### **PRESENTER'S GUIDE**

## "DOT IN-DEPTH HAZMAT SECURITY TRAINING"

For the Department of Transportation's 49 CFR 172.700 Subpart H Training Requirements

Quality Safety and Health Products, for Today... and Tomorrow

# **OUTLINE OF MAJOR PROGRAM POINTS**

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The following outline summarizes the major points of information presented in the program. The outline can be used to review the program before conducting a classroom session, as well as in preparing to lead a class discussion about the program.

- Each day, millions of tons of hazardous materials are safely transported, by trucks, trains, planes, ships and pipelines, to facilities throughout the country.
- But the September 11<sup>th</sup> tragedy and other terrorist incidents that have occurred since then have clearly demonstrated that we need to protect ourselves every day from people who would attack us.
  - In the wrong hands, hazardous materials can be, and have been, used as weapons.
- From a terrorist's point of view, hazardous materials can be "the perfect weapon".
  - Flammable, explosive, corrosive, reactive or toxic to people and the environment, HAZMATs can work well as "weapons of mass destruction".
  - And they are often easily available.
- Unlike military equipment and weapons, HAZMATs are in use, in storage or in transit throughout the United States every day.
  - To extremists, this means that the materials are already located in populated areas, where they can be released immediately, by attacks on warehouses, industrial facilities, or from shipments that are being transported.
  - HAZMATs can be legally purchased or stolen for use in later attacks, as well.
- To prevent this, the U.S. Department of Transportation (DOT) has established security regulations which apply to all businesses that are involved in the transportation of hazardous materials.

- The DOT further requires these companies to provide their employees with two types of training on these regulations.
  - "Security Awareness Training"
  - "In-Depth Security Training".
- DOT HAZMAT Security Awareness Training must be given to all workers who load, deliver or otherwise participate in the transportation of any hazardous materials.
- "Awareness" training provides employees with an understanding of the security risks that can be associated with transporting hazardous materials.
  - It also addresses the policies and procedures that should be followed to help the HAZMATs reach their destination safely.
- Shippers and carriers of certain types and quantities of hazardous materials are also required to create their own written HAZMAT "Security Plan", as well as provide In-Depth Security Training for their employees.
- In addition to discussing the goals, organization and management of their company's Security Plan, "In-Depth" training shows employees how to:
  - Recognize security threats.
  - Perform specific security procedures.
  - Respond to a security breach or attack.
- DOT In-Depth HAZMAT Security Training helps employees like you act as the first line of defense against terrorists using hazardous materials to attack people in the U.S.

- To prevent HAZMATs from falling into the hands of terrorists or other criminals, the DOT requires most HAZMAT shippers to create and implement a written "Security Plan".
  - Your company will have such a plan if it transports certain quantities and types of hazardous materials, including substances that are explosive or radioactive or "select agents and toxins" that are regulated by the Centers for Disease Control and Prevention.
- To create a Security Plan the first thing a company will need to do is conduct a "risk assessment", to identify specific hazards that the Plan needs to address.
  - The assessment determines which of the materials that are handled by or stored at the facility could be used by terrorists as "weapons of mass destruction".

#### • The assessment will also examine:

- Personnel security, including intentional or unintentional security breaches that are caused by employees.
- "Unauthorized access", the ways that terrorists could penetrate security and physically get inside a facility.
- "En Route Security", how HAZMATs could be stolen or sabotaged while they are in transit between facilities.
- Once these vulnerabilities have been identified, the Security Plan can be structured to control or eliminate them.
- When the plan is completed, the DOT requires that employees:
  - Receive training on the policies and procedures that are included in the Plan.
  - Be provided with the written portions of the Plan that apply to the tasks that they perform in their work at the facility.

- "Personnel security" has a high priority for a good reason, because employees can compromise a company's security very easily.
  - Employees know the physical layout of a facility as well as its security procedures.
  - As part of their work, employees may also have access to "sensitive areas" such as HAZMAT storage locations.
- One misguided worker or "bad apple" could pass on information that puts the Security Plan, and the hazardous materials that it protects, at risk.
  - This is why the DOT requires all facilities that deal with HAZMATs to conduct background checks on job applicants and employees.
  - It's important to determine if someone might be inclined to reveal sensitive information, before they can do it.
- Security "spot-checks" of lockers as well as personal vehicles for security violations can also be performed as an additional safeguard.
  - "Unintentional" security breaches can be just as serious as the ones that are done on purpose.
- It's important to remember that terrorists have the skills and technology to:
  - Eavesdrop on you.
  - Penetrate your company's computer networks.
  - Hack into the equipment that is connected to them.
- To avoid revealing confidential information, sensitive data should always be encrypted before you store it on a computer or send it across any type of network.
- Terrorists want to use HAZMATs to help them wage their own kind of war against us.

- To prevent criminals from getting hold of hazardous materials, you should always be careful of what you say, how you say it, where you say it (or store it) and who you say it to.
  - You should never talk about your facility's operations in public places or discuss sensitive information over wireless devices such as cell phones.
- When someone who has no business being inside a facility that handles HAZMATs does manage to get in, the DOT calls it "unauthorized access".
  - If that person is a terrorist, unauthorized access could let them steal or sabotage the hazardous materials at the location.
- The DOT requires companies that handle HAZMATs to describe how they will prevent unauthorized access to their facility in their written Security Plan.
  - A Security Plan can combine the use of physical barriers with surveillance systems and standard security procedures.
- "Physical barriers" typically include walls and fencing around a facility, which can be further "hardened" against attacks with concrete barricades and perimeter trenches.
  - Surveillance lights, cameras and security patrols help to prevent anyone from sneaking up on the site without being noticed.
  - An alarm system can provide visual and audible warnings of any would-be intruders that do manage to get too close.
- Controlling personnel and vehicle access is also very important.
  - If possible, a facility should have only one, guarded accessway, which should be equipped with a gate.
  - All gates and entrance doors into the facility should be kept locked.

- All visitors to a site should have to show identification and sign in before being admitted.
  - Someone from the company should stay with them throughout their visit.
- No delivery vehicle should be allowed inside the facility's grounds unless:
  - The shipment is expected.
  - The driver's name, license and vehicle number "check out".
  - The shipping papers and other documentation for the delivery are all in order.
- Even then, the vehicle and its cargo should still be thoroughly inspected before being allowed through the gate.
- Gates should be closed immediately after a vehicle passes through, so another vehicle can't sneak in without stopping for clearance.
- Security procedures should continue on the inside of the facility as well.
  - "Sensitive areas" and HAZMAT storage locations should be kept locked.
  - Valves on pipelines, tanks as well as storage vats should be secured too.
- Access to keys should be controlled through an "authorization and sign-out" system.
  - All security devices such as locks, and card readers should be inspected regularly for signs of tampering.
- When a HAZMAT shipment leaves a secure facility, it becomes a much easier target for sabotage, theft or hijacking by terrorists.

- So the DOT requires a company's Security Plan to establish the infrastructure, policies and procedures that are necessary to keep the hazardous materials that they ship safe while they are "en route" to their destination.
  - While we are focusing on HAZMATs that are traveling by <u>truck</u>, many of the security principles and practices that are described here will apply to <u>other</u> forms of transportation as well.
- A company that ships hazardous materials by truck should establish a "crisis communication system" for all its delivery vehicles.
- Radio and other wireless communications allow vehicle operators to:
  - Stay in touch with their home terminal.
  - Report problems in real time.
  - Contact emergency services or local law enforcement quickly if they need to.
- Many HAZMAT shippers also use GPS technology to monitor their vehicles.
  - GPS can alert dispatchers when a hijacking is in progress, and help law enforcement locate the stolen vehicle, as well.
- Routine HAZMAT deliveries can become a greater security risk if a truck always follows the same route to get to its destinations, and always arrives at the same times.
  - Varying delivery schedules and routes will make it more difficult for criminals to plan a hijacking, and should be done whenever possible.
- Companies should also schedule several smaller deliveries of hazardous materials, rather than having one big one.
  - This limits the quantity of a material that can be stolen and makes it less likely that a single load could be used as a "weapon of mass destruction".

- It's also important to have reliable people behind the wheel of the delivery vehicles.
  - Before commercial drivers are allowed to transport HAZMATs, their license needs to be upgraded with a DOT "Hazardous Materials Endorsement".
  - The DOT's Threat Assessment Program will only give the Hazardous Materials Endorsement when it has established that a driver isn't a security risk.
- In addition to your own company's drivers, it's important to check the security measures that any subcontractor carriers have in place, and make sure that they perform background checks on their drivers, as well.
- Vehicle operators play an especially important role in maintaining the security of hazardous materials while they are being transported, or "en route".
  - Remember, while we are focusing on HAZMATs that are traveling by truck, much of this information will also apply to other types of transportation.
- Your company's Security Plan will include a number of safe practices that drivers should follow.
- The first thing you should do is to perform a vehicle inspection, verifying that it is in good mechanical condition, before you head out.
  - Then the load itself should be checked to make sure it is properly secured and the doors on the truck are locked.
  - Having "security seals" on the truck's doors will let you know if anybody tries to tamper with the load en route.
- When you're on the road, follow major highways whenever possible, but try to avoid going through tunnels, over bridges or past heavily populated areas.
  - Terrorists are more likely to stage attacks in these locations.

- Use radio or other wireless devices to periodically check in with your dispatcher.
  - Let them know about any delays or detours that you encounter.
  - Don't talk about your load or give details regarding your route.
  - Remember, terrorists may be listening.
- Avoid stopping for breaks or layovers.
  - On long hauls, two drivers should take the wheel in shifts, so it's not necessary to stop for the night.
- If you must stop, select a location that is on a well-traveled road.
  - If it's at night, make sure that you park in a welllighted area.
  - Lock your vehicle before you leave it.
  - Do your best to keep an eye on your truck during your break.
  - Never talk about what you are carrying or where you are heading if there are other people around.
- Before you start off again, check for any signs that your truck or its cargo have been tampered with.
- You should also stay alert for vehicles that appear to be following you.
  - If you think that you are being followed call 911 immediately and give your location.
  - Give yourself room to maneuver so that you can't be "trapped" between other vehicles on the road.
- If you're involved in receiving and unloading shipments of hazardous substances, you also play an important role in their security, and that of your facility as well.

- You should never accept a HAZMAT delivery when the container or packaging has been damaged in any way.
  - While this condition might be the result of sloppy work by the shipper or carrier, it could also indicate that someone has tampered with the shipment, and possibly stolen some of the material.
  - If you find evidence of tampering with locks, valves or the material in a container, report it to your supervisor immediately.
- Pay special attention to shipments that arrive from suppliers or locations that are unusual or unfamiliar.
  - Examine all international shipments carefully.
  - There may have been little or no security at their points of origin.
- Once you have established that a shipment is intact and properly documented, you can accept delivery.
  - Remember to close and lock the warehouse doors after unloading is completed.
  - "Locking terrorists out" is one of the most effective ways to keep HAZMATs secure!

### \* \* \* SUMMARY \* \* \*

- The Department of Transportation has established a set of regulations for safeguarding shipments of hazardous materials from terrorists and other criminals.
- The DOT requires companies that handle and transport HAZMATs to create a written Security Plan.
- This Plan should address three main areas:
  - Maintaining personnel security.
  - Preventing unauthorized access to a facility.
  - Securing hazardous materials while they are in transit.

- You should be familiar with all of the policies and procedures that are included in your company's Security Plan, and know what you need to do to follow them.
- Terrorists will try to strike at us again, and they may use hazardous materials to carry out their plots. But by being aware of this threat and following DOT HAZMAT security procedures, you can help to protect your country, your company and yourself against potential attacks!