



EM U.S. Department of Energy
Office of Environmental Management



*Transportation
Emergency
Preparedness
Program (TEPP)*



**Lehigh Valley International Airport (LVIA)
Federal Express Terminal Exercise
Allentown, PA
September 24, 2005**

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LVIA FEDERAL EXPRESS EXERCISE REVIEW

- **INTEREST IN CONDUCTING AN EXERCISE**

- REQUEST AND COMMITMENT LETTERS BETWEEN PEMA AND DOE

- **PLANNING PROCESS**

- NEEDS ASSESSMENT
- AGENCY PARTICIPATION
- EXERCISE OBJECTIVES
- SCENARIO

- **TRAINING PROGRAMS**

- FEMA G346 RADIOLOGICAL TRAINING FOR HOSPITAL STAFF
- DOE MODULAR EMERGENCY RESPONSE RADIOLOGICAL TRANSPORTATION TRAINING (MERRTT)
- CONTROLLER/EVALUATOR TRAINING
- REFRESHER SESSION AS NEEDED

- **EXERCISE CONDUCT AND LESSONS LEARNED**

- TABLETOP
- PROPS
- OBSERVATIONS
- LESSONS LEARNED
- FOLLOW UP TABLETOP AND TRAINING SESSION



LVA FEDERAL EXPRESS EXERCISE REVIEW

- **INTEREST IN CONDUCTING AN EXERCISE**

- PEMA HAS USED MERRTT AS THE BASE PROGRAM TO TRAIN RESPONDERS ACROSS THE STATE FOR FIVE YEARS
- MERRTT HAS PROVEN TO BE AN EFFECTIVE TRAINING PROGRAM TARGETED AT THE LOCAL EMERGENCY RESPONDER
- ANNUALLY PEMA TRAINS 800+ RESPONDERS USING MERRTT
- EVERY YEAR PEMA CONDUCTS RADIOLOGICAL REFRESHER TRAINING FOR ITS 82 REGIONAL RADIOLOGICAL TRAINERS
- EVERY OTHER YEAR A 12 HOUR HANDS-ON SESSION IS CONDUCTED THAT INVOLVES SEVERAL TYPES OF MINI EXERCISE. RADIOLOGICAL IS ALWAYS ONE OF THE MINI EXERCISES





L VIA FEDERAL EXPRESS EXERCISE REVIEW

- **INTEREST IN CONDUCTING AN EXERCISE**

- 500 BILLION PACKAGES SHIPPED ANNUALLY
- 400 MILLION ARE HAZARDOUS
- 3 MILLION ARE RADIOACTIVE
- DOE SHIPS APPROXIMATELY 20K PER YEAR
- LVIA FEDERAL EXPRESS TERMINAL RECEIVES ON AVERAGE 5 PACKAGES PER DAY MONDAY THROUGH FRIDAY
- PEMA ESTIMATES ABOUT 40 CONTROLLED RADIOACTIVE MATERIAL SHIPMENT DEPART OR ARRIVE THROUGHOUT THE STATE ANNUALLY
- USED AS AN OPPORTUNITY FOR PEMA AND LOCAL RESPONDER TO IDENTIFY THE CHALLENGES ASSOCIATED WITH RESPONDING AND MITIGATING AN AIRCRAFT TYPE TRANSPORTATION INCIDENT

[View Video](#)



LVIA FEDERAL EXPRESS EXERCISE REVIEW

• NEEDS ASSESSMENT FINDINGS

- ASSESSMENT TOOLS DEVELOPED TO IDENTIFY ORGANIZATIONAL PLANNING AND TRAINING WEAKNESS FOR RESPONDING TO TRANSPORTATION INCIDENT INVOLVING RADIOACTIVE MATERIAL
- NEEDS ASSESSMENT WAS CONDUCTED WITH LVIA, NORTHAMPTON AND LEHIGH COUNTY RESPONSE ORGANIZATIONS
- AS A RESULT OF THE ASSESSMENT FINDINGS SEVERAL TRAINING SESSIONS WERE CONDUCTED TO PREPARE RESPONDERS FOR THE EXERCISE AND ORGANIZATIONAL PLANS/PROCEDURES WERE REVIEWED TO PREPARE FOR THE EXERCISE

• AGENCY PARTICIPATION

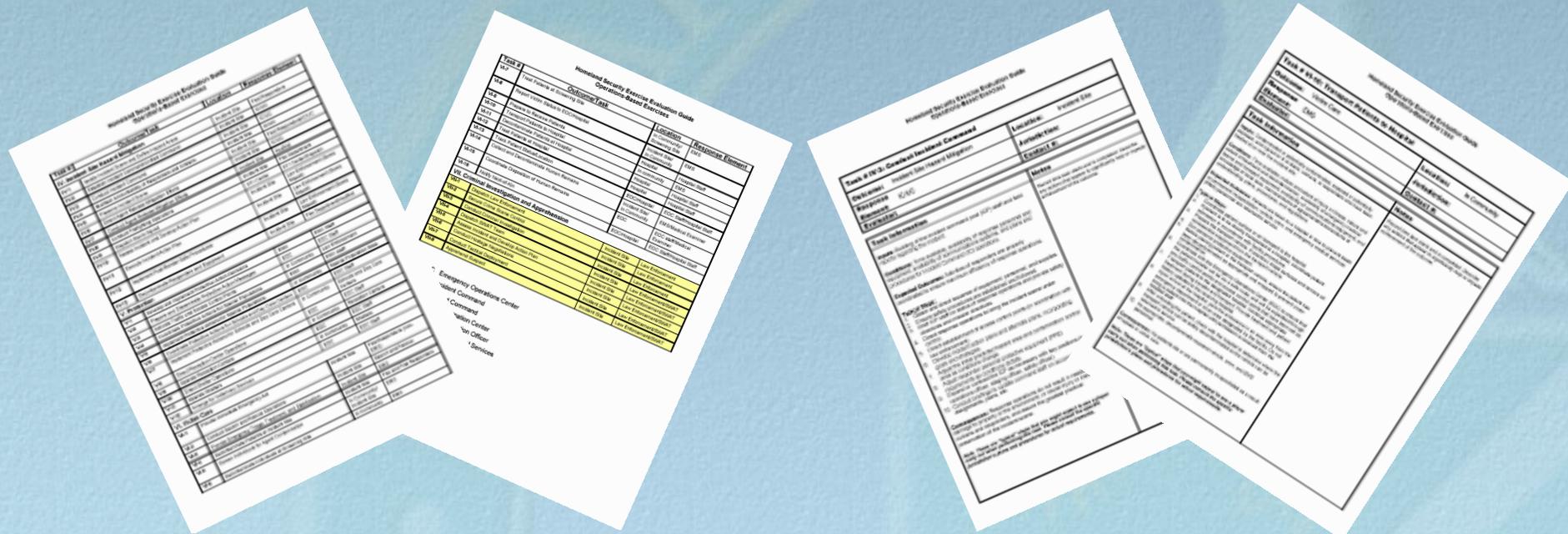
- PEMA WAS THE HOST AGENCY AND LVIA ACTED AS THE COORDINATING AGENCY FOR THE EXERCISE
- MEETINGS AND TRAINING SESSIONS WERE CONDUCTED AT THE AIRPORT
- EMERGENCY SERVICE ORGANIZATION FROM THE TWO COUNTIES SURROUNDING THE AIRPORT (LEHIGH AND NORTHAMPTON) PARTICIPATED IN THE PLANNING AND CONDUCT OF THE EXERCISE
- EMERGENCY MANAGEMENT, FIRE SERVICE, HAZARDOUS MATERIAL TEAMS, EMS AND AIRPORT RESPONDERS PARTICIPATED IN THE EXERCISE



LVIA FEDERAL EXPRESS EXERCISE REVIEW

- **EXERCISE OBJECTIVES**

- TO FACILITATE SCENARIO DEVELOPMENT THE EXERCISE PLANNING COMMITTEE DEVELOPED GENERIC OBJECTIVES AND EACH AGENCY REVIEWED AND APPROVED THE OBJECTIVES
- A TOTAL OF 11 EXERCISE OBJECTIVES WERE DEVELOPED WITH NUMEROUS LINES OF INQUIRY OR EXPECTED EXTENT OF PLAY ACTIONS
- DEPARTMENT OF HOMELAND SECURITY EXERCISE DESIGN AND EVALUATION GUIDANCE WAS USED TO FORMAT THE EXERCISE PACKAGE
- DEPARTMENT OF HOMELAND SECURITY EXERCISE EVALUATION GUIDES





LVIA FEDERAL EXPRESS EXERCISE REVIEW

- **EXERCISE PUBLIC INFORMATION**

- TYPICAL PRESS RELEASE ISSUED BY LVIA TO ANNOUNCE THE EXERCISE



LEHIGH-NORTHAMPTON AIRPORT AUTHORITY FIRE FIIGHTERS CONDUCT A RADIOACTIVE TRAINING EXERCISE

Saturday, September 24, 2005

Contact: Susan Kittle, Director Business Development skittle@lvia.com or 610-231-5206 Lehigh-Northampton Airport Authority 1 - 801 - FLY - LVIA

Lehigh Valley, Pa. - The Lehigh-Northampton Airport Authority, in conjunction with the Pennsylvania Emergency Management Agency and the U.S. Department of Energy are partnering together to conduct an emergency readiness training exercise involving radioactive materials. The exercise will take place at the Federal Express ramp, 315 Postal Road near the Lehigh Valley International Airport (LVIA) on Saturday, September 24, 2005 beginning at 9:00am.

The exercise will simulate a fire that breaks out on a piece of loading equipment that is placing radioactive material packages on a cargo aircraft. The training scenario will include simulated injuries suffered by several workers during the unloading of the aircraft. Emergency responders from LVIA Fire Department, Lehigh and Northampton Counties and the City of Bethlehem will participate in the training exercise. Those with simulated injuries will be transported to several area hospitals in order to test their plans for decontamination and treatment of patients with potential radiological exposure.

Exercise objectives include a demonstration of incident command and control, inter agency cooperation between the airport fire department and county emergency services, and the proper handling of patients that could be contaminated by radiological material. This exercise is open to organizations interested in observing the exercise. Please contact Susan Kittle at 610-231-5206 for information about access to the exercise and information about the multi agency exercise effort.

Lehigh Valley International Airport is located near Allentown, Pennsylvania and serves a twelve county area with a population of 3.6 million people. The Airport is easily accessible from communities in eastern Pennsylvania and northern New Jersey.



LVIA FEDERAL EXPRESS EXERCISE REVIEW

- **SCENARIO**

- THE EXERCISE WAS STAGED AT THE FEDERAL EXPRESS TERMINAL, LOCATED AT THE LEHIGH VALLEY INTERNATIONAL AIRPORT
- THE INCIDENT INVOLVED A FIRE, RADIOACTIVE MATERIALS, AND A TOTAL OF THREE CASUALTIES
- A FIRE OCCURRED ON A CONVEYER UNIT THAT IS USED DURING THE AIRCRAFT UNLOADING PROCESS





LVIA FEDERAL EXPRESS EXERCISE REVIEW

- **SCENARIO**

- THE FIRE SPREAD FROM THE CONVEYER UNIT TO EIGHT RADIOACTIVE MATERIAL PACKAGES THAT HAD BEEN PLACED ON THE CONVEYER DURING THE UNLOADING
- SEVERAL EMPLOYEES WERE INJURED WHILE TRYING TO EVACUATE OR EXTINGUISH THE FIRE





LVIA FEDERAL EXPRESS EXERCISE REVIEW

- **SCENARIO**

- EMERGENCY RESPONDERS ARRIVED AND EXTINGUISHED THE FIRE
- THEY RESCUED THE VICTIMS AND WORKED WITH THE RADIATION AUTHORITY TO DETERMINE THE EXTENT OF THE RADIOACTIVE MATERIAL RELEASE AND NEEDED CLEANUP ACTIVITIES

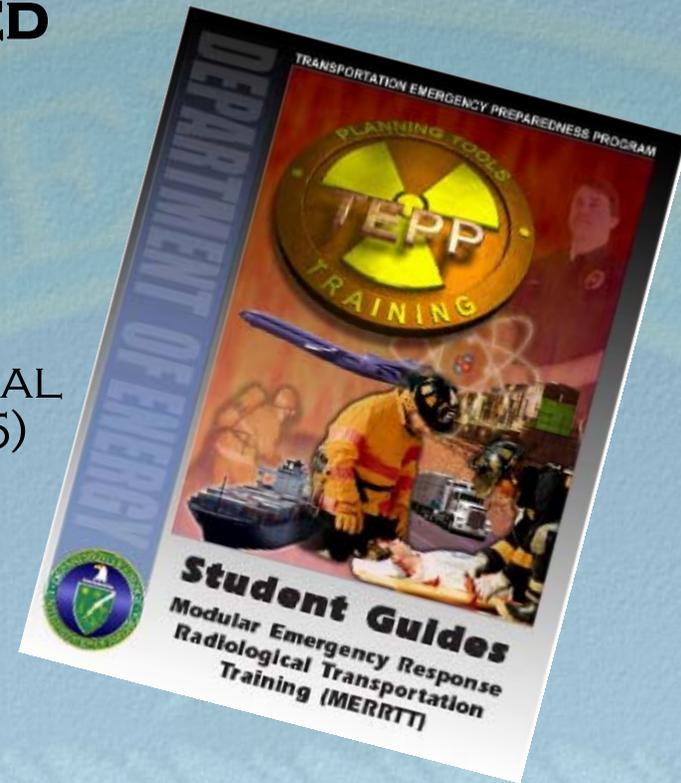




LVIA FEDERAL EXPRESS EXERCISE REVIEW

• TRAINING PROGRAMS CONDUCTED

- 2 - 16 HOUR MERRTT SESSIONS
 - 18 MODULES AND 4 HANDS-ON ACTIVITIES
 - 50 RESPONDERS PARTICIPATED IN THE TRAINING
- 2 - 8 HOUR FEMA G-346 RADIOLOGICAL TRAINING FOR HOSPITAL STAFF (9/05)
 - 14 MODULES, STAFF ATTENDS ONLY PARTS NEEDED AND TRAINING INCLUDES AN ER HANDS-ON EXERCISE
 - 24 ER AND EMS CARE PROVIDERS PARTICIPATED IN THE TRAINING
- 1 - 2 HOUR EVALUATOR/CONTROLLER TRAINING SESSION WAS CONDUCTED
- 1 - 3 HOUR TABLETOP EXERCISE BASED ON EXPECTED RESPONDER ACTIONS





LVIA FEDERAL EXPRESS EXERCISE REVIEW

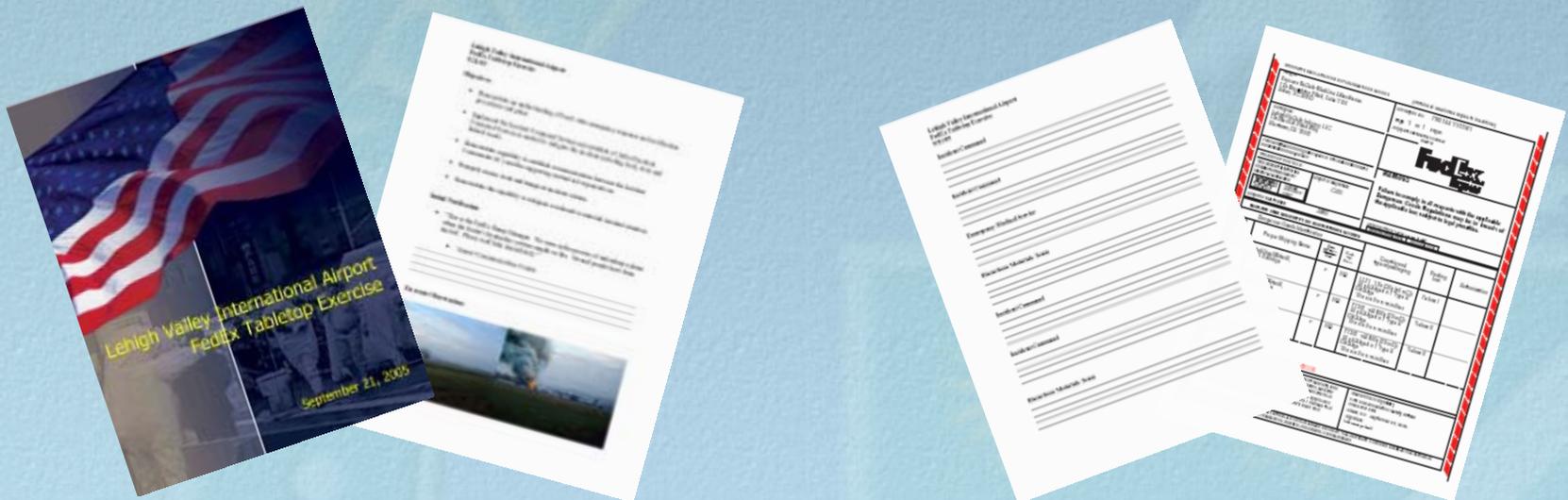
• EXERCISE CONDUCT AND LESSONS LEARNED

– TABLETOP INCLUDED

- CONDUCTED A DETAILED WALK THROUGH OF INCIDENT AND EXPECTED ACTIONS
- TABLETOP INCLUDED POSITION SPECIFIC DISCUSSION ABOUT EXPECTED RESPONSE ACTIONS AND RESULTS

– TABLETOP DID NOT INCLUDE

- DISCUSSION ABOUT INSTRUMENT OPERATION AND LIMITATIONS
- SETUP AND MANAGEMENT OF THE DECONTAMINATION CORRIDOR





LVIA FEDERAL EXPRESS EXERCISE REVIEW

- **EXERCISE CONDUCT AND LESSONS LEARNED**
 - PROPS





LVIA FEDERAL EXPRESS EXERCISE REVIEW

- **EXERCISE CONDUCT AND LESSONS LEARNED**

- **OBSERVATIONS - IMPROVEMENT ITEMS:**

- THE PRIORITY FOR VICTIM ASSESSMENT AND TREATMENT COULD HAVE BEEN TIMELIER
 - ENTRY AND EXIT OF PERSONNEL TO CONTROL CONTAMINATION SPREAD WITHIN THE OPERATIONAL AREA COULD HAVE BEEN IMPROVED
 - INCIDENT COMMAND OPERATIONS COULD HAVE BEEN IMPROVED BY IMPLEMENTING A POSITION SPECIFIC IDENTIFICATION (VESTS) PROCESS, IDENTIFYING THE COMMAND POST, RESTRICTING ACCESS TO THE COMMAND POST TO ONLY KEY COMMAND STAFF POSITIONS AND PROPERLY EQUIPPING THE COMMAND POST WITH NEEDED SUPPLIES AND COMMUNICATION EQUIPMENT
 - ESTABLISH A POLICY TO DESIGNATE A SAFETY OFFICER AT THE SCENE



LVIA FEDERAL EXPRESS EXERCISE REVIEW

- **EXERCISE CONDUCT AND LESSONS LEARNED**

- **OBSERVATIONS - RECOGNIZED STRENGTHS:**

- RESPONSE ACTIONS WERE TIMELY AND BASED ON THE UNITED STATES DEPARTMENT OF TRANSPORTATION EMERGENCY RESPONSE GUIDEBOOK.
 - THE NEED FOR ADDITIONAL RESPONSE RESOURCES WAS RECOGNIZED AND REQUESTED IN A TIMELY MANNER.
 - VICTIM ROLE-PLAYERS PERFORMED REALISTICALLY AND WERE RESCUED AND MOVED TO A SAFE AREA IN A TIMELY MANNER.
 - PUBLIC INFORMATION/PRESS BRIEFING WAS TIMELY AND CONTAINED RELEVANT INFORMATION.



LVIA FEDERAL EXPRESS EXERCISE REVIEW

- **EXERCISE CONDUCT AND LESSONS LEARNED**

- **LESSONS LEARNED**

- USE/IMPLEMENTATION OF A UNIFIED COMMAND
 - MULTIPLE HAZARDOUS TEAMS AT SCENE – NEED TO WORK TOGETHER AND SHARE RESOURCES AND ASSIGNMENTS
 - SCENE SIZE UP IMPROVEMENTS NEEDED – RECOGNIZE SECONDARY HAZARDS AND ACCOUNT OF SHIPPING PAPER INVENTORY
 - IMPROVE INCIDENT COMMAND OPERATIONS AND INVESTIGATE THE POSSIBILITY OF PURCHASING NEEDED CP RESOURCES
 - IMPLEMENT A COUNTY AND REGIONAL RESPONDER ACCOUNTABILITY SYSTEM
 - ESTABLISH AIRPORT ENTRY PROTOCOL FOR VOLUNTEER RESPONDERS
 - RETRAIN ON REMOVAL OF RADIOLOGICALLY CONTAMINATED PATIENT FROM A HOT ZONE

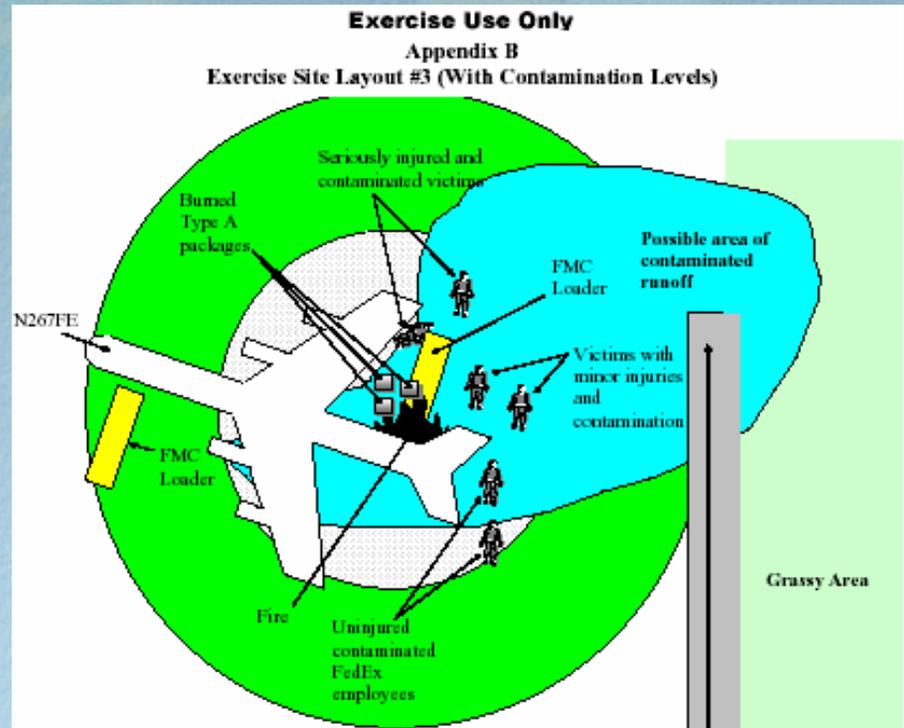
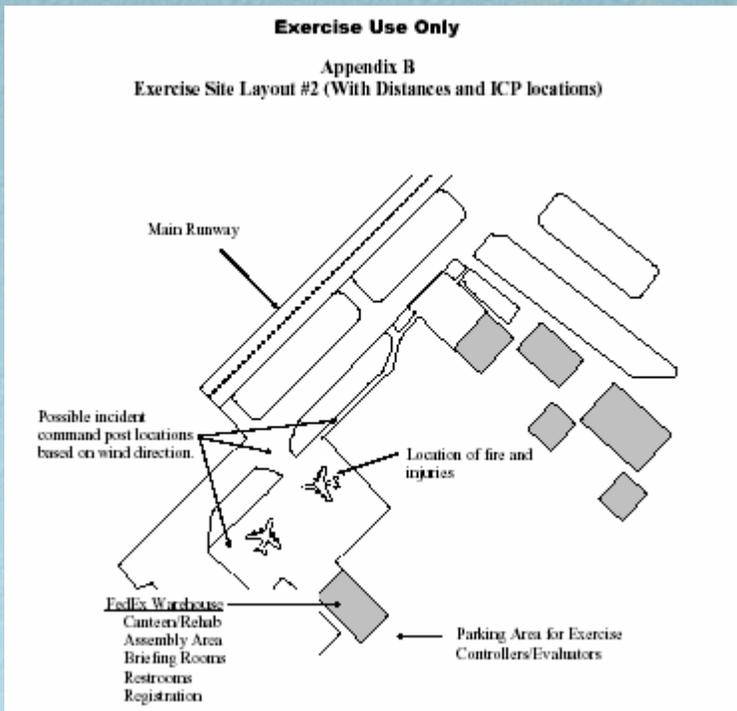


LVIA FEDERAL EXPRESS EXERCISE REVIEW

• EXERCISE CONDUCT AND LESSONS LEARNED

- LESSONS LEARNED

- RETRAIN ON PROPER DECONTAMINATION TECHNIQUES
- RETRAIN ON INSTRUMENT OPERATIONS AND SCENE SURVEY PRACTICES (RADIATION AND CONTAMINATION)
- ESTABLISH SOP/SOG FOR DOCUMENTING INCIDENT RESPONSE





LVIA FEDERAL EXPRESS EXERCISE REVIEW

- **EXERCISE CONDUCT AND LESSONS LEARNED**
 - **FOLLOW UP 8 HOUR TABLETOP AND TRAINING SESSION**
 - CONDUCTED A FOLLOW UP TABLETOP REPEATING THE INCIDENT SCENE AND REPLAYED RESPONSE ACTIONS
 - REPLAYED SECTIONS OF THE INCIDENT SCENE INCLUDING ENTRY AND DECONTAMINATION CORRIDOR OPERATIONS





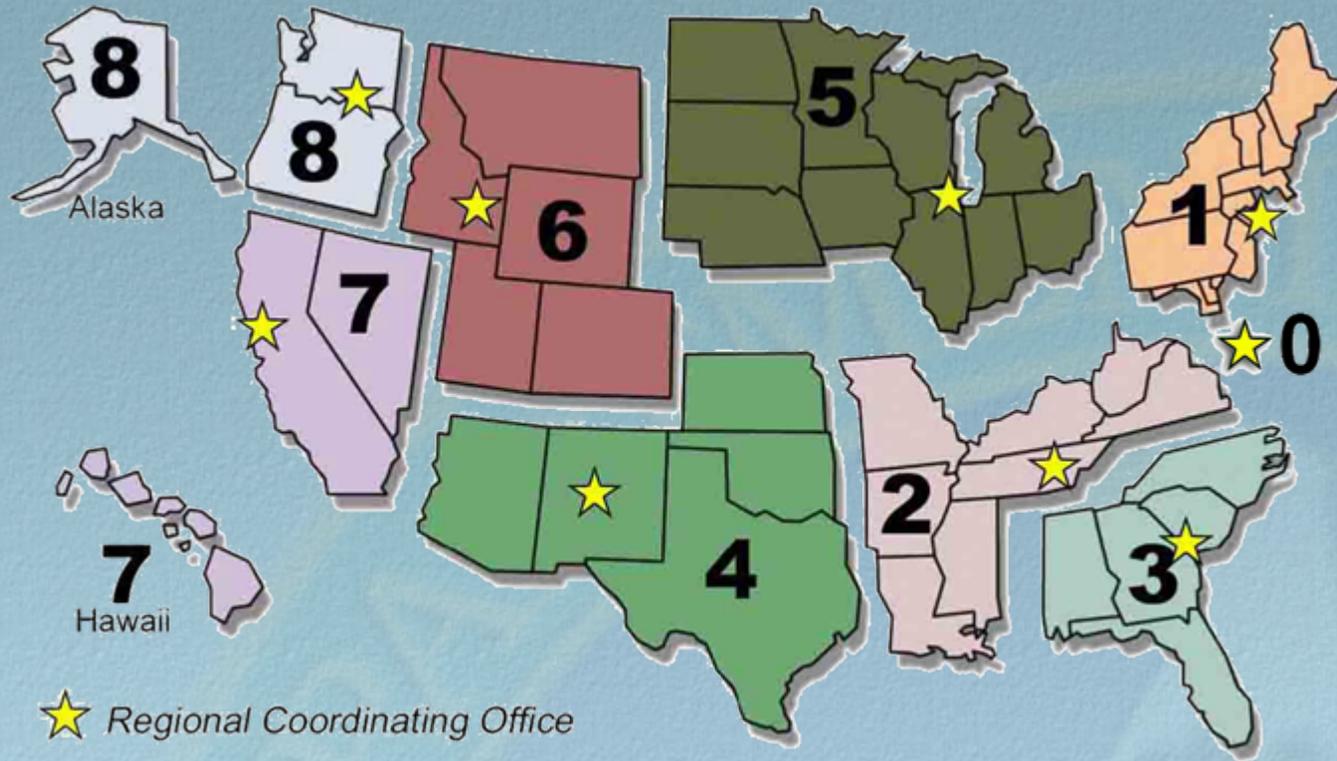
TEPP's Mission

*TEPP will assist Department of Energy (DOE)
and other federal, state, tribal and local
authorities to prepare for response to
a transportation incident involving
DOE shipments of radioactive
material.*





LVIA FEDERAL EXPRESS EXERCISE REVIEW



Region	Regional TEPP Coordinating Office	Office Number
1	Terri Keintel	(631) 344-1221
2	Brady Lester	(865) 576-8354
3	Cindy Brizes	(803) 725-4170
4	Nick Davis	(505) 845-5344
HQ	Washington DC	(301) 903-7284

Region	Regional TEPP Coordinating Office	Office Number
5	Joseph DiMatteo	630-252-2761
6	Stacey Madson	(208) 526-1532
7	Mike Cornell	(510) 637-1794
8	Rick Stutheit	(509) 376-3005
WIPP	Carlsbad, NM	(505) 234-7200



DANGER

QUESTIONS



CONTAMINATED MATERIAL

