



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 10

1200 Sixth Avenue, Suite 900
Seattle, Washington 98101-3140

17 NOV 2008

Reply To: OCE-164

David A. Brockman, Manager
United States Department of Energy
Richland Operations Office
P.O. Box 550, MSIN A7-50
Richland, Washington 99352

Re: Revision of the Toxic Substances Control Act (TSCA) Risk-based Disposal Approval (RBDA) Application for Storage of Two Water Tower Tanks Pending Disposal

Dear Mr. Kline:

This letter constitutes approval of revisions to the approval dated January 23, 2007, under the authority of 40 Code of Federal Regulations (CFR) 761.61(c) and 761.62(c) for storage of two 50,000 gallon water tower tanks at the Hanford facility. These revisions authorize processing for disposal as necessary to meet the waste acceptance criteria of the Hanford Environmental Restoration Disposal Facility (ERDF), and for such additional storage for disposal as necessary to complete processing for disposal and final disposal of the two water tower tanks. As noted in the original approval, interior paint in these water tower tanks is regulated as polychlorinated biphenyl (PCB) bulk product waste. To help ensure clarity and completeness, EPA is re-issuing the entire approval including both the original conditions and additional conditions authorizing processing for disposal. The rationale of the United States Environmental Protection Agency (EPA) for establishing each of these conditions is contained in the Statement of Basis appearing as Enclosure 2 to this letter. This written decision for a risk-based method for processing and storage for disposal of PCB bulk product and PCB remediation waste is based on the documentation identified in Enclosure 1. In granting this approval, EPA finds that the proposed processing and storage for disposal of PCB bulk product and PCB remediation waste, subject to the conditions below, will not pose an unreasonable risk of injury to health or the environment. DOE-RL shall ensure that activities conducted pursuant to this approval are in full compliance with conditions of the approval. The conditions of this approval are enforceable under TSCA and implementing regulations at 40 CFR Part 761.61(c) and 761.62(c). Any actions by DOE-RL which violate the terms and conditions of this letter may result in administrative, civil, or criminal enforcement by EPA in accordance with Section 16 of TSCA, 15 USC § 2615.

Conditions

1. DOE-RL may store tanks 2901 S and 2902 B in the immediate vicinity of their original towers according to the storage for disposal activities described in the first paragraph of the section entitled "Planned Storage/Management Activities" in the risk-based disposal application dated November 13, 2006, until completion of processing for disposal as authorized by this approval is complete. This storage authorization also includes components of the water tanks which may result from size reduction during processing for disposal. If processing for disposal has not been completed by June 30, 2009, DOE-RL will provide written notice to EPA according to Condition 5 that processing for disposal has not been completed and a reasonable estimate of what additional time may be necessary to do so. If required, this notice will be submitted by July 31,

2009. DOE-RL shall ensure that this storage for disposal location remains subject to existing or equivalent security and access controls.

2. DOE-RL is authorized to process for disposal tanks 2901 S and 2902 B via size reduction as necessary to satisfy the waste acceptance criteria for the Hanford Environmental Restoration Disposal Facility (ERDF) according to the following requirements:
 - a. Size reduction will be accomplished through shearing and/or cutting without external application of heat;
 - b. Size reduction activities will be conducted so as to minimize environmental impacts and unnecessary spread of PCB paint chips which may be generated during size reduction activities;
 - c. Workers engaged in size reduction activities will make use of appropriate personal protection equipment (PPE) and work practices to avoid contact with or inhalation of PCB bulk product waste. Worker protection measures such as those used for similar demolition activities conducted under CERCLA according to "Policy on Decommissioning Department of Energy Facilities Under CERCLA," http://www.epa.gov/fedfac/documents/decommissioning_doe.htm will be considered an acceptable means of demonstrating compliance with this condition.
 - d. Soils contaminated with PCB paint chips during storage for disposal or size reduction activities will be removed by scraping, digging or other means as necessary to ensure no unreasonable risk of injury to health or the environment and managed as PCB remediation waste. Removal of soils a minimum of two (2) inches below the level of soils disturbed by storage and processing for disposal activities as identified by visual means, and disposal in ERDF, will be considered an acceptable means of demonstrating compliance with this condition.
3. Nothing in this approval relieves DOE-RL of any obligation to comply with other rules and regulations applicable to the activities subject to this approval.
4. If anytime before during or after storage or processing for disposal of PCB bulk product waste pursuant to this approval or management of PCB remediation waste which may result from processing for disposal activities, DOE-RL possesses or is otherwise made aware of any data or information (including but not limited to site conditions that differ from those presented in the application) that activities approved herein may pose an unreasonable risk of injury to health or the environment, DOE-RL must report such data, via facsimile or e-mail to EPA according to Condition 6 within five working days, and in writing to the Regional Administrator within 30 calendar days, of first possessing or being made aware of that data. DOE-RL shall also report new or different information related to a condition or any element of the approved storage activities if the information is relevant to this approval. EPA may direct DOE-RL to cease any or all of the storage activities subject to this approval, or take such other actions it finds necessary, to ensure the approved storage activities do not pose an unreasonable risk of injury to health or the environment. DOE-RL shall follow such direction until written approval is obtained from EPA that finds the condition(s) requiring such direction no longer poses an unreasonable risk of injury to health or the environment. EPA reserves the right to modify or revoke this approval based on information provided pursuant to this condition, or any other information available to EPA that provides a basis to conclude that activities covered by this approval pose an unreasonable risk of injury to health or the environment.

5. Submissions required by this approval shall be provided to EPA.as follows:

EPA: Michael A. Bussell, Director
Office of Compliance and Enforcement
EPA Region 10
1200 6th Ave., Suite 900, MS OCE-164
Seattle, WA 98101
E-mail: Bussell.mike@epa.gov
Facsimile: (206) 553-7176

w/copies to Dave Bartus
Office of Air, Waste and Toxics
EPA Region 10
1200 6th Avenue, Suite 900, MS AWT-122
Seattle, WA 98101
E-mail: Bartus.dave@epa.gov
Facsimile: (206) 553-8509.

Should you have any questions or comments, please contact Dave Bartus at (206) 553-2804, or Bartus.dave@epa.gov.

Sincerely,



Michael A. Bussell, Director
Office of Compliance and Enforcement

Enclosures (2)

cc: Jane Hedges, Washington State Department of Ecology
Wayne Toebe, Fluor Hanford

Enclosure 1

References

- 1) Letter, Keith A. Klein, United States Department of Energy, Richland Operations Office (DOE-RL) to Elin D. Miller, United States Environmental Protection Agency, Region 10 (EPA), "Risk-based Disposal Approval (RBDA) Application for Storage of Two Water Tower Tanks on the Hanford Site," November 13, 2006.
- 2) Letter, Matthew S. McCormick, DOE-RL, to Michael A. Bussell, EPA, "Risk-based Disposal Approval (RBDA) Extension Request for Storage of Two Polychlorinated Biphenyl Bulk Product Waste Water Tanks on the Hanford Site," December 20, 2007.
- 3) E-mail, Anthony C. McKarns, DOE-RL, to Dave Bartus, EPA, "PCB information on the 2 water towers," February 4, 2008.

Enclosure 2

Statement of Basis

As noted in the application supporting this risk-based disposal approval (RBDA), the United States Department of Energy (DOE-RL) is attempting to secure recycling and/or disposal capacity for two water tanks formerly used at the Hanford site. Unlike most wastes associated with site cleanup, these tanks are not radioactively contaminated – on-site disposal is not possible, since existing on-site disposal capacity is limited to radioactively-contaminated wastes. DOE-RL therefore sought to recycle the tanks as scrap metal, but has been unable to do so after becoming aware that paint in the interior of the tanks contains polychlorinated biphenyls (PCBs) at levels such that the tanks are regulated as PCB bulk product waste under the Toxic Substances Control Act (TSCA). With this finding, DOE-RL has found that identifying a final disposition pathway is both more complicated and more time consuming. Since continued storage is regulated under TSCA, and TSCA-compliant on-site storage that could accept the tanks is not available, DOE-RL is seeking a risk-based approval for compliant storage of the two tanks while it continues final disposition efforts.

EPA concurs that the proposed method of storage outlined in the RBDA application does not pose an unreasonable risk of injury to health or the environment as required by 40 Code of Federal Regulations (CFR) 761.61(c) and 761.62(c). As documented in the RBDA application, PCB-containing paint is located in the interior of the tank, so that exposure to the paint is precluded by the tank structure itself. Since openings in the tank have closures, potential receptors are prevented from entering the tank, and mobile PCBs in the form of paint chips that might eventually be found are effectively contained. The tanks are currently located within the security perimeter of the Hanford site, so any potential human receptors would need authorization to access the site, and be subject to either training or escort requirements that reasonably preclude any unintentional access to the tanks that might result in exposure to or release of PCBs from the tanks. Since PCBs are in paint, and there are no mechanical or chemical forces at work in the interior of the tank, exposure or transport via an air pathway will not occur. Although the tanks are not watertight, any PCBs that might leach out of the paint would have long since done so since the tanks were used to store water in the first place. Based on this consideration of possible transport routes and receptor exposures, EPA concludes that storage of the tanks as bulk PCB product waste does not pose an unreasonable risk of injury to health or the environment.

To ensure that EPA's analysis remains supportable during storage under this approval, EPA is establishing a number of conditions. These conditions, and EPA's rationale for establishing them, are outlined below.

1. DOE-RL may store tanks 2901 S and 2902 B in the immediate vicinity of their original towers according to the storage for disposal activities described in the first paragraph of the section entitled "Planned Storage/Management Activities" in the risk-based disposal application dated November 13, 2006 until completion of processing for disposal as authorized by this approval is complete. This storage authorization also includes components of the water tanks which may result from size reduction during processing for disposal. If processing for disposal has not been completed by June 30, 2009, DOE-RL will provide written notice to EPA according to Condition 5 that processing for disposal has not been completed and a reasonable estimate of what additional time may be necessary to do so. If required, this notice will be submitted by July 31, 2009. DOE-RL shall ensure that this

storage for disposal location remains subject to existing or equivalent security and access controls.

This condition ensures that the tanks remain in their documented location, have closures sufficiently secure to prevent unintended access, are marked to identify risks, and are subject to site security. By ensuring these circumstances will not change, EPA is assured that its analysis of potential risks from the proposed storage bulk PCB product waste will remain valid during the approved storage period.

DOE-RL has not proposed a specific completion date for processing for disposal activities, for final disposal of the water tanks after size reduction, or completion of any soil cleanup that may be necessary following size reduction activities. EPA recognizes that this open-ended schedule for completion of work authorized by this RBDA is somewhat of a practical necessity, since availability of the necessary specialized size reduction equipment is contingent on completion of other more environmentally-significant work elsewhere on the Hanford site. To ensure that work pursuant to this RBDA is completed in a reasonably timely manner, however, EPA is establishing a notification requirement if work is not completed by June 30, 2009.

2. DOE-RL is authorized to process for disposal tanks 2901 S and 2902 B via size reduction as necessary to satisfy the waste acceptance criteria for the Hanford Environmental Restoration Disposal Facility (ERDF) according to the following requirements:
 - a. Size reduction will be accomplished through shearing and/or cutting without external application of heat;
 - b. Size reduction activities will be conducted so as to minimize environmental impacts and unnecessary spread of PCB paint chips which may be generated during size reduction activities;
 - c. Workers engaged in size reduction activities will make use of appropriate personal protection equipment (PPE) and work practices to avoid contact with or inhalation of PCB bulk product waste. Worker protection measures such as those used for similar demolition activities conducted under CERCLA according to "Policy on Decommissioning Department of Energy Facilities Under CERCLA," http://www.epa.gov/fedfac/documents/decommissioning_doe.htm will be considered an acceptable means of demonstrating compliance with this condition.
 - d. Soils contaminated with PCB paint chips during storage for disposal or size reduction activities will be removed by scraping, digging or other means as necessary to ensure no unreasonable risk of injury to health or the environment and managed as PCB remediation waste. Removal of soils a minimum of two (2) inches below the level of soils disturbed by storage and processing for disposal activities as identified by visual means, and disposal in ERDF, will be considered an acceptable means of demonstrating compliance with this condition.

In addition to providing explicit authorization to conduct processing for disposal activities of PCB bulk product waste, this conditions establishes basic performance standards for size reduction activities that ensure that the work does not pose an unreasonable risk of injury to health or the environment. Size reduction conducted according to (2)(a) may result in some paint chips being generated through deformation of the metal surface to which the paint is applied, but is not otherwise expected to generate PCBs or PCB bulk product waste in a form that might be dispersible or pose an unreasonable risk of injury to worker health or the environment. To minimize or eliminate the

potential for paint chip dispersal or worker exposure, EPA is establishing requirements in (2)(b) and (2)(c). In complying with (2)(b), DOE-RL must consider both work practices and environmental conditions, such as wind speed. To minimize environmental impacts and unnecessary spread of PCB paint chips, all work must be conducted only during weather conditions with wind speeds sufficiently low that any paint chips that may be generated are not dispersed away from the immediate work area.

Since the requirements of paragraph 2.d address soils cleanup, and thus management of PCB remediation waste, EPA is issuing this RBDA under the authority of 40 CFR 761.61(c) in addition to 40 CFR 761.62(c).

3. Nothing in this approval relieves DOE-RL of any obligation to comply with other rules and regulations applicable to the activities subject to this approval.

This condition establishes that this approval under TSCA does not relieve DOE-RL of any other obligation that it may have with respect to the approved activities.

4. If anytime before during or after storage of PCB bulk product waste pursuant to this approval, DOE-RL possesses or is otherwise made aware of any data or information (including but not limited to site conditions that differ from those presented in the application that activities approved herein may pose an unreasonable risk of injury to health or the environment, DOE-RL must report such data, via facsimile or e-mail to EPA according to Condition 5 within five working days, and in writing to the Regional Administrator within 30 calendar days, of first possessing or being made aware of that data. DOE-RL shall also report new or different information related to a condition or any element of the approved storage activities if the information is relevant to this approval. EPA may direct DOE-RL to cease any or all of the storage activities subject to this approval, or take such other actions it finds necessary, to ensure the approved storage activities do not pose an unreasonable risk of injury to health or the environment. DOE-RL shall follow such direction until written approval is obtained from EPA that finds the condition(s) requiring such direction no longer pose an unreasonable risk of injury to health or the environment. EPA reserves the right to modify or revoke this approval based on information provided pursuant to this condition, or any other information available to EPA that provides a basis to conclude that activities covered by this approval pose an unreasonable risk of injury to health or the environment.

This condition ensures that if any information not available to EPA at the time this approval is issued becomes known, it will be made available to EPA for purposes of ensuring that activities subject to this approval continue to pose no unreasonable risk of injury to health or the environment. This condition also ensures EPA's ability make changes to the storage activities, including withdrawing approval for storage, as necessary to ensure no unreasonable risk of injury to health or the environment.

5. Submissions required by this approval shall be provided to EPA as follows:

EPA: Michael A. Bussell, Director
Office of Compliance and Enforcement
EPA Region 10
1200 6th Ave., Suite 900, MS OCE-164
Seattle, WA 98101

E-mail: Bussell.michael@epa.gov
Facsimile: (206) 553-7176

w/copies to

Dave Bartus
Office of Air, Waste and Toxics
EPA Region 10
1200 6th Avenue, Suite 900, MS AWT-122
Seattle, WA 98101
E-mail: Bartus.dave@epa.gov
Facsimile: (206) 553-8509