



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

June 9, 2016

Ms. Tracey Duncan
Federal Facility Agreement Manager
United States Department of Energy
Portsmouth/Paducah Project Site Office
5501 Hobbs Road
Kevil, KY 42053

RE: EPA Approval: Treatability Study Report for the C-400 Interim Remedial Action Phase IIB Steam Injection Treatability Study at Paducah Gaseous Diffusion Plant (DOE/LX/07-2202&D2), transmittal dated May 10, 2016 (PPPO-02-3440759-16)

Dear Ms. Duncan,

The U. S. Environmental Protection Agency Region 4 (EPA) has reviewed the Department of Energy's (DOE) responses to Agency comments and the revised *Treatability Study Report for the C-400 Interim Remedial Action Phase IIB Steam Injection Treatability Study at Paducah Gaseous Diffusion Plant (DOE/LX/07-2202&D2)*. Overall, the Treatability Study Report met the objectives identified in the Work Plan and is approved.

Typically, Treatability Studies are Secondary Documents under the Paducah Gaseous Diffusion Plant Federal Facility Agreement. EPA notes, however, that the Treatability Study Report for Phase IIB Steam Injection is a Primary Document per the October 28, 2013 *Memorandum of Agreement for Resolution of Informal Dispute for the D2 Revised Proposed Plan for Volatile Organic Compound Contamination at the C-400 Cleaning Building (DOE/LX/07-1263&D2)*. A copy of the Memorandum of Agreement (MOA) is provided as an enclosure to this approval letter. EPA recommends that the DOE correct all occurrences of the "Secondary Document" notation on/in the report with the "Primary Document" notation for consistency with the tri-party MOA when finalizing the D2 report for the Administrative Record.

The results of the C-400 Treatability Study support steam injection as a technically implementable, and cost-effective, technology for heating of the Regional Gravel Aquifer (RGA) in the Phase IIB area of C-400 to achieve TCE contaminant source reduction. Therefore, EPA supports moving forward with design and full-scale implementation of Steam Enhanced Extraction (SEE) at the Phase IIB area - with or without a complete understanding of the sub-surface contamination beneath the C-400 Building. As previously discussed with the DOE and the Kentucky Division of Waste Management (KDWM), the EPA believes that the best approach for resolving C-400 sub-slab uncertainties is a limited and focused C-400 sub-slab investigation in the southeast corner

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(near the current Phase IIb area). The limited and focused C-400 sub-slab investigation can occur simultaneously with the design process, allowing for design modifications (if necessary) if additional source areas are encountered. Further, EPA expects the design and full-scale implementation of SEE for source mitigation in the C-400 Phase IIb area to move forward expeditiously, consistent with the expectations of the Federal Facility Agreement (Section III (A)(7) and (B)(11); *Purposes of Agreement*), and the deadlines established in the approved Fiscal Year 2015 Site Management Plan and the October 28, 2013, MOA. The KDWM approved the Treatability Study Report on May 27, 2016. Therefore, the D1 Revised Proposed Plan should be submitted to EPA and KDWM not later than 110 days after EPA's approval (on June 9, 2016) of the Treatability Study Report.

If you have any questions about this correspondence, please do not hesitate to contact me at (404) 562-8547 or via electronic mail at corkran.julie@epa.gov.

Sincerely,



Julie L. Corkran, Ph.D.
Federal Facility Agreement Manager
Superfund Division

Enclosure:

1. *Memorandum of Agreement for Resolution of Informal Dispute for the D2 Revised Proposed Plan for Volatile Organic Compound Contamination at the C-400 Cleaning Building (DOE/LX/07-1263&D2), October 28, 2013.*

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