

The U.S. Department of Energy (DOE), Office of River Protection (ORP) and Washington River Protection Solutions LLC (WRPS) are requesting that the Washington State Department of Ecology (Ecology) grant a temporary authorization to approve the requested Class 2 modifications to the 242-A Evaporator Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion (Permit), to allow for scheduled 242-A Evaporator campaign runs. This temporary authorization is requested pursuant to the Washington Administrative Code (WAC) 173-303-830(4)(e). This attachment reiterates the temporary authorization requirements outlined in the WAC and provides the required information. To support start of cold runs at the 242-A Evaporator, temporary authorization is requested by October 9, 2013.

DOE ORP and WRPS are requesting a temporary authorization for a full term of 180-days. The timing of the effective date of the temporary authorization is needed to support the cold run and will be needed for continued operations. If an additional temporary authorization is required to complete the activities, a separate request will be submitted to Ecology. Regulatory text is provided in **bold** as follows.

**WAC 173-303-830(4)(e) Temporary authorizations.**

**(i) Upon request of the permittee, the director may, without prior public notice and comment, grant the permittee a temporary authorization in accordance with this subsection. Temporary authorizations must have a term of not more than one hundred eighty days.**

**(ii)(A) The permittee may request a temporary authorization for:**

**(I) Any Class 2 modification meeting the criteria in (e)(iii)(B) of this subsection**

The Permittees (DOE ORP and WRPS) are requesting a temporary authorization request that meets the criteria of **WAC 173-303-830(e)(iii)(B)(III) to prevent disruption of ongoing waste management activities.** A temporary authorization to implement the requested Class 2 modifications to the Permit will allow Evaporator campaigns to commence to reduce the volume of waste in Hanford's double-shell tank (DST) System and to make additional DST System space available for future waste retrievals from other tanks.

**(B) The temporary authorization request must include:**

**(I) A description of the activities to be conducted under the temporary authorization:**

Mixed waste from the DST System will be transferred for evaporation to the 242-A Evaporator. In accordance with a written Process Control Plan, the DST System waste will be concentrated and the resulting slurry returned to the DST System. A mixed waste stream, the process condensate, is generated from evaporation of the DST System waste. The process condensate is transferred from the 242-A Evaporator to the Liquid Effluent

Retention Facility & 200 Area Effluent Treatment Facility, for storage, treatment, and compliant disposal.

A summary of the changes proposed in the Class 2 modification follows:

Chapter 3 - Waste Analysis Plan

- Process added to address waste additions to candidate feed tanks and feed tanks after isolation.
- The waste acceptance process will not involve estimating the concentration of critical analytes to determine the minimum number of feed tank samples needed for compliance.
- Ammonia emission limits will not be evaluated separately from other organics.
- Four representative samples, from a single riser, will be taken from candidate feed tanks including one at the surface and three subsurface samples. Subsurface sampling depths will be based on professional judgment (e.g., depending on whether layering is suspected to exist). Table 3.3, "Candidate Feed Tank Sample Point Selection" provides sampling detail based on the presence or absence of layering.
- A second statistical analysis to verify the number of samples necessary will no longer occur.
- Riser selection, for sampling purposes, will be determined using best professional judgment.
- Clear sample bottles will be used in lieu of amber-colored sample bottles for surface samples to determine the existence of separable organics.
- New test methods will be used for separable organics and ammonia.
- Improved test methods will be used for total carbon and total inorganic carbon.

Chapter 6 – Procedures to Prevent Hazards

A section for using alternate leak detection during ventilation outages and power outages is proposed to be added.

The changes proposed in Chapter 3 also include other lessor changes that will be managed as Class 2 changes. WAC 173-303-830(4)(a)(iii) allows the permittees to process Class 1 permit modifications as Class 2 modifications. Chapter 3 contains Class 1 changes and several additional changes which are considered "other modifications" according to WAC 173-303-830(4)(e) as they are not explicitly described in WAC 173-303-830 Appendix I. Therefore, the Permittees have also included "other modifications" requested to be evaluated as Class 2 modifications. No Class 3 modifications are included in the modification package.

**(II) An explanation of why the temporary authorization is necessary**

A temporary authorization is necessary in order to maintain scheduled 242-A Evaporator campaign runs to reduce the volume of mixed waste stored in the DST System and to make additional DST System space available for future waste retrievals from other tanks.

**(III) Sufficient information to ensure compliance with the standards in WAC 173-303-280 through 173-303-395 and 173-303-600 through 173-303-680.**

The 242-A Evaporator is a final status operating unit in the Permit. The 242-A Evaporator unit specific chapter of the Permit includes technical and regulatory information required by the Dangerous Waste Regulations, such as a waste analysis plan, contingency plan, and a closure plan. The Permit chapters provide the documentation demonstrating that planned activities comply with WAC 173-303-280 through 173-303-395 and 173-303-600 through 173-303-680, as applicable. The technical information provided in the Class 2 modification request, in combination with the Permit, provides the required regulatory information specific to the operational activities at the 242-A Evaporator.

**(C) The permittee must send a notice about the temporary authorization request to all persons on the facility mailing list maintained by the director and to appropriate units of state and local governments as specified in WAC 173-303-840 (3)(e)(i)(D). This notification must be made within seven days of submission of the authorization request.**

Permit Condition I.C.3 allows for the Tri-Party Agreement processes to be used at the Hanford Facility for temporary authorization notifications. The notice for the Class 2 modification and the temporary authorization will be made within 7-days after transmitting the request to Ecology.