

LANL Waste Characterization, Reduction, and Repackaging Facility DOE ORR 7/21

FIRE PROTECTION (FP)

OBJECTIVE

FP.1: LANS line management has established and implemented a Fire Protection program to ensure safe operations and activities associated with WCRR within the requirements of the safety basis documents and regulatory permits. Sufficient numbers of qualified fire protection program personnel as well as adequate facilities and equipment are available to support WCRRF operations. (CRs 1, 4, 6, 7, 8, 9, 10, and 12)

CRITERIA

1. Fire Hazard Assessments (FHAs) for WCRR are current, implemented, and flow into the BIO and TSRs as required. (DOE O 420.1B)
2. The Fire Protection Program, in support of WCRR, is compliant with DOE 420.1B as well as TSR 5.6.5 (DOE 420.1B; TSR AC).
3. The Fire Protection Program Specific Administrative Controls specified in TSR 5.10.1 have been implemented with procedures in place to assure continued compliance. (WCRRF TSRs)
4. BIO/TSR commitments associated with fire suppression systems including design, construction, operability and maintenance/surveillances (TSR 3/4.2) are accurately and effectively implemented. (BIO; TSR AC; 10 CFR 830.200)
5. The level of knowledge of fire protection personnel concerning their roles and responsibilities for WCRRF operations is adequate. (DOE O 5480.20A)
6. Sufficient numbers of qualified personnel, as well as adequate facilities and equipment, are available to support WCRRF operations (DOE O 420.1B)

APPROACH

Requirements:

- National Fire Protection Association Standards (as applicable)
- DOE O 420.1, *Facility Safety*, Section 4.2, "Fire Protection," Programmatic Requirements

Document Review:

- WCRR FHA and FHA implementation plan
- WCRR BIO and TSR including SER and any conditions of approval implementation plans
- CORR Final Report and corrective action closure packages
- Inspection, testing and maintenance records for WCRR fire detection, alarm and suppression systems
- WCRR combustible control process documentation and records
- Recent LANL Fire Protection program assessments associated with WCRR and corrective action reports
- Wildland Fire Response Plan

- Review the WCRRF Fire Protection Program to determine compliance with DOE 420.1B, TSR 5.6.5, to ensure that the following has been addressed:
 - the occurrence of a fire or related event;
 - a fire that causes an unacceptable on-site or off-site release of hazardous or radiological material that will threaten the health and safety of employees, the public, or the environment;
 - vital DOE programs suffering unacceptable interruptions as a result of fire and related hazards,
 - property losses from a fire and related events exceeding defined limits established by DOE; and
 - critical process controls and safety class systems being damaged as a result of a fire and related events.
- combustible loading and combustion control programs (TSR 5.6.5)

Interviews:

- Facility Manager
- Fire Protection Engineer/Lead with WCRR responsibilities
- WCRR Work Control personnel
- WCRR supervisors/workers (sample)
- Battalion chief (fire department)

Observations:

- Sprinkler and fire detection and alarm systems maintenance procedures as available
- Walkdown WCRR operational, control and storage areas for combustible control including observation of completion of combustible control and other fire protection checklists by selected operations personnel.
- Sprinkler system main drain flow tests
- Selected Fire Suppression System Surveillances (TSR 4.2)