

## **CRITICALITY SAFETY (CS)**

### **OBJECTIVE**

**CS.1** The LANL criticality safety program provides the required technical guidance and oversight capabilities to ensure a comprehensive criticality safety program for the storage of nuclear materials in SSTs. (*Core Requirements 3, 4, 8*)

### **Criteria**

- The Criticality Safety Program is an administrative TSR and meets the General and
- Specific Requirements of DOE O 420.1A, Section 4.3 Nuclear Criticality Safety.
- All processes and operations involving significant quantities of fissile materials are
- described in current procedures approved by line management.
- Procedures contain approved criticality controls and limits, based on HSR-6 evaluations and recommendations.
- Supervisors, operations personnel, and criticality safety officers have received nuclear
- criticality safety training consistent with their assigned tasks and responsibilities.
- Operations personnel have a good understanding of how processes and operations
- involving fissile materials are controlled to be sub-critical under both normal and credible
- abnormal conditions that could occur during transfers.

### **Approach**

#### **Record Reviews:**

Review training records for personnel required to be trained on criticality safety.

Review the Criticality Safety Program as documented in 522-GEN.

Review the documentation for the Criticality Safety Program to verify compliance with DOE O 420.1A, Section 4.3.

Review procedures that implement the Criticality Safety Program.

Review records of a completed transfer of materials requiring evaluation under the requirements of the Criticality Safety Program.

**Personnel Interviews:** Interview personnel responsible for implementing the Criticality Safety Program for the SSTs.

Interview managers and supervisors responsible for overseeing the implementation of the Criticality Safety Program.

**Performance Demonstrations:** Observe the development (or simulation) of storing fissionable material requiring application of the Criticality Safety Program requirements.