



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

March 21, 2014

4WD-FFB

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

**RE: EPA Approval of the Treatability Study Work Plan for Steam Injection,  
Groundwater Operable Unit, at the Paducah Gaseous Diffusion Plant, Paducah, KY  
(DOE/LX/07-1294&D2)**

Dear Ms. Blumenfeld,

EPA has reviewed the *Treatability Study Work Plan for Steam Injection, Groundwater Operable Unit, at the Paducah Gaseous Diffusion Plant, Paducah, KY (DOE/LX/07-1294&D2)*. Several of EPA's concerns have not been adequately addressed. However, EPA expects based on DOE feedback that additional details regarding issues such as technical viability metrics, sampling requirements and design, and the completeness of the temperature data will be evaluated further and resolved in the upcoming design meetings and the design document. Therefore, EPA approves the subject document.

On a separate matter, as discussed in the February 6, 2014 comment resolution meeting, EPA recommends modification to the path forward for data evaluation and full scale steam enhanced extraction (SEE) design portion of the treatability study. Currently, DOE will have a separate procurement for bids among qualified vendors to implement the treatability study once the design is complete. The purpose of a second procurement is to increase competition among the qualified vendors. The vendor that implements the pilot design will also evaluate and model the pilot data, and provide a cost estimate for full scale SEE implementation in the Regional Gravel Aquifer. As discussed previously, EPA strongly recommends that DOE separate the data evaluation from the pilot implementation, and allow the qualified SEE vendors to submit bids for the full scale design and implementation that is based on pilot data. Each vendor would evaluate and model the SEE pilot data and design the most technically effective full scale implementation. This approach will allow more competition for full scale design, which will allow DOE a better

opportunity to select a technically implementable design that is cost effective. Your consideration of this approach is appreciated.

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

Sincerely,

Jennifer Tufts  
Remedial Project Manager  
Federal Facilities Branch

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