



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

November 12, 2013

4WD-FFB

Rachel Blumenfeld
United States Department of Energy
Portsmouth/Paducah Project Site Office
P.O. Box 1410
Paducah, Kentucky 42002

RE: Retraction of the August 19, 2013 EPA Approval and Conditional Concurrence of the Explanation of Significant Differences to the Record of Decision for the Interim Remedial Action of the Northeast Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky (DOE/LX/07-1291&D2)

Dear Ms. Blumenfeld,

The Environmental Protection Agency (EPA) hereby retracts the August 19, 2013 approval of *the Explanation of Significant Differences to the Record of Decision for the Interim Remedial Action of the Northeast Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky (DOE/LX/07-1291&D2*. As you are aware, EPA disagrees with the Technetium-99 (Tc-99) effluent limit of 60,000 pCi/L cited in Table 3, which was identified in the document after EPA sent their approval letter. Consequently, EPA has not sent DOE the signature approval page in order for DOE to finalize the subject document.

Extracted groundwater contaminated with Tc-99 above the Safe Drinking Water Act maximum contaminant level (MCL) of 900 pCi/L, must be treated to a concentration before discharge into the receiving water(s) of the Commonwealth of Kentucky that is protective of human health and the environment. EPA's position stems from discussion with EPA headquarters as well as consideration of EPA policy and guidance related to protective levels for discharges of radionuclides. Discussions between the FFA parties since late August 2013 to determine an acceptable discharge limit for Tc-99 have not been successful.

In accordance with the Federal Facility Agreement (FFA) Section X.X.I. Finalization of Documents, EPA is issuing a conditional concurrence on this Primary Document. In order for EPA to approve a revised D2 document, the Department of Energy (DOE) must make the following changes:

1. Include text in the appropriate sections of the document (e.g., Section 2.1) which states Tc-99 is a contaminant present in the NE Plume with concentrations exceeding the Safe Drinking Water Act maximum contaminant level (MCL) of 900 pCi/L in some areas of the plume that may be captured and extracted in the relocated wells (EW234 and EW235).

2. Include text in the appropriate sections of the document which include description of the new treatment units (e.g., Table 1, Key Design Changes) which states extracted groundwater containing (or assumed to contain) Tc-99 above 900 pCi/L will include resin (or other filtration technology) to remove and/or reduce Tc-99 concentrations below 900 pCi/L.
3. Include text on page 25 below Table 3, “The discharge limit for Tc-99 (401 KAR 100:019 § 44 [10 CFR § 20, Appendix B]) is an annual concentration limit for all the CERCLA projects at the Paducah Site that include this citation as ARAR. For this project, there is a daily maximum effluent discharge limit of 900 pCi/L from each of the ATU(s), if treatment becomes necessary.”

The revised Explanation of Significant Differences to the Record of Decision (styled as a D2/R1), satisfying the condition set forth above, shall be submitted by DOE on or before December 12, 2013 for EPA approval.

If you have any questions or require additional information, please contact me at (404) 562-8513.

Sincerely,

Jennifer Tufts
Federal Facilities Agreement Manager
Federal Facilities Branch

ec: David Dollins, DOE – Paducah, Dave.Dollins@lex.doe.gov
Jeff Carman, LATAKY – Kevil, Jeff.carman@lataky.com
Todd Mullins, KDWM – Frankfort, Todd.Mullins@ky.gov