MEMORANDUM OF AGREEMENT FOR RESOLUTION OF INFORMAL DISPUTE
Concerning U.S. Environmental Protection Agency Conditional Concurrence on the *Remedial Action Work Plan for SWMU 211-A Enhanced In Situ Bioremediation for Volatile Organic Compound Sources to the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky,* DOE/LX/07-2443&D2

Background

In accordance with Section XX.I, Finalization of Documents, of the *Federal Facility Agreement for the Paducah Gaseous Diffusion Plant*, DOE/OR/07-1707 (FFA), the U.S. Environmental Protection Agency, Region 4 (EPA), in a letter to the U.S. Department of Energy (DOE), dated May 26, 2020, provided conditional concurrence on the *Remedial Action Work Plan for SWMU 211-A Enhanced In Situ Bioremediation for Volatile Organic Compound Sources to the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky,* DOE/LX/07-2443&D2 (D2 RAWP). In EPA's conditional concurrence letter, EPA identified twelve conditions. The Kentucky Department for Environmental Protection (KDEP) issued a letter of concurrence on the D2 RAWP on May 27, 2020.

Pursuant to Section XXV.A, Informal Dispute, of the Paducah Gaseous Diffusion Plant (PGDP) FFA, DOE invoked informal dispute resolution on June 26, 2020, regarding five of the total twelve EPA conditions associated with EPA's conditional concurrence [General Condition (GC)-3, GC-6, Specific Comment (SC)-11, SC-12, and SC-18]. Seven of the conditions were accepted by DOE following e-mail correspondence received from EPA and KDEP on June 8, 2020, confirming the June 5, 2020, proposed responses and redline changes to the D2 RAWP were found by EPA and KDEP to be acceptable.

The FFA parties, in good faith, conducted a period of informal dispute under Section XXV.A, Informal Dispute, and reached a mutually acceptable resolution on the disputed conditions.

Resolution

The undersigned agree that the Informal Dispute on the D2 RAWP for SWMU 211-A invoked by DOE hereby is resolved. The terms of the dispute resolution agreement (within this Memorandum of Agreement) are set forth below.

1. DOE agrees to remove the two references to "Area of Contamination." The planned project waste management activities do not require a designated area of contamination (AOC) for management of contaminated media (soils and groundwater) generated during implementation of the in-situ treatment. For future projects at the Paducah Site, DOE reserves its ability to utilize the Area of Contamination concept consistent with EPA written guidance as required by the Paducah Gaseous Diffusion Plant (PGDP) FFA. DOE also reserves its ability to request a modification to the RAWP for SWMU 211-A (subject to EPA and KDEP approval as an FFA primary document) in the event an AOC designation becomes necessary for the project.

2. DOE agrees to remove the following sentence in Section 11.4.4, Discharge of Collected Storm Water and Treated Groundwater:

   "The sampling will provide the Tc-99 activity to insure wastewater, when added to the outfall flow, will not exceed the Table II (902 KAR 100:019 § 44) effluent limits at the applicable outfall(s) for the SWMU 211-A project, or when combined with any other Paducah Site CERCLA projects."

3. The FFA Parties agree that effluent limits in Table II of 902 KAR 100:019 § 44 regulation and DOE Order 5400.5 (replaced with DOE Order 458.1) Derived Concentration Standards (DCS) identified in the Southwest Groundwater Plume ROD ARARs table are not necessary for implementation of the remedial action for SWMU 211-A. The wastewater generated will be primarily well development, decontamination water, and wastewater associated with sampling activities and will be managed in accordance with site waste management plan (Four Rivers Nuclear Partnership, LLC Paducah Deactivation and Remediation Project Waste Management Plan, CP2-WM-0001) as specified in Section 12 of the Remedial Action Work Plan (RAWP). In order to meet the "no longer contains" determination agreed upon by the FFA parties and meet RCRA LDR treatment standards, collected wastewater containing TCE (and other VOCs) will be treated at a wastewater treatment unit located at the PGDP and ultimately discharged through a KPDES outfall unless transferred off the PGDP facility for disposition in accordance with applicable requirements.

   The agreements documented in this MOA are project-specific decisions for this remedial action and are not binding on DOE, EPA or KDEP for any future management of CERCLA wastewaters at PGDP.

4. The revised *Remedial Action Work Plan for SWMU 211-A Enhanced In Situ Bioremediation for Volatile Organic Compound Sources to the Southwest Groundwater Plume at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky,* (DOE/LX/07-2443&D2/R1) incorporating the terms and conditions of this dispute resolution agreement, along with the agreed upon revisions for the non-disputed condition resolution, will be submitted to EPA and KDEP within 60 days of the date of this last FFA party signature on this agreement.

5. The FFA parties agree that EPA and KDEP will review and provide letters of written approval within 30 calendar days of receipt of DOE's submittal of the D2/R1 RAWP provided that the revised D2/R1 RAWP meets the aforementioned terms and requirements of this Memorandum of Agreement (MOA).

6. Consistent with the Section XXIX, Extensions, of the FFA, the FFA parties agree that the submittal date for the D1 Interim Remedial Action Completion Report has been affected by the dispute and the FFA parties will modify Appendix C and Appendix G of the FFA to incorporate the revised date of March 30, 2023, for the D1 Interim Remedial Action Completion Report in accordance with Section XXXIX of the FFA. All FFA parties agree that the modification of the submittal date for the D1 Interim Remedial Action Completion Report is a minor modification to the FFA.

Other Terms and Conditions

Pursuant to Section XXV.B.10 of the PGDP FFA, resolution of this dispute constitutes a final resolution of the dispute, which resolution is incorporated into and becomes a term and condition of the PGDP FFA. Nothing in this MOA modifies other FFA Terms and Conditions or other Comprehensive Environmental Response, Compensation and Liability Act projects at Paducah Gaseous Diffusion Plant, except as specifically stated above. To the extent authorized under the PGDP FFA, nothing in this MOA shall prevent any of the Parties from disputing any other matters related to the aforementioned projects.

VICTOR WEEKS Digitally signed by VICTOR WEEKS
Date: 2021.09.07 11:00:33 -04'00'

Victor Weeks
Federal Facility Agreement Manager
U.S. Environmental Protection Agency, Region 4

Date

Brian D. Begley Digitally signed by Brian D. Begley
Date: 2021.09.07 10:38:42-04'00'

Brian Begley
Federal Facility Agreement Manager
Division of Waste Management
Kentucky Department for Environmental Protection

Date

Tracey L. Duncan Digitally signed by Tracey L. Duncan
Date: 2021.09.07 09:12:22 -05'00'

Tracey Duncan
Federal Facility Agreement Manager U.S. Department of Energy
Portsmouth/Paducah Project Office

Date