



## Dangerous Goods Advisory Council

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November 19, 2007

Dr. Ted Willke  
Associate Administrator for  
Hazardous Materials Safety  
Pipeline & Hazardous Materials Safety Administration  
U.S. Department of Transportation  
Washington, DC 20590

Re: Petition for rulemaking; hazardous materials transportation, loading, unloading and storage incidental to transportation

Dear Dr. Willke:

The Dangerous Goods Advisory Council (DGAC), in accordance with §106.95 of the hazardous materials regulations (HMR), hereby petitions for the adoption of a new Subpart J in 49 CFR Part 172, to establish requirements for loading, unloading, and storage incidental to transportation. We believe safety in transportation, as that term is defined in 49 U.S. Code 5102 and 49 CFR 171.8, compels adoption of nationally uniform new requirements applicable to these operations.

### INTRODUCTION

DGAC is a non-profit educational organization that promotes hazmat transportation safety by providing classroom training, seminars and conferences, and participation in domestic and international regulatory activities in its promotion of not only safe, but also efficient transportation of hazardous materials/dangerous goods in commerce. Our members include shippers and carriers engaged in loading and unloading operations.

### BACKGROUND AND JUSTIFICATION

The Pipeline and Hazardous Materials Safety Administration's (PHMSA) recent review of reported serious incidents confirms that at least one quarter, and possibly as much as one half, of those incidents were associated with loading and unloading operations involving bulk packagings (i.e., those having a capacity greater than 3000 liters). As noted at PHMSA's June 14, 2007, public work shop on this subject, the National Transportation Safety Board (NTSB) and the Chemical Safety Board (CSB) investigations demonstrate a need for regulation in this area and workshop attendees and comments to the docket support the need for responsive PHMSA rulemaking action.

While the HMR currently include some provisions applicable to these activities, they are not sufficiently comprehensive, particularly when operations are conducted outside the presence of the transporting carrier. For example, hazmat employee training, including function specific training on unloading procedures, would not be required if the work of unloading were performed by a person outside the presence of the transporting carrier. The current HMR provide few

specifics pertaining to the *processes* of loading and unloading, and planning needed for their execution, regardless of who performs those actions. In addition, the relationship between the bulk transportation equipment to be loaded or unloaded, and the fixed facilities and appurtenances used in transferring materials, is not addressed. This is in contrast to the “systems approach” provided by US Coast Guard regulations governing bulk transportation of hazardous materials by water which provide for safe and secure transportation and safe and secure loading, unloading and temporary storage.

A number of helpful industry practices have been developed to address these issues, but there is no requirement in the HMR compelling any person to follow such standards or practices. We believe national regulations setting out uniform and consistent requirements could best remedy current deficiencies evidenced by the high number of incidents reported.

To this end, we petition PHMSA to adopt requirements in a new Subpart J in Part 172 as shown in the attachment. Similar to existing Subparts H and I on hazmat employee training and security plans, the proposal is performance based. While establishing new requirements and clarifying regulatory obligations, it would allow the regulated industry sufficient flexibility to accommodate differences in products, sites, and operations.

In conclusion, we believe adoption of the attached requirements would enhance safety and security in transportation, clarify responsibilities, and provide for viable federal enforcement. We believe such a rule change would respond effectively to the incident record as well as to the recommendations and findings of the NTSB and the CSB. In the process of developing this petition for rulemaking, we have communicated directly with other organizations in an enterprise approach to enhancing transportation safety.

We do not consider a proposed rule change consistent with this petition to constitute a major rulemaking, as that term is defined. The majority of companies represented by our organization and those consulted have some provisions in place similar to the requirements we propose. To the extent costs may be incurred, we believe the expected reduction in incidents during loading, unloading, and related storage would justify those costs.

Please contact us directly if you have any questions on this petition for rulemaking.

Sincerely,

A handwritten signature in black ink that reads "Michael Morrisette". The signature is written in a cursive, slightly slanted style.

Michael Morrisette  
President

Attachment

## Attachment

DGAC petitions PHMSA to adopt the following new requirements:

### Subpart J –Loading, Unloading, and Incidental Storage Requirements for Hazardous Materials in Bulk Packagings

§172.900 (a) *General requirements.* This section applies to loading, unloading, and storage incidental to transportation of a hazardous material in a packaging having a capacity greater than 3000 liters.

- (1) The offeror, consignee, or transloading facility operator shall assure that loading, unloading, or storage is performed in accordance with the provisions of this section.
- (2) The operational procedures described in §172.901 and §172.902 shall be –
  - (A) written and updated as necessary; and
  - (B) available and provided upon request to each hazmat employee performing a loading or unloading function.

§172.901 *Operational procedures for loading and unloading.* The offeror, consignee, or transloading facility operator shall have operational procedures for loading or unloading that are based on safety and security analyses.

(a) Standards, protocols or guidelines issued by federal agencies or industry organizations (e.g., AAR Pamphlet 34 for rail tank car loading and unloading operations) may be used to satisfy the requirements in this section.

(b) Operational procedures shall, as appropriate, take into account the following:

- (1) Designation of hazmat employees responsible for each aspect of the loading or unloading operation and attendance or monitoring of the operation.
- (2) Protective equipment appropriate to the material being handled.
- (3) Information on the hazards of the material to be loaded or unloaded, including measures to be taken relevant to the loading and unloading operations such as the control of temperature or pressure and the maximum filling limit.
- (4) Conditions specific to the transfer location that could affect safety, including access control, lighting, ignition sources and physical obstructions.
- (5) Measures to be taken to ensure the security of the transfer facility.
- (6) Means of communication.
- (7) Means of control and monitoring of conditions, including temperature of the lading and pressure of the containment vessel.
- (8) Provisions for periodic testing and inspection of cargo transfer equipment.
- (9) Pretransfer procedures, including –
  - (A) identification and verification of the material to be transferred;
  - (B) inspection of the transport unit and transfer area for safety and security purposes;
  - (C) securement of the transport unit against movement;
  - (D) grounding and bonding of the transport unit;
  - (E) inspection of transfer equipment, including hoses and valves, for condition, suitability to handle the material, and unexpired test dates;
  - (F) inspection of connections;
  - (G) identification and verification of the piping path, equipment lineups and operational sequencing;
  - (H) confirmation of communication methods, equipment, procedures and signals;
  - (I) spill containment; and
  - (J) identification of equipment and special operating procedures for emission control systems.

- (10) Transfer procedures, including –
  - (A) initiating and controlling the lading flow;
  - (B) monitoring temperature of the lading and pressure of the containment vessel;
  - (C) monitoring filling limits; and
  - (D) terminating lading flow.
- (11) Post-transfer procedures, including –
  - (A) evacuation of the transfer system and depressurization of the containment vessel;
  - (B) disconnection of the transfer system; and
  - (C) inspection and securement of transport unit fittings, closures, markings and placards.
- (12) Emergency procedures, including –
  - (A) identification of emergency response equipment and individuals authorized in its use;
  - (B) incident response;
  - (C) use of emergency shut-down systems; and
  - (D) emergency communication and spill reporting.

§172.902 *Operational procedures for storage.* The offeror, consignee, or transloading facility operator with control and custody of the package in storage incidental to movement shall have procedures, as appropriate, to –

- (1) monitor for leaks and releases;
- (2) ensure the safe condition of the lading and the package; and
- (3) address security concerns.

§172.903 Employees engaged in loading and unloading operations subject to this Subpart shall be qualified on the procedures commensurate with their responsibilities and shall follow them in the performance of their duties.

#### §172.904 Special Requirements for Chlorine

For chlorine unloading operations emergency shut-off systems that comply with Chlorine Institute Pamphlet 57 or equivalent must be in use.

Amend §173.30 to read as follows:

#### §173.30 Loading and unloading of transport units

A person who is subject to the loading and unloading regulations in this subchapter must load or unload hazardous materials into or from a transport vehicle or vessel in conformance with procedures required in Subpart J of part 172, as applicable, and with applicable loading and unloading requirements of parts 174, 175, 176, and 177 of this subchapter.

Note: As an alternative for consideration, it may be possible to incorporate proposed Subchapter J requirements in a revised and expanded §173.30.