GUIDELINES FOR COMPLIANCE WITH THE:

DOT SECURITY REQUIREMENTS FOR OFFERORS AND TRANSPORTERS OF HAZARDOUS MATERIALS

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GUIDELINES FOR COMPLIANCE WITH THE:
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OF HAZARDOUS MATERIALS

I INTRODUCTION

On March 25, 2003, DOT issued its final rule that establishes new requirements intended
to enhance the security of hazardous materials transported in commerce. The regulation
was issued in reaction to concerns that hazardous materials moving in commerce may be
targets of terrorist or criminal activities that could pose a significant threat to the public
health and safety and our nation’s critical infrastructure.

Under the new regulation, all shippers and carriers of hazardous materials must assure
that their employee training includes a security component. In addition, shippers and
carriers of certain hazardous materials must develop and implement security plans and in-
depth security training programs. The new regulation establishes three primary
obligations:

A. Security Awareness Training. All employers, facilities, persons, etc. subject to the
   DOT hazardous material regulations (regardless of the frequency, quantity or nature of
   hazmat shipped) must provide all hazmat employees with training that provides an
   awareness of security risks associated with the transportation of hazardous materials.

B. Security Plans. Companies who offer for transport or transport certain hazardous
   materials (i.e., those shipments that also trigger the DOT registration requirement) must
   develop and implement a security plan as prescribed by the final rule.

C. In-Depth Security Training. Companies subject to the security plan requirements
   must also provide each hazmat employee with training regarding the security plan and its
   implementation.

This outline will define employer’s primary responsibilities under each major
requirement listed above and will provide suggestions as to how to comply with the
various obligations established under DOT’s Security Requirements for Offerors and
Transporters of Hazardous Materials.

II SECURITY AWARENESS TRAINING

A. Scope of Coverage. All entities (employers, facilities, persons, etc.) subject to the
   DOT hazardous material regulations (regardless of the frequency, quantity or nature of
   hazmat shipped) must provide all hazmat employees with security awareness training.

B. Effective Date.

   1. Current Employees. Security awareness training must be provided no later
      than the date of the first scheduled recurrent training after March 25, 2003, and in
      no case later than March 24, 2006. After the initial security awareness training is
      conducted, security awareness training must be incorporated into the overall
hazmat training employers are required to provide to their hazmat employees once every three years.

2. New Employees. New hazmat employees hired after March 25, 2003 must receive the security awareness training within 90 days of employment.

C. Content. Security awareness training must include the following at a minimum:

1. Awareness of security risks associated with hazardous materials transportation.
2. Methods designed to enhance transportation security.
3. How to recognize and respond to possible security threats

D. Model Security Awareness Training Program. A sample security awareness training program is attached to this document as Appendix A.

III SECURITY PLANS

A. Scope of Coverage. Employers that offer for transportation or transport in commerce one or more of the hazardous materials listed in section 172.800 (and listed below) must develop and implement a security plan for hazardous materials consistent with the requirements of the rule:

1. A quantity of hazardous material that requires placarding under the DOT Hazardous Materials Regulations (HMR);
2. A shipment in other than a bulk packaging of 2,268 kg (5,000 pounds) gross weight or more of one class of hazardous materials for which placarding of a vehicle, rail car, or freight container is required for that class under the HMR;
3. A highway route-controlled quantity of a Class 7 (radioactive) material, as defined in Sec. 173.403 of the HMR, in a motor vehicle, rail car, or freight container;
4. More than 25 kg (55 pounds) of a Division 1.1, 1.2, or 1.3 (explosive) material in a motor vehicle, rail car, or freight container;
5. More than one L (1.06 qt) per package of a material poisonous by inhalation, as defined in Sec. 171.8 of the HMR that meets the criteria for Hazard Zone A, as specified in Sec. 173.116(a) or 173.133(a) of the HMR;
6. A shipment of a quantity of hazardous materials in a bulk packaging having a capacity equal to or greater than 13,248 L (3,500 gallons) for liquids or gases or more than 13.24 cubic meters (468 cubic feet) for solids; or
7. A select agent or toxin regulated by the Centers for Disease Control and Prevention under 42 CFR Part 73.
Note: In regard to facilities subject to the security plan requirements by virtue of engaging in any one of the above listed activities, according to DOT, the security plan requirements apply only to those shipments of hazardous material described above, and only to facilities at which the above listed hazardous materials are prepared or stored during transportation.

B. Effective Date: September 25, 2003.

C. Components of a Security Plan. A security plan must meet the following requirements:

1. **Vulnerability Assessment.** The security plan must include an assessment of possible transportation security risks for those shipments identified in 172.800.

2. **Appropriate Measures.** The plan must include those measures appropriate to address the assessed risks. Specific measures implemented by any given facility may vary commensurate with the level of threat at a particular time.

3. **Personnel Security.** Plans must include measures to confirm information provided by job applicants hired for positions that involve access to or handling of hazardous material listed in 172.800.
   - Need not apply to those applicants who do not handle or have access to hazmat (e.g., those who only prepare shipping papers).
   - Need not check or confirm all information that an applicant provides.
   - Check information related to recent employment history, references, and authorization to work in the U.S.
   - Measures must be consistent with federal and state laws related to employment practices and individual privacy.

4. **Unauthorized Access.** Plans must include measures to address the assessed security risk that unauthorized persons may gain access to the hazardous materials listed in 172.800 or transport conveyances being prepared for the transportation of the hazmat listed in 172.800.
   - Unauthorized persons include those individuals not employed by the company as well as the general public, unless they have specific authority by the company to have such access.
   - Up to each entity to define the “universe” of unauthorized persons taking in to consideration the nature of the facility and the type of activities conducted at the facility (i.e., an unauthorized person is any person who is not authorized by the entity to have access to hazmat or vehicles being prepared for transportation).
5. **En Route Security.** The plan must include measures to address the assessed security risks of shipments of hazmat listed in 172.800 en route from origin to destination.

- DOT “expects shippers to work with carriers” to address en route security risks of materials listed in 172.800.
- At a minimum, shippers should satisfy themselves that a carrier has a security plan in place that adequately addresses the assessed security risks of the hazardous material being transported.

6. **Miscellaneous.** In addition to the above requirements, security plans must be:

   a) Written and maintained at the facility;
   
   b) Made available to employees who are responsible for implementation; and

   c) Revised and updated as necessary to reflect changing circumstances.

D. **Security Plan Guidelines.** Appendix B of this document contains guidelines for the development of a security plan including a sample plan.

IV IN-DEPTH SECURITY TRAINING

A. **Scope of Coverage.** Employers who are required to have a security plan must provide each hazmat employee with “in-depth security training.”

B. **Effective Date:** December 22, 2003. After initial in-depth security training is conducted, it must be incorporated into your facility’s 3 year recurrent hazmat training.

C. **Components of In-Depth Security Training.** The following components must be addressed in the in-depth security training:

   1. Elements of the security plan and its implementation. (Cover the major elements of the plan in a broad-brush fashion including personnel security, unauthorized access to hazmat, and en route security)

   2. Company security objectives. (To enhance the security of hazardous material transported in commerce through the reliance on improved personnel security practices, enhanced en route security, and securing hazmat from access by unauthorized personnel.)

   3. Specific security procedures. (Address the specific action items included in the plan.)
4. Employee responsibilities.

5. Actions to be taken in the event of a security breach. (What actions are required of employees in the event of a security incident.)

6. Organizational security structure. (Describe whom employees are to report to internally as well as externally in the event of a security incident or inquiry.)
APPENDIX A

MODEL SECURITY AWARENESS TRAINING PROGRAM

I AWARENESS OF SECURITY RISKS.

A. Introduction. Hazardous materials are essential to the economy of the United States and the well being of its people and the quality of life they enjoy. Hazardous materials include products that are used to fuel our cars and trucks, heat and cool our homes and offices, and maintain clean and sanitary conditions in our homes and public buildings. Hazardous materials are also used in farming, medical applications, and in manufacturing, mining and many more industrial applications crucial to our nation’s quality of life.

In the wrong hands, however, hazardous materials can present a significant security threat to the public, critical infrastructure (i.e., bridges and tunnels, water supply, etc.), and the economy.

- 1993—Group of religious fundamentalists attempt to bring down the World Trade Center by detonating a rented truckload of ammonium nitrate, urea, and nitric acid.
- 1995—Timothy McVeigh blows up federal building in Oklahoma City using a truck loaded with various hazardous materials including ammonium nitrate.
- 1999—Two members of an anti-government militia were arrested for plotting to detonate 24 million gallons of liquid propane at a storage facility in Elk Grove, CA.

These and other incidents demonstrate how hazardous materials have the potential to be transformed into weapons of destruction. Addressing these and other similar threats is crucial to protecting our citizens as well as our critical infrastructure and overall economy.

The task of securing hazardous materials in transportation is a daunting one. Given the quantity and number of shipments daily, law enforcement cannot do it alone, but rather needs the cooperation of shippers, carriers, and hazmat employees.

The purpose of this security awareness training is to make hazmat employees aware of the potential security risks and threats related to the transportation of hazardous materials as well as to instruct hazmat employees regarding actions they can take in regard to hazardous materials to enhance their secure transportation.

B. Potential Targets. Millions of tons of hazardous materials (corrosive, flammable, poisonous, radioactive, explosive) are transported in commerce every day. Over 800,000 shipments of hazardous material are made every day in the U.S., 95% of these shipments are made by truck. The remaining shipments are transported by rail, air, and vessel.
These shipments are essential to commerce and our way of life, but in the wrong hands are potentially deadly weapons.

Some chemical mixtures can cause a powerful explosion if detonated or ignited, others can release poisonous fumes if released or combined with other substances. Consider the following as suggestive of potential targets that can cause substantial harm if terrorists or others are able to detonate, ignite or otherwise release hazardous materials with the intent to wreak havoc or inflict damage or personal injury:

- Toxic chemicals such as chlorine could cause substantial casualties if released in a confined area.
- Flammable liquids and compressed gases such as propane can cause substantial damage if ignited or otherwise detonated.
- The first attempt to bring down the World Trade Center involved the detonation of a truckload of ammonium nitrate, urea, and nitric acid.
- A terrorist cell planned to hijack and ignite a truck loaded with flammable material in New York’s Hudson River Tunnel.
- A city’s water supply may be contaminated through the intentional release of hazardous materials.
- Threat of theft or hijacking of a truck loaded with hazardous material.
- Fraudulent shipment of hazardous materials to a group intent on destruction.
- Sensitive infrastructure such as tunnels, bridges, highways, etc. or chemical plants and loading facilities may also be targets of a saboteur.
- High density population centers (apartment buildings, sports complexes, schools, etc.) can be a target of terrorist or criminal activities.

C. Potential Threats. There are many potential sources of threats to the security of hazardous material in transportation. These sources can be internal (i.e., current or former employees) as well as external (i.e., terrorists, criminals, etc.), and can threaten hazmat security at your facility or while en route to your customer.

It is important therefore to be vigilant, and suspicious of unusual behavior, and to report such suspicious actions to your superiors.

Types of Individuals that may Pose a Threat to Hazmat Security:

1. External Threats (i.e., Terrorists, Criminals): It has been widely reported that terrorists may live in our communities undetected for many years holding jobs, going to school, shopping at the local malls, hanging out at clubs and
otherwise leading normal, uneventful lives that do not draw attention to themselves. Likewise many criminals have adopted lifestyles designed not to bring attention to their criminal activities.

One of the biggest mistakes we can make is to stereotype terrorists or criminals in general. Do not discount unusual behavior because the individual does not meet some preconceived notion of a terrorist or criminal. Be suspicious of all unusual behavior and report it to your supervisor.

2. Internal Threats (i.e., Former and Current Employees): It is also possible that an unsuspected attacker could be a disgruntled former or current employee who is dissatisfied with a supervisor, or the employer, the government, etc. Such individuals may feel persecuted or unjustly treated and may make threats. Employees should take such threats seriously and report them along with any suspicious behavior to their superiors.

Part-time or temporary employees may also try to use their position to obtain access to hazardous materials and carry out acts of sabotage.

II RECOGNITION OF THREATS TO SECURITY AND METHODS TO ENHANCE TRANSPORTATION SECURITY

A. Personnel.

1. Instruct employees to report to their supervisor suspicious behavior, incidents or events that they may observe and which may impact hazmat security (i.e., unauthorized personnel loitering around loading areas or other areas with access to hazardous material, unusual orders of hazardous material, etc.).

2. Instruct employees regarding the Nation’s Threat Level as represented by the Homeland Security Advisory System.

In brief, the Homeland Security Advisory System is a means to disseminate information regarding the risk of terrorist acts to federal, state, and local authorities and to the American people. There are five Threat Conditions, each identified by a description and corresponding color. From lowest to highest, the levels and colors are:

Low = Green;
Guarded = Blue;
Elevated = Yellow;
High = Orange;
Severe = Red.

The higher the Threat Condition, the greater the risk of a terrorist attack. Risk includes both the probability of an attack occurring and its potential gravity. Threat Conditions may be assigned for the entire Nation, or they may be set for a particular geographic area or industrial sector.
The higher the Threat Condition, the more care and caution employees should exercise in monitoring and ensuring the security of hazardous material. The greater the Threat Condition, the more vigilant employees should be of suspicious behavior. In such situations, employees should more aggressively pursue “anomalies” they may observe (see Facility Security below).

3. Inform employees how they will be kept apprised of the current status of the Nation’s Threat Level (i.e., periodic meetings, email, memos, posted signs, etc.), and emphasize to employees the need to monitor these communications.

B. Facility Security

1. Instruct employees to report “anomalies” to their supervisors. Anomalies may include such things as overdue or missing vehicles or shipments; intrusions or trespass of the physical plant, grounds, etc.; evidence of tampering around vehicles, loading docks, etc.; unusual orders such as extremely large quantities to new customers; etc.

2. Information about your facility as it relates to the storage and transportation of hazardous materials should be restricted to employees only and those who have a need to know.

3. Control access to hazardous materials stored at your facility. Do not allow unauthorized individuals to have access to hazardous materials storage areas as well as loading docks, vehicles, etc. Employees should report any such instances to their supervisor.

4. In regard to pick up orders, ensure that you are dealing with an authorized customer representative (check identification, etc.)

5. Employees should report to their supervisors any shortages or discrepancies in regard to the quantities of hazardous materials stored at the facility.

6. Ensure that access doors to hazardous materials are secured.

C. En Route Security

1. Instruct employees to verify the identity of the carrier/driver prior to tendering the hazardous material shipment.

2. Identify preferred routing (i.e., shortest route, avoid populated areas if feasible).

3. Expedite shipment to final destination (i.e., minimize the number of stops)

4. If driver must stop the truck, select well-lit locations on well traveled roads, and keep truck in sight to the extent feasible.
5. Never leave the vehicle running—shut off the engine and lock the doors.

6. Drivers should be alert when driving. Be aware of suspicious activity (i.e., vehicles following you, anyone approaching your vehicle while at a stop light, etc.). Employees should report such incidents to their supervisor.

7. Drivers should not discuss hazmat cargo, destination, or other specifics with people they don’t know.

8. Drivers should have proper identification and paperwork for the hazardous material on board.

9. Employees should report lost or stolen shipments, incidents of unauthorized access and other such incidents to their supervisor.
APPENDIX B

GUIDELINES FOR THE DEVELOPMENT OF A SECURITY PLAN TO ENHANCE THE SECURITY OF HAZARDOUS MATERIAL IN TRANSPORTATION

I  INTRODUCTION

Given the increased concern over terrorism, domestic sabotage, criminal activities, and other potential threats, the security of hazardous materials in transportation has become a priority for shippers, consignees, emergency responders, law enforcement personnel, and government officials in general.

Reflecting this heightened concern, on March 25, 2003, DOT issued its final rule on Security Requirements for Offerors and Transporters of Hazardous Materials, which is intended to enhance the security of hazardous materials transported in commerce.

Among other obligations, this rule requires certain facilities to develop and implement a security plan. Facilities subject to the security plan requirements include those who are subject to the registration requirements in 49 CFR 107 (e.g., those who ship or offer for transportation quantities of hazmat requiring placarding) as well as those who offer or transport select agents and toxins regulated by the Centers for Disease Control and Prevention. In addition, facilities subject to the security plan requirements must also train their hazmat employees in regard to the specific requirements of the plan.

At a minimum, under the new DOT regulation, a security plan must be in writing and must include the following elements:

- Assessment of possible transportation security risks and appropriate measures to address the assessed risks;
- Personnel security;
- Unauthorized access; and
- En route security.

The security plan also must be available to employees who are responsible for its implementation. It must also be revised and updated as necessary to reflect changing circumstances.

A. Target Audience. This guide is intended for those individuals who have been charged with responsibility for the safe and secure transportation of their products classified as hazardous materials pursuant to the DOT hazardous materials transportation regulations codified at Title 49 of the Code of Federal Regulations. Moreover, the guide is targeted to distributors and manufacturers of cleaning products.

B. Purpose. The primary purpose of this guide is to address security considerations during the transportation of hazardous materials and to reduce the risk of potential harm by terrorists, criminals and others who may seek to hijack, sabotage, or otherwise use hazardous material as a means of inflicting injury, damage, or other harm. The guide is
also intended to facilitate compliance with the security plan requirements established by DOT.

The implementation of the guidance contained in this document in the form of an actionable plan is likely to vary from company to company based on the nature and quantity of chemical products shipped, mode and route of transportation, activities involved, current company practices, complexity of operations and vulnerability assessments. The actual measures implemented by a particular facility should address that company’s particular assessed security risks and thus is likely to vary from facility to facility.

This guide presents a structural approach for assessing security risks and provides suggestions regarding practical, common sense approaches to further reduce security risks. This guidance is not intended to be an all inclusive list of transportation security considerations for distributors and manufacturers of cleaning products, but does provide examples of the types of activities companies may wish to pursue in evaluating and implementing transportation security measures. While this guide emphasizes the internal operations of a company, it is important for companies to coordinate and communicate security procedures with their carriers (if any) and others that may also be involved in the safe and secure transportation of their hazardous products.

II PRINCIPLES OF MANAGING SECURITY RISK

In developing a security plan, it is important to observe and incorporate into the framework of your plan the following fundamental principles that are critical for managing security risks associated with the transportation of hazardous materials:

- Obtain commitment to reduce security risks on the part of both managers and workers.
- Promote a “risk reduction culture with a security focus” in your day-to-day operations.
- Partner with all parties involved in securing the hazardous materials transportation chain (e.g., carriers).
- Prioritize identified security risks so that resources can be allocated effectively.
- Implement action steps to reduce the security risks that have been identified.
- Strive for continuous improvement.
- Communicate with and train all affected employees to ensure that each knows its role and is aware of relevant security information.
III ASSESSMENT OF TRANSPORTATION SECURITY RISKS

Assessment of transportation security risks is a key component in the development and implementation of a security plan under the DOT Security Requirements for Offerors and Transporters of Hazardous Materials. Assessment of possible transportation security risks actually involves several steps:

- Identification and characterization of a facility’s hazardous materials activities
- Risk assessment of the various hazmat activities
- Prioritization of security risks

Please note that the guidance contained herein is not intended to be a prescriptive approach. Rather it is a suggested flow of thought and information. It is entirely conceivable that some of the guidance may not apply to a given company based on a company’s operations, activities, or existing programs.

A. Identification and Characterization of Hazardous Material Activities. In order to properly assess any potential transportation security risks, it is essential that you first characterize the nature and extent of your hazmat activities. This inventory of activities will help focus the risk assessment process itself and help companies make decisions as to which transportation activities should have more security scrutiny.

In this regard, please note that the DOT security plan requirements apply only to shipments of hazardous materials as specified in 49 CFR 172.800 (i.e., shipments of hazardous material that require placarding, etc.). Therefore, at a minimum, you should identify those activities and assess potential security risks involved with such shipments of hazardous material. The following is a checklist of those activities that should be addressed in describing your hazmat activities.

- Describe the nature and quantities of hazardous materials shipments
  - Hazard classes
  - Any unique hazards or conditions
  - Quantities (include container volume as well as total quantities shipped per shipment)
  - Frequency of shipments
  - Identify routes used including whether there are major population centers along route, proximity to landmarks and critical infrastructure
  - Identify any storage in transit

- Set forth the process your company uses in handling hazardous materials
  - Address the receipt, storage, and shipment of hazardous materials
  - Describe who handles the material, what exactly is done to transport the hazmat such as packaging, shipping paper preparation, placarding, etc.
• Identify existing baseline programs (i.e., those business practices and regulatory programs that should be in place to ensure the safe transportation of hazardous materials)
  o Hazmat regulatory programs (i.e., hazard communication, DOT hazardous materials regulations, community right to know reporting, employee training, emergency preparedness activities, etc.)
  o General standard operating procedures (i.e., company inventory practices in relation to hazmat, incident investigation, maintenance and inspection activities)

• Describe existing security activities associated with the hazmat transportation operations.
  o Include those activities that were originally designed for security purposes (e.g., fencing, locked doors, security systems, etc)
  o Also include those activities considered originally for safety or risk management purposes but now have a recognized security value (e.g., parking restrictions, restricted access to certain portions of storage facility, etc.)
  o Address security issues with personnel (e.g., background checks), existing security procedures and plans, and security of facilities and equipment

• Identify interactions with any others involved in transporting hazardous materials, such as carriers a company may use.

B. Risk Assessment. The risk assessment step involves analysis of a company’s operations and characterization of the nature and magnitude of the security risks. The assessment does not have to be costly or complex, but can begin simply and progress in complexity as needed.

The risk assessment can simply involve reporting the impressions of experienced company staff, brainstorming, or conducting a survey by a diverse team composed of staff from various operations (e.g., traffic managers, drivers, hazmat specialists). This process should include the identification of hazmat with the potential for use as a weapon of destruction. You should also review the current transportation activities and operations from a security perspective. Ask “What are we doing now? What could go wrong? What can we do differently?”

Alternatively, the assessment can involve more formal and rigorous hazard assessment techniques such as the use of risk matrices and scoring or ranking systems. Such a system is recommended in the Transportation Security Guidelines for the U.S. Chemical Industry, published by the American Chemistry Council, which is available at www.americanchemistry.com or by contacting ISSA.

In any event, the goal is the same. In this process companies should strive to identify those points in the hazmat transportation chain where security risks exist, and where actions can be taken to reduce the security risk. These points are referred to as risk control points. These risk control points can vary widely from facility to facility and may include everything from conducting background checks on hazmat employees, to an
increased emphasis on security en route, or adding to existing emergency response procedures.

When selecting security risk control points the following areas require special attention:

- Personnel backgrounds (e.g., employment history and verification of eligibility for employment in the U.S. pursuant to requirements established by the Immigration Reform and Control Act)
- Hazardous materials and package control (e.g., locked doors, security systems)
- En route security (e.g., avoidance of tunnels and high population centers)

In conducting your risk assessment, you may wish to use the following checklist to facilitate the process:

SECURITY CHECKLIST FOR THE SHIPPER OF HAZMAT

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>RESPONSE</th>
<th>RECOMMENDATION</th>
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<tbody>
<tr>
<td><strong>Hazmat Storage and Handling</strong></td>
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<tr>
<td>1. How are hazardous materials secured?</td>
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<td>2. Does your company protect hazardous materials using alarms, or other security systems?</td>
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<td>3. How are unauthorized personnel restricted from areas where hazmat is stored?</td>
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<td>4. How are untrained personnel restricted from the area?</td>
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<tr>
<td>5. What records are maintained to inventory hazardous material?</td>
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<td>6. How often is the inventory audited?</td>
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<td>7. What procedures are followed if material is missing from inventory?</td>
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<tr>
<td>8. Do your employees have and use a checklist for packaging and transferring hazmat?</td>
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<td>9. Does your company implement routine security inspections?</td>
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<td>10. Are security personnel used to monitor the facility?</td>
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<tr>
<td>QUESTION</td>
<td>RESPONSE</td>
<td>RECOMMENDATION</td>
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<tr>
<td>11. When was the last time locks on access doors to hazmat were examined?</td>
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<td>12. Who has keys or access to keys to these locks?</td>
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**Training and Personnel**

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<th>QUESTION</th>
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<tr>
<td>13. How are shipping personnel and hazmat employees trained?</td>
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<td>14. How are training records maintained?</td>
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<td>15. Are hazmat employees trained in the recognition and disposal of suspect packages?</td>
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<td>16. Are hazmat personnel trained in recognizing and dealing with suspicious or aberrant behavior?</td>
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<td>17. Are hazmat employee background checks conducted or other means used to confirm employment info?</td>
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<tr>
<td>18. Does your company hold regular meetings to discuss security measures and awareness with employees?</td>
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**Carrier Safety (for those who use carriers)**

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<tr>
<th>QUESTION</th>
<th>RESPONSE</th>
<th>RECOMMENDATION</th>
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<tbody>
<tr>
<td>19. How is the carrier’s identification matched to shipping records?</td>
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<tr>
<td>20. What procedure do you have to verify that the carrier is authorized to carry your hazmat?</td>
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<tr>
<td>21. How do you audit your carrier’s security procedures?</td>
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**Securing Shipments En Route Generally**

<table>
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<tr>
<th>QUESTION</th>
<th>RESPONSE</th>
<th>RECOMMENDATION</th>
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<tbody>
<tr>
<td>22. How do you track the shipment after it has left your facility?</td>
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<tr>
<td>23. When is the receiver notified that the shipment is en route?</td>
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<td>24. What information is provided to the receiver?</td>
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<td>25. Is this information adequate?</td>
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<tr>
<td>QUESTION</td>
<td>RESPONSE</td>
<td>RECOMMENDATION</td>
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<tr>
<td>26. What procedure do you have to follow up on the safe arrival of hazmat?</td>
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**En Route Safety (for those transporting on their own vehicles)**

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<tr>
<th>QUESTION</th>
<th>RESPONSE</th>
<th>RECOMMENDATION</th>
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<tbody>
<tr>
<td>27. Do your drivers carry the proper identification (i.e., drivers license, employee ID, etc.)?</td>
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<tr>
<td>28. What procedures do you have in place to verify if your drivers are authorized to transport hazmat?</td>
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<tr>
<td>29. How is the vehicle checked for safety?</td>
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<tr>
<td>30. What procedures are in place for safeguarding hazmat during en route breakdowns and/or other emergencies?</td>
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<tr>
<td>31. Is access to hazmat on board the vehicle secured?</td>
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**C. Prioritizing.** Once you have successfully completed the risk assessment, in which risks are characterized and in many cases quantified to some extent, and risk control points identified, you are ready to prioritize your results. As in nearly any risk management context, priority setting is an essential prerequisite for developing and implementing a workable security plan.

The risk assessment process usually will generate numerous risk reduction opportunities for which various kinds of interventions could reduce risks. Your security plan should be designed to reduce any particularly high risks and to address lower risks where it is cost effective to do so. Based on your risk assessment results, you should rank or otherwise identify the most important risks associated with your operations for possible attention as well as any “low hanging fruit” (i.e., lower risks that can be remedied inexpensively).

Criteria to be considered in ranking risks initially include size of the risk, nature of the risk, severity of the possible adverse effects, and certainty about the risk. After ranking the risks, priorities should be set among the opportunities for risk reduction, factoring in risk information along with cost and technical feasibility of control actions and any other considerations important to decision making for your operations.

As you are aware, resources are limited. Beyond the absolutely necessary actions needed to reduce any particularly high risks, a key determination is to identify where resources can be applied to achieve the most risk reduction. In other words, which risk control points can you target and which controls can you apply to get the most “bang for the buck.”
IV SECURITY PLAN

A. General. In drafting your security plan, remember that it should be designed to reduce any especially high risks and to address those lesser risks where it is cost-effective to do so. Moreover, the security plan is yours to devise and should address those risks that you identify as most important, and should spell out preventive and control actions consistent with your operations.

The security plan can call for actions that are new and different to your facility, or it can simply call for enhancements to current activities. The plan can address an organization’s baseline programs, or they can target specific control points identified as problematic. Whatever shape or form your plan takes, remember that the fundamental goal of the plan is to reduce security risks and to do so cost-effectively.

For example, if a company has a high turnover rate, it may decide to review employee rosters to ensure that comprehensive background checks have been performed on all hazmat employees. Likewise, if a facility has a particular concern regarding unauthorized access to hazardous materials based on its risk assessment, it may wish to require employees to display badges or identification cards to gain access to areas containing hazardous materials. Guards, fences, or locked doors also may be used to secure access to hazmat stored on site.

In contemplating your facility’s security plan, it is often valuable to develop and then evaluate a set of different control options. The process of comparing and contrasting options (in terms of their risk reduction potential, their feasibility, their cost, and other relevant considerations) can lead to more confidence that your security plan is effective and efficient.

Usually, for comparison purposes, one of the control options analyzed is the “no additional action” alternative. Sometimes, at the conclusion of the various analyses and the assessment of control options, a decision may be made that no further action is needed at the present time to manage a particular risk. In other words, your analysis leads you to conclude that your current baseline programs and other in-place risk control actions are sufficient. While such decisions are valid, they should be revisited periodically to make sure that changes in conditions over time have not made some other kind of action appropriate. (Likewise, decisions to take action should be revisited periodically as well.)

B. DOT Requirements. Furthermore, in drafting your security plan, remember that DOT has established certain minimum requirements that all hazmat security plans must address. Specifically, at a minimum, a security plan must be in writing and include the following elements:

1. Personnel Security. Plans must include measures to confirm information provided by job applicants hired for positions that involve access to or handling of hazardous materials covered by the security plan.
• These measures need not apply to those applicants who do not handle or have access to hazmat (e.g., those who only prepare shipping papers).

• It is not necessary to check or confirm all information that an applicant provides. Rather, focus on confirming information related to recent employment history, references, and whether applicants are authorized to work in the United States.

NOTE: The Federal Immigration Reform and Control Act (IRCA) prohibits employers from hiring or continuing to employ aliens who are not authorized to work in the United States, and establishes an elaborate verification procedure to assure compliance. The IRCA also prohibits employment discrimination based on national origin or U.S. citizenship, and makes it unlawful for employers to discriminate against job applicants who may look or sound as if their country of origin is not the U.S. Such applicants can only be turned down if they fail to meet the documentation requirements listed on the INS I-9 form.

In light of these obligations, an employer would be prudent to: 1) Ask applicants whether they are authorized to work in the U.S.; 2) Require the applicant to present documentation establishing their identity and eligibility to work in the U.S. as required by the IRCA; and 3) Avoid asking applicants about their national origin or place of birth.

For more information about the requirements established by the IRCA, contact ISSA.

• Measures must be consistent with federal and state laws related to employment practices and individual privacy.

2. Unauthorized Access. Security plans must include measures to address the assessed security risk that unauthorized persons may gain access to the hazardous materials covered by the security plan or transport vehicles or other conveyances being prepared for the transportation of hazmat covered by the security plan.

3. En Route Security. The plan must include measures to address the assessed security risks of shipments of hazmat covered by the security plan en route from origin to destination.

C. Action. This step is simply the implementation of the written security plan. In this step, any specified preventive or corrective measures are taken, any called for changes are made to standard operating procedures, and other actions are taken as appropriate. Furthermore, identified modifications to baseline programs, such as training or emergency preparedness and response, should be implemented as well.

While this step does not require much explanatory text here, it is a critical aspect of successful risk management. Without action and follow through, the most refined
analysis, the most elegant strategy, or the most well crafted plan will not successfully reduce risks.

**D. Training.** In addition to providing their hazmat employees with Security Awareness training, those facilities that are subject to the Security Plan requirements must also provide their hazmat employees with training concerning the security plan and its implementation.

This “in-depth security training” must include company security objectives, specific security procedures, employee responsibilities, actions to be taken in the event of a security breach, and the organizational security structure.

The training also reinforces to employees that management supports the security policies and views them as critical to the management of their operations.

Companies should also establish an effective communications plan to keep employees aware of security issues that relate specifically to their facilities as well as those that have broader implications such as the status of the Nation’s Threat Level as represented by the Homeland Security Advisory System.

**E. Verification.** As is good practice for managing any process, it is important that you monitor implementation of the security plan to ensure that the prescribed actions are being taken and that everything is proceeding according to plan. Verification procedures should be incorporated into the security plan so that it is apparent how the facility will monitor activities and otherwise ascertain the achievement of key milestones. Verification need not be a cumbersome, bureaucratic procedure, but rather can be as simple as assigning someone to be in charge of tracking the implementation of certain activities called for in the plan.

**F. Evaluation.** While verification is necessary to ensure that the security plan is actually being implemented to the fullest extent possible, verification alone is not enough. To ensure that the security plan is actually accomplishing its goal of enhanced security, it is essential to periodically evaluate the effectiveness of the plan. An evaluation often can suggest useful improvements in the strategy and can be the basis for identifying changes to either enhance the risk reduction effectiveness or reduce the costs of implementation.

A key element in evaluating your security plan is the selection of appropriate performance indicators that can be tracked inexpensively and that relate closely to the enhanced security objectives of the overall plan. In selecting such appropriate metrics, the objective is to strike a balance between the relevance of the performance indicator or metric, and the feasibility and cost of measuring it. For example, to evaluate your security plan you may wish to track the incidence of theft of hazardous materials or trespass to property, and other such events as well as “near misses.”

**G. Sample Security Plan.** The following is a sample security plan for illustrative purposes only. It is not intended to be adopted word for word by companies who may be referring to this guidance. As has been stressed throughout this document, security plans will vary from company to company based on the nature and quantity of chemical
products shipped, mode and route of transportation, activities involved, current company practices, complexity of operations, and vulnerability assessments.

The sample security plan below, therefore, is intended only as a visual example of what an actual plan may look like, and is not intended for you to adopt verbatim as your own plan. Your actual plan may look considerably different from the sample plan depending on your assessment of potential security risks at your own facility. Therefore, please use the sample merely as an illustrative example only.

SAMPLE SECURITY PLAN FOR THE XYZ COMPANY

1. Introduction

The XYZ Company is engaged in the manufacture/distribution of a broad variety of cleaning products, many of which are regulated as hazardous materials by the U.S. Department of Transportation when transported in commerce.

The XYZ Company recognizes that, in the wrong hands, certain of these hazardous materials may pose a security threat. Therefore, the XYZ Company has conducted an assessment of potential security risks related to its transportation of hazardous materials in commerce including but not limited to a review of current security measures, transportation operations, hazmat activities, storage practices and other areas. Based on this assessment, the XYZ Company has developed the following plan for the purpose of enhancing the security of hazardous materials it transports/ships in commerce,

2. Personnel Security

The XYZ Company recognizes the possibility that someone we hire as a hazmat employee may pose a security risk. Therefore we have established a process by which we will confirm information provided by job applicants for positions that involve access to and handling of hazardous materials.

Such process shall include the Director of Human Resources confirming or otherwise inquiring of the following information related to job applicants for hazmat employee positions. This information shall be confirmed through direct inquiries made or authorized by the Director of Human Resources or through the use of appropriate third party services.

a) Gaps in employment

b) Frequent job changes

c) Personal and professional references

d) Type of military discharge (if applicable)

e) Criminal convictions
f) Verify eligibility to legally work in the U.S. pursuant to the requirements established by the Immigration Reform and Control Act

3. Unauthorized Access

The XYZ Company recognizes that unauthorized access to hazardous materials stored at our facilities and on our transportation vehicles parked on our premises may pose security concerns. As a consequence, the XYZ Company has elected to take the following actions to enhance security in these areas.

a) Hazardous materials shall be stored in locked buildings and/or within fenced areas.

b) The Facility Manager will periodically check the adequacy of locks on doors, fences, and other devices used to secure access to areas where hazardous materials are stored. Locks deemed to be insecure shall be replaced.

c) Keys to locks securing doors, fences, and other devices used to secure access to hazardous materials will be maintained by the Facility Manager and shall be available to authorized employees upon signature.

d) Fencing preventing unauthorized access shall be maintained around those areas where hazardous materials are stored outdoors. The adequacy of such fencing shall be checked periodically by the Facility Manager and repaired/replaced as appropriate.

e) Outdoor lighting shall be maintained near entrances and exits to hazmat storage areas and shall be inspected periodically to ensure working order.

f) Visitors to the XYZ Company must register and show photo identification prior to entering the facility. Visitors shall be accompanied by an XYZ employee at all times.

g) Employees shall be issued a company employee identification card which shall be displayed by employees while on the company premises.

h) All vehicles loaded with hazardous materials and parked on the premises shall be secured.

i) Employees shall be instructed to report suspicious behavior, criminal activity, instances of unauthorized access to hazmat, trespass, and other unusual behavior to the Facility Manager. The Facility Manager shall inform the local police of such incidents if, in the opinion of the Facility Manager, the situation warrants it. The Facility Manager shall also record such incidents as part of the overall security plan.

4. Security En Route

The XYZ Company recognizes that the transportation of hazardous materials in commerce may pose certain security risks. As a consequence, the XYZ Company has taken the following steps to enhance the security of hazardous materials while en route.
(Note: Steps a) through d) are intended for those companies that use carriers to transport hazardous materials.)

a) The Transportation Manager shall verify that all carriers used have in place a security plan consistent with the DOT hazmat regulations at 49 CFR Subpart I, Sections 172.800-804.

b) Prior to releasing hazardous material for shipment, the Transportation Manager shall verify the identity of the carrier and the driver. The driver shall be asked to show his/her commercial drivers license and company identification.

c) Confirm with the driver the name of the consignee and the destination of the material.

d) The carrier shall confirm with the Transportation Manager the delivery of shipments of hazardous materials.

(Note: Steps d) through n) are intended for those companies that use their own vehicles to transport hazardous materials.)

e) The Transportation Manager shall identify preferred and alternative routes (i.e., shortest routes, avoid population centers if possible, avoid tunnels and bridges if feasible, etc.).

f) Drivers shall expedite the shipments to their final destination and otherwise minimize the number of stops they make.

g) If drivers must stop they will select locations with adequate lighting on well-traveled roads. Drivers shall inspect the vehicle after stopping to check if it has been tampered with.

h) Drivers shall be instructed to never leave the vehicle running—Drivers shall shut off the engine and lock the doors when the vehicle is parked.

i) Drivers shall be instructed to be alert when driving and to be aware of suspicious activity (i.e., vehicles following you, anyone approaching your vehicle while at a stop light, etc.)

j) Drivers shall not discuss cargo, destination, or other specifics with people they don’t know.

k) Drivers shall have proper identification and paperwork for the hazardous material on board.

l) Driver shall confirm the delivery of shipments to the Transportation Manager by the end of the business day.
Drivers shall report lost or stolen shipments or other incidents to the Transportation Manager. The Transportation Manager shall report such incidents to the local police as appropriate, and shall keep records of such incidents as part of the security plan.

Vehicles shall be equipped with tamper proof locks to prevent unauthorized access to hazardous materials. Drivers shall keep access to hazardous materials cargo secured by use of such locks.

**5. Training.** Hazmat employees shall be trained about the contents of this plan, its implementation, and their responsibilities under the plan consistent with the provisions of 49 CFR 172.704(5). Such employees shall also be instructed as the security organizational structure at the XYZ Company.

**6. Verification.** The Director of Human Resources, the Facility Manager and the Transportation Manager shall all verify that those aspects of this security plan that come under their control are being implemented according to the plan.

**7. Evaluation.** The Director of Human Resources, the Facility Manager and the Transportation Manager shall evaluate the effectiveness of the plan in enhancing the security of hazardous materials transported in commerce on an annual basis. In evaluating the security plan, they shall review any record of incidents at the facility or during transportation, as well as report on the operation of the plan overall.

Any recommendations to revise the security plan shall be directed to the Vice President of Operations. Upon authorization by the Vice President of Operations, the recommendations shall be incorporated into the security plan and implemented in a timely manner.