A photograph of a marina scene. In the foreground, a wooden pier structure with vertical posts is visible on the left. A white boat with a pink buoy is docked at the pier. In the background, another white boat is moving across the blue water, leaving a white wake. The sky is clear and blue, and a distant shoreline with trees and buildings is visible.

# Hazardous Waste Management at Marinas

NCDENR - Division of Waste Management  
Hazardous Waste Section  
Compliance Branch

# Resource Conservation and Recovery Act (RCRA) History

- Passed by Congress in 1976 to provide a cradle-to-grave management of hazardous waste
- Enforced by the following governmental agencies:
  - Federal - Environmental Protection Agency (EPA)
  - State - Division of Waste Management, Hazardous Waste Section



# What will be covered?

- Waste Determination
- Types of Generators
- Site Evaluation
- Generator Paperwork Requirements
- Generator Container Management Requirements
- Universal Waste Requirements
- Used Oil Requirements

# What is Hazardous Waste?

It is waste with properties that make it dangerous or capable of having a harmful effect on human health or the environment.

# Hazardous Waste Determination

40 CFR 262.11

A person who generates a solid waste, as defined in 40 CFR 261.2, must determine if that waste is a hazardous waste using the following method:

- 1) Determine if the waste is excluded from regulation under 40 CFR 261.4
- 2) Determine if the waste is listed as a hazardous waste in Subpart D of 40 CFR 261

# Hazardous Waste Determination

40 CFR 262.11 (cont'd)

- 3) If the waste is not listed in Subpart D of 40 CFR 261, the generator must then determine whether the waste is identified in Subpart C of 40 CFR Part 261 by either:
- Testing the waste according to the method set forth in Subpart C of 40 CFR Part 261; or
  - Applying knowledge of the hazardous characteristics of the waste in light of the materials or the processes used



# Hazardous Waste Determination

40 CFR 262.11

Is the material:

- 1) solid waste?
- 2) excluded/exempt?
- 3) "listed" hazardous waste?
- 4) "characteristic" hazardous waste?

# What is a “Waste”?

A material that has been used or has otherwise served its intended purpose and, for whatever reason (e.g. contamination, spent) can or will no longer be used for its intended purpose.



# What is Excluded or Exempt from Regulation?

- Check 40 CFR 261.2, 261.3 and 261.4
- Examples:
  - Materials that are not solid wastes:
    - Industrial wastewater when subject to CWA
  - Materials that are not hazardous waste:
    - Household hazardous wastes
  - Other
    - Used Oil to be recycled
    - Residues from RCRA Empty Containers

# What is “Listed” Hazardous Waste?

40 CFR 261 Subpart D

## Listed Hazardous Waste

F - Non-specific sources

K - Specific sources

P - Discarded products, off-specification species, container residues, spill residues

U - Chemical products, intermediates, off-specification commercial products

# What is a "Characteristic" Hazardous Waste? 40 CFR 261 Subpart C

## Characteristics

- Ignitability - Flash point  $<140$  ° F
- Corrosivity - pH  $\leq 2.0$  or  $\geq 12.5$
- Reactivity - spontaneously reacts with air/water
- Toxicity - TCLP contaminants

Examples:	Lead	5.0 ppm
	Cadmium	1.0 ppm
	Mercury	0.2 ppm



? Don't  
know  
what  
this  
product is.

MSDS  
Safety Data Sheet  
This document provides information on the hazards of the product and the measures that should be taken to protect health and the environment.  
It is intended for use by trained personnel only.  
For more information, contact the manufacturer.

ST

White residue on the side of the drum.







# Common Marina Wastes

- Paint and paint related wastes
- Aerosol cans
- Chemical stripping wastes
- Abrasive stripping wastes
- Equipment cleaning wastes
- Machine shop wastes
- Engine repair wastes
- Transmission fluid
- Waste fuel
- Welding wastes
- Fiberglass fabrication (solvents, resins, gelcoat wastes)
- Leftover raw materials/ off-spec products
- Used Oils, gear and lube oils

# Common Marina Wastes

- Lead acid batteries
- Bilge water/bilge sludges
- Engine test tank waters
- Parts washer waste
- Rags
- Adhesive wastes
- Acids and alkalis
- Metal finishing wastes
- Electronics wastes
- Pesticides and herbicides
- Compressed gas cylinders
- Filters- fuel, oil, paint booth
- Antifreeze (benzene)
- Dust collection system residues

# Hazardous Waste Generators

- Conditionally Exempt Small Quantity (CESQG)
  - $\leq 220$  lbs per calendar month
  - $\leq 2.2$  lbs acute hazardous waste
- Small Quantity (SQG)
  - $>220$  lbs and  $<2200$  lbs per calendar month
  - $\leq 2.2$  lbs acute hazardous waste
- Large Quantity (LQG)
  - $\geq 2200$  lbs per calendar month
  - $>2.2$  lbs acute hazardous waste

# Conditionally Exempt Small Quantity Generator Requirements 40 CFR 261.5

- Identify waste to determine whether it is hazardous waste (40 CFR 262.11)
- Do not accumulate more than 2200 lbs of hazardous waste or 2.2 lbs of acute hazardous waste at any time
- Treat / dispose of the waste on-site, or ensure that the waste is sent to a permitted or interim status TSDF, permitted municipal or industrial waste facility, or recycling facility

# Small Quantity Generator Requirements 40 CFR 262.34

- Identify waste to determine if it is hazardous waste (40 CFR 262.11)
- Do not accumulate hazardous waste for >180 days
- Quantity must never exceed 6000 kg
- Hazardous waste must be placed IN containers

# Generator Record Review

- Hazardous Waste Manifests / LDRs
- Emergency Information posted by phone
- Inspection Records (<180 Day Storage Area)

# Hazardous Waste Manifests

40 CFR 262 Subpart B and D

- Required to maintain manifests on-site for 3 years

RECOMMEND YOU KEEP THEM FOREVER!

- Must receive signed manifest from designated facility within 60 days of shipment
- Exception reporting requirements
- Land disposal restrictions

# Inspections

## 40 CFR 265 Subpart I

- Weekly inspections conducted on less than 180 day storage area looking for leaks and deterioration caused by corrosion or other factors
- Inspections must be documented



# Emergency Preparedness and Prevention

40 CFR 262.34

- Emergency Coordinator
- Specific emergency information posted next to phone
- Employees familiar with hazardous waste procedures
- Adequate alarms and communications present
- Emergency response equipment present, inspected and maintained
- Arrangements made with local emergency response authorities
- Facilities must be maintained/operated to reduce risk of fire, explosion or releases of hazardous waste

A blue-tinted photograph of a vast ocean under a cloudy sky. The text "Satellite Accumulation Areas" is overlaid in white, centered horizontally and slightly above the vertical center.

# Satellite Accumulation Areas



FLAMMABLE LIQUID

HAZARDOUS WASTE

UR70

R-M

VRD

865

No. 70032

At or near the point of generation and under the control of the operator



No more than a total of up to 55 gallons of hazardous waste or one quart acute hazardous waste



Marked with words "hazardous waste" or other words that identify the contents

Containers must  
be closed - except  
when adding or  
removing waste



FEB 3 2006



# Hazardous Waste Storage Areas


Containers must be clearly marked/labeled with the words "Hazardous Waste" and with an accumulation start date. Labels must be visible for inspection.







Containers must  
be closed - except  
when adding or  
removing waste



Twenty-four inches of aisle space must be maintained to respond to containers in an emergency



Containers must be in good condition and waste must be compatible with container



# Common Storage Area Violations

- No labels or dates
- Containers open
- Evidence of releases or leaks
- Containers in poor condition
- Dates older than 180 days
- No aisle space and/or labels not visible



MAR 3 2006







# Discharges of Hazardous Waste

Discharge: The accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of hazardous waste into or on any land or water



# Releases and Discharges of Hazardous Waste

- If you have a release on a container, floor, etc., clean it up immediately!
- If you have a discharge to the water or land:
  - Use your Contingency Plan
  - Contact the Department immediately
  - Follow other emergency notification procedures

Suspected problems with other regulations will be reported to the responsible agency for investigation



# Maintenance Areas

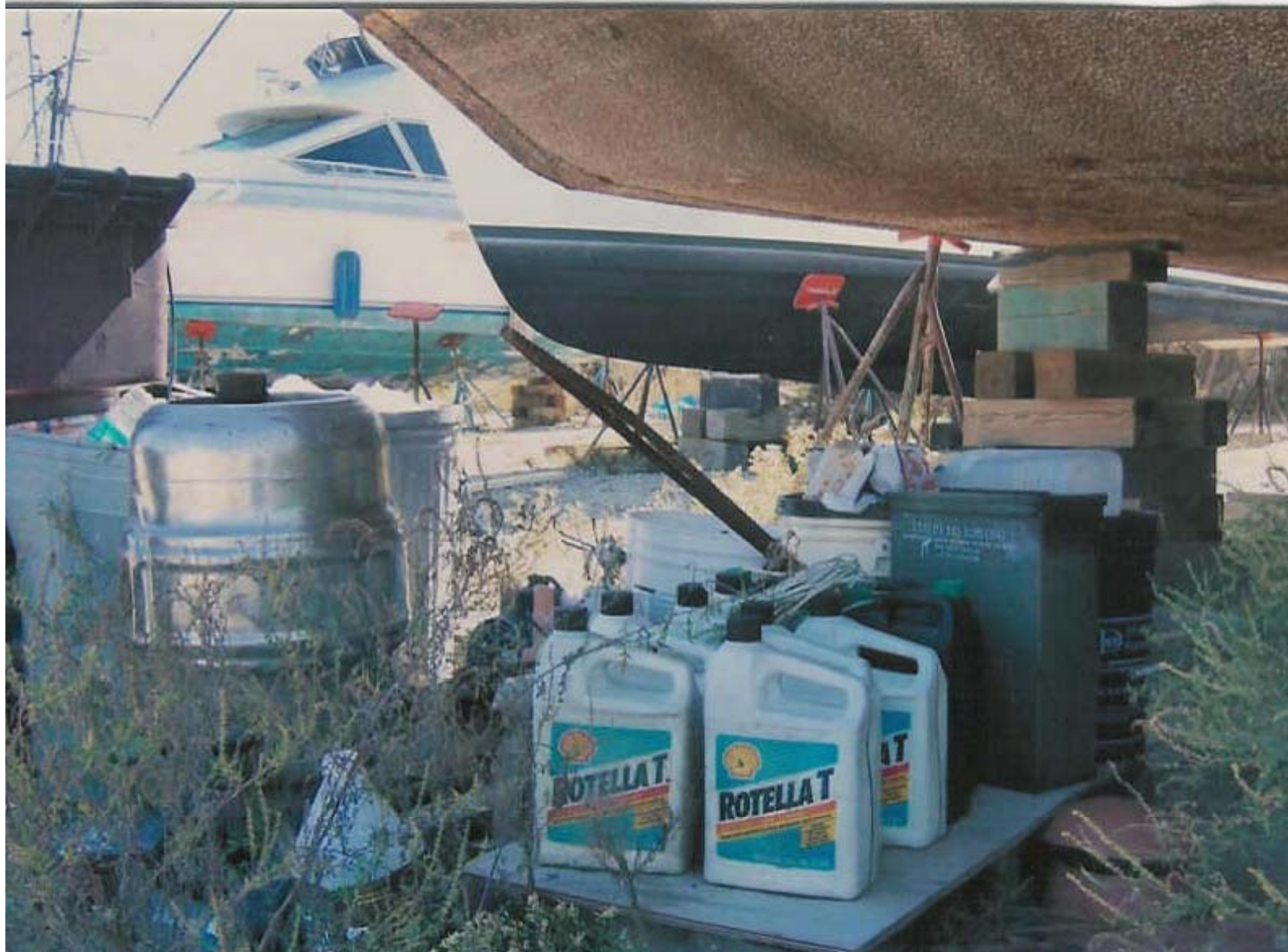
- Building/equipment maintenance
- Vehicle maintenance
- Parts washers
- Sand/bead blasting units
- Used oil
- Universal waste













# Universal Waste

40 CFR 273

Universal Waste currently includes:

- Batteries
- Pesticides - not under FIFRA
- Mercury Containing Devices
- Lights Containing Mercury (LCMs)

Universal waste must be managed to prevent releases by keeping containers closed and using structurally sound and compatible containers



DVE  
3/14/05

**UNIVERSAL WASTE** PER 40 CFR 273.9  
FEDERAL LAW PROHIBITS IMPROPER DISPOSAL  
IF FOUND, CONTACT THE NEAREST POLICE OR PUBLIC SAFETY  
AUTHORITY, OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY.

ACCUMULATION START DATE: 3/14/05 EPA WASTE NO: UNIVERSAL WASTE

DOT PROPER SHIPPING NAME: Environmentally hazardous substances, solid, n.o.s., 8, un3077, 3011 (contains fluorescent bulbs for recycle)

U.N. OR I.D. NO. \_\_\_\_\_

GENERATOR NAME: Engineered Controls International, Inc.

ADDRESS: 1239 Rock Creek Dairy Road

CITY: Whitsett STATE: NC ZIP: 27377

EPA ID NO: NC0902160329 MANIFEST DOCUMENT NO: 41133

PHONE NO: (336) 449-7706 DRUM NO. \_\_\_\_\_

**UNIVERSAL WASTE / HANDLE WITH CARE!**  
PRINTED BY: G.C. LABEL / 1-800-907-6066 / PRINTED IN U.S.A. / ITEM# HWL605 TTYEK

Waste must be identified as

“Universal Waste \_\_\_\_\_”

“Waste \_\_\_\_\_”, or

“Used \_\_\_\_\_”

UNIVERSAL WASTE  
ACCUMULATION AREA

Waste can be accumulated/stored up to one year.

Waste must be shipped to another handler or a destination facility.











JAN 10 2006



# Used Oil Generator Requirements

40 CFR 279

- Store only in tanks/containers in good condition
- Label tank/container "Used Oil"
- Clean up any spills/releases immediately
- Self transport no more than 55 gallons to collection center
- Used oil transporter with EPA ID Number



Label tank/container "Used Oil"



Clean up any  
spills/releases  
immediately





Questions?

NCDENR - Division of Waste Management  
Hazardous Waste Section

Compliance Branch

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