

**U.S. Department of Transportation**  
**Office of Hazardous**  
**Materials Enforcement**

**Research and Special**  
**Programs Administration**

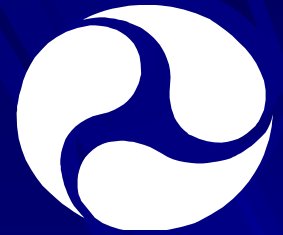


**Robert Bunn**

**Sr. Hazardous Materials Enforcement Specialist**



# Webex Tool



- Participant lines will be muted throughout presentation
- Use WebEx controls to “raise hand”
- Use chat feature to send questions to host
- Host will read question to presenter and group
- Questions from each participant during Q&A, using the chat feature
- Web Seminar will be recorded

# Guest Speaker- DOT /RSPA



Robert Bunn, DOT/RSPA, **Sr. Hazardous Materials Enforcement Specialist**

⌘ Senior Member- U.S. Department of Transportation HazMat Enforcement Team

⌘ Performed Approx. 1,000 inspections of HazMat Shippers and Manufacturers of Certified Packaging

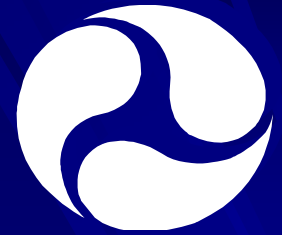
⌘ Represented the Secretary of the Interior in the U.S. Caribbean and Pacific territories (Prior to DOT)

⌘ BBA Degree in Management- University of Georgia

⌘ MBA Degree – Georgia State University, **Graduate School of Business**



# R.S.P.A. Programs

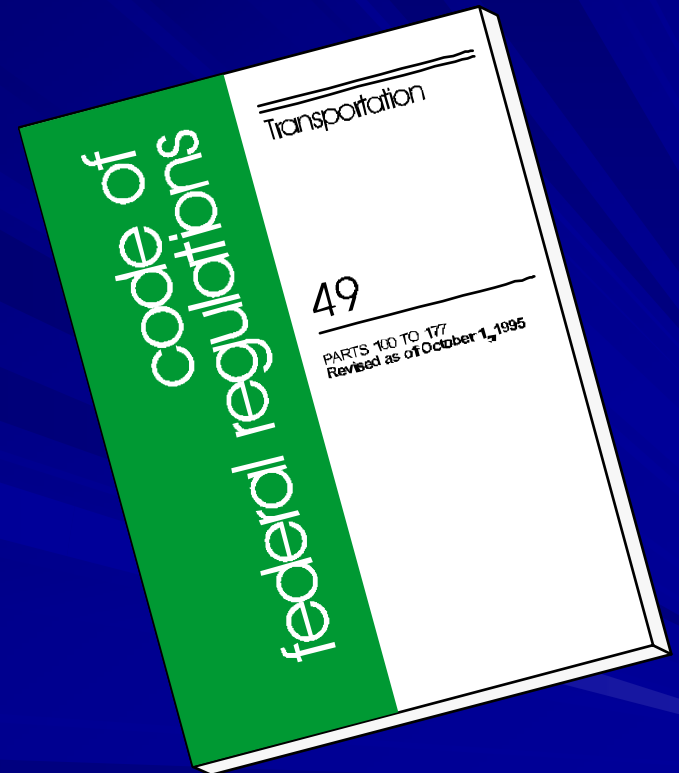


- ✧ Hazmat Standards
- ✧ Exemptions and Approvals
- ✧ **Inspection and Enforcement (OHME)**
- ✧ Publications and Training
- ✧ Information Analysis and Planning
- ✧ Technical Support
- ✧ International and Interagency Coordination

# OHME Mission



- Investigate Hazmat accidents / incidents involving package failure.
- Inspect Hazmat packaging manufacturers and shippers.



# Introduction and Overview of DOT's Hazmat Enforcement Program



- Inspections and Enforcement
- Selection of companies
- Scope of review
- Preparing for an inspection
- Enforcement examples
- Conclusion



# Enforcement

Who must comply with the 49 CFR

Hazardous Materials Transportation Regulations?

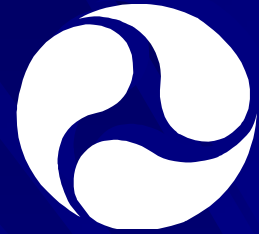
**Any person, individual or company  
who:**

- \* Offers or Accepts**
- \* Transports**
- \* Packages or provides  
packaging for**

**A hazardous material in commerce.**



# OHME Inspections



## Priorities:

- ☹ Complaints
- ☹ Reinspections
- ☹ Inspections
- ☹ Special Requests



# Inspection and Enforcement



- **Inspections are unannounced.**
- **Approximately 3000 inspections are performed per year.**
- **In 2003, 947 tickets and cases were issued.**

# How Companies are Selected for an Inspection



- Allegation or complaint
- Reinspection of previous enforcement action
- Incident reports
- Registration (shipper, approval, cylinder retester, etc.)
- Manufactures certified packaging





# Enforcement

## Inspections- Scope of Review:

- Packaging
- Communication
- Training
- Security Plans





# Enforcement

## Shipper's Responsibilities

Before a hazardous material is offered for transportation, it must be:

☠ Properly classified

☠ Properly described

☠ Properly packaged





# Primary Responsibility:

- The original packager/shipper bears primary responsibility for packaging compliance
- Subsequent shippers, however, are also held responsible for compliance
- Carriers which accept and transport hazmat are also responsible—drivers must be able to recognize non-compliance when readily visible and apparent.

# Choice of transportation mode



- Shipper determination
- Cost factors
- 49 CFR establishes restrictions

2 4 - 7 - 3 6 5

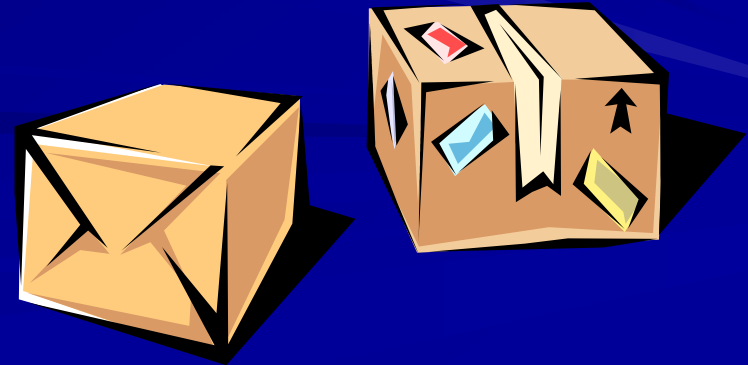
● 3E COMPANY ●

EH&S INFORMATION & COMPLIANCE SERVICES

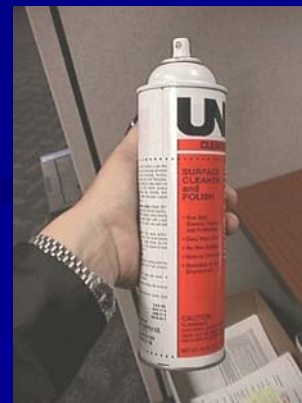
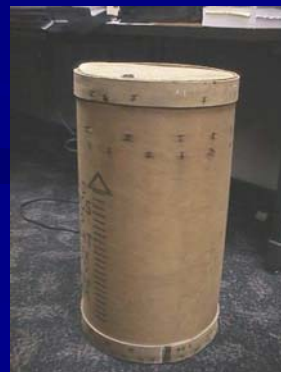


# Package Selection

- Intermediate Bulk Containers (IBCs) or “Totes” (bulk= +119 gal)
- Non-Bulk: Drums, pails, jerricans & fiberboard boxes
- DOT specification cylinders (compressed gases)



# Packaging examples, all of which represent certified packaging options.





# Package Details:

- Valid Certification
- Maximum Weights & Compatibility
- Package Closure & Components
- Unauthorized Variations



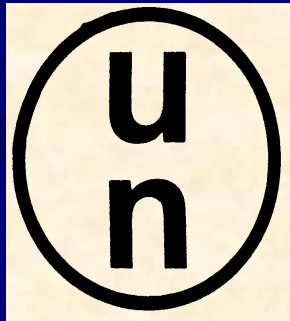


# Interpreting UN marks



178.503(a)(1-11)

- 1 - UN symbol as illustrated
- 2 - Packaging ID code designating type
- 3 - Letter identifying packing group - X, Y, Z
- 4 - Specific gravity (solids = max. gross mass in kg.)
- 5 - Single composite for liquid = test pressure in kPa
- 6 - Last two digits of manufacture year



1H1/Y1.4/200/98...



Typical steel and plastic drums. Both types must be closed to manufacturer's specifications (see closure notification provided by supplier):





# Drum closure tools:



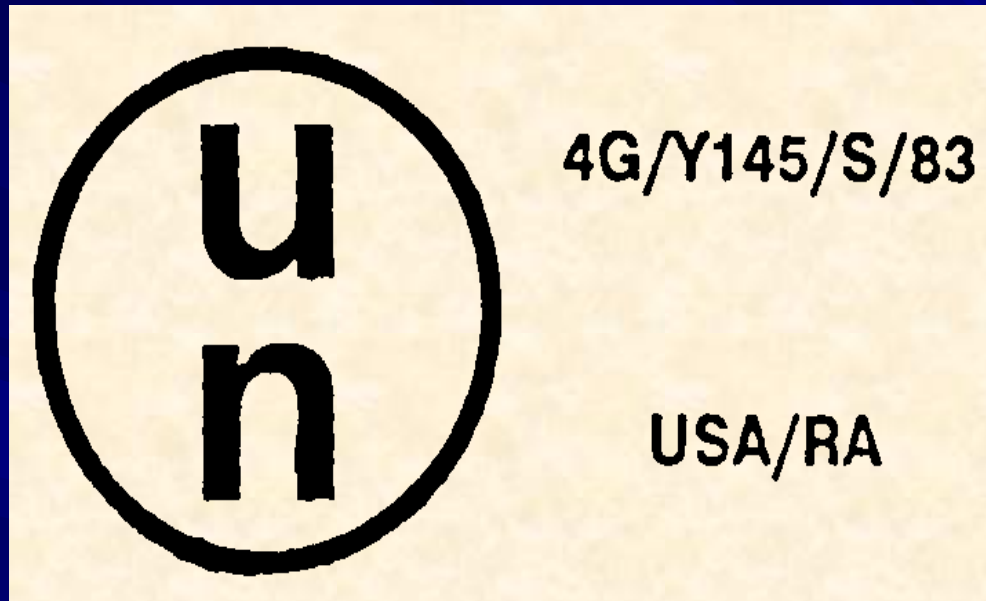
Right! A pre-set torque wrench.

Wrong! Plain non-torque wrenches.





# Interpreting UN marking:



For Packing Groups:

X meets PG I, II and III requirements

Y meets PG II and III requirements

Z meets PG III requirements

# **The key to recognizing a DOT authorized packaging is to:**

- Identify proper shipping description in 172.101 table and locate Column 8.**
- Determine packaging type: non-bulk, bulk, DOT Exemption or other that is appropriate.**
- Verify packaging is authorized in referenced section of Column 8.**
- Interpret UN markings in order to verify compliance.**

# Determine the Packaging



Check the packing group (PG) assigned to the proper shipping name. (Column 5 and 2 of 172.101)

Read the “special provisions” section found in column 7 of hazmat table.

Verify exceptions (column 8A), non-bulk (column 8B) and bulk (column 8C) authorized packagings.



# Design Qualification Test (written report required)

- Includes:**
- \* Drop Test (varies on height according to PG)
  - \* Leakproofness
  - \* Hydrostatic pressure
  - \* Stack Test (min. of 10 feet in height)
  - \* Cooperage test (wooden barrels)
  - \* Closures

**Periodic retest:**

Single/composite = 12 months  
combination = 24 months



# Be sure of your product's packing group

- Often raw materials are blended with water or other non-hazardous material to create a new product..
- What was shipped to you as a packing group I or II material could now be a PG II or III, allowing different packaging choices. A PG III product could be exempt from certain regulations.



# Hazard Communication

- Shipping Papers
  - “Regulated Medical Waste, 6.2, UN3291, PG II”
- Marking
  - “Regulated Medical Waste, UN3291”
- Labeling
  - “Biohazard Symbol”
- Emergency Response Information



# Hazmat Training

- Complete Training

General Awareness, Safety, Function Specific and Security Training

- Testing

Commensurate with the duties performed

- Certification

Employer Certification of Hazmat Employees

- Records

Complete, Current & Function Specific

# Prepare for Your Inspection



1. Retain copies (electronic or paper) shipping papers for at least 375 days, per 49 CFR 172.201(e). Haz-waste three years.
2. Keep training records for all hazmat employees.
3. Make sure you have “closure notifications” for all UN certified packaging in use.
4. Have a copy of your security plan available.
5. Manufacturers: have copies of design qualification and periodic tests.
6. Copy of current registration.





# Enforcement

## Penalties

- Civil
- Criminal





# Enforcement

## Civil Penalties

Violation of a requirement as it relates to the...

transporting or shipment of a hazardous material, manufacture, fabrication, marking, maintenance, reconditioning, repair or testing of a hazardous materials packaging.

\$275 - \$32,500

per violation/ per day basis





# Enforcement

## Criminal Penalty

**Willfully** violating the hazardous materials regulations.

Unlawful altering, removal, defacing, destroying or otherwise tampering with any marking, labeling, placarding or packaging requirement.

Subject to fines

A maximum 5 year imprisonment!





# Enforcement

## RSPA CRITERIA FOR PENALTIES

### Baseline Penalty

- \* nature
- \* extent and circumstances
- \* gravity of violation

result-

Increase of baseline penalty

or-

Decrease of baseline penalty



# Enforcement Examples:



- 1. Shipper:** 1) Offered PG II flammable in non-UN packaging.  
2) Failed to prepare shipping papers

**Penalty: \$11,500**

**This shipper received methyl alcohol in UN 4G boxes (gallons) but repackaged individual gallons in non-UN boxes.**

- 2. Carrier:** 1) accepted and transported the alcohol in non-UN boxes which were clearly marked “PGII”.

**Penalty: \$ 10,500**





## Enforcement examples (cont'd):

3. Shipper offered corrosive liquids, PG II in 4 gallon boxes not re-tested for more than 2 years. Since the shipper was also the manufacturer, violations for manufacturing without periodic retest and for shipping in unauthorized boxes.

Penalty: \$8,500

4. Shipping corrosive solids in non-UN boxes; no training. Penalty: \$10,250.

Carrier accepted. Penalty: \$8,750.





## More examples:

5. Drum manufacturer: two designs of steel drums were purchased by DOT for testing. Result: samples failed drop and hydrostatic tests. Penalty: \$16,200.
  
6. Aerosol filler and shipper:
  - 1) filled and shipped aerosols without hot water bath;
  - 2) no training records.Penalty: \$6,550





## More examples

7. Shipping in used UN drums, not reconditioned or leak tested.

Penalty: \$1,200

8. Shipper designed and built plywood IBC's in which they shipped PG I poison, solid. IBC did not meet standards per 178.709(a)(2) – no liner.

Penalty: \$ 23,275.





## Last example:

9. Shipper used non-UN packaging, non-retested totes (IBCs), no registration, no training, wrong packaging closure.

Penalty: \$21,000.



# RSPA Hazmat Safety Enforcement Regional Offices



**Western**

*Ontario*

**Central**

*Des Plaines*

*West  
Trenton*

**Eastern**

**Southwest**

*Houston*

**Southern**

*Atlanta*

**Alaska**

**Hawaii**

**Puerto Rico**





# How To Reach Us



Hazardous Materials  
**INFO-LINE**

**1-800-HMR49-22**  
(1-800-467-4922)

**FAX: (202) 366-7342**

**E-Mail: TRAINING@rspa.dot.gov**

# Hazmat Safety Website



<http://hazmat.dot.gov/>



# Questions?

## Robert Bunn

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