



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

February 25, 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: CERCLA Five Year Review Addendum: EPA status request for the DOE Vapor Intrusion Study at the C-400 Maintenance Building at the Paducah Gaseous Diffusion Plant, Paducah, KY, EPA ID KY8890008982, McCracken County**

Dear Ms. Duncan,

In correspondence dated September 30, 2014, EPA Region 4 issued a "protectiveness deferred" determination for the C-400 Maintenance Building CERCLA response action. This determination was an outcome of EPA's review of the Department of Energy's (DOE) *Five Year Review (FYR) for Remedial Actions at the Paducah Gaseous Diffusion Plant (DOE/LS/07-1289&D2/R1; May 2014)*. In the 2014 correspondence, EPA stated:

*"The protectiveness determination of the remedy for the C-400 Building cannot be made at this time until further information is obtained. Further information will be obtained by taking the following actions: a vapor intrusion study will be conducted that is consistent with EPA protocol and based on current toxicity values and risk assessment methodology. It is expected that these actions will be completed 1.5 years from the signature date of this letter, at which time a protectiveness determination will be made."*

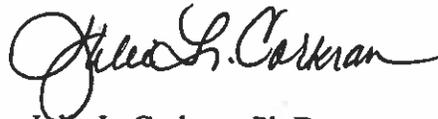
EPA's letter further noted that the vapor intrusion (VI) study was necessary to determine whether this potential pathway of exposure to vapors from TCE in the underlying groundwater *"presents an unacceptable risk to human health, such as the workers that work in and around the C-400 Building."*

The most recent tri-party meeting to scope the Conceptual Site Model (CSM) and Work Plan for the VI Study was held on January 22, 2016. At the close of that meeting, it was EPA's understanding that the following documentation was being prepared by DOE for EPA and KDEP review and approval: (i) a revised CSM, (ii) a Work Plan (Sampling and Analysis Plan and Quality Assurance Project Plan), (iii) a VI Preliminary Analysis of available historical data, and (iv) a Pre-emptive Mitigation proposal.

EPA is concerned that DOE is not currently positioned to meet the March 31, 2016, deadline established for submitting the PGPD *Five year Review Addendum* to the regulatory agencies. Therefore, the purpose of this letter is to request that DOE submit a draft C-400 VI Study Work Plan incorporating available historical data, including a revised Conceptual Site Model\*, to EPA and KY for review and comment as soon as possible. As discussed during multiple tri-party scoping discussions, the Work Plan should be structured to assess the vapor intrusion pathway from the TCE contaminated groundwater (a subsurface vapor source) to indoor air at the C-400 Building. The EPA request for the draft Work Plan is consistent with the Section XXX, *Five Year Review*, of the PGDP Federal Facility Agreement and also with how the FFA Parties conducted a Vapor Intrusion Screening Study in the Water Policy Area in 2015 for reporting in the forthcoming *Five Year Review Addendum*. Please note that any data collected by the DOE absent a Work Plan approved by EPA and KY may not prove sufficient to support a revised protectiveness determination for the C-400 Building response action.

If you have any questions about this correspondence, or if DOE desires to discuss the need for a deadline extension, please do not hesitate to contact me at (404) 562-8547 or via electronic mail at [corkran.julie@epa.gov](mailto:corkran.julie@epa.gov).

Sincerely,



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

\*The existence of a C-400 tunnel was not included in the draft CSM that was provided (on January 15<sup>th</sup>) in support of the January 22<sup>nd</sup> scoping meeting, but was shared with EPA representatives during our site visit to PGDP on February 9-10<sup>th</sup> of this year. An underground tunnel may serve as a preferential pathway for migration of TCE vapors into the C-400 building. Therefore, the revised CSM should include, and consider the implications of, the presence of the tunnel on the vapor intrusion pathway at the C-400 Building.

Electronic copy with Enclosure:

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