

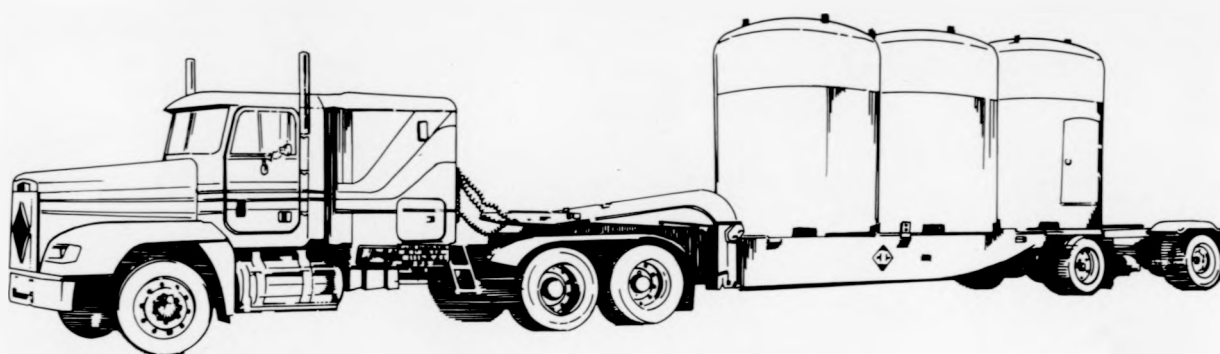
FINAL REPORT

Received by OST
MAY 06 1991



Joint State of Colorado U.S. Department of Energy WIPP Shipment Exercise Program

DO NOT MICROFILM
COVER



TRANSAX '90

DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

DISCLAIMER

Portions of this document may be illegible in electronic image products. Images are produced from the best available original document.

STATE OF COLORADO — U. S. DEPARTMENT OF ENERGY
WIPP SHIPMENT EXERCISE PROGRAM
August - November 1990
FINAL REPORT

TABLE OF CONTENTS

	<u>PAGE</u>
1. BACKGROUND	1
2. PURPOSE OF THE EXERCISE PROGRAM	2
3. OBJECTIVES OF THE EXERCISE PROGRAM	2
4. EXERCISE PROGRAM DESIGN	4
5. EXERCISE PARTICIPANTS	6
6. EXERCISE PROGRAM RESULTS	7
7. RECOMMENDATIONS	8
 ATTACHMENT 1: Issues Tabletop #1 — Port of Entry	 A1-1
 ATTACHMENT 2: Issues Tabletop #2 — Urban Tabletop #3 — Rural	 A2-1
 ATTACHMENT 3: Accident Scenario	 A3-1
 ATTACHMENT 4: Scenario Description/Narrative	 A4-1

DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

STATE OF COLORADO — U. S. DEPARTMENT OF ENERGY

WIPP SHIPMENT EXERCISE PROGRAM

August - November 1990

FINAL REPORT

1. BACKGROUND

Over the last five years, the U. S. Department of Energy (DOE), several States and numerous local governments have been preparing for the transportation of transuranic (TRU) waste to be shipped to the Waste Isolation Pilot Plant (WIPP) in southeastern New Mexico, near Carlsbad. A number of western States, represented by the Western Governors' Association (WGA), submitted a report to the U.S. Congress that discussed the concerns of their constituents related to the transportation of TRU waste through their communities. One of the major concerns identified was emergency preparedness.

Initial funding to resolve concerns identified in the WGA Report to Congress was provided by the U.S. Department of Transportation (DOT). Upon receiving funding, lead States were assigned responsibilities to devise programs aimed at increasing public confidence in the areas of greatest concern. The responsibility for emergency response readiness, as demonstrated through a program of training and responding to simulated accident scenarios, i.e., exercises, was accepted by the State of Colorado.

The State of Colorado laid out an exercise program designed to begin in CY 1990 and continue throughout the lifetime of the WIPP project. The initial phase of this multi-year program included three tabletop issue-driven sessions culminating in a full-scale (orientation) exercise.

In July 1990, the United States Secretary of Energy requested the DOE conduct a transportation emergency exercise before the end of CY 1990. The tasking was directed to DOE's Director of Emergency Operations, who subsequently tasked the Director of DOE's Office of Environmental Restoration and Waste Management (EM) to plan and conduct an exercise, based on a WIPP shipment scenario. The State of Colorado was asked to participate. Colorado, in turn, invited the DOE to integrate the exercise into its own series of WIPP-related tabletop and field exercises for which the State had already begun planning. The result was a joint US DOE/Colorado full-scale (orientation) exercise called Transportation Accident Exercise 1990 (TRANSAX '90).

2. PURPOSE OF THE EXERCISE PROGRAM

The State of Colorado's exercise program was a follow-on to previously conducted classroom training. The program would serve to identify and resolve outstanding issues concerning inspections of the WIPP shipment transporter as it entered and passed through the State on the designated Interstate 25 transportation corridor; criteria for movement under various adverse weather and road conditions; and emergency response to accidents occurring in an urban or rural environment.

The U. S. Department of Energy designed its participation in the exercise program to test selected aspects of the DOE Emergency Management System relating to response to and management of DOE off-site transportation emergencies involving assistance to State and local emergency response personnel.

3. OBJECTIVES OF THE EXERCISE PROGRAM

a. State of Colorado and local government

- 1) Orient participants in appropriate WIPP shipment topics.
- 2) Identify and document notification requirements.
- 3) Identify mechanical and radiological inspection requirements and procedures.
- 4) Determine coordinated emergency response needs, other adverse weather and road criteria.
- 5) Identify recovery actions and responsibilities.
- 6) Evaluate the adequacy of emergency response plans, SOPs, agreements, and checklists.

b. U. S. Department of Energy and its contractors

- 1) Demonstrate timely and efficient procedures in case of transportation incidents for notification of the DOE Headquarters Emergency Operations Center (EOC), the WIPP Project Office, the Albuquerque Operations Office, appropriate DOE Regional Coordinating Offices, State of Colorado, Colorado Springs and El Paso County law enforcement agencies, and other emergency response organizations.

- 2) Evaluate the activation and staffing of the DOE Headquarters Operational Emergency Management Team (OEMT) directed by the Office of Environmental Restoration and Waste Management to deal with an off-site transportation emergency.
- 3) Validate the adequacy of the Operational Emergency Management Team's plan to provide for efficient functioning of the team, integrated decision-making among DOE elements and State and local governments, provide coordination assistance to the affected field elements, and provide effective Washington-level coordination with the White House, the Congress, other Federal agencies, the national media, and others as necessary.
- 4) Demonstrate effective exchange and processing of data and information among the accident scene, the WIPP, the State of Colorado, DOE Field Offices, and the DOE HQ Emergency Operations Center.
- 5) Validate the adequacy of WIPP-generated procedures to be used by a DOE Radiological Assistance Program (RAP) team to evaluate the radiological consequences of physical damage to a TRUPACT II container.
- 6) Validate Emergency Action Levels associated with off-site transportation emergencies.
- 7) Evaluate the adequacy of technical support to responders at the scene of a transportation incident.
- 8) Demonstrate the adequacy of WIPP recovery procedures for an incident involving a non-separated load.
- 9) Demonstrate the adequacy of training and equipment currently available to responders for self-protection and the protection of the public and the environment.
- 10) Demonstrate the adequacy of a jointly coordinated media interface among DOE Headquarters, DOE Field Offices, WIPP, the State of Colorado, and local governments.

4. EXERCISE PROGRAM DESIGN

a. Tabletop #1 - Port of Entry

- 1) The scenario portrayed actions as the WIPP shipment transporter entered the State of Colorado from Wyoming on Interstate 25 and arrived at the initial port of entry (POE) in Fort Collins. (Note: Some consideration was also given to shipments originating at the Rocky Flats Plant northwest of Denver.)
- 2) Participants examined shipment notification requirements; clarified POE inspection criteria (mechanical and radiological), including out-of-service conditions and procedures; assessed various possible adverse weather and road conditions with appropriate agency response; and considered the classification of events (level of response) that could be anticipated.
- 3) Specific issues addressed are listed in Attachment 1.

b. Tabletop #2 - Urban

- 1) The scenario portrayed a multi-vehicle accident at the most hazardous location on Interstate 25 in Colorado Springs, resulting in damage to the WIPP shipment transporter tractor and trailer, extensive damage to the TRANSCOM equipment, slight damage to the TRUPACT II containers, and injury to both drivers; other vehicles had varying degrees of damage and occupant injuries.
- 2) Participants examined shipment and accident notification requirements, identified and classified the event (level of response), assessed types of damage and actions required by response organizations, determined recovery (including clean-up) requirements and responsibilities; outlined media needs, and examined current emergency operations plans, procedures, inter-local agreements, and upgrade needs.
- 3) Specific issues addressed are listed in Attachment 2.

c. Tabletop #3 - Rural

- 1) The scenario involved a multi-vehicle accident on an open stretch of Interstate 25 a considerable distance from populated areas of southern Colorado. The accident resulted in extensive damage to the WIPP shipment transporter trailer, two TRUPACT II containers

with possible penetration abrasions, water and oil leaks but no fire; no transporter drivers were injured. Other vehicles had sustained damage and severe occupant injuries.

- 2) Participants in this session examined the same areas of concern and issues as in Tabletop #2, but from the perspective of a rural community with limited organic response capability. See Attachment 2 for a listing of the issues addressed.

d. Full-Scale (Orientation) Exercise, TRANSAX '90

- 1) A multi-vehicle accident on Interstate 25 in Colorado Springs, portrayed at an exercise site nearby, resulted in a severely damaged WIPP shipment transporter tractor requiring replacement, one TRUPACT II container with a one-foot gash in the outer skin, all three TRUPACT II containers requiring "U" bolt tie-down replacement, injuries to the transporter drivers requiring their evacuation, and fire in another vehicle with one severely injured and one dead occupant.
- 2) This exercise was prepared with a dual purpose from a State of Colorado perspective: (a) to provide the opportunity to visibly demonstrate response to, assessment of, and recovery from an accident involving a TRU waste transporter; and (b) to enable a professional production crew to film the step-by-step actions from entry of the WIPP shipment transporter into the State until accident recovery in order to develop a training film for subsequent use as a public information and response agency vehicle within the State.
- 3) A copy of the scenario and scenario description narrated before the observers in attendance is Attachment 4.
- 4) Prior to the actual demonstration field exercise, a WIPP transporter tractor replacement drill was held and filmed in Colorado Springs. Actual response times from request to the arrival of a rental replacement tractor unit, a contractor wrecker, and a tire replacement contractor were documented and later used for exercise response timing. This permitted realistic timing to be used for all arriving response elements and allowed prior on-scene staging to ensure the demonstration field exercise would not be delayed by unusual events. Several DOE drills were conducted for HQ and field elements. Additionally, a rehearsal was held two days prior to the actual demonstration exercise to ensure that all participants fully understood their roles, positions and timing. The rehearsal also

provided further opportunity for filming key aspects of the exercise for the training film in case bad weather prevented the actual demonstration exercise.

5. EXERCISE PARTICIPANTS

- a. State of Colorado, El Paso County, City of Colorado Springs
 - 1) Colorado Departments of Public Safety (Division of Disaster Emergency Services, Colorado State Patrol), Health (Radiation Control Division) and Revenue (Ports of Entry).
 - 2) El Paso County (Disaster Emergency Management Agency, Coroner).
 - 3) Colorado Springs (Fire, Police Departments; Public Affairs, Risk Management), A-1 and St. Francis Ambulance Services.
- b. Department of Energy
 - 1) Headquarters (HQ DOE): Office of Environmental Restoration and Waste Management (HQ/EM) and its Operational Emergency Management Team which includes representatives from DP, EH, CP, PA and OSS.
 - 2) HQ DOE: Office of Emergency Operations (HQ/DP-9.3).
 - 3) Albuquerque Operations Office.
 - 4) WIPP Project Office.
 - 5) Westinghouse Corporation, Waste Isolation Division.
 - 6) Rocky Flats Plant.
 - 7) Idaho Operations Office.
 - 8) TRANSCOM at Oak Ridge.
 - 9) Nevada Operations Office (on stand-by: participation simulated).
 - 10) Dawn Enterprises.

c. Observers

- 1) Federal: representatives — US DOE, Washington, D.C.; US DOE, Albuquerque Operations Office; US DOE, Rocky Flats Plant; Federal Emergency Management Agency, Region VIII; US DOT; US Army Ft. Carson, CO; USAF Space Command, CO; Los Alamos National Laboratory.
- 2) State: representatives — Missouri Emergency Management; Nuclear Safety Inspector, State of Illinois; Wyoming Emergency Management Agency; New Mexico Emergency Management Bureau; Pennsylvania Emergency Management Agency; Idaho State Police; Utah Highway Patrol; Arizona Radiation Regulatory Agency; Colorado Department of Highways; Colorado Public Utilities Commission; Colorado Department of Local Affairs; Colorado Department of Public Safety (Disaster Emergency Services, State Patrol, and Fire Safety); Colorado Department of Health (Radiation Control Division).
- 3) Local - Mayor of Carlsbad, New Mexico; Colorado Emergency Management representatives — Brighton, Pueblo, Colorado Springs, Castle Rock, Denver, Greeley, El Paso County, Pueblo County, and city government council members.

6. EXERCISE PROGRAM RESULTS

During the tabletop exercises, all appropriate local, State, and Federal agencies attended and participated as players or observers. Their active participation was instrumental in efforts to address the numerous issues identified for discussion and subsequent resolution.

The full-scale exercise was equally successful with approximately 60 local, State, and Federal responders actively participating before over 150 invited guests from across the country. The field exercise was particularly helpful in acquainting players with the various response elements which could be expected to arrive on scene or act in support of such an accident, their roles and responsibilities, and their interface requirements. It also provided all players an opportunity to use and, if necessary, subsequently refine their emergency response procedures. For the DOE, the exercise demonstrated assurance that the DOE has the capabilities, resources, and control structure to effectively assist the civil authorities who would respond to a transportation accident involving DOE nuclear wastes. The exercise also demonstrated a number of DOE communications and control strengths and weaknesses, benefitting participants at all organizational levels.

While a number of issues remain under study for ultimate resolution, others have been resolved and will become the basis for emergency operations plans, SOPs, mutual aid

agreements, and checklist upgrades. Concurrently, the concentrated efforts at local, State, and Federal levels in dealing with WIPP-related activities during this exercise program development have given renewed impetus to all parties as the beginning of actual shipments draws nearer.

During the exercise program and especially as preparations began for the full-scale exercise, attention to the media required increasingly dedicated effort. Planned media briefings, preparation of media information packets, and accommodation of their needs during the exercise paid big dividends in the coverage on exercise day. Local and Denver television coverage was informative and favorable; newspaper coverage in both locations as well as in Albuquerque was equally valuable in bringing an accurate story to the public.

7. RECOMMENDATIONS

- a. That the issues identified during the tabletop sessions be resolved as planned and distributed for incorporation in appropriate local, State, and Federal documents and programs.
- b. That the lessons learned in the full-scale (orientation) exercise be used to upgrade procedural documents and serve to enhance future exercises.

ATTACHMENT 1

ISSUES

(Tabletop #1 - Port of Entry)

Notification

1. Does a 7-day advance State notification by DOE meet Colorado needs? How will unprogrammed schedule changes be handled?
2. What agencies or jurisdictions need to be notified of the schedule by the State of Colorado, and what transmission mode will be used?

Conduct of the Inspection

1. The transporter inspection will be conducted utilizing the normal Title 49 CFR criteria and the Nuclear Material and National Uniform Driver/Vehicle Inspection Protocol adopted by the State of Colorado.
2. When the transporter passes the mechanical and radiological inspection, the vehicle will be authorized to bypass the other POEs en route to the New Mexico State line. A reinspection will be required only in the event an incident involving the transporter occurs en route to the State line. Note: The subsequent POEs will be notified when a transporter has been satisfactorily inspected and is en route.
3. What will be the State policy in the event a WIPP shipment TRUPACT is found to "exceed acceptable radiation limits without outside contamination," i.e., will the transporter with cargo return to its point of origin or will the transporter continue to the WIPP site?
4. Only the "out-of-service" category of unsatisfactory inspection rating will apply to WIPP shipment transporters; "restricted out-of-service" will not apply. What agencies will require notification for mechanical "out-of-service only" inspection results? What agencies will require notification for radiological "out-of-service" inspection results?
5. Should a transporter require relocation to a designated "safe parking area" near the port of entry?

6. WIPP shipment transporters returning north on Interstate 25 should be decontaminated and should travel with the "Drive Safely" placards affixed. Accordingly, they will not require (yet be subject to unannounced) radiological inspection at the Trinidad port of entry; however, the transporter must stop at all POEs through the State of Colorado.

Adverse Weather and Road Conditions

1. What is the policy/criteria used by the carrier for delaying movement when adverse wind conditions prevail? What is the policy/criteria used by the Colorado State Patrol (CSP) for vehicle movement (high profile) when adverse wind conditions prevail?
2. What is the policy/criteria used by the carrier when a winter storm watch has been issued for the area a transporter plans to transit?
3. The WIPP shipment transporter will proceed on a detour route designated by the CSP with all other traffic (reference: PUC Rules and Regulations for Transportation of Nuclear Materials). Are there any situations where such rerouting off Interstate 25 resulting from road closures may require special guidelines?

ISSUES **(Tabletop #2 - Urban)** **(Tabletop #3 - Rural)**

Preparedness

1. What portion of the State notification from the Department of Energy of scheduled shipments will be required at the local jurisdiction? What agency will receive the information from the State and by what transmission mode? What will be the internal distribution of the information?
2. A public information packet will be prepared and distributed to each jurisdiction along the Interstate 25 corridor for use should an incident occur. What additional public information assistance will be forthcoming, and what PIO structure will be used to insure a timely, consistent product?

Incident Response

1. In the event an incident occurs involving the WIPP shipment transporter and/or cargo, the Designated Emergency Response Authority will respond in accordance with established plans and procedures and within local capability. Outside assistance (local, State, and Federal) will respond based on identification and classification of the event (level of response).
2. What initial information needs to be reported from the scene to the local jurisdiction and then to the State should such an incident involving a WIPP shipment transporter occur?
3. What local emergency response agencies are available for response to an incident involving the WIPP shipment transporter, and under what structure will they respond?
4. What local emergency plans, SOPs, and inter-local agreements apply?
5. What degree of response is expected from the local jurisdiction? What specific outside State and Federal agency response can be expected; what are their capabilities or authorities? What emergency management interface structure will

link State and Federal agencies with the local jurisdiction? What State and Federal plans, procedures, agreements or other protocols apply?

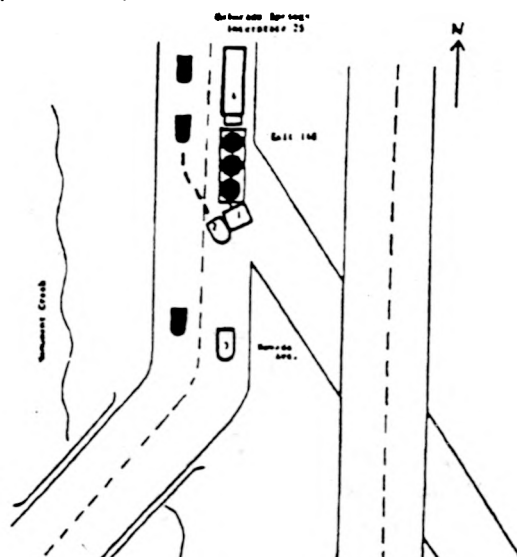
6. In the unlikely event of radiological contamination at the incident site, what medical facility(ies) will be used to initially administer to possible patients?
7. What guidelines apply to movement of the TRUPACTs at an incident site? When can the local jurisdiction make decisions affecting the TRUPACTs without higher authority? When is higher authority advised or required?

Recovery

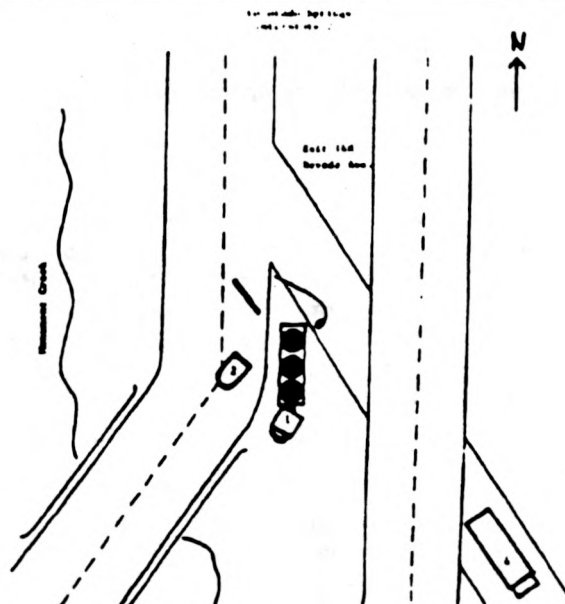
1. This incident results in the need for a replacement tractor and trailer; how much time can be expected to complete such a replacement action? What will be the disposition of the existing transporter equipment and TRUPACTs pending replacement arrival, e.g., remain at or near the incident site, be moved to a designated parking area? Under whose authority will action be initiated?
2. What are the liability implications associated with this incident involving the WIPP shipment transporter and cargo?
3. In the event a TRUPACT is extensively damaged and the inner 55-gallon drums exposed, can the contents of a TRUPACT be repackaged en route from the point of origin to the WIPP site? If so, where can this best be accomplished? If not, what will be the policy for the shipment: will it go back to the point of origin or on to the WIPP site?

ACCIDENT SCENARIO

This accident occurs on Interstate 25 in the northern area of Colorado Springs. A WIPP shipment transporter (consisting of a tractor, trailer, and three TRUPACT II containers) (Vehicle #1) is travelling south in the passing (left) lane approaching the Nevada Avenue Exit (Exit 148) on Interstate 25. On the inside (right) lane, a small sedan (Vehicle #2) is just to the right front of the transporter with a pickup truck (Vehicle #3) further ahead in the left lane. A flatbed truck (Vehicle #4) loaded with structural I-beams, is following the transporter in the left lane.



As Vehicle #2 nears the off-ramp (Nevada Avenue Exit), the driver suddenly decides to exit and cuts sharply in front of the transporter. The transporter driver attempts to avoid contact by veering to the left; this causes the transporter trailer to begin jackknifing. As the transporter driver attempts to regain control, the tractor strikes Vehicle #2; the force of the rear-end collision causes Vehicle #2 to overturn twice and land upright along the passing lane of the interstate. Concurrently, Vehicle #4, following closely behind the transporter, fails to brake sufficiently to avoid a collision with the rear of the transporter and hits the trailer. The force of the collision causes the load of structural I-beams to break loose; one piece of structural I-beam on top of the load ricochets off the roof of the flatbed truck cab, and strikes the rear TRUPACT II container. The transporter driver regains control of the vehicle, however clips off a light post as the transporter slows across the off-ramp exit and comes to a halt along the shoulder of the interstate road. The flat bed driver regains control and turns onto the off-ramp, coming to a stop approximately 100 yards down the road. While the majority of structural I-beams remain on the flatbed truck, a few pieces are scattered across the interstate. Vehicle #3 has continued south without involvement, having seen the accident through the rear view mirror.



At the scene of the accident, the transporter tractor has come to a halt at an angle along the shoulder of the interstate highway; the front axle is heavily damaged. The transporter trailer rests back of the tractor and parallel to the highway; two tires on the right and one on the left rear sides are flat. While the TRUPACT II's are upright on the trailer, the rear TRUPACT II has a one (1) foot gash in the outer skin between the locking ring and the base of the container. Each of the three TRUPACT II containers has a damaged "U" bolt tie-down on the right side. A small amount of rear-end damage, including a small crack, is visible on the transporter trailer, however it does not adversely effect the structural integrity of the trailer. The small sedan has extensive body damage, smashed windows, and the passenger door hangs from the car body. A small fire has started in the spilled gasoline behind the small sedan. The flatbed truck has suffered some front-end damage; but can move without difficulty after the I-beam load is resecured. There are injuries as follows:

- a) The transporter (Vehicle #1) driver has suffered serious lacerations to the forehead and complains of difficulty in breathing. Driver #2 complains of rib cage pains and a possible broken right arm, however he remains functionally alert.
- b) The small sedan (Vehicle #2) driver is unconscious and slumped over the steering wheel with cuts on his face and forehead. The passenger has been thrown from the vehicle and lies face down on the pavement to the rear of the sedan.

All traffic has come to a halt on the southbound Interstate 25 lanes. Elevated northbound traffic away from the scene, while slow near the accident site, continues to move. The time is now 11:00 A.M.

**WIPP SHIPMENT EXERCISE PROGRAM
TRANSAX '90 FULL-SCALE (ORIENTATION) EXERCISE
NOVEMBER 8, 1990**

<u>TIME</u>	<u>SCENARIO DESCRIPTION/NARRATIVE</u>
10:42 AM	Welcome by Governor's Representative
10:45 AM (EVERITT)	<p>o Narrator: Good morning, ladies and gentlemen. I am Jeff Everitt, the Colorado WIPP Program Manager. On behalf of all the participating agencies, welcome to the joint State of Colorado and U. S. Department of Energy Full-Scale (Orientation) Exercise, or TRANSAX '90. It should be pointed out immediately that this exercise will depict a simulated accident on Interstate 25 in Colorado Springs, and the actions portrayed for this incident are not necessarily as they would occur at another location in Colorado or in other States.</p> <p>The waste shipments will begin after the first of the year and originate initially from the Idaho National Engineering Laboratories. For more information on these shipments, I now turn to Jim Bickel, assistant Manager Office of Energy and Special Programs, in DOE's Albuquerque Operations Office.</p>
(BICKEL)	<p>o Narrator: Good Morning, ladies and gentlemen. The waste shipments mentioned by Jeff, originating in Idaho, will be destined for the Waste Isolation Pilot Plant (WIPP), just outside of Carlsbad, New Mexico. The WIPP is a research and development facility of the U. S. Department of Energy that is designed to demonstrate the safe disposal of defense-generated radioactive waste. Shipments of transuranic waste, which is characterized by items such as rubber gloves, shoe covers, laboratory glass, and other items contaminated with radioactive elements heavier than uranium, will be transported to WIPP in a specially designed container called TRUPACT II.</p> <p>(Narrator points to the TRUPACT II)</p> <p>The TRUPACT II complies with all applicable Federal regulations, including certification by the Nuclear Regulatory Commission for meeting the requirements for 'Packaging and Transportation of Radioactive Material.'</p> <p>Jeff —</p>
(EVERITT)	<p>o Narrator: Please scan through your handout, paying special attention to the objectives of today's activities and the accident scenario, simulated to take place shortly on Interstate 25, approximately one mile from here.</p>

10:50 AM
(EVERITT)

- o **Narrator:** For your information, this exercise has been underway since last Thursday, when we were notified by DOE of the simulated scheduled shipment of transuranic waste to move through the State today, November 8. At 6:45 AM this morning, a transportation tracking and two-way digital communications system (TRANSCOM) indicated that the WIPP shipment transporter was crossing the Wyoming State line into Colorado. With the arrival of the transporter in the State, we have been tracking its movement using a TRANSCOM program at the Colorado State Patrol (CSP) Denver Communications Center and periodically at the State Emergency Operations Center in Golden. At 7:15 AM, the transporter arrived at the Fort Collins Port of Entry, where a detailed mechanical and radiological inspection was conducted by specially trained POE inspectors. The inspection took one hour and gave satisfactory results; the transporter resumed travel south on the interstate at 8:20 AM (by prior arrangement, the transporter is not required to stop at either of the two remaining I-25 POEs). After moving through the Denver Metropolitan Area and approaching the Pike's Peak Region at 10:20 AM, the transporter stopped at the Monument POE in order for the drivers to conduct their routine, periodic 100-mile/2-hour vehicle and TRANSCOM antennae inspection. At 10:40 AM, they were back on the interstate. At this time, the transporter is passing the Woodmen Road turn-off, the one you took in getting here this morning, and approaching the North Nevada Avenue exit.

10:55 AM
(BICKEL)

- o Accident occurs at the North Nevada Avenue turnoff (Exit 148) on Interstate 25.
- o **Narrator:** As the transporter comes to a halt, and as the injured drivers are able, they check their own physical condition as well as that of their rig based on what they can determine from the cab. Because the TRANSCOM communications system was damaged as the transporter left the road, DOE accident notification begins with three mobile telephone calls: the first to WIPP's Central Monitoring room (CMR), setting in motion the DOE response structure; the second is to the Colorado State Patrol 24-hour Denver Communications Center, alerting them to the incident; and the third to a local law enforcement agency. Using a checklist in the cab, a basic set of essential information is passed.

WIPP, acting as an initial notification point, contacts Headquarters (HQ) DOE in Washington; the DOE Albuquerque Operations Office, which provides normal WIPP management oversight the carrier, Dawn Enterprises corporate offices; and TRANSCOM to confirm that electronic tracking is interrupted due to an accident. In turn, DOE HQ and Albuquerque notify other DOE and Federal response elements, including the DOE Idaho Operations Office—which has radiological assistance

responsibilities for the region—and the nearby Rocky Flats Office—which maintains local DOE radiological response capabilities. As the shipper, DOE automatically provides a radiological response—in this case, the response is from Rocky Flats, since Rocky Flats is the closest DOE Radiological Assistance Team (RAT). DOE HQ, Albuquerque, and WIPP will activate their Emergency Operations Centers (EOC) with appropriate response personnel for command and control and for the coordination of needed technical assistance. Albuquerque, the DOE office responsible for WIPP, will assume the DOE lead, establish a conference line communications bridge to all DOE elements, serve as the principal contact with the Colorado State EOC, and provide support to the Rocky Flats RAT on scene. HQ assists Albuquerque by coordinating resource requirements and providing the Washington-level interface with other Federal agencies. This may involve the White House and the Congress as well as the national media. WIPP coordinates recovery aspects, which will be discussed later. The Rocky Flats RAT assembles, gathers its equipment, and deploys, with arrival at this accident scene in approximately two hours as will be seen later.

Listen closely to the radio broadcast coming through the CSFD vehicle P.A. speaker at the rear of the bleachers. The accident scene portion of the scenario begins with a 911 call from a concerned citizen.

11:00 AM
(RADIO ONLY)

- o Citizen calls 911 (located in Colorado Springs Police Department Building)

Citizen: - "I want to report a big accident on I-25 with possible injuries."

911 Operator: - "Where on I-25 is the accident, and is it north bound or south bound?"

Citizen: - "It's on I-25, just north of the Pro-rodeo Hall of Fame, and it is southbound."

911 Operator: - "One moment please. Let me transfer you to the Police Department."

Police Dispatcher: - "This is the Police Department. Are you reporting an accident?"

Citizen: "Yes."

Police Dispatcher: "I understand the location of the accident to be on I-25 just north of the Pro-rodeo Hall of Fame. Is that correct?"

Citizen: "That's correct. It looked like a semi and some cars."

(CULP)

- o **Narrator:** Good morning. I am Captain Ron Culp of the Colorado Springs Fire Department. Simultaneously, as the 911 operator transfers the caller to the Police Departments, he notifies the Fire Department and the ambulance company of a traffic accident with injuries and gives both agencies the location of the accident.
- o CSFD Communications Center dispatches Engine Nine (closest to the incident site) to I-25 and North Nevada Avenue to a traffic accident with injuries.

Note: The narrator describes the scene of the accident as a civilian car pulls up to the asphalt road at the east of the bleachers, halts, and four concerned citizens move into the accident scene (2 persons to the cab of the transporter; 1 person to the burning auto; 1 person to the dead person on the pavement).

11:01 AM
(CULP)

- o **Narrator:** The simulated accident you just heard being described by a citizen calling 911 and being routed to the Colorado Springs Police Department Dispatch, the Fire Department and ambulance service, is the most likely means of notification for accidents taking place on the interstate through Colorado Springs.

Depicted to your front is the accident scene as you would see it if seated in an automobile at the Nevada Avenue turnoff. An auto has unexpectedly cut in front of the WIPP shipment transporter while attempting an improper left turn onto the Nevada Avenue turnoff. The transporter has come to a halt along the shoulder, having unsuccessfully tried to avoid hitting the vehicle on the highway. After being struck, the car has overturned twice and is on fire; the driver remains slumped over the wheel in the vehicle, while the unbelted passenger has been thrown out onto the pavement. The two drivers in the transporter are injured and remain in the tractor; a gash has occurred in the rear TRUPACT container from an I-beam thrown off a flatbed truck into the transporter's rear; the flatbed truck has been able to make the turn onto Nevada Avenue and is safely beyond the accident scene. A light post at the turnoff, clipped off by the transporter, rests on the shoulder of the interstate. With the driver's call to the central monitoring room in New Mexico and the 911 telephone call, incident response has begun. Please listen closely for the next few minutes as various radio transmissions can be overheard describing response activities occurring on-scene. I will continue adding descriptive information throughout the response phase.

11:03 AM

- o **Note:** Engine Nine arrives on the scene (east side of bleachers) and transmits initial reports.

- (RADIO) "Engine Nine is at the scene of a multiple vehicle accident with injuries. We have one vehicle on fire. We have a TRUPACT vehicle involved."
- 11:05 AM o Note: The Incident Commander (IC) requests additional resources.
- (RADIO) "Dispatch, this is Engine Nine. Respond Hazmat Nine, Engine Twelve, Decon Twelve, and District Two to my location. We will need two ambulances at this scene and we will need police for traffic control. Engine Nine is North Nevada Command and is located at the north end of the incident."
- 11:06 AM
(CULP) o **Narrator:** The officer on Engine Nine, now the Incident Commander (IC), will deploy the three remaining members of his crew. One plugman from Engine Nine will attack the fire with a dry-chemical extinguisher. And Paramedic Nine will be assigned as Triage Officer and begin medical assessment. The Engine Nine driver will stretch the booster for use should it become necessary.
- o CSFD Communications Center dispatches Hazmat Nine, Engine Twelve, Decon Twelve; notifies Central Ambulance Dispatch of need for two ambulances on the scene.
- o Fire Communications will automatically make the following notifications based on the incident involving a TRUPACT vehicle and incident occurring on the Interstate:
- Fire Chief, Duty Chief, Shift Medical Officer
Hazardous Materials Coordinator
Communications Supervisor, City Safety
Fire Department Safety Officer
Fire Department Public Information Officer (PIO)
City Emergency Manager
County Emergency Manager
Health Department
State Patrol
State Health Department
Division of Disaster Emergency Services (DODES)
- Note:** After notifications are made, the Incident Commander will be advised by fire dispatch that all of the above have been notified.
- o The Incident Commander advises incoming units that Engine Nine has traffic blocked southbound on I-25 and that all units should approach from the south in the southbound lanes. Incident Commander directs incoming units to stage 400 feet south of the incident.

(RADIO) "All stations, this is Command. Be advised that I have blocked all southbound traffic on I-25 from the North Nevada turnoff. All units should approach from the south at Garden of the Gods exit and proceed to the accident site in the southbound lanes."

11:08 AM
(CULP) o **Narrator:** Engine Twelve arrives on scene. Incident Commander directs Engine Twelve to report to the Triage Officer at the damaged car to assist with patient care.

11:09 AM o Decon Twelve arrives on scene.

(RADIO) "Command to Decon Twelve, set up decon at north end of bridge and establish a hot line at that point. All persons within the hot zone will remain there until either decontaminated or cleared to exit."

(CULP) o **Narrator:** Command directs Triage and Engine Twelve to assemble patients and civilians at the decontamination trailer.

(RADIO) o Command radios to Dispatch, "Dispatch, North Nevada Command requests two additional companies. First arriving company will identify and establish Level III Staging."

11:10 AM
(CULP) o **Narrator:** Ambulance and shift medical officer arrive on scene. Triage directs ambulance to stage one block from incident.

o Hazmat Nine arrives at the scene. Personnel report to the Command Post and are briefed by the Incident Commander. The Incident Commander directs Hazmat Nine to assess the radiation levels of patients at the scene and establish a hot zone 150 feet in radius around the TRUPACT containers. Hazmat is also directed to obtain a bill of lading from the cab of the tractor and verify the contents of the shipment.

(CULP) o **Narrator:** The Colorado Springs Fire Department Hazardous Materials Unit is now on scene to assess radiation levels and establish a 150 foot hot line.

11:11 AM
(CULP) o Local radio and TV reporters have arrived on scene and are directed to the Command Post.

o Questions posed by the media are:

Who can talk to us about what has happened?

- What caused the accident? When?
- How many people are hurt? Who are they?
- What hospital were the injured taken to?
- What's in the containers?
- Are there any explosives or other hazardous materials in the TRUPACT?

(CULP) o Narrator: As the representatives of the local media arrive on scene and begin to ask questions, the IC must determine the most efficient way to accommodate their needs. In this case, the IC provides initial information and directs the media to another location where the Public Affairs Officer will provide a more in-depth briefing and answer questions more fully.

11:12 AM o District Two Chief arrives on scene. The chief reports to Command and is briefed by the Incident Commander via radio. District Two Chief assumes command of the incident. The Incident Commander requests that dispatch contact Public Affairs and advise them of the incident.

(RADIO) "Dispatch, this is Command. Contact City Public Affairs and advise them of this incident." IC requests dispatch to contact Fire Prevention Bureau to provide PIO and request that City Safety respond to the scene for resource augmentation.

11:13 AM o Fire Department Safety Officer arrives.

11:14 AM o City Emergency Manager contacts the Incident Commander for a situation assessment. After consultation with the Incident Commander, the Emergency Manager calls the Division of Disaster Emergency Services (DODES) and reports a "Site Emergency" involving a WIPP shipment.

(RADIO) "Command, this is the City Emergency Manager. Would you give me a current situation assessment?"

(RADIO) "City Emergency Manager, this is Command. We have an incident involving a TRUPACT transporter. Both drivers are injured; one seriously and the other with possible internal injuries. Two passengers in an overturned auto are also involved; one is unconscious, the other is dead. A fire in the auto has been extinguished. The TRUPACT transporter tractor has disabling damage but no fire. And one of the TRUPACTs has a 1-foot gash in the outer skin. How deep the gash is remains unknown."

11:15 AM
(CULP)

-
- o **Narrator:** Based on this assessment by the Incident Commander, the City Emergency Manager determines that sufficient information and uncertainties exist concerning status of the TRUPACTs to classify this occurrence as a "Site Emergency." This level of response is important to the State in activating the Emergency Operations Center (EOC), dispatching radiological monitoring teams, and identifying State personnel required for determining protective measures needed in the immediate vicinity of the shipment container. Accordingly, the City Emergency Manager calls the State Emergency line and notifies DODES of the city's response declaration.

11:20 AM

- o The District One Chief arrives at the scene and is appointed liaison by the Incident Commander.
 - o Liaison directs media to a safe area to await PIO.
-

11:30 AM
(CULP)

- o CSP Hazmat team arrives at Incident Command Post.
- o The City PIO arrives and establishes a press briefing area upwind west of the incident at a distance appropriate to the present uncertainties, as determined by the Incident Commander.
- o The PIO provides a description of the incident response up to that point and explains what the shipment is and the anticipated events yet to occur.
- o Media questions following the PIO briefing are:
 - Did this shipment come from Rocky Flats?
 - How can you be sure no radioactive materials have been released?
 - Will you have to evacuate the area?
 - Have you trained for this type of accident?
 - Does the State Health Department know about this accident?
Does DOE?
 - How often will shipments of this type transit the state?

(CULP)

- o **Narrator:** District One Chief has arrived on the scene and is appointed liaison by the Incident Commander. To your right front, across the bridge, the city PIO is conducting a press briefing in a designated upwind location where the incident site can be observed. The Incident Commander is establishing a staging area in a nearby parking area.

- o First of the additional companies calls out as Staging Officer at a nearby parking lot.
- 11:32 AM
- o Hazmat Nine reports to the Incident Commander.
- (RADIO)
- "Command, this is Hazmat Nine. We have conducted our readings; the results reflect no radiation levels above normal background. We await confirmation readings by the State Health Department."
-
- 11:35 AM
(CULP)
- o Patients and civilians are monitored by Hazmat personnel for radiological contamination and found to be free. Patients are stabilized and moved from the area en route to the hospital. Non-patients have been identified and await arrival of State Public Health officials. The deceased victim is taken to the control line to await the arrival of the coroner.
-
- 11:45 AM
- o The Hazmat Coordinator arrives; after an assessment of the situation, he notifies the County Health Department.
-
- 11:55 AM
(EVERITT)
- o **Narrator:** At this time, the local response agencies (fire, law enforcement, medical, hazmat) have done all they can at the scene. The fire has been extinguished, the patients (that is, the two drivers of the transporter and the driver and passenger of the small automobile) and the civilians who rushed to their assistance have been administered to, and the area has been checked for radiological contamination. The State EOC has been notified and, because this is categorized as a potential radiological incident, any further action around the TRUPACTs must await arrival of the State Department of Health/Radiation Control Division. The activities of this and other State and Federal agencies becomes the next step to be demonstrated beginning at 12:15 PM.
- Note: We are just about to begin our first break. The break will begin when a single blast is heard from the Incident Commander's electronic air horn. When two blasts of the air horn are sounded, you will have only five minutes before the next on scene phase begins. Please be seated before the next phase begins.
-
- SHORT BREAK
-
- 12:15 PM
(CULP)
- o **Narrator:** The Incident Commander has isolated the area pending arrival of the State and Federal agencies. The first to arrive, approximately two hours after notification, is the State Coordination Officer from the State Disaster Emergency Services, who will provide Federal, State, and local interface as a member of the Incident Commander's staff. This officer will have direct communications with the State Emergency Operations Center in Golden and with agency resources as they arrive at the designated

marshalling area. CSP hazmat teams from Pueblo and Denver will be available for any assistance considered necessary by the Incident Commander and for reinspection purposes.

A DOE Radiological Assistance Team (RAT) will automatically respond to any incident involving a DOE shipment of radiological material. In this instance, the Rocky Flats RAT consists of a team leader, one radiological engineer, two radiological monitors and a public affairs officer (PAO). The Rocky Flats RAT has responded because it is the nearest DOE resource to this accident location. For other areas of the State, RAT response could come from other DOE sources. The Colorado Department of Health Radiological Assistance Team will respond at approximately the same time. In this incident, the DOE RAT, arriving approximately two hours after alert, notifies the State Coordination Officer of its assistance capability; and after consultation with the Incident Commander, the State Coordination Officer calls the RAT forward to confirm earlier radiation level readings around the TRUPACT and check the condition of the TRUPACT container having the gash.

12:20
(CULP)

- o **Narrator:** The RAT Public Affairs Officer (PAO) confers with the State Coordination Officer and the City Public Affairs Officer to get up-to-date information regarding the status of the incident.
- o The RAT PAO informs the assembled media that a DOE statement will be issued in 10 minutes.
- o The DOE RAT arrives at the Incident Commander's location and requests a briefing on the status of the incident. The minimal information required is:
 - 1. Injuries
 - 2. Patient locations
 - 3. Copy of any bill of lading or manifest or cargo information if no bill of lading
 - 4. Potential or actual radioactive material release
 - 5. Mitigation efforts already expended
 - 6. Access/egress controls ("hot line")
 - 7. Other pertinent information, i.e., other hazards at the scene

Note: Once the briefing is completed, the RAT team will enter the control area through the hot line control point and begin obtaining samples and taking readings with their detection equipment for the purpose of determining if there has been any radiological release as a result of this accident. Determinations made by the RAT are tape recorded, hand

recorded and in some instances relayed by radio to the team chief located with the Incident Commander.

- o When the RAT arrives at the transporter, it will perform a detailed survey of each TRUPACT II container with special emphasis given to the damaged TRUPACT II.
- o The RAT PAO provides a briefing to the media regarding the DOE involvement in the mitigation of the incident.
- o Media questions (Denver newspaper and news service) to the RAT PAO and the State Coordination Officer:
 - Why didn't this shipment have a police escort?
 - Accidents like this reinforce the fact that this dangerous waste should not be transported on the highways. Could you explain why the DOE wants to move it at all?
 - Why not transport these shipments by rail instead?
 - Does the Governor concur with these shipments transiting the State?
- o **Narrator:** The Colorado Department of Health Radiological Assistance Team, consisting of two health physicists, reports to the staging area and requests a status briefing. The team leader will receive a briefing from the State Coordination Officer or Incident Commander on the status of the incident. This briefing will consist of, at least, the following items:
 1. Injuries
 2. Radioactive materials present per bill of lading or manifest
 3. Release or potential release of contamination
 4. Access to area (i.e., "hot line", boundaries, control)
 5. Other hazards in the area

12:30 PM
(QUILLIN)

While the team leader is receiving his briefing, the other member of the team is dressing in protective clothing, performing operational checks on instruments and preparing to conduct the on-site evaluation. The response instrumentation for the Colorado Department of Health Radiological Assistance Team consists of:

1. A Compliance Inspection Instrument Kit and,
2. A Transportation Response Monitoring and Protection Set containing:

- a. an air sampler
- b. a monitoring and sampling instrument kit
- c. a personnel protection kit

The monitoring and sampling instrument kit has instruments specifically designed for the detection of alpha radiation, the principle radioactive emission from contact-handled transuranic waste.

The Transportation Response Monitoring and Protection Sets are located in Greeley CO, Pueblo CO, and Denver CO for timely dispatch to the scene of an incident should alpha radiation be a potential threat. These instrument kits will be available for you to observe at the conclusion of the exercise.

Upon completion of the briefing by the State Coordination Officer, the team leader will brief the other team members; and a monitoring and sampling plan will be developed and implemented. When the monitoring and sampling plan has been completed, the results will be reported to the Incident Commander.

-
- | | | |
|-----------------------|---|--|
| 12:40 PM | o | DOE RAT initial readings are completed as well as the examination of the TRUPACT IIs. |
| 12:50 PM | o | The CDH Radiological Assistance Team completes its readings. |
| 12:55 PM
(QUILLIN) | o | Narrator: More thorough readings and conditional checks are compared between the DOE RAT and CDH team chiefs, levels of contamination are evaluated, and the results discussed with the Incident Commander. In this case, earlier readings are confirmed with the more sophisticated instrumentation, and closer observation of the gash in the TRUPACT reveals no apparent penetration beyond the outer protective skin. Based on this further evaluation, the CDH Team Chief recommends to the Incident Commander that recovery actions commence for removal of vehicles from the accident scene. |
-
- | | | |
|----------------------|---|---|
| 1:10 PM
(EVERITT) | o | Narrator: As mentioned, when the accident occurred and the driver sustained extensive injuries, the alternate driver (there are two drivers with each WIPP shipment transporter) with rib cage pain and a possible broken arm remained functionally alert. A check of the TRANSCOM equipment revealed its inoperative status; therefore, he used his mobile phone to notify the WIPP Central Monitoring Room in Carlsbad, New Mexico, of the transporter status as he could determine it from the cab of the tractor. In addition to reporting their physical condition, the alternate driver also reported that there was evidence of heavy damage to the front axle requiring a tractor replacement. This initial notification to the WIPP |
|----------------------|---|---|

Central Monitoring Room, and ultimately the carrier, triggered Dawn Enterprises to request a tractor replacement from Hertz-Penske in Denver, one planned source of replacements along the route from Idaho (where this TRU waste cargo originated) to the WIPP site east of Carlsbad, New Mexico. This and other recovery actions will be demonstrated beginning at 1:30 p.m., after a short break.

Note: Remember, when you hear two blasts on the electronic horn there will only be five (5) minutes remaining until we begin the third and final phase of today's exercise.

SHORT BREAK

1:30 PM
(BICKEL)

- o **Narrator:** During the local emergency response, the Hazmat teams checked radiation levels along each TRUPACT and especially near the gash in the outer protective skin of the rear container. Because the TRUPACT IIs are designed to sustain damage far exceeding this type impact, there is no radiation release.
- o **Narrator:** The TRUPACT II is a stainless steel cylinder with a flat bottom and a domed top. The TRUPACT II package consists of an inner sealed, non-vented, stainless steel containment vessel inside another sealed, non-vented, stainless steel containment vessel. Each containment vessel is capable of withstanding 50 pounds of pressure per square inch (psi). The inner containment vessel cavity is approximately six feet in diameter and six feet deep, with a capacity of fourteen 55-gallon drums. The vessels have removable lids held in place by lock rings and retainers. The outer containment vessel is surrounded by approximately ten inches of polyurethane foam that acts as both a thermal insulator and an energy-absorbing cushion. On the outside of the foam is a stainless steel shell that functions as a protective structure as well as an impact limiter. This sandwich-like method of construction increases the package strength and safety to withstand accidents associated with transport.

The U. S. Department of Energy has successfully completed a vigorous testing program for TRUPACT II and has received a Certificate of Compliance from the Nuclear Regulatory Commission (NRC).

The tests were designed to meet the Federal requirements of 10 CFR 71 which covers the shipment of nuclear waste. The test sequence resulted in the TRUPACT II being subjected to accident conditions more severe than any anticipated in use. The test series included multiple drops from 30 feet onto an unyielding surface (a 25-foot-thick concrete and steel pad covered with an 8-inch steel armor plate) and from a height of 40 inches onto a six-inch diameter blunted steel puncture spike, followed by a 30-minute burn test at 1475 degrees F. To successfully complete the series, a post test evaluation was conducted to ensure both the inner and outer containment

vessels remained leak tight. Leak tight means less than one cubic inch of air (about the size of a ping pong ball) would escape in a four-year period. The containment vessels serve as barriers between TRUPACT II's contents and the outside environment.

The Certificate of Compliance issued by the NRC addresses limits of operation, as well as weight, number of watts, and number of grams of fissile material allowed. In addition to verifying the design, a plan is in place to maintain the integrity of the container throughout its operational lifetime.

The TRUPACT IIs being used in this exercise are not the actual units that will be used to transport TRU waste. They are models used for public information purposes. The actual units will not have doors on the side nor the plexiglass window.

Additionally, you have seen the State Department of Health's Radiation Control Division, assisted by the Department of Energy's Radiological Assistance Team, confirm that there is no release of radiation, and recommend that recovery work continue.

1:32 PM
(BICKEL)

- o **Narrator:** Because the transporter and cargo will undergo a mechanical and radiological reinspection by the CSP before being allowed to move from the accident site, a CSP team of two trained personnel has been waiting to perform this initial inspection. They have also been present during the consultations with the Incident Commander on the results of the radiological evaluation. Even though the CSP team as a matter of procedure will normally confirm for themselves the radiation levels around the vehicle, we will go straight to the mechanical evaluation. In this case, the damaged tractor is still able to provide pressure to the air brakes, and therefore the mechanical inspection can get underway.
- o The CSP inspectors conduct the mechanical inspection of the tractor, trailer and TRUPACTs. The results are passed to the Incident Commander as each component is evaluated. Private heavy equipment mechanics have been identified and asked by the Incident Commander to provide assistance in working on deficiencies. Concurrently, Colorado Springs Police Department accident investigators arrive on scene to conduct their accident investigation.

1:40 PM
(BICKEL)

- o **Narrator:** The CSP team has confirmed that the tractor has extensive front axle damage, thereby necessitating tractor replacement - an activity initiated by Dawn Enterprises based on initial reports received by CMR from the transporter driver.
-

1:50 PM
(BICKEL)

- o **Narrator:** An evaluation of the TRUPACTs shows that one of the four "U" bolt tie-downs on each container is broken or cracked. The "U" bolts secure the container to the bed of the trailer; these three broken "U" bolts will require removal and replacement. Guidance and tools for this effort are available in the cab of the tractor for the untrained mechanic. In this instance, the replacement drivers dispatched to the scene by private charter aircraft arrived in approximately three hours and are now on-site. They will immediately begin replacement of defective "U" bolts. At the same time, when police investigators give the "okay," a wrecker dispatched to the scene will begin clearing the site of the heavily damaged automobile and the debris.

1:55 PM
(BICKEL)

- o **Narrator:** Further CSP inspection of the trailer reveals that (a) there are three flat tires, which require replacement, and (b) the trailer shows evidence of a hairline crack. However, there is no threat to the structural integrity of the weight-bearing components. Concurrent with the "U" bolt replacement, the flat tires will be replaced by heavy equipment mechanics located and sent to the scene by local authorities.

2:30 PM
(BICKEL)

- o **Narrator:** As the "U" bolt tie-down and tire replacement concluded, the heavy equipment wrecker (class 8) is brought into position for removal of the disabled tractor. After the trailer is detached, the disabled tractor is relocated in order for the replacement tractor to be moved into position for hook-up of the trailer.

2:45 PM
(EVERITT)

- o The removal of the disabled tractor is completed; the replacement tractor moves into position and the trailer is attached. CSP inspectors make final inspection of the tractor, trailer and TRUPACT containers, and recommends movement to a "safe parking area" where final preparation for subsequent travel to the WIPP site and DOE self-inspections can be made. The Incident Commander in consultation with on scene experts will make the decision concerning onward escorted movement of the transporter.

2:55 PM
(EVERITT)

- o **Narrator:** As the replacement tractor moves into position and links up with the trailer, a few comments are in order.

First: The State of Colorado and the Department of Energy recently conducted a tractor replacement drill—a "No Notice" for the Dawn Enterprises carrier requiring a replacement tractor at the accident site. From notification to arrival at the exercise site, including a Port of Entry inspection, the tractor replacement drill took two hours and twenty-six minutes. DAN Enterprises has contracted with the DOE to have tractor replacements within eight hours.

Second: In this or any accident, the first and foremost priority for both the State and the DOE is preservation of the public health and safety and protection of the environment. As you see, such assurance has been a major, often time-consuming effort in this incident. At the same time, as the public health is ensured, emphasis becomes increasingly focussed on removing the transporter and other debris on the interstate so normal traffic can resume. The detour required as a result of this particular scenario turns out to be the most extensive of any that could be required along the interstate as it moves through Colorado Springs; it involves the services of 27 police officers, so you can appreciate the pressure to resume normal traffic as soon as possible.

Third: Since the CSP inspection is dedicated to normal criteria, and since this accident has produced some conditions of an uncertain nature, the State requests that the transporter move to a "safe parking area" for issue resolution. This action will allow for a more deliberate and comprehensive evaluation of the conditions of the WIPP shipment transporter before it continues to its ultimate destination in New Mexico. The "safe parking area" selected for this further investigation is the Rocky Flats Plant northwest of Denver. For your information, safe parking areas may be required during the WIPP shipping campaign in case of mechanical problems, adverse weather conditions, bad road conditions or other potential problems. The Western Governors' Association under a cooperative agreement with the DOE is developing criteria to identify and prioritize safe parking areas within the States. In addition, the DOE has a Memorandum of Understanding with the Department of Defense (DOD) to utilize DOD facilities along WIPP routes for safe parking of WIPP shipments.

3:00 PM
(EVERITT)

-
- o As the WIPP shipment transporter is moved under escort to the designated "safe parking area", we will conclude this exercise and respond to any questions you may have. Thank you for your attention. We hope you have benefitted from today's activities as we have. The lessons learned will serve as the basis for ongoing action by the State and the DOE in preparation for this or any similar hazardous materials incident in the State of Colorado or any other WIPP-corridor State.