

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

## SAFETY BASIS (SB)

### OBJECTIVE

**SB.1:** Safety documentation in support of WCRRF operations, including appropriate Criticality Safety Program elements, is in place and has been implemented that describes the safety envelope of the WCRR facility and operations. Sufficient numbers of qualified safety basis personnel are available to support WCRRF operations. **(CRs 1, 4, 6, 7, 9, and 14)**

### CRITERIA

*NOTE: Selected portions of TSR implementation including Safety Management Programs (SMPs) and Specific Administrative Controls (SAC) will be assessed by other functional areas to which the items apply. Overall assessment of the adequacy and effectiveness of Safety documentation implementation will be included in this SB Functional Area.*

1. A Basis for Interim Operations (BIO) and Technical Safety Requirements (TSRs) have been developed by LANS and approved by LASO to reflect WCRR facilities and operations (10 CFR 830.200)
2. The BIO and TSRs are consistent with the physical facility configuration including all modifications. The equipment and systems are present as described and credited, and the requirements can be accomplished. (10 CFR 830.202)
3. ALL requirements, assumptions, commitments, and controls in the WCRR BIO and TSR have been implemented into WCRR processes and procedures. Implementation of commitments is tracked from the BIO, TSR, and SER to the implementation mechanisms. USQ review processes for WCRRF include reference to the implementation flow down tracking mechanisms. (10 CFR 830.201)
4. The Draft Authorization Agreement for WCRRF has been submitted to and accepted by LASO. All requirements and commitments of the Authorization Agreement that can be accomplished prior to the DOE ORR have been implemented. (POA)
5. The LANL change control process requires compliance with the LASO-approved Unreviewed Safety Question (USQ) procedure for changes to the WCRR facility and procedures. The USQ program is effectively implemented for WCRR with adequate numbers of qualified personnel to ensure that the WCRR safety basis remains accurate. LANL processes are in place to develop annual updates for the WCRR BIO. (10 CFR 830.203)
6. The Criticality Safety program is effectively implemented at WCRR with adequate numbers of qualified personnel to ensure that the program remains adequate. (10 CFR 830.204)
7. The level of knowledge of safety basis, USQ, and criticality safety program personnel concerning their roles and responsibilities for WCRR operations is adequate. (DOE 5480.20A)

8. Sufficient numbers of qualified safety basis personnel are available to support WCRRF operations (10 CFR 830).

## APPROACH

### Requirements:

- 10 CFR 830, *Nuclear Safety Management*
- DOE O 420.1B, *Facility Safety*
- DOE Order 5480.20A, *DOE Nuclear Facility Personnel Training and Qualification Process*

### Document Review:

- WCRR BIOS, TSRs, Criticality Safety Evaluations, and SER
- Draft Authorization Agreement
- WCRR flowdown of controls document
- TSR Surveillance records
- Select procedures including
  - Procedures for inspecting drums prior to shipment to WCRR and prior to acceptance at WCRR
  - TBD from flow down document
- LANL DSA annual update procedure as it applies to WCRR
- Change control procedure for WCRR facility and procedures
- USQ documents for most recent changes to WCRR procedures and facility (made following submittal of the BIO)
- Results of the management self assessment in the safety basis/criticality safety areas, including issues raised and their resolution
- WCRR CORR Final Report and corresponding SB finding corrective action plans
- Results of the management self assessment in the safety basis, USQ, criticality safety areas, including issues raised and their resolution.

### Interviews:

- WCRRF Engineering Manager
- A qualified USQ evaluator for the WCRR facility
- Person responsible for writing WCRR BIO regarding disposition of any conditions of approval in SER
- Selected Operators
- Criticality Safety Engineer responsible for WCRR facility
- Process Operators
- LANL/LANS issues coordinator/program manager

### Observations:

As available:

- Drum inspection prior to shipment to WCRR
- Drum acceptance inspection at WCRR and drum weighing prior to putting on lift fixture
- Inventory Surveillance 4.1.1 - 4.1.2
- Load testing of drum lifting fixture
- Attachment of drum to lift fixture