



# Emergency Management Issues Special Interest Group Annual Meeting

## Removing the Mystery of LANL

Informing First Responders and the Community of Unique Hazards, Proper Response, and Potential Impacts

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# Introduction

- Los Alamos County Fire Department (LAFD) has provided fire suppression and medical responses to LANL since 1989.
- LAFD provides these services under a Cooperative Agreement (CA) with NNSA, starting in Fiscal Year 2008.



# Background

- Few, if any, tours provided to LAFD on specific LANL hazardous material facilities.
- Little to very little understanding of Emergency Planning Hazards Assessments and necessary Protective Actions.
- No training provided to LAFD on rad control, glovebox fire fighting, criticality safety, or other hazards particular to LANL.
- Lack of understanding in community of LANL hazards.

# Training Approach

- In mid 2009, LANL established the “Training Advisory Board” to address these concerns.
- The Training Advisory Board consisted of:
  - LAFD Department, EMS, and Training Chiefs
  - LANL Training and Emergency Management Groups, SMEs
  - LASO Emergency Program Manager
- Strategy of “tours + training + exercises”



# Classroom & Hands-On Training

- Formal, first-time, training established on subjects of:
  - Pyrophorics & Glovebox Firefighting
  - Unique Hazards (HE, Be, nano, H3, bio, gas cylinder, shock sensitive mat'ls)
  - Ventilation Fires
  - Rad monitoring equipment
  - Emergency Responder Radiological Training
  - Assessing nuclear & high-hazard facilities

# Glovebox & Pyrophorics Training



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May 2-5, 2011 Charleston Marriott • Charleston, South Carolina

# HazMat Facility Tours

- Since FY2009, LANL has provided ~6 facility tours per year – aiming to capture all 124 firefighters in the County.
- Tours usually have 6-12 firefighters and all use a similar format with formal learning objectives.
- LANL has 20 Hazardous Material Facilities (3 year periodicity on tours)

# LANL Emergency Management

- Extensive Base Program (covering 2,800+ buildings)
- Comprehensive site and facility maps
- 20 EPHA's, 249 EAL's for radiological, chemical, & biological releases
- Cat & Class procedure
- Written EAL's
- 112 Potential release locations

# Hazard Surveys, EPHAs and Protective Actions

- The difference between Hazard Surveys and how EPHAs are developed was explained.
- The target audience: LAFD and EM
- How the LANL IC uses Emergency Action Levels to set Protective Actions
- EAL Protective Actions are based on worst case scenarios

# LAFD/ LANL EM 1<sup>st</sup> Responder Briefings

- Known Response Information
  - Building Run-sheets
  - Pre-fire Plans
  - Response Guides
- Hazard Surveys
  - Screening Process for Hazardous Materials
- EPHA
  - Protective Actions

# Briefing Format

- The Briefing provide an overview of the EPHA(s) for the following facilities: TA XX-ABC
  - Facility Categorization and Current Status
  - Location and Access to the Facilities
  - Hazards and Location of Hazmat
  - Boundaries and Adjacent Facilities
  - Wind Directions
  - Emergency Action Levels
  - Emergency Planning Zones
  - Contacts for Facilities
  - Resources and special response issues

# The Responder Briefings

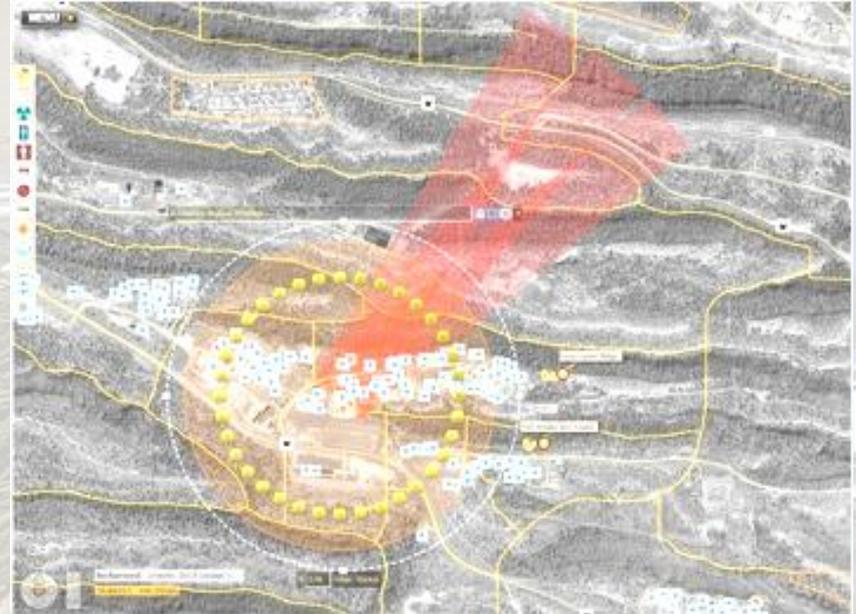
- Initially were held at the EOC for LAFD Chief Officers and LANL Incident Commanders (Emergency Managers)
- 18 EPHA Briefings Covered 20 EPHA Facilities
  - Radiological Facilities
  - Chemical Facilities
  - Biological Facilities
- 24 sessions with over 180 attending in FY 10

# Responder Briefings FY 11

- Change in location to LAFD Fire Administration building.
  - Better participation LAFD. Chiefs to the Captain level.
- Briefings scheduled before EPHA Facility Exercises and/or walkdowns.
- Briefings bring in the use of EOD's Rapid Response Tool for simulated response to EPHA Facility.

# Responder Briefing Discussions

- Rapid Response Tool use to present different EPHA scenarios.
- By seeing and placing responders on an interactive map this facilitated many discussions about response issues.



# Responder Briefing Discussions

- The right people are in the room:
- LAFD, LANL ICs, LANL EPHA Facility Operators, LANL HazMat, LANL Security, SOC, and SOC Planners.
- The right questions are being asked and answered:
  - Where is the ICP is set up?
  - Are you in the isolation zone?
  - Aware of all the hazards? Chemical vs. Radiological?
  - Contamination Airborne or is the runoff contaminated & controlled?
  - Is the ventilation better on or off for this facility?
  - Physical Plant characteristics.
  - Communications and Physical Security posture during a response.

# Additional Responder Briefings FY 11

- LANL Occupational Medicine
  - Once a month at Occupational Medicine
  - Not as in depth (different needs and knowledge base)
  - Also facilitates discussion
- Next Goal = Local Hospital
  - Location ? LANL Occupational Medicine?  
LAFD Fire Administration? Or LAMC?

# HazMat Facility Exercises

- Facility exercises (~10 annually with LAFD participation) test tours & training.



# LEPC (Public Briefings)

- Used Responder Briefings as a basis for the LEPC Briefings
- Scaled down information from EPHA briefings to include:
- 5 Briefings presented at the LEPC over 20 EPHA Facilities in FY 10

# Results

- Current observations:
  - Improved response performance by LAFD
  - Improved coordination with LANL emergency managers.
  - Improved confidence of firefighters, NNSA, and the general public.
  - Establishment of a formal firefighter training program, for both existing firefighters and academy recruits.

# Questions

