## **Emergency Operations Center**

## **Program Profile**

Los Alamos National Laboratory's current EOC was retrofitted into a basement at TA-59 during the 1980s. Cramped, with space for only 16 people, it has limited communications capabilities and sits in a vulnerable location. As the County of Los Alamos did not have an Emergency Operations Center, county emergency managers operated from the Laboratory's EOC and various county buildings during the Cerro Grande Fire. The Cerro Grande Rehabilitation Project has provided funding for more effective emergency response by the County and the Laboratory, including the new, 38,000-square-foot EOC.

## **EOC Facts**

- The building rests on 30 inches of concrete; in an unlikely seismic event, the EOC might move off plumb, but it will remain intact.
- The EOC runs on natural gas, but a backup diesel generator can kick on in less than nine seconds to supply all power to the building for 14 days. Battery backup for four hours is also available for all critical systems including the Police, Fire and 911 Dispatch Center.
- There's sufficient food (MREs), potable water (20,000 gallons), sanitary sewer holding (20,000 gallons), water for fire protection (120,000 gallons), diesel fuel for the backup generator (50,000 gallons) and other on-site services for 100 to 120 people to occupy the building for 14 days.
- The outside of the building is made up of large concrete masonry units.

- Beneath that is an interlayer, or "skin" of three layers: polyethelene, aluminum, polyethelene. The building is reasonably air tight and equipped with three layers of air filtration to prevent events such as a nearby fire or chemical spill from affecting those inside: a roughing layer filter to remove larger particulates, activated charcoal beds and a HEPA filter. A complete set of backup filters is available if the filters begin to lose their efficacy.
- All elements of a new multi-faceted communications system will tie directly to the new EOC, including a multi-band radio system, a media interface/emergency broadcast system, a mobile communications van and mobile command center to which essential functions can be transferred immediately in an emergency, fixed wing and helicopter surveillance and

- emergency communications of all kinds. More than 600 telephone and highspeed data lines serve the EOC.
- In an emergency, primaries who lead emergency response will wear proximity badges, like a one-way version of the Star Trek communicators. Dispatchers will know instantly in which room the Lab Director or DOE and Los Alamos County decision makers are located at all times and can send calls there.
- The EOC has a vault for classified documents or discussions and the capability to change into secure Limited Area Status mode by closing shutters over the windows and shutting off sound in rooms where classified information is being discussed or depicted.
- The EOC will have the ability to receive video from fixed cameras monitoring traffic at key points throughout Los Alamos County and the Laboratory, and to control programmable signs that can advise motorists of emergency or traffic conditions on the main roads.
- The EOC information network includes a data mirror with the latest information on facility conditions, hazardous material inventories and other updates that would aid first responders.
- Included in the network is a broadcast media interface that allows the Laboratory Public Affairs Office to produce video for release on the spot, and eventually will permit Public Affairs to feed that video to local television outlets via Internet broadband.
- The EOC project was completed under a design-build contract with the Austin Companyof Cleveland, Ohio, the oldest design-build firm in the country. Design and construction of the facility took less than two years. The facility was operational two months ahead of schedule and \$800,000 under budget at a total project cost of less than \$21 million.



The new, state-of-the-art Emergency Operations Center will serve the laboratory, Los Alamos County and surrounding pueblos and communities.

