

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

RADIATION PROTECTION (RP)

OBJECTIVE

RP.1: LANL line management has established Radiation Protection programs to ensure safe accomplishment of WCRR operations and maintenance activities within the requirements of the safety basis documents and regulatory permits. Sufficient numbers of qualified personnel as well as adequate facilities and equipment are available to support WCRRF operations. (CRs 1, 4, 6, and 7)

CRITERIA

1. The LANL Radiation Protection Program has been effectively implemented in support of the full scope of WCRR operations including Bioassays, ALARA, RWPs, survey requirements, decontamination, etc. (10 CFR 835, WCRRF TSR 5.6.6)
2. An adequate number of radiation protection program personnel including RCTs, radiation protection engineers, and support technicians are assigned and available to support WCRR activities. (10 CFR 835)
3. The results of the radiation protection assessments are evaluated and issues are resolved. The assessments confirm the adequacy of the radiation protection program in support of WCRR activities. (10 CFR 835)
4. Instrumentation in support of WCRR activities is appropriate, adequate inventory provided, and calibrations are current and source checks performed as required. (10 CFR 835)
5. The level of knowledge of radiation protection personnel concerning their roles and responsibilities for WCRR operations is adequate. (TSR; DOE O 5480.20A)

APPROACH

Requirements:

- 10 CFR 835, *Radiation Protection*
- 10 CFR 830, *Nuclear Safety Management*
- DOE O 226.1; *Implementation of DOE Oversight Policy*
- DOE O 414.1C, *Quality Assurance*
- DOE O 5480.20, *Personnel Selection, Qualification and Training for DOE Nuclear Facilities*

Document Review:

- WCRR BIO/TSR
- CORR final report and corrective action closure packages for findings
- Routine Monitoring Instructions for TA-50-1 (RP-1-WO-TA50-1-RMI-07)
- Facility Radiation Protection Strategy
- Radiation Protection ISD 121-1.0
- LANL Radiation Protection Program documentation and records including:
 - RWPs

- Work packages related to WCRR activities for which radiological controls are appropriate
- Contamination control plan
- ALARA review documentation
- Bioassay plans and results
- WCRR Radiation Protection Program equipment calibration data
- Procedures used for the radiation protection program
- WCRRF Training Matrix
- Radioactive Waste Management Program documentation in support of WCRR
- LANL assessment records associated with the radiation protection program as they apply to WCRR operations and activities.
- Assessment results/issues tracking system entries associated with the WCRRF radiation protection program

Interviews:

- WCRR Facility Manager
- WCRR work control Shift supervisors
- WCRR radiation control technicians (one from each shift) and planners (sample)
- WCRR radiation protection personnel (sample)
- ESH & QA Manager
- Facility Operations Manager
- Radioactive Waste Management personnel responsible for WCRR
- WCRR operators (one from each shift)

Observations:

- WCRR operational demonstrations
- Radcon equipment calibration procedures
- Routine and special radiation and contamination surveys
- Work authorization process using RWPs
- Performance of personnel at boundary control stations/access controls,
- Performance of personnel in performing routine surveys and monitoring (both airborne & surface), Survey records-maps
- Postings and Container labeling