Name	Waste Source	Review of Load	Prohibited Waste Found	Action Taken	Notes
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									

Waste Source

1. Household
2. Commercial
3. Government
4. _____
5. Other

Review of Load

1. No prohibited waste found
2. Prohibited waste separated
3. Unable to separate prohibited waste
4. Discovered after the fact
5. Other

Action Taken

1. Entire load refused
2. Partial load refused
3. Prohibited waste held for follow-up
4. Unable to segregate prohibited waste

Notes

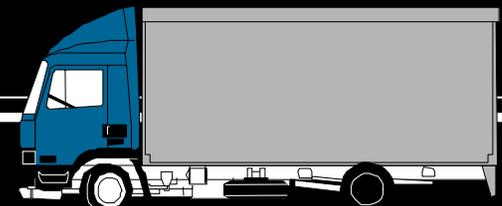
1. Generator unknown
2. Generator referred to hauler
3. Prohibited waste reported to agency
4. _____
5. Other

Incident log/records

- Records of any emergency or special incident will be maintained for at least 3 years, or for any other minimum retention period required under applicable law, whichever is longer.
- Incidents are required to be reported in a solid waste facility's log of special occurrences

Shipping records

- Various shipping records are used for removal of hazardous wastes including
 - Uniform hazardous waste manifest (e.g. pesticides)
 - A Bill of Lading (e.g. monitors, lead acid batteries)
 - Receipts (e.g. used oil)
- Anyone signing these shipping records needs to receive training in Department of Transportation requirements for transporting hazardous materials



Record Retention

■ Regulatory

- Load checking – no time set
- Incidents – 3 years
- Manifests – 3 years
- Bill of Lading – 375 days



■ Reality

- Forever

Evaluation Criteria

- Does the written program meet the regulatory requirements?
- Is it representative of current activities?
- Is it effective?
- Can you prove it (records, et.al.)?



Questions
&

Answers