

Radiochemical Processing Laboratory Authorization Agreement
Between
U.S. Department of Energy, Richland Operations Office
And
Battelle Memorial Institute,
Operator of the Pacific Northwest National Laboratory

1. Purpose

This Authorization Agreement (AA) serves as a mechanism whereby the U.S. Department of Energy (DOE) Richland Operations Office (RL) and Battelle Memorial Institute (Battelle), operator of the Pacific Northwest National Laboratory (PNNL) jointly agree to the conditions for conducting work safely and efficiently in the Radiochemical Processing Laboratory (RPL), also known as the 325 Building.

Work must be accomplished in a manner that achieves high levels of quality, protects the environment, the safety and health of workers, and the public, and is compliant with the applicable contractual and regulatory requirements. The intent of the AA is to address significant elements important to establishing and supporting the RPL Authorization Envelope (AE). The AA is incorporated as Appendix F to Battelle's Prime Contract (DE-AC05-76RL01830).

2. Scope of Authorization

The AA applies to the scope of work authorized by DOE in the RPL Nuclear Safety Basis, RPL Safety and Health Requirements Basis, and RPL Environmental Basis.

3. Authorization Envelope

The RPL AE establishes the limits of safe operation for all RPL activities. These limits are based on documented design limitations, controls, regulatory requirements, and assumptions or commitments that are required and based on identified hazards associated with the RPL facility and operations. The AE includes the RPL Nuclear Safety Basis as required by 10 CFR 830.202 "Safety Basis" and applicable environmental, safety, and health requirements.

The RPL AE includes those documents listed in Sections 3.1, 3.2, and 3.3 of this AA. Battelle will maintain the documents under a disciplined configuration management program. Because the RPL is a research and development facility, the work conducted in the facility frequently changes consistent with programmatic objectives. However, the activities performed in RPL will be performed within the physical boundaries (i.e., systems, structures, and components) defined in the AE defined in this section.

This agreement will be reviewed at least every two years and updated as necessary. This AA will be revised if new documents are added to or existing documents are deleted from the listings in Sections 3.1, 3.2, and 3.3. Revisions or updates to the listed documents will not cause this AA to be revised until the scheduled review and revision date.

3.1 RPL Nuclear Safety Basis

- PNNL DSA-RPL, Documented Safety Analysis for the Radiochemical Processing Laboratory: and approved revisions and/or amendments thereto;
- PNNL-TSR-RPL, "Technical Safety Requirements for the Radiochemical Processing Laboratory", and approved revisions and/or amendments thereto; and
- Safety Evaluation Report(s), and revisions and/or amendments thereto, and the PNNL-DSA-RPL or PNNL-TSR-RPL.

3.2 RPL Safety and Health Requirements Basis

- Attachment A to this agreement, "List of DOE Directives Uniquely Applicable to RPL Operations," and Battelle's Prime Contract, DE-AC05-76RL01830, Section J, Appendix D, "List of Applicable DOE Directives and External Requirements" and subsequent approved revisions, constitutes the safety and health requirements basis. Authorized deviations for RPL from the "List of DOE Directives Uniquely Applicable to RPL Operations" will be documented by Battelle, and approved by DOE through a change to this agreement, or through Exemption Requests, Compliance Schedule Agreements, or Implementation Plans, as appropriate. New or revised requirements to the "List of DOE Directives Uniquely Applicable to RPL Operations" will be incorporated into this agreement as negotiated with DOE.
- RPL Facility Use Agreement, as approved and amended by Battelle.

3.3 RPL Environmental Basis

State, Federal, or Local government environmental permits obtained in the name of DOE or Battelle that include provisions applicable to the RPL facility and/or activities. Environmental permits are obtained in accordance with the Clean Air Act, Clean Water Act, Resource Conservation and Recovery Act, and other applicable requirements.

A. Dangerous Waste Permit

- Dangerous Waste Portion of the Hanford Site Resource Conservation and Recovery Act Permit No. WA7890008967, and any approved modifications. Note: The Dangerous Waste Permit Application for the RPL is included in Attachment 36 of the above document: 325 Hazardous Waste Treatment Units Part A, Form 3 and Part B Permit Application, DOE/RL-92-35.
- Hazardous and Solid Waste Amendment portion of the Hanford Site Resource Conservation and Recovery Act Permit No. WA7890008967, and any approved modifications.

B. Radioactive Air Emissions

- State of Washington, Department of Health, Hanford Site Air Operating Permit, Radioactive Air Emissions Permit, Ecology Publication #00-05-006.
- ALARACT demonstration for efficiency testing of “primary” HEPA filters located in high radiation areas of the RPL Laboratory, August 7, 2001.

C. State of Washington Water Discharges

- State Waste Discharge Permit ST-4511, dated February 16, 2005.

D. Chemical Air Emissions

- State of Washington, Department of Ecology, Hazardous Waste Treatment Unit & Building Emissions Permit #DE 98NWP004, September 1, 1998.
- State of Washington, Department of Ecology, Hanford Site Air Operating Permit, Radioactive Air Emissions Permit, Ecology Publication # 00-05-006.

4. **Terms and Conditions**

The RPL facility and activities are subject to the terms and conditions as identified in Battelle’s Prime Contract, including Section C – “Description/Specifications/Statement of Work” and Section H – “Special Contract Requirements.” The Contractor Requirements Documents listed in Attachment A of this Authorization Agreement may be modified in accordance with Battelle’s prime Contract, DE-AC05-76RL01830, Section H, clause H-18, “Application of DOE Contractor Requirements Documents.” The following RPL-specific activities are required by Battelle’s Prime Contract:

- Implement and maintain the RPL Nuclear Safety Basis consistent with the facility configuration (hardware, procedures, and organization) through an approved Unreviewed Safety Question process compliant with the requirements of 10 CFR 830.203, “Unreviewed Safety Question Process”, for the nuclear safety basis documents listed in Section 3.1.
- Follow all applicable Federal, State, and Local statutes, regulations, rules and ordinances (collectively, “Laws”), and permit conditions, unless the appropriate oversight authority grants a waiver or exemption.
- Implement and maintain an approved Quality Assurance program consistent with 10 CFR 830, Subpart A, “Quality Assurance Requirements”.
- Implement and maintain an approved Radiation Protection program consistent with 10 CFR 835, “Occupational Radiation Protection”.

- Perform an operational readiness review or a readiness assessment in accordance with DOE CRD O 425.1B prior to restart of the RPL following 1) DOE management directed unplanned shutdown for safety reasons, 2) shutdown because operations are outside the nuclear safety basis, and/or 3) shutdown for greater than twelve months. In the event of a major modification, a Battelle-prepared and DOE-approved Preliminary Documented Safety Analysis (PDSA) is required by 10 CFR 830, Subpart B. The PDSA associated with the modification would address restart requirements, including those associated with DOE CRD O 425.1B.
- Evaluate the need for performing an operational readiness review or readiness assessment prior to startup or restart of program work when the new or restarted program work requires revision to the RPL DSA or RPL TSRs as a result of a positive unreviewed safety question.

New or revised terms and conditions will be incorporated into this agreement as negotiated between Battelle and DOE. Battelle will evaluate new or revised terms and conditions as part of the Requirements Management process to identify any impacts to this agreement. Authorized deviations for RPL will be documented by Battelle and approved by DOE through a modification to this agreement, Exemption Requests, Compliance Schedule Agreements, or Implementation Plans, as appropriate.

If Battelle discovers a deviation or noncompliance with the documents listed or referenced by Section 3 of this AA, Battelle will take the actions noted in the applicable document(s). This AA does not impose any new actions to be taken by Battelle.

5. Contractor Qualifications

DOE has determined through the performance of management assessments, the validation of Battelle's Integrated Environment, Safety, and Health Management System, and performance of readiness reviews and programmatic reviews that Battelle is technically qualified to engage in the activities authorized by this agreement and provides adequate protection of the workforce, the public, and the environment.

6. Effective Date and Expiration Date

This AA becomes effective upon the date of signature by both parties and will remain in effect until rescinded or revised in writing by both parties, or shall expire upon expiration or termination of Contract DE-AC05-76RL01830.

This AA supersedes all prior RPL AAs, as amended, and all such prior AAs are specifically rescinded by mutual agreement.

7. Statement of Agreement

This agreement is subject to the conditions specified herein, and DOE and Battelle each agree to the conditions herein. The terms of this AA, if breached in any manner by any party shall not subject the breaching party to any liabilities, fines, or penalties not already

imposed under the terms and conditions of Battelles Prime Contract and current statutes, rules, and regulations and ordinances.