



U.S. Department of Homeland Security  
U.S. Department of Transportation



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## **RECOMMENDED SECURITY ACTION ITEMS FOR THE RAIL TRANSPORTATION OF TOXIC INHALATION HAZARD MATERIALS**

### **SUPPLEMENT NO. 1, ISSUED NOVEMBER 21, 2006**

This document contains recommended security action items for the rail transportation of materials poisonous by inhalation, commonly referred to as Toxic Inhalation Hazard (TIH)<sup>1</sup> materials. Adoption of these measures is voluntary. Movement of large quantities of TIH materials by rail in proximity to population centers warrants special consideration and attention. These materials have the potential of causing significant numbers of fatalities and injuries if intentionally released in an urban environment.

The supplemental security action items contained in this document are the result of cooperative work between government and industry to craft meaningful and executable actions that will provide for the reduction in the security risk associated with the rail transportation of TIH materials. These action items are an addition to the original 24 action items that were issued on June 23, 2006.

The three action items contained herein represent the next step in enhancing the security of rail shipments of TIH. These three items especially item number 1, the provision calling for the preparation of site-specific plans for high threat urban areas build upon rather than replace the original 24 action items.

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<sup>1</sup> Under the Hazardous Materials Regulations (49 CFR 171-180), TIH materials are gases or liquids that are known or presumed on the basis of tests to be so toxic to humans as to pose a hazard to health in the event of a release during transportation. See 49 CFR 171.8, 173.115, and 173.132.

## **I. Introduction**

The Department of Homeland Security and the Department of Transportation are concerned about the risk posed by the transportation by rail of bulk Toxic Inhalation Hazard materials (TIH) in High Threat Urban Areas. Our intention is to work with the freight rail industry to develop and implement security initiatives that will measurably reduce the risk and enhance the security of bulk Toxic Inhalation Hazards moved by rail in High Threat Urban Areas (HTUA). DHS and DOT have identified four areas to be addressed:

- The establishment of secure storage areas for rail cars carrying Toxic Inhalation Hazard (TIH) materials;
- The expedited movement of trains transporting rail cars carrying TIH materials;
- The positive and secure handoff of TIH rail cars at points of carrier interchange and at points of origination and delivery; and,
- The minimization of unattended\* loaded tank cars carrying TIH materials

## **II. Risk Definition**

All railroad freight carriers operating in High Threat Urban Areas will develop annexes to their security plans that are site specific to that High Threat Urban Area as defined by the Department of Homeland Security Urban Area Security Initiative (UASI) geographic areas.

The security plans will be risk-based and will include metrics that reflect population density and the amount of TIH materials transported by rail and the length of time that these shipments are in High Threat Urban Areas. The plans will be classified appropriately to protect sensitive information.

TSA will provide the rail carriers with a list of urban areas previously identified.

The goal of this initiative is to measurably reduce the risk of the transportation by rail of bulk TIH materials through high threat urban areas. Railroads will strive to reduce risk by 25 percent in the first year. TSA will work with the railroads on goals for succeeding years. Risk will be defined as a function of population density, number of TIH shipments, and the length of time TIH cars are unattended\* and unsecured.

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\* Unattended Cars for the purpose of this document are those rail cars that are in a train or on railroad-controlled leads or tracks with no crew on board, no personnel active in the area, or no electronic monitoring. "Personnel" includes railroad employees or agents, law enforcement officers, private security guards, and rail customer employees.

### **III. Data Base**

The risk reduction will be measured by the time TIH cars are held in yards, terminals, on railroad-controlled leased tracks and the time that TIH trains are stopped or standing within a HTUA. Railroads will strive to provide TSA baseline data within 60 days.

### **IV. Action Plans to Reduce Risk**

#### ***Supplemental Security Action Item No. 1***

Rail carriers with operations in High Threat Urban Areas (HTUA) will develop site-specific security plans that address the security of the transportation in bulk of TIH material in loaded rail cars (“TIH cars”) in HTUA. The site-specific security plan should include specific and detailed measures to enhance the security of TIH cars in the carrier’s custody. These plans should be completed within 90 days of the issuance date of the guidelines.

The site-security plan will address the following objectives for railroad operations within the HTUA:

- 1) Reduce the number of hours TIH cars are held in yards, terminals, and on railroad-controlled leased track in HTUA.
- 2) Minimize the occurrence of unattended\* TIH cars in HTUA.
- 3) Reduce potential exposure to surrounding people, property and environment in HTUA. Special emphasis should be placed on reducing potential exposure to hospitals, high-occupancy buildings, schools, and public venues.
- 4) Reduce the occurrence of standing TIH trains in HTUA.
- 5) Provide a procedure for the protection or surveillance of unattended TIH trains in HTUA
- 6) Ensure compliance with CFR 49 Part 174.14 (48 hour rule).
- 7) Develop site-specific procedures for the positive and secure handoff of TIH cars at points of origin, destination, and interchange in high threat urban areas.

***Supplemental Security Action Item No. 2***

Rail carriers will not operate trains carrying TIH within a specified distance of public venues with National Special Security Events in progress and as requested by the appropriate agency responsible for overall event security coordination.

***Supplemental Security Action Item No. 3***

Rail carriers will, in the security planning process, identify and select areas throughout the carrier's system where cars containing TIH can be moved and held when threat conditions warrant. Risk and exposure to the general public are factors to be considered in the selection process. The rail carrier will provide this information to the government upon request.

**V. Verification**

The Transportation Security Administration and the Federal Railroad Administration will work cooperatively to evaluate the degree of implementation of these security action items through data analysis and inspection, and may take appropriate actions to encourage carriers to achieve risk reduction.