

February 17, 2004



U.S. Department  
of Transportation

400 Seventh Street, S.W.  
Washington, D.C. 20590

**Research and  
Special Programs  
Administration**

DOT-E 11361  
(FOURTH REVISION)

EXPIRATION DATE: January 31, 2006

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: NOVA Chemicals, Incorporated  
Indian Orchard, MA
2. PURPOSE AND LIMITATION:
  - a. This exemption authorizes tank cars, containing hazardous materials identified in paragraph 6, to remain standing with unloading connections attached when no product is being transferred, provided that a minimal level of monitoring, as specified in this exemption is maintained, and authorizes the setting of the hand brake and blocking a wheel in both directions of the first and last cars of a series of coupled tank cars prior to unloading. This exemption provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated.
  - b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 172.302(c); § 174.67(a)(2), (i) and (j), except as specified herein.
5. BASIS: This exemption is based on the application of NOVA Chemicals, Incorporated dated January 28, 2004, submitted in accordance with § 107.109.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

<b>Proper Shipping Name/ Hazardous Materials Description</b>	<b>Hazard Class/ Division</b>	<b>Identi- fication number</b>	<b>Packing Group</b>
Styrene monomer, stabilized	3	UN2055	III

7. SAFETY CONTROL MEASURES:

a. Prescribed packagings are DOT Specification tank cars authorized for the material specified meeting all DOT Specification requirements. Packagings must be equipped with efficient hand brakes which must comply with the Railroad Safety Appliance Standards in 49 CFR Part 231.

b. Any manually operated switch, under the proprietary control of the exemption holder, providing access to the track on which the equipment is located must be lined against movement to that track and locked with an effective locking device operable only by a representative of the facility.

c. The hand brake must be set and at least one wheel blocked in both directions on the first and last car of a series of tank cars coupled together, being unloaded, provided the grade of the track is less than or equal to 0.5 percent.

d. For grades exceeding 0.5 percent, the following table must be used to determine the percentage of additional hand brakes to be applied:

<b>Grade (Percent)</b>	<b>Percentage of cars to have hand brakes applied</b>
> 0.5 ≤ 0.6	17
> 0.6 ≤ 0.7	20
> 0.7 ≤ 0.8	23
> 0.8 ≤ 0.9	26
> 0.9 ≤ 1.0	29

e. The facility operator must install a bi-directional derail in an effective location (at least 50 feet when possible) from the end of the equipment to be protected by the caution sign. The person performing the unloading operation must lock the device in the derailing position with an effective locking device operable only by a representative of the facility.

f. The facility operator must designate an employee responsible for on-site monitoring of the transfer facility in the absence of the unloader. The designated employee must be made familiar with the nature and properties of the product contained in the tank car, procedures to be followed in the event of an emergency; and, in the event of an emergency, have the ability and authority to take responsive actions.

g. When a signalling system is used (including a monitoring system or a sensing device), the system must be capable of alerting the designated employee in the event of an emergency and providing immediate notification of any monitoring system malfunction. If the monitoring system does not have self-monitoring capability, the designated employee must check the monitoring system hourly for proper operation. (For recommendations on the selection, installation and maintenance of signalling systems see NFPA 72 - Installation, Maintenance and Use of Protective Signalling Systems.)

h. In the absence of the unloader:

- (1) the tank car and facility shutoff valves must be secured in the closed position;
- (2) no product may be transferred; and
- (3) the requirements of § 174.67(a)(2) and (3) apply.

i. The transfer facility shutoff valve must be located as close as practicable to the point of connection between the transfer system and the tank car and in a manner that will minimize the release of product in the event of hose rupture or separation. The facility operator must take appropriate steps to prevent rupture of transfer hoses due to product expansion (i.e. liquid expansion chambers or hoses with an increased minimum burst pressure rating.)

8. SPECIAL PROVISIONS:

a. The facility operator must have written safety procedures on file at each location that uses this exemption. The facility operator must instruct each employee performing any function under this exemption on the contents of these procedures and ensure compliance with them. The written procedures must contain at least the following:

- (1) A physical description of the facility including the address and hours of operation.
- (2) A drawing of the transfer facility showing natural and manmade barriers, locations of protective equipment (i.e. derail and caution sign), locations of emergency equipment and locations of signalling equipment.
- (3) Procedures for monitoring the transfer facility [see paragraphs 7(f) and (g)].
- (4) Information on the contents of the tank car including:
  - (i) chemical or common name of the product
  - (ii) health and physical hazards involved in handling the product
  - (iii) emergency and first-aid procedures.
- (5) Procedures for securing the transfer facility and protective equipment including derail, switch locks, tank car brakes, caution sign and wheel blocks.
- (6) Equipment available for employee safety and procedures for using the equipment.
- (7) Procedures and limitations for movement of tank cars in the vicinity of the transfer facility.
- (8) Testing and maintenance of system components including signalling systems.
- (9) Training requirements for designated employees responsible for monitoring the transfer facility.

- (10) Procedural steps in the event of an emergency, including names and phone numbers of key personnel and public agencies to contact.
- (11) Procedures for reviewing incidents to determine whether the written procedures require revision or modification to prevent future occurrences and amending those procedures when the review necessitates changes.

b. The facility operator must establish and maintain liaison with fire, police and other appropriate public officials to learn the responsibilities and resources of each governmental agency that may be called upon to respond to an emergency involving the tank car and transfer facility and acquaint the officials with the facility's capabilities and procedures in the event of an emergency.

c. The marking requirements of § 172.302(c) are waived.

- 9. MODES OF TRANSPORTATION AUTHORIZED: Rail freight.
- 10. MODAL REQUIREMENTS: None as a requirement of this exemption.
- 11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:
  - All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
  - Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when this exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (Sections 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this incident involving the package and shipments made under the terms of this exemption.

Issue in Washington, D.C.:



for Robert A. McGuire  
Associate Administrator for  
Hazardous Materials Safety  
Address all inquiries to: Associate Administrator for  
Hazardous Materials Safety, Research and Special Programs  
Administration, Department of Transportation, Washington, D.C.  
20590. Attention: DHM-31.

Copies of this exemption may be obtained by accessing the Hazardous Materials Safety Homepage at <http://hazmat.dot.gov/exemptions> Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

PO: Schoonover/alb