

U.S. DEPARTMENT OF ENERGY
RICHLAND OPERATIONS OFFICESACG MEETING MINUTES
8/30-9/1/85
ATTACHMENT #6

ORDER

RL 5481.1

10-5-83

SUBJECT: SAFETY ANALYSIS AND REVIEW SYSTEM

1. PURPOSE. To supplement DOE 5481.1A, SAFETY ANALYSIS AND REVIEW SYSTEM, and establish requirements and procedures for preparation and review of safety analyses and authorization of operations under the jurisdiction of the Richland Operations Office (RL). This process is to identify and limit risks to the health and safety of the public, RL, and RL contractor employees, and to adequately protect property and the environment.
2. CANCELLATION. MSI 78-4, AUTHORIZATION FOR STARTUP OF PROCESSES AND FACILITIES, of May 11, 1978.
3. SCOPE. The provisions of this Order apply to RL and RL contractor organizations with responsibilities for assuring the safety and effectiveness of RL operations.
4. REFERENCES.
 - a. NRC Regulatory Guide 3.26, Standard Format and Content of Safety Analysis Reports for Fuel Reprocessing Plants, of February 1975.
 - b. NRC Regulatory Guide 3.6, Content of Technical Specifications for Fuel Reprocessing Plants, of April 9, 1973.
 - c. DOE 76-45 series of documents prepared by the System Safety Development Center (SSDC), Idaho Falls, Idaho. Specific attention is directed to:
 - (1) SSDC-1, Occupancy-Use Readiness Manual
 - (2) SSDC-4, MORT User's Manual
 - (3) SSDC-17, Applications of MORT to Review of Safety Analyses
 - d. DOE/EP-0044, Draft Guidelines for Performing Safety Analysis Activities and for Reviewing Safety Analyses, of February 1982.
 - e. DOE 5484.1, ENVIRONMENTAL PROTECTION, SAFETY, AND HEALTH PROTECTION INFORMATION REPORTING REQUIREMENTS, of 2-24-81.

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DISTRIBUTION:

RL Office and Division Directors
and Branch Chiefs
All Contractors

INITIATED BY:

Safety and Quality Assurance
Division

5. DEFINITIONS.

- a. Contractor Independent Review. A review performed by qualified individuals who are not directly responsible for the operation being reviewed.
- b. Line Program Organization (LPO). The chain of command from the Manager of RL down to the program division director or project office director responsible for the DOE operations being reviewed. The LPO does not include the staff organization within RL, e.g., Safety and Quality Assurance Division (SQA).
- c. Safety Analysis and Review System (SARS) Information. Information required by DOE 5481.1A, Chapter I, page I-1, paragraph 2b(4), which identifies the process or facility operations formally authorized during a fiscal year, including the authorization level, e.g., RL or Contractors; and a three year projection of the anticipated completion dates for safety analyses, reviews thereof, and the anticipated authorization level.
- d. Operational Readiness Plan (ORP). A document approved by management which identifies, for a specific facility or process, the prerequisite tasks to be completed to establish operational readiness.
- e. Operational Readiness Review (ORR). The process of validating the completion of tasks identified in the ORP, and judging operational readiness.
- f. Management Oversight and Risk Tree (MORT). A proceduralized safety management system described in DOE 76-45, SSDC-4.

6. RESPONSIBILITIES AND AUTHORITIES.

- a. RL Line Program Organization shall:
 - (1) Assure preparation of safety analysis and review system information as defined in paragraph 5c above.
 - (2) Provide to appropriate RL management, e.g., Assistant Manager for Defense and Energy Programs (AMDE), Assistant Manager for Projects and Facilities Management (AMPF), Assistant Manager for Advanced Reactor Programs (AMAR), Director of SQA, etc., the recommended internal RL authorization level for operating authorizations to be issued by RL.
 - (3) Coordinate RL reviews of the safety documentation and/or process/facility operational readiness.

- (4) Approve the safety analyses or Operational Safety Requirements (OSR) and Technical Specifications (TS), and/or authorize operation.
 - (5) Advise SQA of changes to the information provided in 6a(1) above.
- b. RL Safety and Quality Assurance Division shall:
- (1) Prepare by September 15 of each year, correspondence for signature by the Assistant Manager for Safety, Safeguards and Quality Assurance (AMS), to the Office of Operational Safety, Headquarters (EP-HQ), with copy coverage to appropriate HQ program organizations. The correspondence will provide the SARS information defined in paragraph 5c of this directive.
 - (2) Prepare by October 1 of each year, correspondence to AMDE, AMPF and AMAR for signature by the AMS, which identifies safety documentation or operations authorizations requiring formal approval by RL management. This information will be consistent with the correspondence in paragraph 6b(1), and will identify the specific RL management position (authorization level) to approve the safety documentation or the operating authorization. Appropriate RL contractors shall also be formally advised.
 - (3) Concur in RL correspondence which (1) approves or disapproves the safety analysis (OSRs/TSs) and/or facility or process operating authorizations, or (2) establishes an RL position on the need, scope, timing, etc., of safety analyses and operating authorizations.
 - (4) Provide advisory and interpretive services regarding DOE safety analysis and operational readiness requirements.
- c. RL Contractors shall:
- (1) Submit to the RL LPO and SQA by September 1 of each year, the SARS information identified in paragraph 5c. The information should be provided on the form enclosed (Attachment 1).
 - (2) Prepare, maintain, and submit to the RL LPO and SQA, a current description of the method used to determine the "Hazard Class" and "acceptable risk" of facilities or processes.
 - (3) Prepare and provide copies of safety analyses to the RL LPO and SQA.
 - (4) Maintain a formal operational readiness review program based on an analytical method such as is presented in DOE 76-45, SSDC-1.

- (5) Provide a formal request for an operating authorization for the facilities identified in the information described in paragraph 6b(2). This request shall be prepared in accordance with the requirements identified in paragraph 7c of this Order and shall be submitted to the appropriate RL LPO.

7. REQUIREMENTS.

- a. Safety analyses prepared for facilities/processes that require DOE approved TSs or OSRs shall meet the requirements of both DOE and RL Orders 5480.1A, Chapters V or VI, and shall apply as appropriate, the NRC Regulatory Guides, e.g., 3.26 and 3.6. Safety analyses for facilities/processes not requiring TSs or OSRs should follow the NRC Regulatory Guides to the extent practicable.
- b. A process or facility will require an RL operating authorization if:
 - (1) It is the initial startup of an operation where a safety analysis is required by DOE 5480.1A, Chapter V or VI.
 - (2) It is the initial startup of an operation where an Environmental Impact Statement is required.
 - (3) Significant changes are introduced into the operations due to repair, maintenance or modification work, e.g., N Reactor maintenance outage.
 - (4) The facility has been out of use for a significant period, e.g., one year or more.
 - (5) An incident is being investigated as required by DOE 5484.1, and RL management has established a startup hold point.
 - (6) The facility has been shutdown for reasons of safety or an effluent release in excess of DOE standards.
 - (7) RL management determines that startup approval is required.
- c. Requests by RL contractors for operating authorizations shall:
 - (1) Be submitted to the responsible RL LPO.
 - (2) Be signed by the contractor's top onsite management official.
 - (3) Identify the actions taken to determine that the process or facility is ready for operations, e.g., ORP, ORR, etc. The ORP and ORR shall be consistent with or equivalent to the methods and philosophy of the MORT process and SSDC-1.

d. All Operating Authorizations shall be supported by:

- (1) An auditable record of activities performed to establish operational readiness.
 - (2) An ORP which defines both the operating and safety criteria to be met and actions to be completed to establish operational readiness. The Contractor independent review activity shall be clearly identified. DOE 76-45 SSDC series documents should be utilized in developing the ORP.
 - (3) An ORR implementing the ORP which clearly identifies:
 - (a) Specific tasks performed to determine operational readiness.
 - (b) The individual(s) responsible for assuring that these tasks have been completed.
 - (c) Justification that deferred items are not prerequisites to start of operation.
- e. For large projects and/or complex (multiple pieces of equipment/operations) facilities, the operating authorization process may allow for the review of readiness to be performed in stages whereby selected parts of operations or operational readiness are authorized in sequence, with the option to begin use of only defined parts of the project/process.

Alex G. Fremling
Manager

SAFETY ANALYSIS AND REVIEW SYSTEM
ANNUAL REPORT

RL 5481.1
10-5-83

Contractor _____

Ongoing Operations _____

Program Account No. _____

New Operations _____

Total FY 1983 authorized operations NOT requiring safety analyses _____

FY 1983 Authorized Operations	Organizational Level At Which Authorized (RL or Contractor)	Anticipated Safety Analyses Completion Dates (FY and Quarters)			Anticipated SAR Review Completion Date (FY and Quarter)	Anticipated Authorized Level for Operation (RL or Contractor)
		Proposed Operation	FY 84	FY 85		

LOW HAZARD

MODERATE HAZARD

HIGH HAZARD

EXAMPLE

ATTACHMENT I
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