

Oak Ridge National Laboratory/UT-Battelle LLC Transportation Security Plan

March 11, 2004

**Prepared by
D. W. Foster**

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**OAK RIDGE NATIONAL LABORATORY/UT-Battelle, LLC
TRANSPORTATION SECURITY PLAN
TPM-TSP-01, Revision 1**

D. W. Foster

March 2004

Prepared by
OAK RIDGE NATIONAL LABORATORY
P.O. Box 2008
Oak Ridge, Tennessee 37831-6285
managed by
UT-Battelle, LLC
for the
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**OAK RIDGE NATIONAL LABORATORY/UT-BATTELLE, LLC
TRANSPORTATION SECURITY PLAN**

**Transportation and Packaging Management
Effective Date: March 11, 2004**

Prepared by

D. W. Foster
Transportation Safety Compliance Manager

Date

Approved by:

J. H. Shelton
Transportation and Packaging Management Manager

Date

Approved by:

J. M. Forstrom
Logistical Services Division Director

Date

Approved by:

S. Abercrombie
Laboratory Shift Superintendent Coordinator

Date

Approved by:

R. R. Smith, Manager
ORNL Security

Date

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OAK RIDGE NATIONAL LABORATORY/UT-BATTELLE, LLC TRANSPORTATION SECURITY PLAN

1. TRANSPORTATION SECURITY PLAN OBJECTIVES

This Transportation Security Plan is written to fulfill the requirements of 49 CFR 172, Subpart I, Security Plans, that each person (company) who offers for transportation in commerce or transports in commerce one or more of the hazardous materials listed in 49 CFR 172.800(b) must develop and adhere to a security plan for hazardous materials. The plan addresses possible transportation security risks for certain shipments listed in 49 CFR 172.800(b) and the appropriate measures required to address the risks. The plan includes personnel security, unauthorized access, and en route security.

The contents of this transportation security plan will be communicated to all applicable contractor personnel including those responsible for implementing the plan. Portions of the plan that are denoted as security sensitive information will be disclosed to appropriate personnel according to their need to know.

ORNL/UT-Battelle's Specific Security Objectives, as related to this Transportation Security Plan, are to:

- Respond to significant threats and vulnerabilities identified in the Transportation Security Plan's risk assessment.
- Provide training of employees in both general terrorism awareness and company procedures.
- Provide training for all Hazmat employees (as defined in 49 CFR 171.8) in general transportation security awareness.
- Provide appropriate training for those employees that are specifically involved in the transportation security plan.
- Assure the safety and security of the contractor's personnel, facilities and equipment, materials, and the general public.
- Comply with applicable local, state, federal, and international regulations.
- Deter theft of Government property.
- Respond to changes in the security environment according to the Department of Energy (DOE) Security Condition (SECON) levels.

2. APPLICABILITY

This transportation security plan applies to transportation management personnel, drivers, driver supervisors, shipping and receiving personnel, security personnel, as well as others who are, or may be, involved with materials covered by this plan.

A transportation security plan is required by 49 CFR Subpart I for any person who offers for transportation in commerce or transports in commerce one or more of the following hazardous materials listed in 49 CFR Part 172.800(b):

- **Highway Route Controlled Quantity of Class 7 (radioactive) material in a motor vehicle, rail car, or freight container;**
- More than 55 pounds (25 kg) of a Division 1.1, 1.2, or 1.3 (explosive) material in a motor vehicle, rail car, or freight container;

- **More than 1.06 quarts (one L) per package of a material poisonous by inhalation in Hazard Zone A;**
- A shipment of a quantity of hazardous materials in a bulk packaging having a capacity of 3,500 gallons (13,248 L) for liquids or gases or more than 468 cubic feet (13.24 cubic meters) for solids;
- A shipment other than in a bulk packaging of 5,000 pounds (2,268 kg) gross weight or more of one hazard class for which placarding of a vehicle, rail car, or freight container is required for that hazard class of 49 CFR Part 172, Subpart F;
- **A select agent or toxin regulated by the Center for Disease Control and Prevention under 42 CFR Part 73; or**
- **A quantity of hazardous material that requires placarding under the provisions of 49 CFR Part 172, Subpart F.**

The bolded items in the list are currently offered for transport and/or shipped by ORNL/UT-Battelle and are discussed in Section 5.

3. PERSONNEL SECURITY

Employees at the ORNL facility are under a comprehensive security program that conforms to requirements promulgated by the Atomic Energy Act of 1954 and is in place at DOE facilities. With regard to personnel security, compliance with these DOE requirements is considered to satisfy the requirements in 49 CFR Part 172, Subpart I as permitted by Part 172.804.

Non-employees are involved in hazardous materials transportation activities in transporting hazardous materials from ORNL, in transporting hazardous materials between sites on the DOE/Oak Ridge reservation and in delivering materials to the ORNL site. These non-employees can be grouped into three categories:

- Drivers employed by other DOE contractors or transportation companies who are also covered by the DOE security programs. These personnel are also considered to satisfy the requirements in 49 CFR Part 172, Subpart I as permitted by Part 172.804.
- Drivers employed by the ORNL/UT-Battelle Accelerated Vendor Inventory Delivery suppliers and common carriers who enter the ORNL facility at least 10 times per year. Personnel who enter at this frequency are required to have General Employee Training and then are issued a badge with a photo. These personnel are also considered to satisfy the requirements in 49 CFR Part 172, Subpart I as permitted by Part 172.804.
- Drivers employed by a company who infrequently delivers material to ORNL and are not covered by a DOE security program. These drivers are required to present a bill of lading/shipping paper addressed to ORNL and a photo identification to Protective Forces personnel before entering the facility. If a driver is attempting to make a pick-up without appropriate documentation (bill of lading or shipping paper), entry will not be allowed without verbal clearance by Transportation and Packaging Management (TPM) personnel via the Security Department.

4. FACILITY SECURITY

The DOE has implemented safeguards and security programs designed to assure appropriate levels of protection against unauthorized access, theft, diversion, loss of custody, destruction, espionage, and other hostile acts that may cause unacceptable adverse impacts on any of the applicable materials listed above or on the health and safety of DOE and contractor employees, the public or the environment. DOE's safeguards and security programs cover the ORNL facility. With regard to facility security and safeguarding access to hazardous materials, these DOE programs are considered to satisfy the requirements of 49 CFR Part 172 Subpart I as permitted by Part 172.804.

Upon arrival at the ORNL West and East guard posts, drivers making deliveries must show a bill of lading/shipping paper addressed to ORNL or subcontractors and either a DOE-issued security badge or photo identification as addressed in Section 3, Personnel Security. Any delivery vehicle entering the facility is visually inspected. Receiving personnel at Building 7001 and Building 7018 then confirm (by item count and description) that the cargo is what is stated on the Bill of Lading and verify that the listed Tamper Indicating Device(s) (TID) match the TID(s) on the vehicle or packages, as applicable.

In some cases material is delivered directly to ORNL destinations by-passing the Receiving Department. These deliveries are approved/escorted/verified by a Materials Clerk or the requestor/user of the material. Appropriate personnel (procurement, vendor, security, etc.) will be contacted to resolve any discrepancies.

In addition, drivers without DOE-issued security badges must stay in the immediate area of their vehicle or in the designated driver waiting area at the receiving area.

5. RISK ASSESSMENT

ORNL/UT-Battelle has assessed the potential vulnerabilities of its facilities and operations concerning current general terrorism threat situation, the nature of the materials shipped and/or transported, and regulatory requirements. The results of the risk assessment are documented in Appendix A, *Risk Assessment Information*. For security reasons, Appendix A is maintained separately from this document and is available on a need-to-know basis by contacting the Transportation Safety Compliance Manager.

If any materials listed in section 2 of this plan are to be transported or offered for transport for which a Risk Assessment has not been performed, immediately notify Transportation and Packaging Management (TPM) at 574-4049 or 576-6401. A Transportation and Packaging representative will ensure that a risk assessment is completed.

6. SITE SPECIFIC SECURITY PROTOCOLS AND PROCEDURES

6.1. DOE SECON level

The DOE SECON system describes a progressive level of common sense protective measures that may be implemented in response to a malevolent or terrorist threat to any or all DOE facilities, assets, and personnel. The purpose of the SECON system is to establish standardized protective measures for a wide range of threats and to help disseminate appropriate, timely, and standardized information for the coordination and support of DOE crisis or contingency activities.

DOE N 473.8, *Security Conditions*, provides guidance on implementation of the DOE SECON system. The five SECON levels are described and Attachment 3 to that notice provides specific security measures to be taken at each SECON level. The standard DOT security requirements place the hazardous materials transport function on what is essentially a SECON Level 3 at all times.

Under SECON 1 or 2, it is expected that most normal operations will cease. When either of these highest security levels is implemented, within 48 hours an initial assessment is made to determine the level of operation allowed. In some cases site-specific issues may require that certain operations that may increase vulnerability to malevolent or terrorist threats be conducted. At SECON 1 or 2 these necessary operations must be cleared, and coordinated, through the LSSO who will in most cases request Headquarters permission before proceeding with the operations.

In most cases mitigating security measures will be implemented for the operation. These measures will be implemented strictly on an as-needed basis and may include a range of activities such as escorting high-risk shipments, or adding armed escorts.

6.2 Site Requirements and Procedures

ORNL has several command media that address transportation and related security requirements. The following information is not intended to be comprehensive or to take the place of a current, controlled copy of a document, but is intended to provide general information about transportation-related security requirements and procedures.

DOE O 460.1B, *Packaging and Transportation Safety*

- Establishes the flow-down of Department of Transportation requirements (49 CFR) to DOE contractors. 49CFR 172.800 requires UT-Battelle to have a Transportation Security Plan.

DOE O 471.2A, *Information Security Program*, and its manual
DOE M 471.2-1C, *Classified Matter Protection and Control Manual*

- Chapter I, Section 8 addresses storage and protection of container information
- Chapter II, Section 6 addresses receipt and transmission of classified matter including the use of commercial express service organizations, including Federal Express, (paragraph k) and the use of common carrier services (paragraph l).

DOE O 472.1C, *Personnel Security Activities*

- Establishes requirements for allowing access to DOE classified matter and special nuclear material. Attachment 4 of the order provides a summary.

DOE O 473.1, *Protection and Control of Safeguards and Security Interests* and its manual
DOE M 473.1-1, *Physical Protection Program Manual* (was DOE M 5632.1C-1, *Manual for Protection and Control of Safeguards and Security Interests*)

- Chapter II addresses the protection of special nuclear materials including Table II-1, which gives access requirements for categories of special nuclear materials.

- Chapter III addresses the protection and control of classified matter including packaging requirements and common carrier shipments.
- Chapter IV addresses the protection of unclassified irradiated reactor fuel in transit.

DOE M 474.1-1B, *Manual for Control and Accountability of Nuclear Materials*

- Assigns categories and attractiveness levels to Special Nuclear Materials based on type and quantity. The category and attractiveness level is used, in other documents, to determine access requirements.

The aforementioned requirements are listed in the UT-Battelle/DOE contract and implemented through the internal Standards Based Management System (SBMS). Each requirement is assigned to a specific management system within SBMS. The following Management Systems and Subject Areas are utilized to implement UT-Battelle's transportation security requirements.

Safeguards and Security Management Systems

- Subject Areas
 - Facility/asset Protection
 - Nuclear Material
 - Sites and Facility Access
- Program Descriptions
 - Classified Matter Protection and Control
 - Integrated Safeguards and Security

Transportation Management Systems

-) Subject Areas
 - Off-Site Transportation
 - Commercial Motor Vehicles

7. EN ROUTE SECURITY

En route security is primarily the responsibility of the transporter, but also involves the shipper and receiver. ORNL/UT-Battelle offers shipments for transport in commerce by commercial carriers and functions as a registered motor carrier to transport other shipments in commerce. **For any hazardous material shipment via motor freight consigned by ORNL/UT-Battelle to a commercial carrier or transported by UT-Battelle, the driver or dispatcher should immediately contact the ORNL Laboratory Shift Superintendent (LSS) at 865-574-6606 in the event of an emergency.**

7.1. Shipments Consigned to Commercial Carriers

After September 25, 2003, any commercial carrier transporting applicable hazardous materials (see Section 2) must have a security plan in place that adequately addresses the assessed security risks of the material to be transported, including risks related to the storage incidental to transportation.

A carrier may need to develop supplements to their security plan to address specific requirements for a shipment. The carrier must provide evidence to ORNL Transportation and Packaging Management that:

- For all outbound commercial shipments from ORNL, the carrier possesses personnel that are appropriately trained (after December 22, 2003) in the implementation of a security plan that meets the requirements of 49 CFR 172, Subpart I, Security Plans, and
-) Also for all inbound and outbound shipments meeting the criteria for implementation of a “Security Plan”, the carrier must be an approved carrier through the DOE Evaluation Program, the Automated Transportation Management System (ATMS), or approved by TPM.

7.2 Shipments transported by ORNL/UT-Battelle

Shipments carried by ORNL/UT-Battelle are currently limited to shipments to local areas. Risks associated with those shipments are discussed in Section 5.

7.3 Best Practices

Best practices for maximizing en route security for any applicable hazardous material shipment are given below. Some of these best practices are procedural requirements for some shipments.

7.3.1 Shipper

-) Provide consignee with advanced notification of carrier, seal/lock numbers, and an estimated time of arrival.
 - Provide consignee with name of driver or arrange for carrier to provide the information to the consignee.
 - Install tamper indicating devices and/or seals on all valves and container openings when practical.
 - Install locks on vehicle doors when practical, especially if containers do not have tamper indicating devices.
 - Record seal/lock numbers on bills of lading for sealed loads.

7.3.2 Receiver

- Verify tamper indicating device, seal, and lock numbers as applicable.
- Verify material received matches that which is listed on shipping documents before unloading, when applicable

7.3.3 Carrier (ORNL/UT-Battelle or commercial carrier)

- Report emergencies, delays in transit, or unusual situations to the dispatcher or the ORNL LSS at 865-574-6606.
- Use a satellite tracking system (such as TRANSCOM) for high visibility or high-risk shipments.
- Verify tamper indicating device, seal, and lock numbers as applicable.
- Minimize stops en route; however, if necessary, select locations with adequate lighting on well-traveled roads and avoid high-crime or dangerous areas.
- Lock vehicles when stopped.
- Limit conversations with strangers concerning cargo, routes, and destinations.
- Perform vehicle security inspections after stops (e.g., integrity of seals, any evidence of vehicle tampering, etc.)
- Use various routes to frequent destinations and avoid high population centers when possible.
- Use designated hazardous materials routes when possible.
- Periodically escort shipments.
- Avoid tunnels and bridges when possible.

8. RECORDS

The document owner will maintain the master copy of this transportation security plan. All copies of the completed security plan are considered sensitive information and should be treated accordingly.

Per 49 CFR 172.802(b), this Transportation Security Plan must be in writing and must be retained for as long as it remains in effect. Copies of the security plan or portions thereof, must be and are available to the employees who are responsible for implementing it, consistent with personnel security clearance or background investigation restrictions and a demonstrated need to know. The security plan must be revised and updated as necessary to reflect changing circumstances. When the security plan is updated or revised, all copies of the plan must be maintained as of the date of the most recent revision.

The Transportation Safety Compliance Manager is responsible for the development and maintenance of this plan. The Transportation Safety Compliance Manager will review, and revise as necessary to reflect changing circumstances, this plan at least once every 24 months to ensure that its objectives are met.

9. TRAINING

Each ORNL Hazmat employee is required by 49 CFR 172.704(a)(4) to receive security awareness training as part of initial and recurrent Hazmat training. Security awareness training provides an awareness of security risks associated with hazardous materials transportation and methods designed to enhance transportation security.

Each ORNL Hazmat employee affected by this plan is also required to be trained concerning this security plan and its implementation. Initial training must be complete by December 22, 2003, and updated as part of recurrent Hazmat training (every three years) or when the plan is updated. The Security Plan training will include:

- Contractor security objectives and site-specific documents
- Applicable security procedures
- Employee responsibilities
- Actions to take in the event of a security breach
- ORNL security structure

