

The background features a large, faint seal of the California Highway Patrol. The seal is circular with a five-pointed star in the center. The star contains a figure of a woman in a helmet holding a spear, with the word "EUREKA" above her. The words "CALIFORNIA HIGHWAY PATROL" are written around the perimeter of the seal.

California Highway Patrol

Commercial Enforcement Program

*Hazardous Materials Package
Securement*

CVS



Introductions

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Commercial Vehicle Section
Hazardous Materials Unit
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CHP Responsibility

Enforcement of hazardous materials (HM) transportation regulations to ensure the safety of persons and property utilizing California highways.

Regulations

- State law
 - California Vehicle Code
- State regulations
 - Title 13 California Code of Regulations
- Federal regulations
 - Title 49 Code of Federal Regulations



The HM Inspection

- NAS Inspection
- Various Areas of Compliance
 - Documentation
 - HM Communication
 - Package Authorization, Integrity, and Securement



The HM Inspection cont.

Transporting



Cargo Securement - Generally

§393.100(c) *Prevention against shifting of load.* Cargo must be contained, immobilized or secured in accordance with this subpart to prevent shifting upon or within the vehicle to such an extent that the vehicle's stability or maneuverability is adversely affected.

Different Rules for Packages of HM

49 CFR §177.834(a)

Packages containing hazardous materials are held to a higher standard. This standard is intended to:

- Prevent damage to the package(s)
- Ensure package integrity
- Prevent a release of the hazardous material.



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Hazmat Package Securement

§177.834(a) *Packages secured in a motor vehicle.*

Any package containing any hazardous material, not permanently attached to a motor vehicle, must be secured against shifting, including relative motion between packages, within the vehicle on which it is being transported, under conditions normally incident to transportation. Packages having valves or other fittings must be loaded in a manner to minimize the likelihood of damage during transportation.



49 CFR §177.834(a)

“Any package containing any hazardous material, not permanently attached to a motor vehicle...”

This includes full, partially full, and packages containing only the residue of a hazardous material.

Permanently attached - e.g. cargo tanks

49 CFR §177.834(a) cont.

“must be secured against shifting, including relative motion between packages, within the vehicle on which it is...”

This does not mean no movement at all.

Shifting

A change in place or position of the package from the original place or position occupied when it was loaded onto the motor vehicle.



49 CFR §177.834(a) cont.

“under conditions normally incident to transportation ...”

These conditions include vehicle starting, stopping, cornering, accident avoidance, and varied road conditions (dips, bumps, potholes etc.).

Out-of-Service

Loading and securement
is included in the North
American Standard Out-
of-Service Criteria

NORTH AMERICAN STANDARD OUT-OF-SERVICE CRITERIA

*April 1, 2016

COMMERCIAL VEHICLE SAFETY ALLIANCE

Part I – <i>North American Standard Driver Out-of-Service Criteria</i>	Pages 1 - 12
Part II – <i>North American Standard Vehicle Out-of-Service Criteria</i>	Pages 13 - 62
Part III – <i>North American Standard Hazardous Materials Out-of-Service Criteria</i>	Pages 63 - 66
Part IV – <i>North American Standard Administrative Out-of-Service Criteria</i>	Pages 67 - 68
Appendix	Pages 69 - 94

**THIS DOCUMENT REPLACES AND SUPERSEDES ALL
PREVIOUS OUT-OF-SERVICE CRITERIA**



Promoting Uniformity in Commercial Motor Vehicle Safety & Enforcement

Commercial Vehicle Safety Alliance
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Greenbelt, MD 20770
Phone: 301-830-6143 · www.cvsa.org

Out-of-Service cont.

Failure to secure HM packages from shifting will result in the vehicle being placed out-of-service. The vehicle may not continue until the violation has been corrected.

7. LOADING AND SECUREMENT

a. Blocking and Bracing

Transporting HM/DG not blocked, braced, or secured as required by applicable regulation constitutes an out-of-service condition.

NOTE: Any shifting likely to adversely affect HM/DG package integrity, under conditions normally incident to transportation.



Frequently Asked Questions (FAQs)

Are there certain methods required to be used to secure packages of HM?

No. Any of the following may be used provided the requirements of §177.834(a) are met:

- Blocking
- Bracing
- Using other cargo or dunnage
- Tie-downs
- Shoring bars (load locks)

FAQs cont.

Is stretch or shrink wrapping packages to a pallet considered securement?

Packages may be wrapped (unitized) on a pallet but they must be secured from shifting on the pallet. Additionally, the pallet must be secured from shifting.

Why is it Important?

1. Safety

- Risk to Persons, Property and Environment

2. Damaged Containers = Leaking = Clean-Up

3. Fines/Penalties

4. Effect on Safety

Measurement System Data

- Hazardous Materials
Compliance Basic



Safety Measurement System

Section	Description	Severity Weight	Out-of-Service
173.24(b)	Leaking HM from package	10	+2
173.24(c)	Use of unauthorized packaging	10	+2
177.801	Transporting a forbidden material	10	+2
177.834(a)	HM package not secure in vehicle	10	+2

Source: **Safety Measurement System (SMS) Methodology:**
Behavior Analysis and Safety Improvement Category (BASIC)
Prioritization Status

U.S. Department of Transportation
Federal Motor Carrier Safety Administration
February 2016

Awareness and Training

Train drivers and other personnel in charge of loading cargo, the requirements of this section.

It provides a higher level of safety and is required by 49 CFR §172.704 (HM function-specific training)

Resources

U. S. Department of Transportation
Pipeline and Hazardous Materials Safety
Administration



Interpretations

16-0088

02-0044

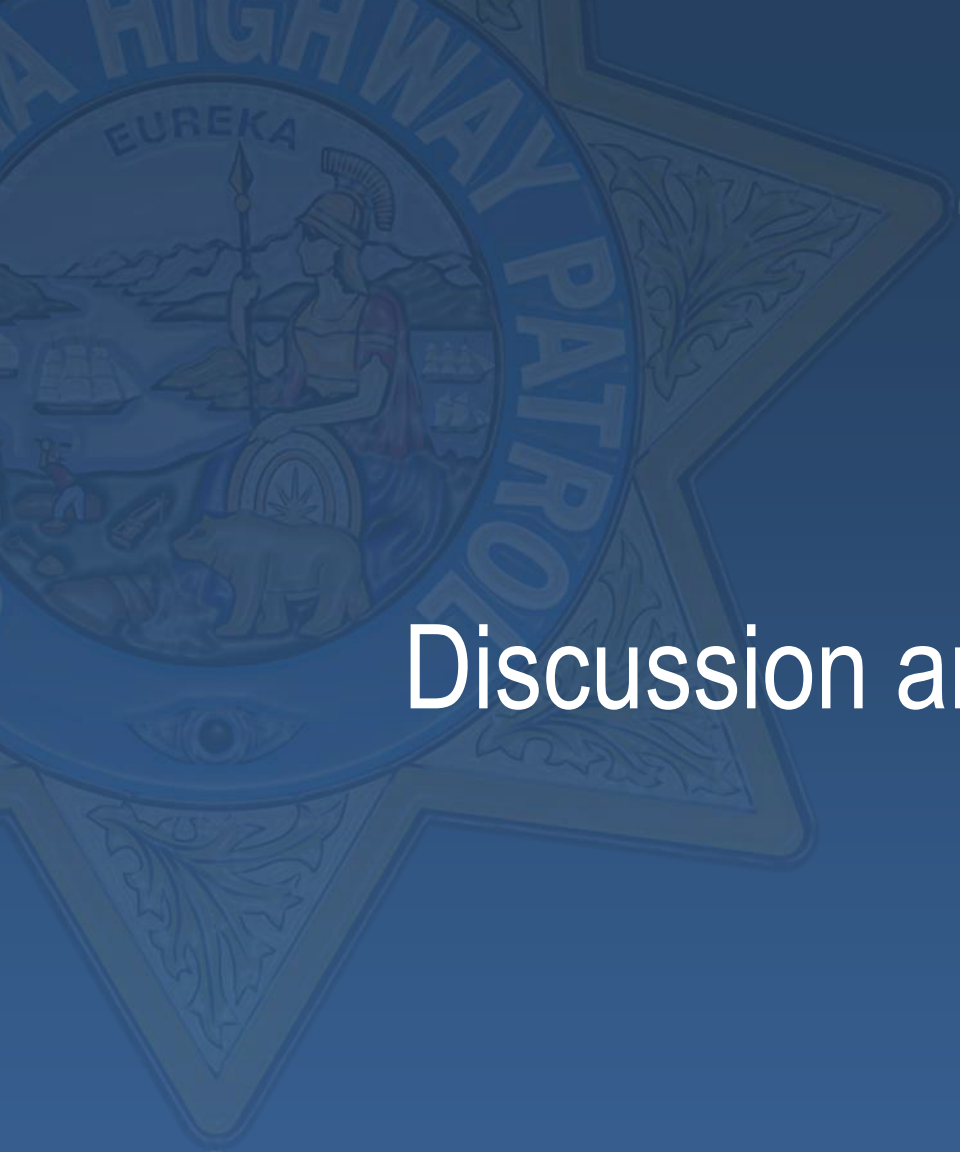
14-0230

12-0136

10-0046

14-0176

11-0198



Discussion and Questions

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