



Department of Energy
Pacific Northwest Site Office
P.O. Box 350, K9-42
Richland, Washington 99352

07-PD-0321

JUL 23 2007

Mr. Michael Kluse, Interim Director
Pacific Northwest National Laboratory
Richland, Washington 99354

Dear Mr. Kluse:

CONTRACT NO. DE-AC05-76RL01830 – REQUEST FOR APPROVAL OF THE 2007 ANNUAL UPDATE OF THE RADIOCHEMICAL PROCESSING LABORATORY (RPL) DOCUMENTED SAFETY ANALYSIS (DSA) AND TECHNICAL SAFETY REQUIREMENTS (TSR)

Attached for your action, as appropriate, is the Richland Operations Office (RL) response to your letter to Keith A. Klein, RL, same subject as above, dated April 30, 2007, requesting approval of the annual update to the RPL DSA and TSR including modifications to address the Unreviewed Safety Question regarding inventories.

If you have any questions, please contact Doug Shoop, Assistant Manager for Safety and Engineering, RL, at (509) 376-0108, or you may contact Dave Biancosino, PNSO Programs Division, at (509) 372-4084.

Sincerely,

A handwritten signature in black ink, appearing to read "Julie K. Erickson".

Julie K. Erickson
Acting Manager

PD:DLB

Attachment

cc w/attach:
D. S. Shoop, RL

United States Government

Department of Energy
Richland Operations Office**memorandum**

DATE: JUN 25 2007
REPLY TO
ATTN OF: SED:GZM/07-SED-0299

SUBJECT: CONTRACT NO. DE-AC05-76RL01830 -- REQUEST FOR APPROVAL OF THE 2007 ANNUAL UPDATE OF THE RADIOCHEMICAL PROCESSING LABORATORY (RPL) DOCUMENTED SAFETY ANALYSIS (DSA) AND TECHNICAL SAFETY REQUIREMENTS (TSR)

TO: Julie K. Erickson, Acting Manager
Pacific Northwest Site Office

This is in response to the Pacific Northwest National Laboratory (PNNL) letter on the same subject, dated April 30, 2007, which requested that RL approve the annual update to the RPL DSA and TSR including modifications to address the Unreviewed Safety Question (USQ) regarding inventories. The submittal is approved with no conditions of approval. The bases for approval are documented in the attached Safety Evaluation Report (SER). PNNL has 90 days to implement the update after receipt of the SER. Implementation of the TSR changes will allow PNNL to lift the restriction put in place in response to the positive USQ on inventories. If you have any questions, please contact me, or your staff may contact Doug S. Shoop, Assistant Manager for Safety and Engineering, on (509) 376-0108.

Sincerely,

Michael J. Weis
Acting Manager

SED: GZM

Attachment

cc w/attach:

F. G. Buck, PNNL
L. O. Casazza, PNNL
A. R. Stithem, PNNL
D. L. Biancosino, PNNL

Safety and Engineering Division
U.S. Department of Energy, Richland Operations Office

Safety Evaluation Report

Date Published: June 2007

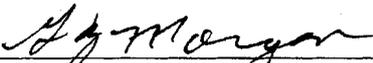


2007 ANNUAL UPDATE
RADIOCHEMICAL PROCESSING LABORATORY

U.S. DEPARTMENT OF ENERGY, RICHLAND OPERATIONS OFFICE
SAFETY EVALUATION REPORT
RPL ANNUAL UPDATE

SIGNATURE PAGE

Prepared By:



Gregory Z. Morgan, Review Team Leader
Safety and Engineering Division

6/21/2007

Date

Approved By:



Pete J. Garcia Jr., Director
Safety and Engineering Division

6/21/07

Date

U.S. DEPARTMENT OF ENERGY, RICHLAND OPERATIONS OFFICE
SAFETY EVALUATION REPORT
RPL ANNUAL UPDATE

Introduction

This Safety Evaluation Report (SER) documents the approval basis for the Annual Update of the Documented Safety Analysis (DSA) and Technical Safety Requirements (TSR) for the Radiochemical Processing Laboratory (RPL).

Scope of Review

The Pacific Northwest National Laboratory (PNNL) submittal, letter, M. Kluse, PNNL, to K.A. Klein, RL, "Request for Approval of the 2007 Annual Update of the Radiochemical Processing Laboratory (RPL) Documented Safety Analysis (DSA) and Technical Safety Requirements (TSR)", dated April 30, 2007, provided the Annual Updates. A subsequent letter, M. Kluse, PNNL, to M. J. Weis, RL, "Submittal of the Annual Summary of Unreviewed Safety Question Determinations (USQD) for the Radiochemical Processing Laboratory", dated June 11, 2007, provided the annual summary of Unreviewed Safety Question Determinations.

Department of Energy staff of the Safety and Engineering Division and Pacific Northwest Site Office performed a review of the submittals. This review was performed under the applicable portions of the RL Integrated Management System Authorization Basis review procedure.

Review Summary

The PNNL submittal addresses several issues. This includes a reduced inventory of radioactive materials, to address an Unreviewed Safety Question (USQ), and a reorganization to increase accountability for nuclear safety. The reduced allowable radioactive inventory reduces accidental doses, resolves the USQ on inventory, and allows operation within health and safety guidelines. The submittal includes revisions to the TSRs to restrict the inventory. The reorganization creates a position of "Nuclear Operations Director", who "is responsible for the RPL safety basis, ensuring RPL operations are conducted within the safety basis, and implementation of the Unreviewed Safety Question (USQ) process". PNNL believes that this position and authority will improve conduct of operations and reduce the potential for safety basis issues. The Review Team concurs with this assessment.

The submittal also removes all references to the Navy heat source inside the RPL which was shipped from RPL and no longer applies.

The USQD Annual Summary lists ten USQDs. The Review Team concurs that none of these USQDs resulted in Unreviewed Safety Questions.

U.S. DEPARTMENT OF ENERGY, RICHLAND OPERATIONS OFFICE
SAFETY EVALUATION REPORT
RPL ANNUAL UPDATE

Conditions of Approval

None.

Conclusion

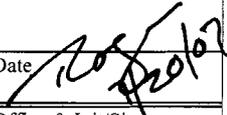
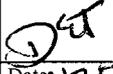
Based on the above, the Review Team concludes that risks associated with the RPL, including this update, are acceptable. Therefore, the Review Team recommends that the RL Manager, as the designated approval authority for this facility, approve this submittal, with no Condition of Approval.

PNSO Concurrence Sheet

bcc w/attach:
 PD Official File
 PD Rdg File
 D. L. Biancosino, PD
 T. L. Davis, MGR
 J. M. Escamillo, OD
 R. M. Kilbury, PD
 J. J. Short, MGR

Record Note: This is forwarding the RL approval of the RPL DSA and TSR.

07-PD-0321/gm

Concurrence	
Office & Init/Sig.	
PD/Biancosino	
	
Date	7/19/07
Office & Init/Sig.	
OD/Escamillo	
	
Date	7/19/07
Office & Init/Sig.	
OD/Christensen	
	
Date	7/20/07
Office & Init/Sig.	
PD/Trader	
	
Date	7/19/07
Office & Init/Sig.	
MGR/Davis	
	
Date	7/23/07
Office & Init/Sig.	
Date	
Office & Init/Sig.	
Date	
Office & Init/Sig.	
Date	

RECEIVED
 JUL 24 2007
DOE-PNSO-CC