

# Corporate Compliance Assessment of HazMat Functions

From material classification to shipment

Presented by:
Watco Compliance Services

"This is to certify that the above-named materials are properly classified, described, packaged, marked, and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation."





With very few exceptions, the "trigger" for each hazardous material activity is the "offering of the material into transportation in commerce."

# **Shipping Conditions**

- In other words, the transportation of a hazardous material is forbidden unless certain conditions are met.
- These conditions include:
  - The proper classification of the material;
  - Proper hazard communication on the documents and the package;
  - Proper package selection, condition, and preparation;
  - The development and implementation of a systematic hazmat training program;
  - The development and implementation of a transportation safety and security risk plan; and
  - Registration of the offeror and transporter.



### **Corporate Commitment**

A corporate compliance assessment begins with a commitment from senior management to perform periodic assessments, to ensure that findings and recommendations are carefully addressed, and to ensure that on-site activities are arranged to support the assessment.



An assessment is a systematic, independent, review of a program to verify conformance with prescribed requirements using a well-defined review process and check sheet to ensure consistency.

An assessment is a fundamental part of an effective compliance program to help ensure that measurable results are obtained to reach defensible conclusions.

#### HazMat Compliance Check Sheet

Name of Facility	
Location	
Date	
Participants	
Training	Comments
1 What is Hazmat training?	
2 Are you required to have HazMat training? If so, how often?	
3 When did you receive your last HazMat training?	
4 Do you have a certificate?	
5 What did this training cover?	
6 Do you remember any test question that you had difficulty answering?	
7 How could your company improve the training?	
8 How would you rate your training?	
9 Do you believe that you are truly trained and	
qualified to load I unload, inspect, and offer cars	
into transportation?	
10 Who was your instructor?	
10 Who was your instructor?  General Knowledge	
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## **Corporate Assessment**

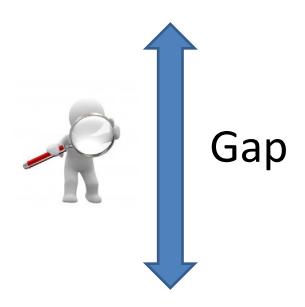
An assessment begins by asking who performs, or is responsible for performing, the following functions;

- Classification;
- Hazard communication;
- Package selection and preparation;
- Special permits;
- Training;
- Registration;
- Transportation security plans;
- Package inspection, maintenance, and repair instructions and surveillance; and
- Reviewing regulatory history.



# **Corporate Level**

(How we think things operate)



Worker Level
(How things actually operate)

## Compliance Team

- Legal counsel;
- Corporate compliance leaders;
- Transportation logistics leaders;
- Plant managers;
- Safety officers;
- Operators; and
- Subject matter experts as auditors.



## Classification



- The first step in any hazardous material compliance program is the proper classification of a material.
- Classification is the systematic arrangement of a hazardous material into a group or category according to established test criteria.
- In nearly all cases, an offeror must classify a new material before offering the material for transportation.
- Both DOT and OSHA require classification of a material for hazard communication.
- DOT has specific test criteria based on the UN Standards.

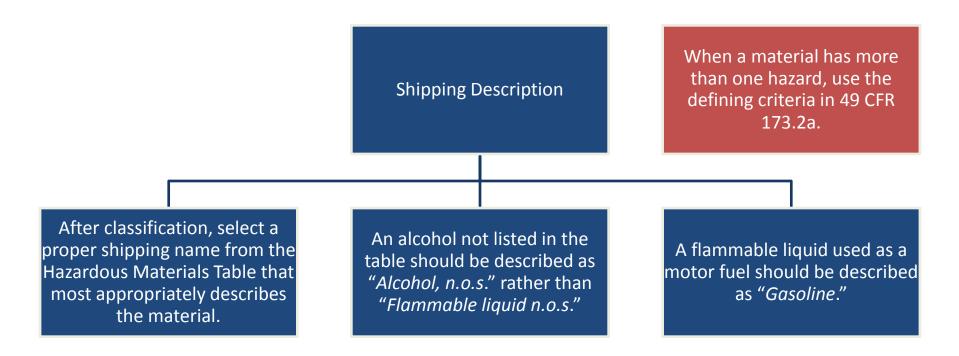






- Have established written procedures to determine the hazards (i.e., an OSHA 29 CFR 1910.1200 (d)(6) requirement).
- For each product, a laboratory report should identify:
  - The composition / components of the material;
  - Physical and chemical properties based on DOT / UN physical test criteria; or relevant and available scientific literature, test data, or other evidence concerning the potential hazards;
  - Corrosion rate on steel for tank car shipments;
  - Results of any test; and
  - Assignment of a hazard class and, if required, a packing group.
- Verify that the company has documented evidence of classification, and the classification conforms to the DOT hazard class criteria.

#### **Product Classification Sheet** Trade Name DOT Shipping Name Composition/Components Physical Chemical Properties Classification Test Results Class 1 Class 2 Class 3 Class 4 Class 5 Class 6 Class 7 Class 8 Class 9 49 CFR 173.3a Precedence Marine Pollutant Radionuclide Classification Literature (in lieu of physical tests) Package 1 Package 2 Package 3 Package 4 Authorized Packaging Special Provision Approval Special Permit Shipping Name Hazard Class ID Number RQ Marine Pollutant Orientation Markings Other Name Date Original Date Revision Date Next Review Date



#### § 172.101 HAZARDOUS MATERIALS TABLE—Continued

							(8)			(9)		(10) - Vessel stowage	
Sym- bols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identi- fication Numbers	PG	Label Codes	Special provisions (§ 172.102)	Packaging (§ 173.***)			Quantity limitations (see §§ 173.27 and 175.75)			
IOIS							Excep- tions	Non- bulk	Bulk	Passenger aircraft/rail	Cargo air- craft only	Loca- tion Oth	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
G	Flammable solids, corrosive, organic, n.o.s	4.1	UN2925	9300	4.1, 8	A1, IB6, IP2, T3, TP33		212	242	15 kg	50 kg	2337	40
G	Flammable solids, organic, n.o.s	4.1	UN1325		4.1	A1, IB6, T1, TP33 A1, IB8, IP2, IP4, T3, TP33		212	240	25 kg 15 kg	100 kg 50 kg		40
G	Flammable solids, toxic, organic,	4.1	UN2926	 	4.1 4.1, 6.1.	A1, IB8, IP3, T1, TP33 A1, IB6, IP2, T3, TP33	151 151	213 212	240 242	25 kg 15 kg	100 kg 50 kg		40
	1100			III	4.1,	A1, IB6, T1, TP33	151	213	242	25 kg	100 kg	В	40

# Hazard Communication Includes:

- Shipping papers
- Package markings
- Package labels
- Package placards
- Hazard warning markings
- Emergency response information
- MSDS / SDS







Verify that the hazard classification is appropriate for the shipping description and that the MSDS / SDS, shipping paper, package markings, and other hazard warnings are consistent.

# Package Selection

- Using the Hazardous Materials Table, and any corresponding federal regulation, approval, special provision, special permit, and industry standard, determine the authorized packaging for the material.
- Verify through physical observation, packaging markings, and a review of the purchasing documents that each selected package conforms to the specification.



# Package Preparation

- Review Plant "Standard
   Operating Procedures" for
   each loading / offloading
   area.
- Review loading / offloading check sheets.
- Observe and interview operators concerning their job functions and related training.



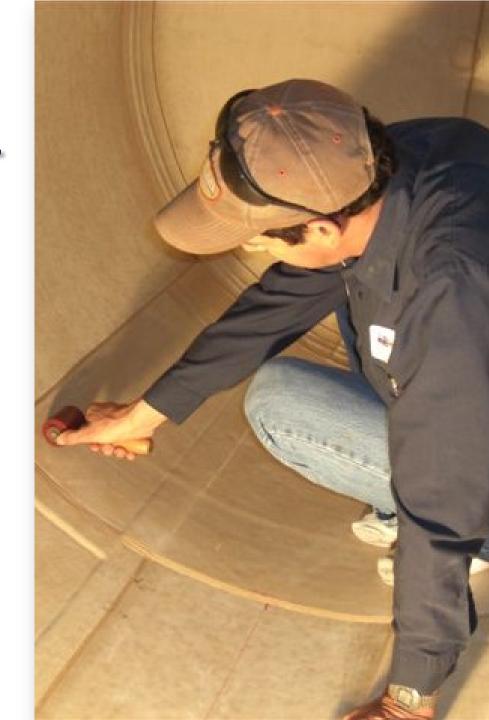
#### Performance Assurance

- Interview questions should consider the knowledge, skills, and abilities ("KSA's) of the hazmat employee:
  - Knowledge of check sheets;
  - Knowledge of the AAR Interchange Rules and Freight Car Safety Standards;
  - Knowledge of the tank and related markings;
  - Knowledge of service equipment;
  - Importance of proper inspection, acceptance criteria, and the securement of service equipment, including inspection of gaskets, to prevent non-accident related releases of product; and
  - Knowledge of outage.



# Verification of Performance Assurance

- In the context of training, performance assurance not only refers to classroom training, but also that the hazmat employee understood the training and can apply it in practical situations.
- Verify that the operators / workers understand and can demonstrate and apply the training and work instructions for performing a task.



# **Special Permits**

October 16, 2012



U.S. Department of Transportation East Building, PHH-30 1200 New Jersey Avenue S.E. Washington, D.C. 20690

Pipeline and Hazardous Materials Safety Administration

> DOT-SP 14935 (FIRST REVISION)

EXPIRATION DATE: September 30, 2016

(FOR RENEWAL, SEE 49 CFR § 107.109)

- L. GRANTEE: E.I. DuPont de Nemours & Company, Inc. Wilmington, DE
- 2. PURPOSE AND LIMITATION:
  - a. This special permit authorizes the one-time, one-way transportation in commerce of certain portable tanks and intermediate bulk containers with visible indications of damage or wears containing the residue of a Class 3 hazardous material for cleaning and repair. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
  - b. The safety analyses performed in the development of this special permit only considered the hazards and risks associated with the transportation in commerce.
  - c. No party status will be granted to this special permit.
- 3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-  $\overline{180}$ .
- 4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR \$\$ 173.29 and 173.242 in that damaged portable tanks and intermediate bulk containers not meeting the original specifications are not authorized for transportation, except as specified herein.
- 5. BASIS: This special permit is based on the application of

- Does the company operate under any special permit?
- If yes, verify whether the special permit is current or expired, and the company's process to manage the execution and renewal of the permit.
- Engage the corporate law office to verify the company name against the legal documents.

# **Special Permits**

- PHSMA has an on-line special permit look-up:
  - http://www.phmsa.dot.gov /hazmat/regs/sp-a/specialpermits/search
- Verify through physical observation, packaging markings, and a review of the purchasing documents that each authorized package conforms to the special permit.



# **Training**

According to DOT statistics, human error is the probable cause of most transportation incidents.

Training increases an employee's awareness of safety considerations involving the loading, offloading, handling, storage, transportation, and emergency response preparedness to a hazardous material release.



# **Training**

- Training means a systematic program that ensures a hazmat employee has:
  - General awareness/familiarization training;
  - Function specific training, including modal requirements;
  - Safety training; and
  - Security training
    - General
    - In-depth

Systematic Training

- Needs Analysis
- Training Programs and Manual
- Deliver Training Program
- Evaluate the Training Program



#### Who requires training? Generally, persons who:

- Classify materials;
- Select packagings to contain a hazardous material;
- Manufacture, inspect, test, maintain, or repair a package marked to a DOT or UN specification;
- Load, offload, or pack a hazardous material into a packaging;
- Mark, label, or placard a package containing a hazardous material;



#### Individuals who require training also include persons who:

- Prepare shipping documents for a hazardous material;
- Offer or accept a hazardous material into transportation;
- Transport a hazardous material in transportation;
- Handle a hazardous material during transportation; and
- Directly affect hazardous materials transportation safety.

# **Training Continued**

#### Initial training

- Within 90-days
- Under the supervision of a properly trained and knowledgeable hazmat employee

#### Recurrent training

- At least once every 3 years
- Within 90-days of a change in the security plan

#### Relevant training

 Training received from a previous employer or other source may be used to satisfy the training requirements



# Training Records Include:

- Hazmat employee's name
- Most recent training date
- A description, copy, or location of the training material
- Name and address of the person providing the training
- Certification that the hazmat employee has been properly trained and tested

# Verification

- Verify that the company has a systematic training program and that records of training are maintained.
- Ensure that the records contain the required information.
- Review the system to capture the training information and whether or not the system can alert a supervisor or employee prior to the expiration of training.

# Registration

- Persons who offer or transport certain quantities of a hazardous material must file a registration statement and pay a fee.
- Registration must include the company name and mailing address of the principle place of business.
- PHMSA offers an on-line company look-up at:
- <a href="https://hazmatonline.phmsa.dot.gov/Services/companylookup.aspx">https://hazmatonline.phmsa.dot.gov/Services/companylookup.aspx</a>
- Engage the corporate law office to verify the company name against the legal documents.
- Verify that the registration statements are current, and the process to ensure timely renewal.

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION



#### HAZARDOUS MATERIALS CERTIFICATE OF REGISTRATION FOR REGISTRATION YEAR(S) 2012-2015

Registrant: WESTLAKE VINYLS COMPANY LP Attn: TROY TASSIN

PO BOX 228 GEISMAR, LA 70734

This certifies that the registrant is registered with the U.S. Department of Transportation as required by 49 CFR Part 107, Subpart G.

This certificate is issued under the authority of 49 U.S.C. 5108. It is unlawful to alter or falsify this

HM Company ID: 078313

#### Record Keeping Requirements for the Registration Program

The following must be maintained at the principal place of business for a period of three years from the date of issuance of this Certificate of Registration:

- (1) A copy of the registration statement filed with PHMSA; and
- (2) This Certificate of Registration

Each person subject to the registration requirement must furnish that person's Certificate of Registration (or a copy) and all other records and information pertaining to the information contained in the registration statement to an authorized representative or special agent of the U. S. Department of Transportation upon request.

Each motor carrier (private or for-hire) and each vessel operator subject to the registration requirement must keep a copy of the current Certificate of Registration or another document bearing the registration number identified as the "U.S. DOT Hazmat Reg. No." in each truck and truck tractor or vessel (trailers and semi-trailers not included) used to transport hazardous materials subject to the registration requirement. The Certificate of Registration or document bearing the registration number must be made available, upon request, to enforcement personnel.

For information, contact the Hazardous Materials Registration Manager, PHH-52, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, 1200 New Jersey Avenue, SE, Washington, DC 20590, telephone (202) 366-4109.

## **Transportation Security**

- Determine the types and quantities of a hazardous material offered into transportation.
- Does the facility require a DOT security plan?
- If yes, verify that the plan includes:
  - Personnel security
  - Unauthorized access
  - En route security



# Rail Security

# For certain high-risk hazardous materials, a railroad must:

- Perform a rail transportation route analysis;
- Perform an alternative route analysis;
- Select the route;
- Designate a rail carrier point of contact on routing issues;
- Designate a rail security coordinator;
- Address storage, delays in transit, and notification;
- Define chain of custody and control requirements between offerors, carriers, and consignees; and
- Provide for recordkeeping.



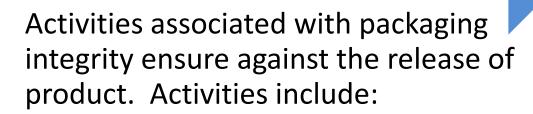
# Packaging Integrity



Each package used for the shipment of a hazardous material shall be designed, constructed, maintained, filled, its contents so limited, and closed, so that under conditions normally incident to transportation:

- There will be no identifiable (without the use of instruments) release of a hazardous material to the environment; and
- The effectiveness of the package will not be substantially reduced.

is suitable for its intended purpose throughout its life.



- Inspection
- Maintenance
- Repair and Overhaul

## Qualification and Maintenance of Tank Cars



Within the context of the federal regulations and the AAR standards, each owner is responsible for developing a "Tank Car Qualification and Maintenance Plan" that identifies:

- When to inspect;
- What to inspect;
- How to inspect;
- What is acceptable;

## The Plan Should Also Address



#### How to manage the following conditions:

- Maintenance (includes repair);
- Modification (includes alterations and conversions); and
- Reconditioning (includes reseal, rebuild, and remanufacture).



How to ensure leak tightness when assembling a completed joint (*i.e.*, gasket selection and torque values, and tightening sequence for fasteners);



Corrosion prevention and control program; and



#### Recordkeeping and Analysis

- Recording and reporting inspection and test results; and
- Analyzing the inspection and test results to determine the reliability characteristics of an item and defining an appropriate inspection interval..

# Regulatory Information

Assessment criteria should include information from other sources to allow a comparison of how well a program compares to or exceeds minimum compliance levels.

# Other related sources include:

- DOT Safety Advisories
- DOT rulemakings
- DOT letters of clarification and interpretation
- Regulatory citations
- Publically available accident and incident reports
- Internal incident reports
- Industry best practice standards

# Company Regulatory History

- Obtain the following from the Department of Transportation through the Freedom of Information Act ("FOIA"):
  - Information from the DOT 5800.1 report identifying releases of product from an offered package.
  - Information from FRA 6180.96 report identifying findings and violations from a pre-transportation function or an offered package.
  - AAR BOE Annual Reports



# FRA Defects and Violations by Regulatory Topic 2007 –2011

Regulatory Subject	Defects	Violations
Shipping Papers	8,324	814
Markings	3,820	345
Labeling	87	0
Placarding	18,572	373
<b>Emergency Response Information</b>	1,072	561
Training	41,191	8,287
Safety and Security Plans	2,992	57
Shippers—General Requirements for Shipments and Packagings	14,467	4,035
Carriage by Rail	16,420	2,281
Specifications for Tank Cars	512	649
Qualification and Maintenance of Tank Cars	184	45

# Top FRA Defects and Violations 2007 –2011

Section		Defects	Violations	Total
1720704	Training Requirement	32,182	5,462	37,644
1730031	Use of Tank Cars	13,036	3,629	16,665
1720702	Applicability and Responsibility for Training and Testing	9,009	2,825	11,834
1720516	Visibility and Display of Placards	9,597	53	9,650
1720504	General Placarding Requirements	6,416	91	6,507
1740026	Notice to Train Crews	3,789	1,331	5,120
1790007	Quality Assurance Program	3,715	613	4,328
1720201	Preparation and Retention of Shipping Papers	3,592	139	3,731
1740050	Nonconforming or Leaking Packages	3,364	194	3,558
1740003	Unacceptable Hazardous Materials Shipments	3,068	11	3,079
1720802	Components of a Security Plan	2,620	32	2,652

# Final Report and Recommendations

- The final report should address:
  - Corporate functions
  - Field functions
  - Regulatory information
  - Regulatory company history
- The final report should identify the "gaps" in the system.
  - The difference between how corporate believes things operate and how things actually operate in the field.
- The report should provide recommendations on improvement based on the stated facts.
  - Recommendations should address any identified "gap" in the compliance program.
  - If required, provide a solution to each of the recommendations.
  - Taking action to answer a recommendation and carefully developing corrective and preventive actions is the most important part of the assessment.

