



Department of Energy

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JAN 24 2011

Mr. Wm. Turpin Ballard, Remedial Project Manager
U.S. Environmental Protection Agency, Region 4
Federal Facilities Branch
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Atlanta, Georgia 30303

PPPO-02-1057481-11F

Mr. Edward Winner, FFA Manager
Kentucky Department for Environmental Protection
Division of Waste Management
200 Fair Oaks Lane, 2nd Floor
Frankfort, Kentucky 40601

Dear Mr. Ballard and Mr. Winner:

MEMORANDUM OF AGREEMENT FOR THE WASTE DISPOSAL ALTERNATIVES PROJECT AT THE PADUCAH GASEOUS DIFFUSION PLANT

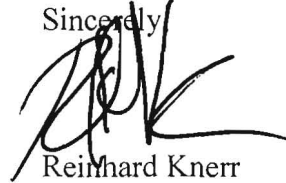
References:

1. Letter from A. Webb to R. Knerr, "Notice of Informal Dispute for the Work Plan for the CERCLA Waste Disposal Alternatives Evaluation Remedial Investigation/Feasibility Study (DOE/LX/07-0099&D2/R1)," dated October 28, 2010
2. Letter from T. Ballard to R. Knerr, "Withdrawal of EPA Approval of the Work Plan for CERCLA Waste Disposal Alternative Evaluation RI/FS at the Paducah Gaseous Diffusion Plant (PGDP) (DOE/LX/07-0099&D2) After Review of the Work Plan for CERCLA Waste Disposal Alternative Evaluation RI/FS at the Paducah Gaseous Diffusion Plant (PGDP) (DOE/LX/07-0099&D2/R1)," dated October 28, 2010

Please find enclosed the *Memorandum of Agreement for Resolution of Informal Dispute for the Waste Disposal Alternatives Evaluation Remedial Investigation/Feasibility Study Work Plan at the Paducah Gaseous Diffusion Plant, Paducah Kentucky (DOE/LX/07-0099&D2/R1)*, dated January 20, 2011. The U.S. Department of Energy will work with the Low-Level Waste Disposal Facility Federal Review Group and initiate the workshop(s) discussed in the Memorandum of Agreement.

If you have any questions or require additional information, please contact Jeff Snook at (270) 441-6814.

Sincerely



Reinhard Knerr
Paducah Site Lead
Portsmouth/Paducah Project Office

Enclosure:

FFA Memorandum of Agreement

cc w/enclosure:

DMC/Kevil

e-copy w/enclosure:

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**MEMORANDUM OF AGREEMENT FOR RESOLUTION
of Informal Dispute for the Waste Disposal Alternatives Evaluation Remedial
Investigation/Feasibility Study Work Plan at the Paducah Gaseous Diffusion Plant,
Paducah, Kentucky
(DOE/LX/07-0099&D2/R1)**

The undersigned agree that the Informal Dispute invoked by the Kentucky Department of Environmental Protection (KDEP) in the letter to the U.S. Department of Energy (DOE), dated October 28, 2010 is hereby resolved and includes the conditions below. This agreement also resolves the issues raised by the United States Environmental Protection Agency (EPA) in its letter to DOE dated October 28, 2010.

- 1) DOE shall withdraw the *D2/R1 Work Plan for the CERCLA Waste Disposition Alternatives Evaluation Remedial Investigation/Feasibility Study* (Work Plan). Withdrawal of the Work Plan shall not be deemed a failure to submit the document in a timely manner.
- 2) The EPA, KDEP, and DOE (Parties) agree that Additional Work pursuant to Section XIX. of the Paducah Federal Facility Agreement (FFA) is necessary for modeling of the engineered barrier performance. While initial work may focus on synthetic liner degradation, compacted clay barrier permeability and target risk and hazard values, the Parties agree that all aspects of performance modeling may be included in the Additional Work as appropriate. As a result, the schedules set forth below are targets and not timetables and deadlines under the FFA to give the Parties flexibility in achieving the goals set forth in this agreement.
- 3) For the evaluation of the on-site waste disposal alternative, one of the goals of the performance modeling is to develop the preliminary waste acceptance criteria (PWAC) that will differ from the final WAC due only to considerations that could not have been known, such as site selection, cell design, and waste form and placement.
- 4) In February 2011, DOE will, with the support of the Low-Level Waste Disposal Facility Federal Review Group (LFRG), target the initiation of workshop(s) to "scope the model" to be used to develop the PWAC. The purpose of these workshop(s) is to provide a forum for open discourse between subject matter experts, DOE, USEPA, and Kentucky in order to reach a common understanding of the modeling efforts and modeling inputs. While all inputs will be discussed, the appropriate design life of the engineered barrier is a significant input and may therefore be the subject of an individual workshop. The Parties agree that changes to the site conceptual model or to exposure (risk) scenarios are not warranted for the submission of the Work Plan.

- 5) DOE will host at least one workshop with Subject Matter Experts to discuss engineered barrier performance and degradation, application of bench studies involving engineered barriers to field conditions, and available data from existing disposal facilities. KDEP and EPA will ensure that their technical-support SMEs are available to participate in the workshops. The number and length of the workshops will be dependent on SME and the Parties' availability; however, the Parties will target the end of March 2011 to complete the workshops. The goal of these workshops is to reach consensus among the Parties by March 31, 2011 on modeling parameters for the engineered barrier.
- 6) DOE will conduct performance modeling, based on the input being provided during the workshop discussions. Kentucky's SMEs will perform the same modeling in parallel with DOE. DOE will provide all necessary model inputs to Kentucky's modelers. The parties will share modeling results. The parties intend to resolve differences by a target date of May 15, 2011.
- 7) DOE will target re-submittal of the *D2/R1 Work Plan* to the KDEP and EPA by June 1, 2011. The Parties agree that the only changes to the resubmitted Work Plan should be to Appendix C and the incorporation of responses to comments already received from KY and USEPA on the withdrawn *D2/R1 Work Plan*. The Work Plan will be submitted as a D2 document subject to the review, approval, and dispute provisions of the FFA. The Parties expect that the modeling parameters agreed to as a result of this dispute resolution will be included in the Work Plan and the results of the modeling will be included in the RI/FS Report.
- 8) DOE will target submittal of the *D1 Waste Disposal Options Remedial Investigation/Feasibility Study Report* (RI/FS Report) to the KDEP and EPA by July 1, 2011. Although there may be a number of sensitivity analyses that are completed during the modeling of the engineered performance barriers, the Parties agree that there will be a single Preliminary Waste Acceptance Criteria in the RI/FS Report.
- 9) In the event consensus on the modeling parameters cannot be reach by the Parties, any of the Parties may invoke dispute resolution.

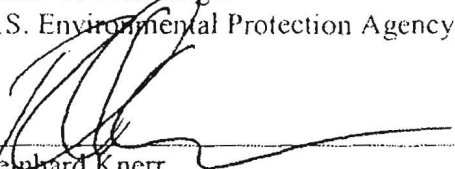
Subsequent to submittal of the RI/FS Report to EPA and KDEP, it is the expectation of the FFA parties to establish enforceable milestone dates for the CERCLA Waste Disposal Options Proposed Plan and Record of Decision. Upon establishment of these dates, the Parties will modify Appendix C (if current year milestones are established) and Appendix G of the FFA to incorporate the agreed to due dates in accordance with Section XXXIX of the FFA.

Nothing in the Memorandum of Agreement modifies the FFA Conditions, for example related to review and comment on Primary Documents, Extension Requests, and Dispute Resolution, except as specifically stated above. In addition, nothing in this Memorandum of Agreement shall prevent the Parties from exercising their rights under the FFA related to the aforementioned project.



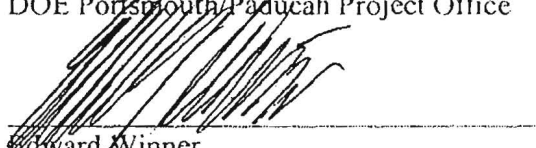
Turpin Ballard
PGDP FFA Manager
U.S. Environmental Protection Agency, Region 4

Date 1/20/11



Reinhard Knerr
PGDP FFA Manager, Paducah Site Lead
DOE Portsmouth/Paducah Project Office

Date 1/20/11



Edward Winner
PGDP FFA Manager
Division of Waste Management
Kentucky Department for Environmental Protection

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