

(g) Law enforcement response to violations of law, including pursuit;

(h) Use and occupancy of National Forest System lands and resources pursuant to a written authorization issued under Federal law or regulations; and

(i) Use of a road or trail that is not under Forest Service jurisdiction.

#### § 261.14 Snowmobile use.

It is prohibited to possess or operate a snowmobile on National Forest System lands in violation of a restriction or prohibition established pursuant to 36 CFR part 212, subpart C, provided that the following uses are exempted from this section:

(a) Limited administrative use by the Forest Service;

(b) Use of any fire, military, emergency, or law enforcement vehicle for emergency purposes;

(c) Authorized use of any combat or combat support vehicle for national defense purposes;

(d) Law enforcement response to violations of law, including pursuit;

(e) Use and occupancy of National Forest System lands and resources pursuant to a written authorization issued under Federal law or regulations; and

(f) Use of a road or trail that is not under Forest Service jurisdiction.

#### PART 295—[REMOVED]

16. Remove part 295.

Dated: July 7, 2004.

**Dale N. Bosworth,**

*Chief.*

[FR Doc. 04-15775 Filed 7-14-04; 8:45 am]

BILLING CODE 3410-11-P

## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Part 261

[SW-FRL-7786-6]

#### Hazardous Waste Management System; Proposed Exclusion for Identifying and Listing Hazardous Waste

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule and request for comment.

**SUMMARY:** The EPA (also, 'the Agency' or 'we') is proposing to grant a petition submitted by the United States Department of Energy, Richland Operations Office (DOE-RL) to exclude (or 'delist') from regulation as listed hazardous waste certain mixed waste

('petitioned waste') that are treated at the 200 Area Effluent Treatment Site (200 Area ETF) on the Hanford Facility, Richland, Washington.

The Agency proposes to conditionally grant the exclusion based on an evaluation of waste stream-specific and treatment process information provided by the DOE-RL. These proposed decisions, if finalized, would conditionally exclude the petitioned waste from the requirements of hazardous waste regulations under the Resource Conservation and Recovery Act (RCRA) of 1976 as amended.

If today's proposal is finalized, we will have concluded that DOE-RL's petitioned waste does not meet any of the criteria under which the wastes were originally listed, and that there is no reasonable basis to believe other factors exist which could cause the waste to be hazardous.

**DATES:** Comments. We will accept public comments on this proposed decision until August 30, 2004. We will stamp comments postmarked after the close of the comment period as 'late'. These 'late' comments might not be considered in formulating a final decision.

**ADDRESSES:** Comments. Please send two copies of your comments to Dave Bartus, EPA Region 10, 1200 6th Avenue, MS WCM-127, Seattle, WA 98101. Electronic comments can be e-mailed to [bartus.dave@epa.gov](mailto:bartus.dave@epa.gov).

**Request for Public Hearing.** Your request for a hearing must reach EPA by July 30, 2004. The request must contain the information prescribed in section 260.20(d). Any person can request a hearing on this proposed decision by filing a written request with Rick Albright, Director, Office of Air, Waste and Toxics, EPA Region 10, 1200 6th Ave., MS OAR-107, Seattle, WA 98101.

**Docket.** The RCRA regulatory docket for this proposed rule is maintained by EPA, Region 10. You may examine docket materials at the EPA Region 10 library, 1200 6th Avenue, Seattle, WA 98101, (206) 553-1289, during the hours from 9 a.m. to 4 p.m., Monday through Friday, excluding Federal holidays.

Copies of the docket are available for review at the following Hanford Site Public Information Repository locations:

University of Washington, Suzzallo Library, Government Publications Division, Box 352900, Seattle, WA 98195-2900, (206) 543-4664. Contact: Eleanor Chase, [echase@u.washington.edu](mailto:echase@u.washington.edu), (206) 543-4664.

Gonzaga University, Foley Center, East 502 Boone, Spokane, WA 99258-0001, (509) 323-5806. Contact:

Connie Scarppelli,  
[carter@its.gonzaga.edu](mailto:carter@its.gonzaga.edu).

Portland State University, Branford Price Millar Library, 934 SW Harrison, Portland, OR 97207-1151, (503) 725-3690. Contact: Michael Bowman, [bowman@lib.pdx.edu](mailto:bowman@lib.pdx.edu).

U.S. DOE Public Reading Room, Washington State University-TC, CIC Room 101L, 2770 University Drive, Richland, WA 99352, (509) 372-7443. Contact: Janice Parthree, [reading\\_room@pnl.gov](mailto:reading_room@pnl.gov).

Copies of material in the regulatory docket can be obtained by contacting the Hanford Site Administrative Record via mail, phone, fax, or e-mail:

**Address:** Hanford Site Administrative Record, PO Box 1000, MSIN H6-08, 2440 Stevens Center Place, Richland, WA 99352, (509) 376-2530. E-mail: [Debra\\_A\\_Debbie\\_Isom@rl.gov](mailto:Debra_A_Debbie_Isom@rl.gov).

**FOR FURTHER INFORMATION CONTACT:** For technical information concerning this document, contact Dave Bartus, EPA, Region 10, 1200 6th Avenue, MS WCM 127, Seattle, WA 98101, telephone (206) 553-2804, or via e-mail at [bartus.dave@epa.gov](mailto:bartus.dave@epa.gov).

**SUPPLEMENTARY INFORMATION:** The information in this section is organized as follows:

- I. Overview Information
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  - K. What data must DOE RL submit?
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- N. Relationship between today's proposed action and compliance LDR treatment standards.
- IV. Statutory and Executive Order Reviews
- A. Executive Order 12866
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  - J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations

## I. Overview Information

### A. What Action Is EPA Proposing?

The EPA is proposing a delisting action related to mixed<sup>1</sup> waste managed or generated by the 200 Area ETF on the Hanford Facility in Richland, Washington. The action relates to treated liquid effluents produced by the 200 Area ETF, which were first delisted in June 1995. A description of the wastewater influent to the 200 Area ETF considered in the original delisting, and how the original delisting was developed, may be found in the original proposed rule (60 FR 6054, February 1, 1995). EPA is proposing to modify this existing delisting by increasing the annual quantity of waste delisted to conform to the expected full treatment capacity of the 200 Area ETF and by expanding the list of constituents associated with hazardous waste number F039 (multisource leachate) for which 200 Area ETF treated effluent is delisted, from the current F001 to F005 constituents to all constituents for which F039 waste is listed.<sup>2</sup> This change will allow ETF to fulfill its anticipated future missions, which

<sup>1</sup> Mixed waste is defined as waste that contains both hazardous waste subject to the requirements of Resource Conservation and Recovery Act (RCRA) of 1976 as amended, and source, special nuclear, or by-product material subject to the requirements of the Atomic Energy Act (AEA) [See 42 United States Code (U.S.C.) 6903 (41), added by the Federal Facility Compliance Act (FFCA) of 1992].

<sup>2</sup> Today's proposal is not modifying the list of constituents for which F039 multisource leachate is listed. At the time of the original delisting, DOE-RL did not expect to manage F039 wastes at the 200 Area ETF from sources other than F001-F005 wastes. Therefore, the original 200 Area ETF delisting excluded only F039 wastes from F001-F005 sources.

include treating mixed wastewaters from a number of additional sources beyond 242—A Evaporator process condensate (PC) upon which the original delisting was based. Finally, EPA is proposing to expand the list of hazardous waste numbers for which treated effluent is delisted to include certain wastewater forms of U- and P-listed wastes. In particular, these U- and P-listed waste numbers are those whose chemical constituents are included in the list of hazardous constituents for which F039 was listed (see 40 CFR part 261, appendix VII). This latter addition is intended to accommodate possible management of U- and P-listed wastewaters from spill cleanup or decontamination associated with management of these wastes at the Central Waste Complex (CWC) or other storage facilities. These spill cleanup wastes include exactly the same constituents that will eventually contribute to F039 when the source wastes are land disposed, so today's analysis of expanding the 200 Area ETF treated effluent to include F039 applies equally to the wastewater forms of the same chemical constituents in their U- and P-listed waste forms. This action will allow the 200 Area ETF to fulfill an expanded role in supporting Hanford Facility cleanup actions beyond those activities considered in the 1995 delisting rulemaking. Further details of how hazardous waste numbers are applied to 200 Area ETF treated effluent can be found in section II.A of today's proposal. Further details about 200 Area ETF treated effluent and how it is generated can be found in section III.A

The DOE-RL petitioned EPA to exclude (delist) treated liquid effluent from the treatment of liquid mixed waste at the 200 Area ETF because DOE-RL believes that the petitioned waste does not meet the RCRA criteria for which EPA originally listed the petitioned waste. The DOE-RL also believes there are no additional constituents or factors that could cause the waste to be a hazardous waste or warrant retaining the waste as hazardous waste.

Based on our review described in today's proposal, we agree with the petitioner that the identified treated liquid effluents are non-hazardous with respect to the original listing criteria. Furthermore, we find no additional constituents or factors that could cause the waste stream to be a hazardous waste or warrant retaining the waste as a hazardous waste. If our review had found that the waste remained a hazardous waste based on the factors for which the waste originally was listed, or if we found additional constituents or

factors that could cause either waste stream to be a hazardous waste or warrant retaining the waste as a hazardous waste we would have proposed to deny the petition. It is important to note that even if the waste becomes delisted, the DOE-RL remains responsible for complying with the Atomic Energy Act (AEA), as the treated effluents will generally remain regulated as low-level radioactive wastes. Further, disposal of the treated liquid effluent on site is regulated by the Washington State Department of Ecology (Ecology) under the authority of WAC 173-216. Further details of how treated effluent will be managed if excluded under today's proposal may be found in section I.C below.

### B. Why Is EPA Proposing To Approve These Delistings?

We believe that the petitioned waste should be conditionally delisted because the waste, when managed in accordance with today's proposed conditions, do not meet the criteria for which the wastes originally were listed and the waste do not contain other constituents or factors that could cause the waste stream to be a hazardous waste or warrant retaining the waste as a hazardous waste. Our proposed decision to delist the petitioned waste is based on information submitted by DOE-RL, including the description of the wastewaters managed by the ETF and their original generating sources, the ETF treatment processes, and the analytical data characterizing performance of the 200 Area ETF.

In reviewing this petition, we considered the original listing criteria and the additional factors required by the Hazardous and Solid Waste Amendments (HSWA) of 1984. [See 42 U.S.C. 6921(f), and 40 CFR 260.22 (d)(2) through (4)]. These factors included (1) whether the waste are considered acutely toxic; (2) the toxicity of the constituents; (3) the concentration of the constituents in the waste; (4) the tendency of the hazardous constituents to migrate and to bioaccumulate; (5) persistence of the constituents in the environment once released from the waste; (6) plausible and specific types of management of the petitioned waste; (7) the quantity of waste produced; and (8) variability of the waste. We also evaluated the petitioned waste against the listing criteria and factors cited in § 261.11(a)(1), (2) and (3).

### C. How Will DOE RL Manage the Petitioned Waste if Delisted?

Treated liquid effluents currently generated by the 200-Area ETF are land disposed at the State Authorized Land

Disposal Site (SALDS).<sup>3</sup> Treated effluent discussed in today's proposal must be disposed of at SALDS, as a condition of today's proposal. A brief description of the SALDS can be found in the DOE-RL application for the State Waste Discharge Permit ST 4500, and the permit fact sheet available at <http://www.ecy.wa.gov/programs/nwp/pdf/4500dfs.pdf>. EPA's original evaluation of this disposal unit with respect to delisting is found at 60 FR 6061 (February 1, 1995). The DOE-RL's petition for modification of the existing delisting does not reflect any change in design and operation of the SALDS compared to DOE-RL's original delisting petition and EPA's associated analysis. We note that this proposed exclusion is not dependant on the characteristics or protectiveness of effluent disposal at the SALDS. The fact that DOE-RL is not proposing management of excluded treated effluent other than at the SALDS; however, does provide a basis for the EPA to conclude that it is not necessary to consider other risk or exposure pathways in today's proposal beyond those considered in the original delisting rulemaking applicable to treated effluents.

In the November 2001 petition, DOE-RL noted that in the future the delisted treated effluent from 200 Area ETF could be used as makeup water at onsite facilities that have a demand for large quantities of demineralized water. Delisted treated effluent, however, contains appreciable amounts of tritium and must be managed to minimize personnel exposure and the potential for release. EPA encourages DOE-RL to pursue potential alternate uses of 200 Area ETF liquid effluents, and believes that, in general, such practices could prove to be fully protective, and a means to further the Hanford Site cleanup mission. Because no specific proposals have been made by DOE-RL, however, EPA lacks information to specifically evaluate impacts of such reuse practices with respect to delisting criteria, or whether such practice would identify other factors that would need to be considered in a delisting decision.

<sup>3</sup> The SALDS disposal site is an effluent infiltration gallery, consisting of a 116 foot by 200 foot rectangular drainfield with 4 inch porous pipe laterals coming off an 8 inch diameter header at 6 foot intervals. The drainfield pipes are 6 inches below the surface of a 6 foot deep gravel basin. The gravel basin is covered by a layer of native soil at least 12 inches deep. See <http://www.ecy.wa.gov/programs/nwp/pdf/4500dfs.pdf>. For purposes of developing delisting exclusion limits in the original 200 Area ETF exclusion and in today's proposal, EPA considers the SALDS unit to be functionally equivalent to an unlined surface impoundment, consistent with existing EPA delisting guidance and the existing 200 Area ETF delisting.

Today's proposed rulemaking is based on continued disposal of treated effluents at the SALDS, but does include a provision whereby DOE-RL could request EPA to evaluate treated liquid effluent reuse proposals. If EPA finds, through this review, that delisting conditions in place at the time of the request ensure that the treated effluent is managed protectively with respect to delisting criteria, EPA may allow DOE-RL to commence the proposed activity without changes to the delisting rule. Otherwise, EPA could require the DOE-RL to submit a revised delisting petition, and new delisting conditions would need to be established to reflect the new proposed disposal/use activity.<sup>4</sup>

#### *D. When Would EPA Finalize the Proposed Delisting Exclusions?*

RCRA section 3001(f), 42 U.S.C. 6921(f), specifically requires the EPA to provide notice and an opportunity for comment before granting or denying a final exclusion. Thus, EPA will not make a final decision to grant an exclusion until the EPA has addressed all timely public comments (including any at public hearings) on today's proposal.

RCRA section 3010(b)(1), 42 U.S.C. 6930(b)(1), allows rules to become effective in less than six months when the regulated community does not need the six-month period to come into compliance with the new regulatory requirements. EPA believes that today's proposed exclusion, if finalized, would reduce existing regulatory requirements, so that a six-month period is not necessary for DOE-RL to come into compliance. As a result, EPA believes that, if finalized, today's proposal should be effective immediately upon final publication. A later date would impose unnecessary hardship and expense on the petitioner. See also section II.B for a discussion of today's proposal on State regulatory programs.

## **II. Background**

### *A. What Laws and Regulations Give EPA the Authority To Delist Wastes?*

On January 16, 1981, as part of the final and interim final regulations implementing section 3001 of RCRA, EPA published an amended list of hazardous wastes from non-specific and specific sources. EPA has amended this list several times. See 40 CFR 261.31 and 261.32. EPA lists these wastes as

<sup>4</sup> As noted elsewhere in this proposal, delisting requirements that could be established as a result of this proposal are not effective under RCRA in States that have final authorization for delisting exclusion petition (40 CFR 260.22).

hazardous because (1) the wastes exhibit one or more of the characteristics of hazardous wastes identified in subpart C of part 261 (that is, ignitability, corrosivity, reactivity, and toxicity) or (2) the wastes meet the criteria for listing contained in § 261.11(a)(2) or (a)(3).

Individual waste streams could vary depending on raw materials, industrial processes, and other factors. Thus, while a waste that is described in these regulations generally is hazardous, a specific waste from an individual facility meeting the listing description might not be hazardous.

For this reason, 40 CFR 260.20 and 260.22 provide an exclusion procedure, allowing persons to demonstrate that a specific waste from a particular generating facility<sup>5</sup> should not be regulated as a hazardous waste.

To have their waste excluded, petitioners first must show that the waste generated at their facilities does not meet any of the criteria for which the waste was listed. See 40 CFR 260.22(a) and the background documents for the listed waste. Second, the EPA Administrator must determine, where the Administrator has a reasonable basis to believe that factors (including additional constituents) other than those for which the waste was listed could cause the waste to be hazardous waste, that such factors do not warrant retaining the waste as hazardous waste. Accordingly, a petitioner also must demonstrate that the waste does not exhibit any of the hazardous waste characteristics (*i.e.*, ignitability, reactivity, corrosivity, and toxicity), and must present sufficient information for the EPA to determine whether the waste contains any other toxic constituents at hazardous levels. See 40 CFR 260.22(a), 42 U.S.C. 6921(f), and the background documents for the listed waste. Although waste that is "delisted" (*i.e.*, excluded) has been evaluated to determine whether or not the waste exhibits any of the characteristics of hazardous waste, generators remain obligated under RCRA to determine whether or not their waste continues to be non-hazardous based on the hazardous waste characteristics (including characteristics

<sup>5</sup> Although no one produces hazardous waste without reason, many industrial processes result in the production of hazardous waste, as well as useful products and services. A "generating facility" is a facility in which hazardous waste is produced, and a "generator" is a person who produces hazardous waste or causes hazardous waste to be produced at a particular place. 40 CFR 260.10 provides regulatory definitions of "generator", "facility", "person", and other terms related to hazardous waste, and 40 CFR part 262 provides regulatory requirements for generators.

that might be promulgated subsequent to a delisting decision).

In addition, residues from the treatment, storage, or disposal of listed hazardous waste and mixtures containing listed hazardous waste also are considered hazardous waste. See 40 CFR 261.3(a)(2)(iv) and (c)(2)(i), referred to as the "mixture" and "derived-from" rules, respectively. Such waste also is eligible for exclusion but remains hazardous waste until excluded.

On October 10, 1995, the EPA Administrator delegated to the EPA Regional Administrators the authority to evaluate and approve or deny petitions submitted by generators in accordance with 40 CFR 260.20 and 260.22 within their Regions (See EPA Delegations Manual, Delegation 8-19) in States not yet authorized to administer a delisting program in lieu of the Federal program.

#### *B. How Would This Action Affect the States?*

This proposed rule, if promulgated, would be issued under the Federal (RCRA) delisting authority found at 40 CFR 260.22. Some States are authorized to administer a delisting program in lieu of the Federal program, *i.e.*, to make their own delisting decisions. Therefore, this proposed exclusion, if promulgated, would not apply under RCRA in those authorized States. For States not authorized to administer a delisting program in lieu of the Federal program (as is the case with the State of Washington as of the date of today's proposal), today's proposal, if promulgated, would become effective with respect to the Federal (RCRA) program. DOE-RL would, however, have to comply with additional applicable State requirements.

States are allowed to impose regulatory requirements that are more stringent than EPA's, pursuant to section 3009 of RCRA. These more stringent requirements may include a provision that prohibits a federally issued exclusion from taking effect in a State. Because a petitioner's waste may be regulated under a dual system (*i.e.*, both Federal and State programs), petitioners are urged to contact State regulatory authorities to determine the current status of their wastes under the State laws.

### **III. EPA's Evaluation of the Waste Information and Data for Liquid Effluent Waste**

#### *A. What Waste Did DOE RL Petition EPA To Delist and How Is the Waste Generated?*

The original delisting action considered treatment of only one waste

stream, process condensate from the 242-A Evaporator (242-A Evaporator PC). Since promulgation of the original delisting, the operating mission of the 200 Area ETF has expanded considerably. Currently, the operating capacity of the 200 Area ETF provides treatment of 242-A Evaporator PC, treatment of Hanford Site contaminated groundwater from various pump-and-treat systems, and a variety of other wastewaters generated from waste management and cleanup activities at Hanford.

As discussed in section 3.0 of DOE-RL's November 2001 petition, the mission of the 200 Area ETF is to treat wastewater generated on the Hanford Facility from cleanup activities including multisource leachate from operation of hazardous/mixed waste landfills, and other hazardous wastewaters from a variety of sources including analytical laboratory operations, research and development studies, waste treatment processes, environmental restoration and deactivation projects, and other waste management activities. Based on this change in the 200 Area ETF mission, the DOE-RL has petitioned EPA to modify the existing delisting applicable to treated liquid effluent from the 200 Area ETF by increasing the effluent volume limit to 210 million liters per year, and to conditionally exclude treated effluents from treatment by the 200 Area ETF of certain liquid Hanford wastes with hazardous waste numbers identified at 40 CFR 261.31 and 261.33 as F001-F005, F039, and all U- and P-listed substances appearing in the listing definition of F039. Under the current delisting, the liquid effluent volume is limited to approximately 86 million liters per year, and delisted only for F001-F005 waste numbers and F039 constituents from F001 through F005 waste numbers.

The November 2001 delisting petition explains that wastes bearing numbers P029, P030, P098, P106, P120, and U123, as well as other U- and P-listed numbers corresponding to F039 constituents, are currently managed, or may be managed in the future, as part of Hanford cleanup operations. Wastes bearing these waste numbers are intended for future disposal in the mixed waste landfill (Low-Level Burial Grounds (LLBG)). These wastes, therefore, eventually will contribute to generation of F039 multisource leachate from this unit, and are specifically considered in the analysis of F039 constituents in DOE-RL's delisting proposal (refer to Appendix B of the November 2001 delisting petition). The DOE-RL believes that wastewaters

bearing these waste numbers could be generated from activities such as spill cleanup or equipment decontamination, and such wastewaters could be managed best at the 200 Area ETF. The DOE-RL is not proposing to manage the discarded commercial chemical products in the 200 Area ETF, but only wastewaters from spill cleanup or equipment decontamination. EPA believes that this is a reasonable approach, and is proposing to include these U- and P-listed numbers in today's proposed exclusion.

To ensure that the commercial chemical compounds themselves are not inappropriately managed at the 200 Area ETF, EPA is proposing as a condition of the proposed exclusion for these wastes that the 200 Area ETF may manage only influent wastewaters bearing less than 1.0 weight percent of any hazardous constituent. These wastewaters would also bear the same U- and P-listed numbers by virtue of the "derived from" rule discussed above in section I.A. Because the hazardous constituents from these U- and P-listed wastes are already included in the analysis of 200 Area ETF performance for treatment of F039, EPA is not proposing any separate analysis specific to U- and P-listed numbers. EPA's proposal to include these U- and P-listed waste numbers in today's proposed action is intended to include influent wastewaters that might be generated from management of wastes currently stored in CWC, as well as such wastes managed elsewhere at Hanford or which may be generated in the future.

In theory, the provision of today's proposal dealing with U- and P-listed waste numbers could include all 213 constituents included in the regulatory definition of F039. In practice, EPA expects that the actual number of U- and P-listed constituents that might actually be managed under this provision will be significantly less for two reasons. First, not all F039 constituents have corresponding U- or P-listed waste numbers. Second, it is highly unlikely that most, or even many, of the U- and P-listed waste numbers considered by this provision would ever enter the influent wastewaters managed by ETF. In any case, EPA believes that today's proposal is fully protective and demonstrates compliance with delisting criteria regardless of the number of U- and P-listed waste numbers that actually end up contributing to wastewaters managed by ETF.

Beginning in 2007, DOE-RL expects to begin processing liquid effluents (wastewaters) from the Waste Treatment Plant (WTP), which currently is being designed and constructed to treat high-

level mixed waste stored in 177 underground storage tanks. At this time, a complete, detailed characterization of WTP liquid effluents is not available. Should this waste stream fit within the conditions of today's proposal, then the WTP effluents could be managed under this delisting action, if finalized. Should WTP effluents require significant reconfiguration of the 200 Area ETF system to be treated successfully or be outside the waste volume limitations or treatability envelope, or otherwise fail to meet the requirements of today's proposal, the DOE-RL could not manage either the treated effluent or concentrated wastes resulting from processing of WTP effluents as excluded wastes. In this instance, the DOE-RL would need to seek a further modification of the delisting rulemaking.

Given the lack of characterization data for future WTP effluents, EPA specifically is not considering this waste stream in its analysis of the proposed delisting action, other than to acknowledge that the DOE-RL might manage WTP effluents in the 200 Area ETF, provided the applicable delisting criteria and verification sampling requirements are met. EPA anticipates that it might be necessary to further modify the treated effluent delisting rule once WTP effluents are fully characterized.

#### *B. What Information and Analyses Did DOE RL Submit To Support These Petitions?*

The DOE-RL has provided a general description of the various waste streams that the 200 Area ETF expects to manage in addition to 242-A Evaporator PC and other waste streams currently being treated. This information is found in section 3.0 of the November 2001 delisting petition. Some of these waste streams have not yet been generated. As a result, these waste streams cannot be fully characterized at this time, nor can surrogate wastewaters be developed as was done as part of pilot testing associated with the original delisting action. The DOE-RL's request to modify the original delisting is based on extending the original process model, which has been validated through operating history, to these anticipated future waste streams. EPA is proposing that treated liquid effluent from these new influent waste streams be conditionally managed as excluded waste provided that the DOE-RL demonstrates prior to 200 Area ETF processing that delisting criteria can be met through application of the 200 Area ETF process model. All treated effluent, including treated effluent from

processing of new influent waste streams that do not have an operating history of being managed at the 200 Area ETF, will be subject to a verification sampling requirement similar to that in the original delisting action for 242-A Evaporator PC. As with the original delisting action, all treated effluent will be subject to routine, periodic verification sampling. (See section III.N for a discussion of the applicability of LDR treatment requirements.)

The DOE-RL has submitted substantial data comparing actual operating performance of the 200 Area ETF to predicted treatment efficiency developed through pilot plant testing. These data consistently validate the pilot plant model developed in support of the original delisting, and indicate that for 242-A Evaporator PC processed to date, treatment efficiency is well in excess of that predicted by the process model. These data are presented in Table A-1 of the November 2001 delisting petition. The EPA believes that these data confirm that the 200 Area ETF is a robust treatment system well equipped to provide treatment necessary to meet delisting criteria for the wide range of new waste streams considered in this revised delisting action.

Detailed characterization data are not available for many non-process condensate waste streams that the DOE-RL proposes for consideration under this delisting action. Therefore, the DOE-RL has proposed a detailed waste acceptance process that allows this analysis to be conducted in conjunction with the 200 Area ETF waste acceptance process required by the Hanford Facility RCRA Permit WA7 89000 8967 and the State Waste Discharge Permit (ST4500) for the SALDS. Particulars of the waste acceptance process with respect to this proposed delisting action can be found in section 2.2 of the November 2001 delisting petition. In addition, Ecology provided technical assistance to the EPA on this matter by reviewing DOE-RL's 200 Area ETF waste acceptance process, including permit-required quality assurance plans (QAPs). EPA has reviewed and concurs with Ecology's technical conclusions that the waste profiling and acceptance process at the 200 Area ETF is sufficient to support delisting of the resulting treated effluents.

Briefly, this waste acceptance process is intended to accomplish the following:

- Establish operating conditions and operating configuration of the 200 Area ETF;
- Ensure contaminant concentrations do not interfere with or foul 200 Area

ETF treatment processes (e.g., interfere with ultraviolet oxidation (UV/OX) destruction, foul reverse osmosis (RO) membranes, etc.);

- Ensure compatibility with 200 Area ETF materials of construction and other influent wastewaters;
- Ensure treated effluents meet delisting criteria and SALDS waste discharge permit requirements;
- Estimate concentrations of constituents in the secondary treatment train and in concentrated waste (a discussion of EPA's proposed delisting of concentrated wastes follows);
- Ensure compliance with Hanford Facility RCRA Permit waste acceptance requirements.

Based on waste profile information provided by wastewater generators, the DOE-RL would compare constituent concentrations to ensure that the influent falls within the 200 Area ETF treatability envelope. The ETF treatability envelope is defined as the maximum untreated waste concentrations that the 200 Area ETF is capable of managing to meet treated effluent delisting criteria. The treatability envelope concept is essentially the same approach used by the EPA in evaluating treatability data provided by the DOE-RL in support of the original delisting petition, with modifications to account for operating history.

In some instances, wastewaters are accepted directly into the 200 Area ETF for treatment, while other wastewaters are accepted into the Liquid Effluent Retention Facility (LERF) basins.<sup>6</sup> Waste acceptance evaluations for wastewaters managed in LERF basins account for compatibility with basin materials in addition to treatability envelope considerations. For wastewaters accepted into LERF basins, treatability envelope evaluation reflect the commingled wastewater stream. Wastewaters are required to undergo periodic re-valuation under the site-wide permit waste analysis plan.

The DOE-RL's petition for modifying the existing treated effluent delisting is based on establishing a waste processing strategy for each waste stream. Each time a new wastewater is managed in the 200 Area ETF, a document must be prepared containing the waste processing strategy to reflect specific

<sup>6</sup>Information concerning management of influent wastewaters is provided for background and informational purposes only. Whether influent wastewaters are received directly by the 200 Area ETF directly or via management in the LERF basins is generally an operational decision distinct from the question of whether the wastewaters are acceptable candidates for management under today's proposed delisting.

waste constituents and to ensure that the treated effluent meets delisting criteria. The waste processing strategy consists of the processing configuration of the various treatment technologies available at the 200 Area ETF and the operating conditions of each. Examples of operating conditions include UV/OX residence time, RO reject rate, etc. Wastewaters that fit within the treatability envelope for a particular processing strategy can be processed directly, subject only to the periodic re-evaluation of each waste stream with respect to waste acceptance criteria required by the Hanford site-wide RCRA permit, and periodic verification of the treated effluent with respect to delisting requirements. Wastewaters for which a new processing strategy is developed where no operating history has been accumulated must undergo initial verification sampling similar to that required by the original delisting action. EPA believes that this scheme of establishing waste acceptance and processing strategy on a verified process model, coupled with initial and periodic on-going verification, provides certainty that delisting criteria will be met, reflecting data that validate the original process model, and the redundancy of verification testing, and is consistent with the delisting framework established in the original delisting action. In addition, it provides flexibility needed for the 200 Area ETF to fulfill its key role in Hanford Site cleanup activities.

### C. How Did EPA Evaluate the Risk of Delisting This Waste?

For EPA to delist a particular waste, the petitioner must demonstrate that the waste does not meet any of the criteria under which the waste was listed, and that the waste does not exhibit any of the hazardous waste characteristics defined in 40 CFR 261.21 through 261.24. In addition, based on a complete application, EPA must determine where it has a reasonable basis to believe that factors (including additional constituents) exist other than those for which the waste was listed that could cause the waste to be a hazardous waste. If such factors exist, EPA must determine that such factors do not warrant retaining the waste as a hazardous waste. For petitioned waste that contains detectable chemical constituents, EPA generally makes this determination by gathering information to identify plausible routes of human or environmental exposure (*i.e.*, groundwater, surface water, air) and using fate and transport models to predict the release of hazardous constituents from the petitioned waste

once the waste is disposed. The transport model predicts potential exposures and impacts of the petitioned waste on human health and the environment.

As discussed in the original delisting proposal (60 FR 6054, February 1, 1995), EPA used a modified version of the Environmental Protection Agency Composite Membrane Liner (EPACML) model based on disposal of waste in a surface impoundment to establish delisting levels for treated 200 Area ETF effluent. The original delisting proposal included a discussion of plausible exposure routes and an analysis of how these potential exposure routes influenced EPA's selection of delisting criteria, as well as a detailed discussion of how delisting levels were calculated from model outputs and toxicological data.

In analyzing the DOE-RL's current delisting petition, EPA does not believe that there is a substantial basis for choosing a different approach to evaluating the risks of delisting this waste or for establishing revised delisting criteria. In reaching this conclusion, we considered several factors:

- No changes in waste disposal practices. The DOE-RL currently manages 200 Area ETF treated effluents in the same manner as considered by EPA in the original delisting analysis, and DOE-RL's revised delisting petition does not propose any changes in these waste disposal practices. Therefore, we do not find any basis for any different analysis of potential exposure pathways or modeling compared to the original delisting analysis.

- 200 Area ETF treatment technology. Current 200 Area ETF processing technologies and configurations remain unchanged from the proposed design considered in EPA's original upfront delisting analysis. Further, the 200 Area ETF operating history confirms the treatment efficiencies and performance predicted by pilot plant testing and considered by EPA in the original delisting analysis. Therefore, we do not find any basis for alternate evaluation methodologies based on the treatment capabilities of the 200 Area ETF.

- Wastes managed by the 200 Area ETF. Although the original delisting analysis considered only PC from the 242-A Evaporator, this waste stream is quite complex, and is characterized by a wide range of chemical constituents and classes of compounds from diverse wastes in the Hanford Facility double shell tank system. Specifically with respect to organic constituents and the treatment efficacy of ultraviolet oxidation (UV/OX), the original

delisting analysis was based on treatment efficiency for groups or classes of organic compounds. Although today's proposal considers additional chemical compounds that might be present in F039 multisource leachate from wastes other than F001 through F005, EPA believes that these additional constituents can be analyzed effectively using the original methodology. Further, EPA does not believe that any of the additional constituents considered in this delisting proposal pose treatability or risk questions that suggest the original chemical group approach to analyzing delisting risks and establishing delisting levels needs to be re-evaluated. A more specific discussion of how treatability groups and delisting levels are established, considering the additional waste streams and waste numbers to be managed by the 200 Area ETF under this proposed delisting, can be found in section 4.1.1 of the November 2001 delisting petition.

EPA also has examined the performance record of discharges of treated effluents from the 200 Area ETF under State Waste Discharge Permit No. ST4500. This permit, issued under the authority of chapter 90.48 of the Revised Code of Washington, as amended, requires monitoring of treated effluent and of groundwater affected by the SALDS. There are three elements to the ST4500 Permit monitoring requirements. These are: (1) Maximum effluent limitations; (2) "early warning" effluent limitations that provide an early warning that groundwater limitations are being approached in the effluent; and (3) groundwater limits. Each of these elements are described below:

- ST4500 Permit effluent monthly average—the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

- Groundwater limit—maximum constituent concentration allowed in groundwater at monitoring well specified in the ST4500 Permit.

- Groundwater early warning limit—constituent concentration in groundwater that triggers early warning reporting requirements. Exceeding an early warning value does not constitute a violation of ST4500 Permit requirements.

These limits, including a comparison to proposed delisting levels (section D), are shown in the following table. All values are mg/L. The first three columns correspond to the ST4500 permit monitoring requirements described above, while the remaining columns contain the following information:

• Proposed delisting treatability group—class of similar chemical constituents as defined in Table 4–1 of

the November 29, 2001 delisting petition.

• Proposed delisting level—constituent concentration limit for treated effluent in today’s proposal.  
• Comments—self-explanatory.

Constituent	ST 4500 permit effluent monthly average	Groundwater limit	Effluent groundwater early warning	Proposed delisting treatability group	Proposed delisting level	Comments
Acetone .....	N/A	0.16	N/A	19	2.4	Proposed delisting limit based on PQL.
Acetophenone .....	0.01	N/A	N/A	19	N/A	
Benzene .....	N/A	0.005	0.005	3	0.06	
Carbon Tetrachloride .....	0.005	N/A	N/A	13	0.018	
Chloroform .....	N/A	0.062	0.005	13	N/A	
n-Nitrosodimethylamine .....	0.02	N/A	N/A	10e	0.02	
Tetrachloroethylene .....	0.005	N/A	N/A	14	N/A	
Tetrahydrofuran .....	N/A	0.1	0.1	18a	0.56	
Total Organic Carbon (TOC) .....	1.1	N/A	N/A	N/A	N/A	
Arsenic .....	0.015	N/A	N/A	22	0.015	
Beryllium .....	0.04	N/A	N/A	21	0.045	
Cadmium .....	N/A	0.01	0.0075	22	0.011	
Chromium .....	0.02	N/A	N/A	22	0.068	
Copper .....	N/A	0.07	0.07	N/A	N/A	
Lead .....	N/A	0.05	0.038	22	0.09	
Mercury .....	N/A	0.002	0.002	22	0.0068	
Ammonia .....	0.83	N/A	N/A	24	6	
Chloride .....	N/A	N/A	N/A	N/A	N/A	
Nitrate .....	N/A	N/A	N/A	N/A	N/A	
Nitrite .....	N/A	N/A	N/A	N/A	N/A	
Sulfate .....	N/A	250	N/A	N/A	N/A	
Total Dissolved Solids .....	N/A	500	380	N/A	N/A	

PQL = practical quantitation limit.

N/A = not applicable. The set of constituents with reporting or enforceable limits established in the ST 4500 permit and in today’s proposal are not identical. N/A table entries correspond to constituents included in the ST 4500 permit but not as constituents representative of a treatability group or vice versa.

To date, the DOE–RL has not reported any exceedences of any of the three monitoring criterion established by the ST4500 Permit. According to the Ecology fact sheet issued in conjunction with the latest reissue of the ST4500 Permit:

“During the history of the previous permit, the Permittee has remained in compliance based on Discharge Monitoring Reports (DMRs) and other reports submitted to Ecology and inspections conducted by Ecology.” The only exceptions have been a few early high groundwater levels of sulfate. The sulfate levels were not due to the discharge of sulfate, but rather by the clean effluent dissolving sulfate that exists in the vadose zone. The sulfate levels peaked for about a year, always below groundwater standards, and have since returned to background levels.

Given that all of these ST4500 Permit wastewater discharge limits are at or below corresponding delisting levels, EPA concludes that the 200 Area ETF performs at least as well as the proposed delisting levels. This conclusion supports EPA’s belief that 200 Area ETF processing model is well validated, and can be appropriately used to predict performance of 200 Area ETF for treatment of new waste streams for which actually operating data is not yet

available. Further, these data show 200 Area ETF discharges to SALDS are not having a significant impact on groundwater. EPA therefore concludes that further analysis of groundwater monitoring data is not necessary in the context of the proposed delisting revisions.

*D. What Delisting Levels Are EPA Proposing?*

EPA is proposing to conditionally exclude treated effluents by establishing a set of verification constituents and concentrations that must be met as a condition of the exclusion. These concentrations are referred to as delisting levels. The process of selecting delisting levels and proposed verification constituents is similar to that used in the existing 200 Area ETF exclusion where constituents that are representative of a treatability group were selected as verification parameters.

Treatability groups established in today’s proposal can be found in Table 4–1 of the November 29, 2001 delisting petition. Treatability groups have been established by grouping chemicals identified as 200 Area Effluent Treatment Facility Consolidated Constituents in Table B–1 of the

November 29, 2001 delisting petition according to similar chemical structure and function. For example, all organic constituents with phthalate structure are grouped into treatability group 8. Inorganic constituents (metals in particular) are each assigned to their own treatability group. One difference in the process for selecting constituents representing each organic treatability group between the original delisting and today’s proposal is that one constituent is selected and proposed to represent a treatability group. For inorganic treatability groups, each constituent is in a separate treatability group.

Because the initial delisting was an upfront delisting,<sup>7</sup> multiple constituents were selected for a few treatability groups. The initial delisting focused exclusively on listed wastewaters with a designation of F001 to F005, or F039 derived from F001 to F005, and the verification parameters included multiple constituents in several treatability groups. Because this

<sup>7</sup> An upfront delisting is an exclusion granted for a waste stream prior to full-scale commercial generation or treatment of the waste stream. In contrast, a traditional exclusion applies to an existing waste stream that can be fully characterized on a commercial scale.

delisting modification expands the constituents associated with the F039 waste number being delisted, the proposed verification constituents need to represent all the treatability groups. EPA's analysis of data presented in the DOE-RL's petition indicate that the data verify the process model used in the original delisting action. Further, EPA concludes the treatment performance necessary to meet delisting exclusion limits will be successfully demonstrated by the individual constituents proposed to represent each treatability group. Since these representative constituents have been selected after consideration of both toxicity and how difficult each constituent is to treat, EPA concludes that requiring multiple constituents to represent each treatability group would not provide greater assurance that exclusion limits are met for all constituents in the treatability group.

The constituents and the delisting levels for monitoring are determined in a three-phase approach. First, the health-based levels (HBLs)<sup>8</sup> are calculated based on toxicological data for each constituent of concern identified in Table B-1 of the November 2001 delisting petition. The HBLs are calculated using current toxicological data from IRIS, HEAST, and NCEA.<sup>9</sup> The target risk factor of  $1.0 \times 10^{-5}$  excess cancer risk is used with the oral slope factor to calculate a HBL for carcinogens. The target hazard quotient factor of 0.10 is used with the reference dose for oral exposure to calculate a HBL for non-carcinogens. When an oral slope factor and a reference dose for oral exposure are both available, the minimum (more conservative) resulting HBL is used. The groundwater ingestion pathway was the only pathway considered, based on the same rationale used to select the groundwater pathway in the initial delisting exclusion, found in 40 CFR part 261, appendix IX.

Second, a constituent is selected from a treatability group to represent the entire group. This methodology uses HBLs (the lower the HBL the higher the constituent toxicity), the electrical energy/order (EE/O), which is a measure of the UV/OX treatment efficiency for a constituent (the higher the EE/O the more difficult it is to destroy a

constituent), and the practical quantitation limit (PQL). Constituents are ranked by the HBL and by the EE/O. HBLs within a factor of 10 are considered identical for this selection process because HBLs of constituents within most treatability groups range over a number of orders of magnitude. Each treatability group is evaluated individually. The constituents having the lowest HBL and the highest EE/O are the first candidates considered for selection. To ensure that acceptable analytical data can be obtained, the PQL is considered. If the PQL is higher than the delisting level (HBL times the dilution attenuation factor [DAF]),<sup>10</sup> then another constituent is evaluated.

Finally, the proposed delisting levels are based on the HBL times the DAF of 6. The methodology used by DOE-RL to calculate this DAF appears in section 4.0 of the November 2001 delisting petition. EPA has previously determined that the methodology used by DOE-RL in establishing the DAF of 6 is protective in a previous delisting. See 56 FR 32993, July 18, 1991. In a few cases, the delisting level is based on either the PQL, maximum contamination limit (MCL), or a concentration level derived from requirements of the Toxic Substance Control Act (TSCA) applicable to polychlorinated biphenyls (PCB) remediation waste, which EPA has determined to be protective of unrestricted exposure. EPA is proposing to establish delisting exclusion limits for PCBs based on TSCA values as a means to achieve consistency between RCRA and TSCA requirements applicable to treated effluent. See section III.N for a discussion of the relationship between delisting levels in today's proposal and LDR treatment requirements.

There are a number of constituents of concern in treated effluent where toxicological data are inconclusive or lacking. For treatability groups where these constituents are grouped, toxicological data for the constituent representing the treatability group is selected from one of the remaining treatability group constituents for which conclusive toxicological data are available. Stated another way, constituents representing each

treatability group are selected based on a combination of available health-based data, difficulty to treat the constituent, and availability of acceptable analytical information. EPA believes that the methodology established in the original 200 Area ETF delisting and adopted as the basis for today's proposal provides certainty that when delisting criteria for representative constituents are met, all constituents in the same treatability group satisfy delisting requirements.

The methodology described in the previous paragraph for selecting constituents to represent each treatability group also supports EPA's proposal to have a single chemical constituent represent each treatability group. As noted above, each constituent representing a treatability group is selected on the basis of a combination of being difficult to treat and of being the most toxic. Provided the ETF waste processing strategy successfully demonstrates that the selected represented constituent meets delisting limits (as required as a condition of today's proposal), any other constituent in the same treatability group would either be less toxic, or be more completely destroyed or removed from the treated effluent than the representative constituent. In either instance, the selected representative constituent will always be the limiting factor within each treatability group with respect to meeting the requirements to exclude a particular waste.

The following are exceptions to this methodology.

- Group 2: Diethylstilbestrol, also called estrogen, was not selected because of analytical measurement difficulties and this constituent is highly unlikely to be in wastewater treated at the 200 Area ETF.
- Group 9a: 1-Butanol was chosen over propargyl alcohol because 1-butanol is expected to be more prevalent in wastewaters treated at the 200 Area ETF. Should treatment efficiency of the 200 Area ETF be limited by this treatability group, the greater prevalence of 1-butanol increases the likelihood that this treatment limitation would be identified by the verification sampling program. In other words, a constituent that is rarely found even in wastes prior to treatment would not be a good indicator of whether or not effective treatment has occurred, since such a constituent would not be expected to be found in treated effluent even after ineffective treatment.
- Group 10a: All constituents containing hydrazine were eliminated from selection because of their reactivity under strong oxidizing conditions

<sup>8</sup> Health-based levels are considered the cancer slope factor for carcinogens, and the reference dose for constituents with non-cancer health effects.

<sup>9</sup> The Integrated Risk Information System (IRIS) can be found at <http://www.epa.gov/iris>. The Health Effects Assessment Summary Tables (HEAST) can be found at "Health Effects Assessment Summary Tables FY 1997 Update," 9200.6-303(97-1), EPA 540/R-97-036, PB97-921199, July 1997. Data from the National Center for Environmental Assessment (NCEA) may be found at <http://www.cfpub.epa.gov/ncea>.

<sup>10</sup> A dilution/attenuation factor is a measure of fate and transport effects on constituents as they migrate from a source area to a receptor. In this instance, the source area is the SALDS unit, modeled as an unlined surface impoundment and the receptor is a hypothetical individual ingesting groundwater affected by the waste source). Details of how the EPACML model was used to calculate DAF values for the 200 Area ETF may be found in the original delisting proposal, 60 FR 6054, February 1, 1995.

present in the UV/OX system at the 200 Area ETF. Because these constituents react so quickly in the conditions occurring in the UV/OX system, they do not provide appropriate measures of effective treatment for this treatability group.

- Group 10e: N-Nitrosodimethylamine was chosen. Because of analytical measurement difficulties, the delisting level is the PQL.

- Group 12: The delisting level for PCBs is based on the TSCA limit of 0.0005 mg/L (0.5 ppb). This level is where treated remediation waste is authorized for unrestricted use.<sup>11</sup>

- Group 17, 17a: The aldehyde group, in general, is reactive in water, which makes these constituents unlikely to be in wastewaters treated at the 200 Area

ETF. Also, the reactivity of aldehydes causes analytical problems where these are difficult to analyze in the laboratory. The aldehyde group will be represented by treatability Group 13, the group that is most difficult to destroy.

- Group 19: Acetone was chosen over acetophenone because acetone is expected to be a more prevalent contaminant in wastewaters treated at the 200 Area ETF.

- Group 22, 21: The delisting level for arsenic is based on the PQL rather than the HBL. The delisting level for lead is based on the MCL for drinking water rather than a level based on toxicity.

- Group 25: This group includes group 25a and 25b. Tributyl phosphate was chosen from this group as tributyl phosphate is expected to be more

prevalent in wastewaters treated at the 200 Area ETF.

EPA has not specifically evaluated environmental receptors in the original delisting or today's proposal because the proposed management scenario for excluded wastes is specifically intended to preclude exposure for an extended period of time during natural decay of radioactive tritium (tritium is technically impracticable to treat or remove from the 200 Area ETF effluent). To ensure treated effluent is not managed in a manner that might create environmental exposures, the EPA is proposing to limit management of treated effluent to the SALDS disposal unit.

Based on this methodology, Table 1 provides a list of proposed delisting constituents and delisting levels.

TABLE 1.—PROPOSED DELISTING CONSTITUENTS AND DELISTING LEVELS FOR TREATED EFFLUENT

Treatability group	Proposed delisting constituents	CAS #	HBL (mg/L)	EE/O	Justification	Proposed delisting level (mg/L)
1 .....	Cresol [Cresylic acid]* .....	1319-77-3	$2.0 \times 10^{-11}$	10	Representing group, has relatively low HBL and highest EE/O of group, target compound in SW-846 method <sup>(4)</sup> , PQL less than delisting level.	1.2
2 .....	2,4,6-trichlorophenol .....	88-06-2	$6.0 \times 10^{-2}$	10	Representing group, has a low HBL and is a hard to destroy compound, target compound in SW-846 method, PQL less than delisting level.	$3.6 \times 10^{-1}$
3, 15, 15a ...	Benzene* .....	71-43-2	$1.0 \times 10^{-2}$	3	Representing group, the compound with the lowest HBL, target compound in SW-846 method, PQL less than delisting level.	$6.0 \times 10^{-2}$
4 .....	Chrysene .....	218-01-9	$9.0 \times 10^{-2}$	10	Representing group, has a relatively low HBL and is one of the hard to destroy compounds, target compound in SW-846 method, PQL less than delisting level. Chrysene was chosen because the other constituents with lower HBLs have analytical measurement difficulties.	$5.6 \times 10^{-1}$
5, 5a, 16 .....	Hexachlorobenzene .....	118-74-1	$4.0 \times 10^{-4}$	10	Representing group, has a relatively low HBL and is one of the hard to destroy compounds, target compound in SW-846 method, PQL less than delisting level. Hexachlorobenzene was chosen because Heptachlorodibenzofuran and Heptachlorodibenzo-p-dioxins have analytical measurement difficulties.	$2.0 \times 10^{-3}$
6b, 14 .....	Hexachlorocyclopentadiene ...	77-47-4	$3.0 \times 10^{-2}$	10	Representing group, has a low HBL and is a hard to destroy compound, target compound in SW-846 method, PQL less than delisting level. Hexachlorocyclopentadiene was chosen over 1,4-Dichloro-2-butene and Hexachlorobutadiene because of analytical measurement difficulties, and over 1,1-Dichloroethylene and Vinyl chloride because of a higher EE/O.	$1.8 \times 10^{-1}$

<sup>11</sup>In establishing a delisting limit based on the TSCA unrestricted use limit of 0.5 parts per billion for liquid remediation wastes, EPA is not

necessarily representing that wastewaters managed by the 200 Area ETF are necessarily TSCA remediation wastes. Rather, EPA is simply

“borrowing” a technical standard developed for PCBs and applying it in a RCRA exclusion rulemaking.

TABLE 1.—PROPOSED DELISTING CONSTITUENTS AND DELISTING LEVELS FOR TREATED EFFLUENT—Continued

Treatability group	Proposed delisting constituents	CAS #	HBL (mg/L)	EE/O	Justification	Proposed delisting level (mg/L)
7a .....	Dichloroisopropyl ether [Bis(2-Chloroisopropyl) ether].	108-60-1	$1.0 \times 10^{-3}$	15	Representing group 7a and 7b, has a relatively low HBL and the EE/O is highest of group, target compound in SW-846 method, PQL less than delisting level. Dichloroisopropyl ether was chosen over Bis(2-Chloroethyl) ether and Dichloromethyl ether because of a higher EE/O.	$6.0 \times 10^{-2}$
8 .....	Di-n-octylphthalate* .....	117-84-0	$8.0 \times 10^{-2}$	15	Representing group, has a relatively low HBL and the EE/O is highest of group, target compound in SW-846 method, PQL less than delisting level.	$4.8 \times 10^{-1}$
9a .....	1-Butanol* .....	71-36-3	$4 \times 10^{-1}$ ....	10	Representing group, the compound with the lowest HBL, target compound in SW-846 method, PQL less than delisting level.	2.4
9 .....	Isophorone .....	78-59-1	$7.0 \times 10^{-1}$	30	Representing group, has a relatively low HBL and the EE/O is highest of group, target compound in SW-846 method, PQL less than delisting level. Isophorone was chosen because the other constituents with lower HBLs have analytical measurement difficulties and isophorone had the highest EE/O.	4.2
10a .....	Diphenylamine .....	122-39-4	$9.0 \times 10^{-2}$	15	Representing group, has a relatively low HBL and the EE/O is close to highest of group, target compound in SW-846 method, PQL less than delisting level. Diphenylamine was chosen because other constituents with lower HBLs have analytical measurement difficulties.	$5.6 \times 10^{-1}$
10b .....	p-Chloroaniline .....	106-47-8	$2.0 \times 10^{-2}$	10	Representing group, has a relatively low HBL and the EE/O is highest of group, target compound in SW-846 method, PQL less than delisting level. p-Chloroaniline was chosen over 4,4'-Methylenebis(2-chloroaniline) and o-Nitroaniline because of analytical measurement difficulties.	$1.2 \times 10^{-1}$
10c .....	Acetonitrile .....	75-05-8	Rescinded, previous (1994) HBL is 0.2 mg/L.	10	Representing group, has a relatively low HBL and the EE/O is close to highest of group, target compound in SW-846 method, PQL less than delisting level, the 1994 established HBL (0.2 mg/l) is used. Acetonitrile was chosen because it has, by far, the highest EE/O.	1.2
10d .....	Carbazole .....	86-74-8	$3.0 \times 10^{-2}$	30	Representing group, has a relatively low HBL and it is one of the more difficult compounds to destroy, target compound in SW-846 method, PQL less than delisting level. Carbazole was chosen because other constituents with lower HBLs have analytical measurement difficulties.	$1.8 \times 10^{-1}$
10e .....	N-Nitrosodimethylamine .....	62-75-9	$1.0 \times 10^{-5}$	10	Representing group, target compound in SW-846 method, because of analytical measurement difficulties, the PQL is used as the delisting level.	$2.0 \times 10^{-2}$
10f .....	Pyridine .....	110-86-1	$4.0 \times 10^{-3}$	4	Representing group, the compound with a low HBL, target compound in SW-846 method, PQL less than delisting level. Pyridine was chosen because the other constituent with a lower HBL has analytical measurement difficulties.	$2.4 \times 10^{-2}$

TABLE 1.—PROPOSED DELISTING CONSTITUENTS AND DELISTING LEVELS FOR TREATED EFFLUENT—Continued

Treatability group	Proposed delisting constituents	CAS #	HBL (mg/L)	EE/O	Justification	Proposed delisting level (mg/L)
11 .....	Lindane [gamma-BHC] .....	58-89-9	$5.0 \times 10^{-4}$	40	Representing group, has a low HBL and is one of the more difficult compounds to destroy, target compound in SW-846 method, PQL less than delisting level. Lindane was chosen because of those with lower HBLs lindane has the highest EE/O.	$3.0 \times 10^{-3}$
12 .....	Aroclor 1016, 1221, 1232, 1242, 1248, 1254, 1260.	PCBs	$3.0 \times 10^{-4}$	15	Representing group, target compound in SW-846 method, delisting level based on TSCA value, PQL less than delisting level.	$5.0 \times 10^{-4}$
13, 6a .....	Carbon tetrachloride* .....	56-23-5	$3.0 \times 10^{-3}$	200	Representing group, has relatively low HBL and is the compound with the highest EE/O, target compound in SW-846 method, PQL less than delisting level. Carbon tetrachloride was chosen because the other constituent with a lower HBL has analytical measurement difficulties and carbon tetrachloride has by far the highest EE/O.	$1.8 \times 10^{-2}$
18a .....	Tetrahydrofuran .....	109-99-9	$9.0 \times 10^{-2}$	4	Representing group 18 and 18a, a compound with relatively low HBL, target compound in SW-846 method, PQL less than delisting level. Tetrahydrofuran was chosen because the other constituent with a lower HBL has analytical measurement difficulties.	$5.6 \times 10^{-1}$
19 .....	Acetone* .....	67-64-1	$4.0 \times 10^{-1}$	10	Representing group, has a relatively low HBL and is one of the harder to destroy compounds, target compound in SW-846 method, PQL less than delisting level.	2.4
20 .....	Carbon disulfide .....	75-15-0	$4.0 \times 10^{-1}$	5	Representing group, the compound with the lowest HBL, target compound in SW-846 method, PQL less than delisting level.	2.3
21, 22 .....	Barium* .....	7440-39-3	$3.0 \times 10^{-1}$	.....	HBL $\times$ DAF is delisting level, PQL is less than delisting level.	1.6
21, 22 .....	Beryllium* .....	7440-41-7	$8.0 \times 10^{-3}$	.....	HBL $\times$ DAF is delisting level, PQL is less than delisting level.	$4.5 \times 10^{-2}$
21, 22 .....	Nickel* .....	7440-02-0	$8.0 \times 10^{-2}$	.....	HBL $\times$ DAF is delisting level, PQL is less than delisting level.	$4.5 \times 10^{-1}$
21, 22 .....	Silver* .....	7440-22-4	$2.0 \times 10^{-2}$	.....	HBL $\times$ DAF is delisting level, PQL is less than delisting level.	$1.1 \times 10^{-1}$
21, 22 .....	Vanadium* .....	7440-62-2	$3.0 \times 10^{-2}$	.....	HBL $\times$ DAF is delisting level, PQL is less than delisting level.	$1.6 \times 10^{-1}$
21, 22 .....	Zinc* .....	7440-66-6	1.0 .....	.....	HBL $\times$ DAF is delisting level, PQL is less than delisting level.	6.8
22, 21 .....	Arsenic* .....	7440-38-2	$5.0 \times 10^{-4}$	.....	HBL below PQL, PQL of 0.015 mg/L used as delisting level.	$1.5 \times 10^{-2}$
22, 21 .....	Cadmium* .....	7440-43-9	$2.0 \times 10^{-3}$	.....	HBL $\times$ DAF is delisting level, PQL is less than delisting level.	$1.1 \times 10^{-2}$
22, 21 .....	Chromium* .....	7440-47-3	$1.0 \times 10^{-2}$	.....	HBL $\times$ DAF is delisting level, PQL is less than delisting level.	$6.8 \times 10^{-2}$
22, 21 .....	Lead* .....	7439-92-1	$1.5 \times 10^{-2}$	.....	No HBL, used MCL of 0.015 mg/L and DAF = 6, (MCL $\times$ DAF).	$9.0 \times 10^{-2}$
22, 21 .....	Mercury* .....	7439-97-6	$1.0 \times 10^{-3}$	.....	HBL $\times$ DAF is delisting level, PQL is less than delisting level.	$6.8 \times 10^{-3(2)}$
22, 21 .....	Selenium* .....	7782-49-2	$2.0 \times 10^{-2}$	.....	HBL $\times$ DAF is delisting level, PQL is less than delisting level.	$1.1 \times 10^{-1}$
23 .....	Fluoride* .....	16984-48-8	$2.0 \times 10^{-1}$	.....	HBL $\times$ DAF is delisting level, PQL is less than delisting level.	1.2
24 .....	Ammonia* .....	7664-41-7	$1.0^{(3)}$ .....	.....	HBL $\times$ DAF is delisting level, PQL is less than delisting level.	6.0
24 .....	Cyanide* .....	57-12-5	$8.0 \times 10^{-2}$	.....	HBL $\times$ DAF is delisting level, PQL is less than delisting level.	$4.8 \times 10^{-1}$

TABLE 1.—PROPOSED DELISTING CONSTITUENTS AND DELISTING LEVELS FOR TREATED EFFLUENT—Continued

Treatability group	Proposed delisting constituents	CAS #	HBL (mg/L)	EE/O	Justification	Proposed delisting level (mg/L)
25a .....	Tributyl phosphate* .....	126-73-8	2.0 × 10 <sup>-2(3)</sup>	5	Representing group 25a and 25b, the compound with a low HBL, target compound in EPA method, PQL less than delisting level. No updated HBL. Previous delisting level is used, adjusted for a DAF of 6 instead of 10.	1.2 × 10 <sup>-1</sup>

CAS = Chemical Abstract Service. DAF = dilution attenuation factor. HBL = health-based levels. MCL = maximum contamination limit. PQL = practical quantitation limit. TSCA = Toxic Substances Control Act of 1976. (1) The HBL for cresol is assumed to be that for o-cresol and m-cresol. (2) The HBL for ammonia is assumed to be the same as used in the initial Delisting Petition. (3) The HBL for tributyl phosphate is assumed to be the same as used in the initial Delisting Petition. (4) The phrase “Target compound in SW-846” means that the associated constituent can be analyzed for and reported using promulgated SW-846 analytical methods.

\*Current delisting parameters.

*E. What Other Factors Did EPA Consider in Its Evaluation?*

As noted in section III.C, EPA believes that the approach used in the original 200 Area ETF treated effluent delisting action is sound and environmentally protective. Further, EPA does not believe there is any basis to expand on the analysis conducted to support the original 200 Area ETF delisting. EPA has considered the potential for, but has concluded that there are no other factors that warrant consideration in this proposed delisting modification.

*F. What Did EPA Conclude About DOE-RL’s Analysis?*

After reviewing the DOE-RL petition, EPA concludes that (1) no RCRA hazardous constituents are likely to be present in treated effluent above the proposed health-based delisting levels; and (2) the petitioned waste does not exhibit any of the characteristics of ignitability, corrosivity, reactivity, or toxicity (refer to 40 CFR 261.21, 261.22, 261.23, and 261.24, respectively).<sup>12</sup> In addition, EPA considered other factors or criteria enumerated in section I.B that could cause the wastes to be hazardous under RCRA. Today’s proposal expands the list of constituents for which the

<sup>12</sup> Delisting requirements of 40 CFR 260.22 state that an excluded waste cannot exhibit any of the characteristics of hazardous waste (reactivity, ignitability, corrosivity or toxicity). The delisting levels in today’s proposal are below the toxicity characteristics levels, and there is no record of untreated or treated aqueous wastewaters associated with the 200 Area ETF having sufficient concentrations of any constituent to suggest that the reactivity or ignitability characteristic might be of concern with respect to treated effluents. Similarly, the nature of the treatment processes at the 200 Area ETF, which include multiple pH adjustment steps, insure that treated effluents do not exhibit the characteristic of corrosivity. EPA believes that treated effluents satisfy these delisting requirements. DOE-RL, however, must demonstrate that treated effluents do not exhibit the characteristics of ignitability or corrosivity through application of process knowledge or analytical sampling according to 40 CFR 262.11.

wastes are excluded to include certain U- and P-listed waste numbers which are defined by 40 CFR 261.33 as acutely hazardous. EPA’s analysis demonstrates that treated effluents do not contain U- and P-listed constituents above health-based delisting levels, and therefore no longer meet the criteria under which the waste was originally listed as an acutely hazardous waste. Therefore, the treated effluents may be excluded from the definition of hazardous waste. The remaining factors discussed in section I.B were considered as part the analysis EPA performed to establish exclusion limits and the verification sampling program applicable to the wastes considered in today’s proposed exclusion.

*G. What Must DOE RL Do To Demonstrate Compliance With the Proposed Exclusion?*

DOE-RL’s obligation to demonstrate compliance with this proposed exclusion has two key components. The first is to demonstrate that each influent wastewater is within the processing capabilities (defined in this context as the ability to treat to delisting levels) of the 200 Area ETF prior to treatment. This demonstration is made through application of the verified treatment efficiency process model for the 200 Area ETF unit operations to waste characterization data required by the waste characterization and acceptance procedures in Hanford’s site-wide RCRA permit, WA7 89000 8967. The second component is a treated effluent sampling program intended to verify that the predicted treatment levels in fact are achieved. The verification sampling program in turn has two phases—an initial qualification sampling requirement applicable to all influent waste streams that do not have an operating history of treatment in 200 Area ETF, and an on-going verification “spot check” sampling requirement.

The first qualification phase is intended to demonstrate that the predicted treatment efficiencies can be achieved for new waste streams, while the “spot check” requirement is intended to identify any long-term changes in treatment efficiency or influent waste stream variability that would impact the ability of the 200 Area ETF to meet delisting requirements. At any time that an initial or verification sampling event indicates failure to meet delisting criteria, the DOE-RL is required to re-evaluate the waste characterization data (to identify any constituents, constituent levels, or other factors that might affect treatability of the waste), the treatment strategy and operational baseline, and to make any changes necessary to ensure subsequent batches of treated effluent do not fail delisting criteria. As with new treatment strategies, the initial treated effluent batch after any waste treatment strategy changes also is subject to verification sampling to ensure the treatment strategy changes are effective. In all cases where verification sampling is required, the corresponding batch of treated effluent cannot be discharged to the SALDS unit until compliance with delisting exclusion limits can be documented. Both of these overall compliance components and the two verification sampling program phases are essentially the same as in the original delisting action, with modifications to reflect actual operating experience and the additional influent wastes the 200 Area ETF expects to manage under this proposed exclusion.

EPA is also proposing additional conditions to ensure ongoing compliance with delisting exclusion limits. First, EPA is proposing a re-opener provision to allow EPA to re-evaluate the protectiveness of today’s exclusion limits and management requirements should new information become available that might alter

conclusions reached should today's proposal be finalized. EPA currently includes this re-opener provision as a standard component of delisting rulemakings. Second, EPA is proposing record keeping and reporting requirements. These conditions are intended to ensure that documentation of information necessary to review the compliance history of RL is appropriately recorded and maintained.

#### *H. How Must DOE RL Manage the Delisted Waste for Disposal?*

As a condition of this proposed exclusion, DOE-RL would be required to dispose of treated effluent at the SALDS. As noted elsewhere in this proposal, EPA anticipates and encourages the DOE-RL to evaluate alternate reuse options for treated effluent. Such changes in management practices will require EPA approval pursuant to delisting condition 7.

#### *I. How Must DOE RL Operate the Treatment Unit?*

The DOE-RL would be required to operate the 200 Area ETF according to the waste processing strategies developed pursuant to this proposed exclusion, if finalized, including the waste treatment strategy developed under Condition (1)(a). Although not a specific condition of this proposed delisting, the DOE-RL also must operate the 200 Area ETF in compliance with applicable RCRA regulations, the requirements of the Hanford Facility RCRA Permit WA7 89000 8967, and in part, the requirements of the State Waste Discharge Permit ST4500.

#### *J. What Must DOE RL Do if the Process Changes?*

EPA expects that 200 Area ETF treatment technologies will evolve and/or change over the operating life of the unit in support of Hanford Facility cleanup. EPA is proposing an exclusion condition that will allow the DOE-RL to modify the treatability envelope for the 200 Area ETF with written EPA approval to reflect such changes. Under today's proposal, such changes to the treatability envelope will not require modifications to the exclusion rule. EPA notes that changes to the treatability envelope for ETF may require modification to the State Waste Discharge Permit ST4500 as well.

EPA has included a re-opener clause that may also provide a basis for modification of this proposed exclusion to reflect substantial changes to ETF or its performance. Since it is not possible to completely anticipate potential future changes or modifications to the 200 Area ETF treatment process, EPA is not

providing a comprehensive definition of "substantial" in the context of the reopener clause. However, EPA is proposing that changes that would require Class II or Class III modifications to the Hanford Facility RCRA Permit WA7 89000 8967 would be considered "substantial." Without enumerating all possible changes to the 200 Area ETF, this proposal serves as a general example of "substantial" changes.

EPA notes that substantial changes to the 200 Area ETF that would warrant EPA review in the context of today's proposed exclusion would also likely require modification of the Hanford Facility RCRA Permit WA7 89000 8967

#### *K. What Data Must DOE RL Submit?*

EPA believes that the methodology in this proposed exclusion provides a sound and robust basis to accommodate the diverse waste streams expected to be managed by the 200 Area ETF under this proposed exclusion. Based on the 200 Area ETF operating history, EPA does not expect that the RL will encounter exceedances of delisting levels during verification sampling. Should exceedances occur, however, the retreatment and subsequent verification requirements of Conditions (2) and (3) in today's proposal provide assurances against environmental harm. Should such an exceedance occur, however, EPA believes that it might be indicative of unanticipated changes in waste streams or 200 Area ETF operations that require regulatory evaluation beyond the self-implementing provisions of Conditions (2) and (3). Therefore, EPA is proposing a recordkeeping and data submission requirement to ensure that EPA and Ecology are aware of such situations, and have the opportunity to take any appropriate response actions.

The DOE-RL also must disclose new or different data related to the 200 Area ETF or disposal of the waste if the data is relevant to the delisting (*see* Condition (4) of the proposed rule for the specifics of this requirement). This provision will allow EPA to re-evaluate the exclusion if new or additional information becomes available to EPA. The EPA will evaluate the information on which we based the decision to see if the information still is correct, or if circumstances have changed so that the information no longer is correct or would cause EPA to deny the petition if presented. This provision expressly requires the DOE-RL to report differing site conditions or assumptions used in the petition within 10 days. If EPA discovers such information itself or from a third party, EPA can act on the information as appropriate. The language being proposed is similar to

those provisions found in RCRA regulations governing no-migration petitions at 40 CFR 268.6.

EPA believes that we have the authority under RCRA and the Administrative Procedures Act, 5 U.S.C. 551 (1978) *et seq.* (APA), to re-open a delisting decision. We may re open a delisting decision when we receive new information that calls into question the assumptions underlying the delisting.

EPA believes a clear statement of its authority in delistings is merited in light of Agency experience, where the delisted waste leached at greater concentrations in the environment than the concentrations predicted when conducting the toxicity characteristic leaching procedure (TCLP), thus leading the Agency to repeal the delisting. *See* Reynolds Metals Company at 62 FR 37694 (July 14, 1997) and 62 FR 63458 (December 1, 1997). If a threat to human health and the environment presents itself, EPA will continue to address these situations case by case. Where necessary, EPA can make a good cause finding to justify emergency rulemaking. *See* 5 U.S.C. 553(b).

#### *L. What Happens if DOE RL Fails To Meet the Conditions of the Exclusion?*

If DOE-RL violates the terms and conditions established in the exclusion, the Agency may begin procedures to withdraw the exclusion. If the analytical testing of the waste indicates treated effluents do not meet the delisting criteria described previously, the DOE-RL must notify EPA according to Condition (6). Because the 200 Area ETF provides the capability to re-treat waste, EPA is not proposing to suspend this proposed exclusion if verification sampling results fail to demonstrate compliance with delisting levels. The proposed delisting conditions do, however, require the DOE-RL to review and/or modify the associated waste processing strategy to ensure future treatment batches meet delisting criteria, and to perform additional verification testing to demonstrate that changes are effective. Since the conditions of today's proposed exclusion require DOE-RL to maintain records of verification sampling and waste processing strategies, and report verification failures to EPA (*see* Condition 6(b)), EPA can evaluate whether verification sampling failures are isolated and adequately addressed by re-treatment, or indicative of repeated and consistent failures that might warrant reopening of the exclusion rule under Condition 4. **Note:** Failure of treated effluent exclusion limits would not necessarily provide a basis to begin withdrawal proceedings,

because the waste could be managed as hazardous without violating terms of today's proposed exclusion, or applicable waste management requirements.

#### *M. What Is EPA's Final Evaluation of This Delisting Petition?*

We have reviewed DOE-RL's November 29, 2001 delisting petition, the operating history of the 200 Area ETF treatment process, the basis EPA used to establish the original delisting, and DOE-RL's proposed delisting levels and approach for waste acceptance and processing strategy development for new waste streams. EPA believes that these data and information provide a sufficient basis for EPA to grant the proposed modifications to the existing exclusion. The framework proposed by the DOE-RL for the 200 Area ETF operations, along with the updated verification requirement being proposed, ensures that the treated effluent will not pose a threat when managed as non-hazardous low-level radioactive waste in the SALDS. EPA, therefore, proposes to grant the proposed exclusion modification.

If we finalize this proposed exclusion, EPA no longer will regulate the petitioned waste as a listed hazardous waste under 40 CFR parts 262 through 268 and the permitting standards of part 270.

#### *N. Relationship Between Today's Proposed Action and Compliance LDR Treatment Standards*

Today's action proposes to exclude certain wastes from the definition of hazardous waste under the authority of 40 CFR 260.20 and 260.22. EPA is not proposing any action that establishes or imposes treatment requirements under the authority of land disposal restriction rules appearing at 40 CFR part 268, nor is EPA proposing that the numerical delisting criteria in today's proposal necessarily satisfy existing LDR treatment standards that may be applicable to treated effluents. In general, all of the influent wastewaters considered in today's proposal are expected to be generated and actively managed prior to the point of exclusion, should today's proposal be finalized. As such, EPA believes that the treated effluent in question are prohibited wastes and subject to applicable LDR treatment requirements prior to land disposal at the SALDS. For disposal at SALDS, applicable LDR prohibitions and treatment requirements are specified by WAC 173-303-140, which incorporates by reference 40 CFR part 268.

## **IV. Statutory and Executive Order Reviews**

### *A. Executive Order 12866*

Under Executive Order 12866 (58 FR 51735, October 4, 1993), the Agency must determine whether the regulatory action is "significant", and therefore subject to OMB review and the requirements of the Executive Order. The Order defines "significant regulatory action" as one that is likely to result in a rule that may: (1) Have an annual effect on the economy of \$100 million or more, or adversely affect in a material way, the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local or tribal governments or communities; (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs, or the rights and obligations of recipients thereof; or (4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order. This proposal to grant an exclusion is not a "significant regulatory action" under the terms of Executive Order 12866, since its effect, if promulgated, would be to reduce the overall costs and economic impact of EPA's hazardous waste management regulations. This reduction would be achieved by excluding waste generated at a specific facility from EPA's lists of hazardous wastes, thus enabling a facility to manage its waste as non-hazardous. Therefore, EPA has determined that this proposed rule is not subject to OMB review.

### *B. Paperwork Reduction Act*

The Paperwork Reduction Act, 44 U.S.C. 3501, *et seq.*, is intended to minimize the reporting and recordkeeping burden on the regulated community, as well as to minimize the cost of Federal information collection and dissemination. In general, the Act requires that information requests and recordkeeping requirements affecting ten or more non-Federal respondents be approved by OPM. Although this action proposes to establish or modify information and recordkeeping requirements for DOE-RL, it does not impose those requirements on any other facility or respondents, and therefore is not subject to the provisions of the Paperwork Reduction Act.

### *C. Regulatory Flexibility*

The Regulatory Flexibility Act (RFA) generally requires an agency to prepare

a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions. For purposes of assessing the impacts of today's rule on small entities, small entity is defined as: (1) A small business, as codified in the Small Business Administration Regulations at 13 CFR part 121; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field. EPA has determined that this action will not have a significant impact on small entities because the proposed rule will only have the effect of impacting the waste management of waste proposed for conditional delisting at the Hanford facility in the State of Washington. After considering the economic impacts of today's proposed rule, I certify that this action will not have a significant economic impact on a substantial number of small entities. We continue to be interested in the potential impacts of the proposed rule on small entities and welcome comments on issues related to such impacts.

### *D. Unfunded Mandates Reform Act*

Title II of the Unfunded Mandates Reform Act (UMRA) of 1995 (Public Law 104-4) establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local and tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local and tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other

than the least costly, most cost-effective or least burdensome alternative if the Administrator publishes with the final rule an explanation why the alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

This proposed rule contains no Federal mandates (under the regulatory provisions of Title II of the UMRA) for State, local or tribal governments or the private sector. It imposes no new enforceable duty on any State, local or tribal governments or the private sector. Thus, today's proposed rule is not subject to the requirements of sections 202 and 205 of the UMRA. EPA has determined that this proposed rule contains no regulatory requirements that might significantly or uniquely affect small government entities. Thus, the requirements of section 203 of the UMRA do not apply to this rule.

#### *E. Executive Order 13132: Federalism*

Executive Order 13132, entitled "Federalism" (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among various levels of government."

This proposed rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among various levels of government, as specified in Executive Order 13132. This proposed rule addresses the conditional delisting of waste at the federal Hanford Facility. Thus, Executive Order 13132 does not apply to this rule. Although Section 6 of the Executive Order 13132 does not

apply to this proposed rule, EPA did consult with representatives of State and local governments in developing this rule. In the spirit of Executive Order 13132, and consistent with EPA policy to promote communications between EPA and State and local governments, EPA specifically solicits comment on this proposed rule from State and local officials.

#### *F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments*

Executive Order 13175, entitled "Consultation and Coordination with Indian Tribal Governments" (65 FR 67249, November 9, 2000), requires EPA to develop an accountable process to ensure "meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications." This proposed rule does not have tribal implications, as specified in Executive Order 13175. The rule proposes to conditionally delist certain waste streams at the federal Hanford Facility and does not establish any regulatory policy with tribal implications. Thus, Executive Order 13175 does not apply to this proposed rule. EPA specifically solicits additional comment on this proposed rule from tribal officials.

#### *G. Executive Order 13045: Protection of Children From Environmental Health and Safety Risks*

Executive Order 13045 (62 FR 19885, April 23, 1997) applies to any rule that: (1) is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This proposed rule is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866 and because the Agency does not have reason to believe the environmental health or safety risks addressed by this proposed action present a disproportionate risk to children. The proposed rule concerns the proposed conditional delisting of certain waste streams at the Hanford facility.

#### *H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use*

This rule is not subject to Executive Order 13211, "Actions Concerning Regulations that Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, May 22, 2001) because it is not a "significant regulatory action" as defined under Executive Order 12866.

#### *I. National Technology Transfer and Advancement Act*

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 ("NTTAA"), Public Law 104-113, section 12(d) (15 U.S.C. 272) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus bodies. The NTTAA directs EPA to provide Congress, through the Office of Management and Budget (OMB), explanations when the Agency decides to use "government-unique" standards in lieu of available and applicable voluntary consensus standards.

This proposed rulemaking involves environmental monitoring and measurement, but is not establishing new technical standards for verifying compliance with concentration limits, data quality or test methodology. EPA proposes not to require the use of specific, prescribed analytic methods. Rather, the Agency plans to allow the use of any method, whether it constitutes a voluntary consensus standard or not, that meets the prescribed performance criteria. Examples of performance criteria are discussed in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication-846, Third Edition, as amended by updates I, II, IIA, IIB and III. EPA welcomes comments on this aspect of the proposed rulemaking and, specifically, invites the public to identify potentially-applicable voluntary consensus standards and to explain why such standards should be used in this regulation, if finalized.

#### *J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low Income Populations*

To the greatest extent practicable and permitted by law, and consistent with the principles set forth in the report on

the National Performance Review, each Federal agency must make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health and environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States and its territories and possessions, the District of Columbia, the Commonwealth of Puerto Rico, and the Commonwealth of the Mariana Islands. Because this proposed rule addresses the conditional delisting of certain waste streams at the Hanford Facility, with no anticipated

significant adverse human health or environmental effects, the rule is not subject to Executive Order 12898.

**List of Subjects in 40 CFR Part 261**

Environmental protection, Hazardous waste, Recycling, Reporting and recordkeeping requirements.

**Authority:** Sec. 3001(f) RCRA, 42 U.S.C. 6921(f).

Dated: July 6, 2004.

**L. John Iani,**  
*Regional Administrator, Region 10.*

For the reasons set out in the preamble, 40 CFR part 261 is proposed to be amended as follows:

**PART 261—IDENTIFYING AND LISTING HAZARDOUS WASTE**

1. The authority citation for part 261 continues to read as follows:

**Authority:** 42 U.S.C. 6905, 6912(a), 6921, 6922, and 6938.

2. In Table 2, of Appendix IX of part 261, it is proposed to revise the entry for “DOE RL, Richland, WA” to read as follows:

**Appendix IX to Part 261—Water Excluded Under §§ 260.20 and 260.22**

\* \* \* \* \*

TABLE 2.—WASTES EXCLUDED FROM SPECIFIC SOURCES

Facility/address	Waste description
<p style="text-align: center;">*</p> <p>Department of Energy, Richland Operations (DOE-RL), Richland, Washington.</p>	<p style="text-align: center;">* * * * *</p> <p>Treated effluents bearing the waste numbers identified below, from the 200 Area ETF located at the Hanford Facility, at a maximum generation rate of 210 million liters per year, subject to Conditions 1–7: This conditional exclusion applies to EPA Hazardous Waste Nos. F001, F002, F003, F004, F005, and F039. In addition, this conditional exclusion applies to all other U- and P-listed waste numbers that meet the following criteria: The U/P listed substance has a treatment standard established for wastewater forms of F039 multi-source leachate under 40 CFR 268.40, “Treatment Standards for Hazardous Wastes”; and The as-generated waste stream prior to treatment in the 200 Area Effluent Treatment Facility (200 Area ETF) is in the form of dilute wastewater containing a maximum of 1.0 weight percent of any hazardous constituent. This exclusion shall apply at the point of discharge from the 200 Area ETF verification tanks after satisfaction of Conditions 1–7.</p> <p>Conditions:</p> <p>(1) Waste Influent Characterization and Processing Strategy Preparation.</p> <p>(a) Prior to treatment of any waste stream in the 200 Area ETF, the DOE-RL must:</p> <p>(i) Complete sufficient characterization of the waste stream to demonstrate that the waste stream is within the treatability envelope of 200 Area ETF as specified in Tables C–1 and C–2 of the delisting petition dated November 20, 2001. Results of the waste stream characterization and the treatability evaluation must be in writing and placed in the facility operating record, along with a copy of the November 29, 2001 petition. Waste stream characterization may be carried out in whole or in part using the waste analysis procedures in the Hanford Facility RCRA Permit, WA7 89000 8967;</p> <p>(ii) Prepare a written waste processing strategy specific to the waste stream, based on the ETF process model documented in the November 29, 2001 petition.</p> <p>(b) DOE-RL may modify the 200 Area ETF treatability envelope specified in Tables C–1 and C–2 of the November 29, 2001 delisting petition to reflect changes in treatment technology or operating practices upon written approval of the Regional Administrator.</p> <p>(c) DOE-RL shall conduct all 200 Area ETF treatment operations for a particular waste stream according to the written waste processing strategy, as may be modified by Condition 3(b)(1).</p> <p>(d) The following definitions apply:</p> <p>(i) A waste stream is defined as all wastewater received by the 200 Area ETF that meet the 200 Area ETF waste acceptance criteria as defined by the Hanford Facility RCRA Permit, WA7 89000 8967 and are managed under the same 200 Area ETF waste processing strategy.</p> <p>(ii) A waste processing strategy is defined as a specific 200 Area ETF unit operation configuration, primary operating parameters and expected maximum influent total dissolved solids (TDS) and total organic waste carbon (TOC). Each processing strategy shall require monitoring and recording of treated effluent conductivity for purposes of Condition (2)(b)(i)(E), and for monitoring and recording of primary operating parameters as necessary to demonstrate that 200 Area ETF operations are in accordance with the associated waste processing strategy.</p> <p>(iii) Primary operating parameters are defined as ultraviolet oxidation (UV/OX) peroxide addition rate, reverse osmosis reject ratio, and processing flow rate as measured at the 200 Area ETF surge tank outlet.</p> <p>(iv) Key unit operations are defined as filtration, UV/OX, reverse osmosis, ion exchange, and secondary waste treatment.</p> <p>(2) Testing. DOE-RL shall perform verification testing of treated effluents according to Conditions (a), (b), and (c) below.</p> <p>(a) Sample collection and analysis, including quality control (QC) procedures, must be performed according to current version of SW-846 or other EPA-approved methodologies. DOE-RL shall maintain a written sampling and analysis plan in the facility operating record. Results of all sampling and analysis, including quality assurance (QA)/QC information, shall be placed in the facility operating record.</p> <p>(b) Initial verification testing.</p> <p>(i) Verification sampling shall consist of a representative sample of one filled effluent discharge tank, analyzed for all constituents in Condition (5), and for conductivity for purposes of establishing a conductivity baseline with respect to Condition (2)(b)(i)(E). Verification sampling shall be required under each of the following conditions:</p> <p>(A) Any new or modified waste processing strategy;</p>

TABLE 2.—WASTES EXCLUDED FROM SPECIFIC SOURCES—Continued

Facility/address	Waste description
	<p>(B) Influent wastewater total dissolved solids or total organic carbon concentration increases by an order of magnitude or more above values established in the waste processing strategy;</p> <p>(C) Changes in primary operating parameters;</p> <p>(D) Changes in influent flow rate outside a range of 150 to 570 liters per minute;</p> <p>(E) Increase greater than a factor of ten (10) in treated effluent conductivity (conductivity changes indicate changes in dissolved ionic constituents, which in turn are a good indicator of 200 Area ETF treatment efficiency).</p> <p>(F) Any failure of initial verification required by this condition, or subsequent verification required by Condition (2)(c).</p> <p>(ii) Treated effluents shall be managed according to Condition 3. Once Condition (3)(a) is satisfied, subsequent verification testing shall be performed according to Condition (2)(c).</p> <p>(c) Subsequent Verification: Following successful initial verification associated with a specific waste processing strategy, DOE-RL must continue to monitor primary operating parameters, and collect and analyze representative samples from every fifteenth (15th) verification tank filled with 200 Area ETF effluents processed according to the associated waste processing strategy. These representative samples must be analyzed prior to disposal of 200 Area ETF effluents for all constituents in Condition (5). Treated effluent from tanks sampled according to this condition must be managed according to Condition (3).</p> <p>(3) Waste Holding and Handling: DOE-RL must store as hazardous waste all 200 Area ETF effluents subject to verification testing in Conditions (2)(b) and (2)(c), that is, until valid analyses demonstrate Condition (5) is satisfied.</p> <p>(a) If the levels of hazardous constituents in the samples of 200 Area ETF effluent are equal to or below the levels set forth in Condition (5), the 200 Area ETF effluents are not listed as hazardous wastes provided they are disposed of in the State Authorized Land Disposal Site (SALDS) (except as provided pursuant to Condition (7)), according to applicable requirements and permits. Subsequent treated effluent batches shall be subject to verification requirements of Condition (2)(c).</p> <p>(b) If hazardous constituent levels in any representative sample collected from a verification tank exceed any of the delisting levels set in Condition (5), DOE-RL must:</p> <p>(i) Review waste characterization data, and review and change accordingly the waste processing strategy as necessary to ensure subsequent batches of treated effluent do not exceed delisting criteria;</p> <p>(ii) Retreat the contents of the failing verification tank;</p> <p>(iii) Perform verification testing on the retreated effluent. If constituent concentrations are at or below delisting levels in Condition (5), the treated effluent are not listed hazardous waste provided they are disposed at SALDS according to applicable requirements and permits (except as provided pursuant to Condition (7)), otherwise repeat the requirements of Condition (3)(b).</p> <p>(iv) Perform initial verification sampling according to Condition (2)(b) on the next treated effluent tank once testing required by Condition (3)(b)(iii) demonstrates compliance with delisting requirements.</p> <p>(4) Re-opener Language.</p> <p>(a) If, anytime before, during, or after treatment of waste in the 200 Area ETF, DOE-RL possesses or is otherwise made aware of any data (including but not limited to groundwater monitoring data, as well as data concerning the accuracy of site conditions or the validity of assumptions upon which the November 29, 2001 petition was based) relevant to the delisted waste indicating that the treated effluent no longer meets delisting criteria (excluding recordkeeping and data submissions required by Condition (6)), or that groundwater affected by discharge of the treated effluent exhibits hazardous constituent concentrations above health-based limits, DOE-RL must report such data, in writing, to the Regional Administrator within 10 days of first possessing or being made aware of that data.</p> <p>(b) DOE-RL shall provide written notification to the Regional Administrator no less than 180 days prior to any planned or proposed substantial modifications to the 200 Area ETF, exclusive of routine maintenance activities. This condition shall specifically include, but not be limited to, changes that do or would require Class II and III modification to the Hanford Facility RCRA Permit WA7 89000 8967 (in the case of permittee-initiated modifications) or equivalent modifications in the case of agency-initiated permit modifications. DOE-RL may request a modification to the 180-day notification requirement of this condition in the instance of agency-initiated permit modifications for purposes of ensuring coordination with permitting activities.</p> <p>(c) Based on the information described in paragraph (4)(a) or (4)(b) or any other relevant information received from any source, the Regional Administrator will make a preliminary determination as to whether the reported information requires Agency action to protect human health or the environment. Further action could include suspending or revoking the exclusion, or other appropriate response necessary to protect human health and the environment.</p> <p>(D) Delisting Levels: All total constituent concentrations in treated effluents managed under this exclusion must be equal to or less than the following levels, expressed as mg/L:</p> <p>Inorganic Constituents: Ammonia—6.0; Barium—1.6; Beryllium—<math>4.5 \times 10^{-2}</math>; Nickel—<math>4.5 \times 10^{-1}</math>; Silver—<math>1.1 \times 10^{-1}</math>; Vanadium—<math>1.6 \times 10^{-1}</math>; Zinc—6.8; Arsenic—<math>1.5 \times 10^{-2}</math>; Cadmium—<math>1.1 \times 10^{-2}</math>; Chromium—<math>6.8 \times 10^{-2}</math>; Lead—<math>9.0 \times 10^{-2}</math>; Mercury—<math>6.8 \times 10^{-3}</math>; Selenium—<math>1.1 \times 10^{-1}</math>; Fluoride—1.2; Cyanides—<math>4.8 \times 10^{-1}</math>.</p> <p>Organic Constituents: Cresol—1.2; 2,4,6 Trichlorophenol—<math>3.6 \times 10^{-1}</math>; Benzene—<math>6.0 \times 10^{-2}</math>; Chrysene—<math>5.6 \times 10^{-1}</math>; Hexachlorobenzene—<math>2.0 \times 10^{-3}</math>; Hexachlorocyclopentadiene—<math>1.8 \times 10^{-1}</math>; Dichloroisopropyl ether; [Bis(2-Chloroisopropyl) ether—<math>6.0 \times 10^{-2}</math>; Di-n-octylphthalate—<math>4.8 \times 10^{-1}</math>; 1-Butanol—2.4; Isophorone—4.2; Diphenylamine—<math>5.6 \times 10^{-1}</math>; p-Chloroaniline—<math>1.2 \times 10^{-1}</math>; Acetonitrile—1.2; Carbazole—<math>1.8 \times 10^{-1}</math>; N-Nitrosodimethylamine—<math>2.0 \times 10^{-3}</math>; Pyridine—<math>2.4 \times 10^{-2}</math>; Lindane [<math>\gamma</math>-BHC]—<math>3.0 \times 10^{-3}</math>; Arochlor [total of Arochlors 1016, 1221, 1232, 1242, 1248, 1254, 1260]—<math>5.0 \times 10^{-4}</math>; Carbon tetrachloride—<math>1.8 \times 10^{-2}</math>; Tetrahydrofuran—<math>5.6 \times 10^{-1}</math>; Acetone—2.4; Carbon disulfide—2.3; Tributyl phosphate—<math>1.2 \times 10^{-1}</math>.</p> <p>(6) Recordkeeping and Data Submittals.</p>

TABLE 2.—WASTES EXCLUDED FROM SPECIFIC SOURCES—Continued

Facility/address	Waste description
	<p>(a) DOE–RL shall maintain records of all waste characterization, and waste processing strategies required by Condition (1), and verification sampling data, including QA/QC results, in the facility operating record for a period of no less than three (3) years. However, this period is automatically extended during the course of any unresolved enforcement action regarding the 200 Area ETF or as requested by EPA.</p> <p>(b) No less than thirty (30) days after receipt of verification data indicating a failure to meet delisting criteria of Condition (5), DOE–RL shall notify the Regional Administrator. This notification shall include a summary of waste characterization data for the associated influent, verification data, and any corrective actions taken according to Condition (3)(b)(i).</p> <p>(c) Records required by Condition (6)(a) must be furnished on request by EPA or the State of Washington and made available for inspection. All data must be accompanied by a signed copy of the following certification statement to attest to the truth and accuracy of the data submitted:                      “Under civil and criminal penalty of law for the making of submission of false or fraudulent statements or representations (pursuant to the applicable provisions of the Federal Code, which include, but may not be limited to, 18 U.S.C. 1001 and 42 U.S.C. 6928). I certify that the information contained in or accompanying this document is true, accurate, and complete.                      As to the (those) identified section(s) of the document for which I cannot personally verify its (their) truth and accuracy, I certify as the official having supervisory responsibility of the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.                      In the event that any of this information is determined by EPA in its sole discretion to be false, inaccurate, or incomplete, and upon conveyance of this fact to DOE–RL, I recognize and agree that this exclusion of waste will be void as if it never had effect or to the extent directed by EPA and that the DOE–RL will be liable for any actions taken in contravention of its RCRA and CERCLA obligations premised upon DOE–RL’s reliance on the void exclusion.”</p> <p>(7) Treated Effluent Disposal Requirements. DOE–RL may at any time propose alternate reuse practices for treated effluent managed under terms of this exclusion in lieu of disposal at the SALDS. Such proposals must be in writing to the Regional Administrator, and demonstrate that the risks and potential human health or environmental exposures from alternate treated effluent disposal or reuse practices do not warrant retaining the waste as a hazardous waste. Upon written approval by EPA of such a proposal, non-hazardous treated effluents may be managed according to the proposed alternate practices in lieu of the SALDS disposal requirement in paragraph (3)(a). The effect of such approved proposals shall be explicitly limited to approving alternate disposal practices in lieu of the requirements in paragraph (3)(a) to dispose of treated effluent in SALDS.</p>
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