

Brent Madho

Environmental Analyst 2

Waste Engineering & Enforcement Division

Brent.Madho@ct.gov

(860) 424-3092

Topics covered

- Inspections
- Universal Wastes (Demonstration of Hazardous waste management online training course)
- Used Oil
- Generator Closure
- Recycling

What do I Need to Inspect?

- Written Inspection Schedule
 - *Monitoring equipment*
 - *Safety equipment*
 - *Emergency equipment*
 - *Security devices*
 - *Operating & structural equipment*
 - *Containers, storage areas, & containment systems*
 - *Tanks & ancillary equipment*
 - *Loading & unloading areas*



What do I need to look for?

Here are some things to look for while performing inspections:

<p>1. Monitoring Equipment</p> <ul style="list-style-type: none">a. Liquid level alarms/metersb. Leak detection systemsc. Fire detection systemsd. Ground water monitoring system	<p>2. Safety Equipment</p> <ul style="list-style-type: none">a. Emergency showerb. Face shieldsc. Protective glovesd. Disposable respiratorse. First aid equipment/suppliesf. Protective clothingg. Air purifying respiratorsh. Signs/placards
<p>3. Emergency Equipment</p> <ul style="list-style-type: none">a. Fire blanketsb. Fire extinguishersc. Fire alarm systemsd. Generatorse. Emergency lightsf. Portable pumps/hosesg. Self-contained breathing apparatush. Absorbentsi. Containment boomj. Spill response carts/kits	<p>4. Security Devices</p> <ul style="list-style-type: none">a. Fencesb. Warning signsc. Gatesd. Lightinge. Locksf. Telephonesg. Pagersh. Two-way radiosi. Intercomsj. Public address systemk. TV monitoring system
<p>5. Operating and Structural Equipment</p> <ul style="list-style-type: none">a. Dikes/bermsb. Troughs/sumpsc. Rampsd. Elevators/liftse. Tank supportsf. Containment vaultg. Bases/foundationh. Roofsi. Walls	<p>6. Containers</p> <ul style="list-style-type: none">a. LT-180 container storage areas<ul style="list-style-type: none">i. labelsii. datesiii. conditioniv. closedb. Containment systems<ul style="list-style-type: none">i. spill palletsii. bermsiii. overpacksiv. liners
<p>7. Tanks and ancillary equipment</p> <ul style="list-style-type: none">a. Waste feed cut-off/bypassb. Discharge control equipmentc. Drainage systemsd. Monitoring equipment datae. Waste levelf. Tank material/seamsg. Plumbing/sumpsh. Labeled/Marked	<p>8. Areas</p> <ul style="list-style-type: none">a. Loading areasb. Unloading areasc. Storage areasd. Main roadwaye. Gate areaf. Periphery

How Often do I Need to Inspect?

- Inspection Schedule
 - *Weekly: container, container storage area, & containment systems*
 - *Monthly: safety & emergency equipment*
 - *When used: loading & unloading areas*
 - *Daily: tanks*



How do I Document Inspections?

- Inspection Items

- *Conditions*
- *Labels*
- *Dates*
- *Containment*
- *Etc.*

- Inspection Log

- *Date & time of inspection*
- *Full name of inspector*
- *Notation of observations*
- *Date & nature of repairs*
- *Keep on file for 3 years from date of inspection*
- *Follow up and record corrective actions*



Blank Weekly Inspection Form

Example

Instructions: Please use ink. Results of weekly inspections of hazardous waste containers and container storage areas must be recorded in this log. If any deficiencies are found, a description of the deficiencies must be recorded in the "Observation" column. Prompt and immediate action must be taken to correct any deficiencies observed. The date and nature of all corrective actions must be recorded in the "Corrective Actions Column". Once this log is completed, it should be maintained in a binder and must be kept on file for at least three years from the date of inspection. These inspection logs must be made available for inspection by State DEP inspectors.

Date of Inspection: _____ Time of Inspection: _____ a.m./p.m.

Full Name of Inspector: _____

Item/Condition to be checked	Yes	No	Observation/Deficiency	Corrective Actions and Date
Are all containers closed?				
Are all containers in GOOD condition (NOT leaking, rusted, bulging or otherwise in poor condition)?				
Are all containers marked?				
Does the marking include the words "Hazardous Waste" and other words to describe the waste?				
Are all markings legible and visible for inspection?				
Are all containers marked with accumulation start dates?				
Are dates less than 180 days?				
Is the amount of waste on site less than 1,000 kg (2,200 lbs)?				
Is there adequate aisle spacing?				
Are the containers stored on an impermeable base that is bermed?				
Are the base and berm free of gaps, cracks, and damage?				
Is the base free of spills, leaks, or other accumulation?				
Are incompatible materials separated by a wall or a berm?				

Note: If the "NO" column is checked, corrective action must be taken and the "Observation" and "Corrective Action" columns must be completed.

Additional Comments:

Blank Monthly Inspection log

Example

Monthly Safety and Emergency Equipment Inspection Log

Instructions: Please use ink. Results of monthly inspections of safety and emergency equipment must be recorded in this log. If any deficiencies are found, a description of the deficiencies must be recorded in the "Observation" column. Prompt and immediate action must be taken to correct any deficiencies observed. The date and the nature of all corrective actions must be recorded in the "Corrective Actions" column. Once this log is completed, it should be maintained in binder and must be kept for at least three years from the date of the inspection. These inspection logs must be made available for inspection by State DEP inspectors.

Date of Inspection: _____ Time of Inspection: _____ a.m./p.m. Name of Inspector (Full Name): _____

Item/Condition to be checked	Required Quantity	Yes	No	Observation/Deficiency	Corrective Actions and Date
Personal Protective Equipment					
Safety Glasses?	5				
Face Shields?	2				
Rubber Gloves (Nitrile)?	50 pairs				
Leather Gloves?	4 pairs				
Cotton Gloves?	40 pairs				
Dust Masks?	24				
Rubber boots?	5 pairs				
Disposable coveralls?	5				
Safety Equipment					
Emergency showers in good operating condition, and marked?	Ink Room R&D Area				
All fire extinguishers fully charged, clear, expiration date marked?	38				
Emergency lights in good working order?	8				
Emergency Equipment					
Sealed 20 Gallon Spill Kit Contents: 20 pads, Heavy Wt; 4 Socks, 3"x48"; 1 Sock, 3"x8"; 2 Pillows, 18"x18"; 1 Bag Ultrasorb, Granular 5#; 3 Temporary Disposal Bags; 3 Plastic Zip Ties, 12"; 1 Pair, Nitrile Gloves; 1 Pair Safety Goggles; 1 Instruction Sheet.	3 spill kits with seals intact				
<i>Mix Room</i>					
3" X 10' sock	4				
Pillows	4				
Mats	60				
Disposable Bags/Ties	8/8				
<i>Loading Dock</i>					
3" X 10' sock	6				
Pillows	4				
Mats	30				
Disposable Bags/Ties	8/8				
Are the salvage drums empty, clear, and marked?	2				

Note: If the "NO" column is checked, corrective action must be taken and the "Observation" and "Corrective Action" columns must be completed.

Additional Comments: _____

Universal Waste

- Wastes include:
 - Batteries
 - Mercury-containing thermostats
 - Mercury-containing equipment
 - Lamps
 - Used electronics
 - Certain pesticides

- Generator Status

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Universal Waste

- How do I store my universal waste?
 - *Container rules:*
 - *Closed*
 - *Structurally sound*
 - *Compatible with contents*
 - *Capable of preventing leakage, spillage, or damage*
 - *Date of initial storage provided*
 - *One year to remove from site*

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Universal Waste

- Universal Waste labeling
 - Accumulation start date
 - One of the following

“Universal Waste _____”

“Waste _____”

“Used _____”

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Example Label

UNIVERSAL WASTE	
CONTENTS	Universal Waste Batteries
ACCUMULATION START DATE	Jan. 1, 2009
SHIPPER	Battery Recycling, Inc.
ADDRESS	1 Battery Road
CITY, STATE, ZIP	Hartford, CT 06106

Universal Waste

- Off-Site Shipments
 - *Licensed Universal Waste Disposal Facility*
 - *Applicable DOT Regulations for the following:*
 - Lead acid batteries*
 - Nickel cadmium batteries*
 - Mercury-containing thermostats*
 - Mercury-containing equipment*



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Universal Waste

- Training Requirements
 - *Proper handling procedures*
 - *Emergency procedures*
- Spill/Release Procedures

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What is Used Oil?

- Oil that is no longer fit for its original use
- Examples include:
 - *Crankcase oil & motor vehicle oils*
 - *Gear, chain, and ball bearing lubricants*
 - *Hydraulic & compressor oils*
 - *Metalworking fluids & oils*
 - *Heat transfer oils*
 - *Dielectric fluid*



Used Oil

- Do not mix with hazardous waste
- Test waste for characteristic waste codes
- Common contaminants include:
 - Halogenated Solvents
 - TCLP Metals
 - PCBs
 - Flammable Solvents



How Do I Manage Used Oil?

- Used Oil Management (Tanks & Drums)
 - *Marked with “Used Oil”*
 - *Good condition*
 - *Sealed unless adding or removing oil*
 - *Located indoors or under roof with containment*
 - *Suitable impervious surface*

USED OIL

GENERATOR INFORMATION

COMPANY _____

ADDRESS _____

CITY/STATE/ZIP _____

SOURCE _____

CONTACT _____

USED OIL



Used Oil – Options for Disposal

- How do I ship my used oil?
 - *CT DEEP Licensed Transporter*
 - *CT DEEP Licensed Used Oil Facility*
- Onsite combustion in a space heater
 - *Oil must be generated onsite*
 - *Heater < 0.5 million Btu/hr capacity*
 - *Exhaust is vented outside*
 - *Oil heating value is >5,000 Btu/lb*

Closure Documentation

- Characterize the waste
- Properly dispose of waste
- Properly dispose or decontaminate any equipment or structures
- Identify constituents of concern list, based on wastes managed
- Assess if releases occurred, consider migration pathways
 - *Concrete sampling*
 - *Wipe sampling*
 - *Soil sampling*
- Records/Documentation
 - *Maintain closure records onsite*
 - *File DEEP/EPA forms to change or renew generator status*

Recycling

Items that are required to be recycled in CT:

- *glass and metal food containers*
- *non-residential high grade white office paper*
- *old newspaper*
- *scrap metal*
- *old corrugated containers*
- *waste oil*
- *lead acid storage batteries*
- *Ni-Cd rechargeable batteries*
- *Leaves*
- *grass clippings*

NEW

Pursuant to [CGS Sec. 22a-241b](#), the following materials will be added to the list of designated recyclable items:

- 1) HDPE and PETE plastic containers,
- 2) boxboard,
- 3) magazines,
- 4) residential high grade white paper,
- 5) colored ledger.

Recycling

- What should my company be doing?
 - *Solid Waste Audit (What's in the trash?)*
 - *Ensure contract in place for recyclables collection*
- See Business Recycling Assistance page linked from DEEP's Recycling Homepage:

www.ct.gov/deep/recycle



Recycling



What should my company be doing? (continued)

- Use reusable or reduced transport packaging
- Identify materials currently being disposed that have recycling markets
 - *Ex. Paper beverage cartons, used textiles, other types of plastics, other types of paper, yard waste, clean wood, electronic devices, etc.*
- Consider changing processes to reduce waste
- Purchase environmentally-preferable products
 - *Ex. Products with recycled content, recyclable, durable and reusable rather than disposable*

Questions?

