



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

July 30, 2018

Joel Bradburne, Site Lead
Portsmouth/Paducah Project Office
U.S. Department of Energy
Post Office Box 700
Piketon, Ohio 45661

USDOE-PORTS
General Correspondence
Remedial Response
Pike County
ID# 466000865

Dear Mr. Bradburne,

Please find attached *Director's Final Findings and Orders for CERCLA Actions to Restore Natural Resources*, issued today.

Also, Ohio EPA will send a letter concurring with US DOE's March 29, 2018 revisions to the Remedial Design and Remedial Action (RD/RA) Work Plan. The RD/RA Work Plan identifies DOE's strategy for obtaining contaminated fill for the OSWDF from the following units: X-701B Area, X-749/120 Area, 7-Unit Area, 5-Unit Area, X-749 Landfill, X-749A Landfill, X-749B (Peter Kiewit) Landfill, and X-231A Oil Biodegradation Plot. Ohio EPA understands that this RD/RA Work Plan will result in the excavation of landfills and plumes within Perimeter Loop Road, with the exception of X-740 and X-231B Oil Biodegradation Plot, which US DOE will excavate pursuant to the present Orders attached hereto. Together, DOE's compliance with the attached Orders and the Revised RD/RA Work Plan will accomplish US DOE's excavation of landfills and plumes within Perimeter Loop Road

If you have any comments or questions, please do not hesitate to contact me at (614) 644-2924.

Sincerely,

A handwritten signature in blue ink, appearing to read "J. Sferra", is written over a faint, larger version of the signature.

James Sferra, Assistant Chief
Division of Environmental Response and Revitalization

**BEFORE THE
OHIO ENVIRONMENTAL PROTECTION AGENCY**

In the Matter of:

**United States Department of
Energy
Portsmouth/Paducah Project Office
1017 Majestic Drive, Suite 200
Lexington, Kentucky 40513**

Respondent

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**Director's Final
Findings and Orders
For CERCLA Actions
To Restore Natural
Resources**

PREAMBLE

I certify this to be a true and accurate copy of the official documents as filed in the records of the Ohio Environmental Protection Agency.

It is hereby agreed to by the Parties as follows:

By: Jerry Bassiter Date: 7/30/18

I. JURISDICTION

1. These Director's Final Findings and Orders ("Orders") are issued to the United States Department of Energy ("Respondent" or "US DOE") pursuant to the authority vested in the Director of Ohio EPA ("Director") under Ohio Revised Code ("ORC") § 3745.01, 42 United States Code ("USC") §107(f)(1), and the June 30, 2011 designation by the Governor of Ohio of the Director as Natural Resource Trustee pursuant to § 107(f)(2)(B) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, ("CERCLA"), and § 1006(b)(3) of the Oil Pollution Act of 1990, as amended ("OPA"), 33 USC § 2706(b)(3).

II. PARTIES BOUND

2. These Orders shall apply to and be binding upon Respondent and Respondent's successors in interest liable under Ohio or federal law.

3. No change in ownership of the Site owned by Respondent, including, but not limited to, any transfer of assets or real or personal property, shall in any way alter Respondent's obligations under these Orders.

4. Respondent enters these Orders pursuant to Section 104 of CERCLA, 42 USC § 9604, Executive Order 12580, as amended, and the Atomic Energy Act of 1954, as amended, 42 USC § 2011, et seq.

5. Respondent shall provide a copy of these Orders to all contractors, subcontractors, laboratories and consultants retained to conduct any portion of the Work performed pursuant to these Orders. Respondent shall ensure that all contractors, subcontractors, laboratories and consultants retained to perform the Work pursuant to these Orders also comply with the applicable provisions of these Orders. With regard to the activities undertaken pursuant to these Orders, each contractor and subcontractor shall be deemed to be in a contractual relationship with Respondent within the meaning of § 107(b)(3) of CERCLA, 42 U.S.C. § 9607(b)(3).

III. DEFINITIONS

6. Unless otherwise expressly provided herein, all terms used in these Orders or in any appendices shall have the same meaning as defined in ORC Chapters 3734 and 6111, 42 USC § 9601 et seq, and the rules promulgated thereunder. Whenever the terms listed below are used in these Orders or in any appendices, attached hereto and incorporated herein, the following definitions shall apply:

- a. "CERCLA" means the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 USC § 9601 et seq.
- b. "Day" means a calendar day unless expressly stated to be a business day. "Business day" shall mean a day other than a Saturday, Sunday, or state holiday. In computing any period of time under these Orders, where the last day would fall on a Saturday, Sunday, or state holiday, the period shall run until the close of the next business day.
- c. "Facility" means the Portsmouth Gaseous Diffusion Plant, and the buildings appurtenant thereto on US DOE property located in Pike County, Ohio.
- d. "NCP" means the National Oil and Hazardous Substances Pollution Contingency Plan, codified at 40 C.F.R. Part 300 (1990), as amended.
- e. "Natural Resources" shall have the meaning as set forth in § 101(16) of CERCLA, 42 USC § 9601(16).
- f. "Natural Resource Damages" or "NRD" means compensation for injury to, destruction of, or a loss of, Natural Resources resulting from or relating to the

release of hazardous substances into, or which have migrated into, the Site.

- g. "OSDC" means the onsite disposal cell to be constructed pursuant to the *Record of Decision for the Site-wide Waste Disposition Evaluation Project at the Portsmouth Gaseous Diffusion Plant* (DOE/PPPO/03-05138.D2) ("WD ROD") issued by Respondent in June 2015 for the disposal of waste materials from the Site. The OSDC is also referred to as the On-Site Waste Disposal Facility ("OSWDF") in post-ROD documents.
- h. "Ohio EPA" means the Ohio Environmental Protection Agency and its designated representatives.
- i. "Paragraph" means a portion of these Orders identified by an Arabic numeral or an uppercase or lowercase letter.
- j. "Parties" means Respondent and the State of Ohio, by and through Ohio EPA.
- k. "Release" or "release" herein is defined at CERCLA §101(22).
- l. "Remedial Design and Remedial Action Work Plan" ("RD/RA Work Plan") means the document(s) of the same name drafted by the Respondent, with Ohio EPA concurrence, pursuant to the Performance of the Work by Respondent Section of the April 13, 2010, Ohio EPA issued administrative Orders, with modifications issued on September 12, 2011 and July 16, 2012. These Orders authorized Respondent to dispose of decontamination and decommissioning ("D&D") waste into the OSDC.
- m. "Respondent" means the United States Department of Energy and its officers, agents, and employees.
- n. "Section" means a portion of these Orders identified by a Roman numeral.
- o. "Site" means all property and buildings owned by the United States government located in Pike County, Ohio, approximately 20 miles north of downtown Portsmouth, Ohio where the treatment, storage, and/or disposal of hazardous substances, as defined in 42 USC §9601(14), and/or the discharge to waters of the state of hazardous substances may have occurred, including any other area owned by US DOE where such hazardous substances have migrated or threaten to migrate.
- p. "State" means the State of Ohio.
- q. "Transferee" means any future owner of any interest in the Site, including but not

limited to, owners of an interest in fee simple, mortgagees, easement holders, and or lessees.

- r. "WD ROD" means the *Record of Decision for the Site-wide Waste Disposition Evaluation Project at the Portsmouth Gaseous Diffusion Plant* (DOE/PPPO/03-05138.D2) issued by Respondent in June 2015 for the disposal of waste materials from the Site.
- s. "Work" means all activities and obligations that Respondent is required to perform under these Orders as specifically described below in Section VI.

IV. FINDINGS

The Director of Ohio EPA has determined the following findings:

- 7. The Site is located in Pike County, Ohio, approximately 20 miles north of downtown Portsmouth, Ohio. The Site is owned by the Respondent US DOE and includes a Facility that historically was used for the separation of uranium isotopes via gaseous diffusion. Facility operations are located on approximately 1,200 acres, which are owned by Respondent.
- 8. The Facility is an industrial Facility owned by the US DOE that was operated by various contractors from 1954 until present, enriching uranium for use in commercial reactors, by the U.S. Navy in power reactors, and for other purposes. From July 1, 1993 until 2011, the Facility was leased to the United States Enrichment Corporation ("USEC"). Pursuant to Section 1403(d) of the Energy Policy Act of 1992, 106 Stat, 2935, Public Law No. 102-486 (October 24, 1992), US DOE is responsible for any costs of decontamination and decommissioning, response action activities, or corrective actions with respect to conditions existing before the July 1, 1993, date that Facility operations were assumed by USEC.
- 9. The principal hazardous substances and hazardous materials generated, released, and/or currently being released from the Site include but are not limited to polychlorinated biphenyls, asbestos, radionuclides, chlorinated solvents, hydrocarbons, lead, and mercury.
- 10. On August 31, 1989, US DOE entered into a Consent Decree with Ohio EPA to address conditions at the Site. The aforementioned Consent Decree was filed in Civil Action Number C2-89-732, in the United States District Court for the Southern District of Ohio, Eastern Division ("Ohio Consent Decree").

11. On September 27, 1989, US EPA and US DOE entered into an Administrative Order on Consent, US EPA Docket Number V-W-90R-03, for the performance of response action activities at the Site.
12. In August 10, 1994, the September 27, 1989, Administrative Order by Consent was amended to, among other things, include Ohio as a party to allow Ohio to recover its oversight costs from US DOE.
13. On August 11, 1997, the August 10, 1994, Administrative Order by Consent was amended to streamline remediation of the Site and to establish Ohio EPA as the regulator overseeing day-to-day remediation activities as provided in the September 27, 1989, Administrative Order by Consent ("Three Party Order").
14. The corrective action/response action process being conducted at the Site employs a quadrant approach in which the Site is divided into four quadrants for the purposes of organizing and facilitating the corrective action/response action process. The quadrants are based approximately on the direction of groundwater flow at the Site.
15. The Ohio Consent Decree required US DOE to, among other tasks, complete a RCRA Facility Investigation (RFI) for each of the quadrants established for the Site. The RFI evaluated the risk and extent of contamination at the Site. Ohio EPA approved the RFI reports for each quadrant in 1997 (Quadrants I, II, III, and IV).
16. On March 17, 1999, Ohio EPA issued administrative orders to Respondent for the integration of groundwater monitoring, surveillance, and maintenance programs that had previously been addressed pursuant to RCRA and/or Ohio's solid waste laws and rules ("Integration Orders"). This order waived certain administrative requirements in order to allow Respondent to streamline the oversight of the various units at the Site.
17. In May 2001, the gaseous diffusion portion of the Facility ended active operations.
18. The Ohio Consent Decree also required US DOE to complete a Corrective Measures Study (CMS) for each quadrant or unit within the quadrant. The purpose of the CMS was to identify potential remedies for the Site for Ohio EPA's consideration. Ohio EPA approved the CMSs for Quadrant I in 2000, Quadrant II in 2001, Quadrant III in 1998, and Quadrant IV in 1999.
19. Ohio EPA approved the Deferred Unit RFI/CMS Work Plan on June 26, 2015. DOE has completed the investigation, and the Deferred Unit RFI/CMS Report was submitted to Ohio EPA on September 27, 2017. Ohio EPA will issue a Decision Document for the Deferred Units, which will include the 7-Unit Plume.

20. Pursuant the Ohio Consent Decree, Ohio EPA issued Decision Documents for multiple solid waste management units on the Site. The Decision Documents were issued as follows:

Decision Document	Month/Year issued
X-611A	June 1996
X-749B Peter Kiewit Landfill	May 1997
Quadrant III	May 1999
X-734 Landfill	October 1999
Quadrant IV	September 2000
Quadrant I	March 2001
X-701B	December 2003

The Decision Documents outline Ohio EPA's selected remedies for the above-referenced quadrants or units within the quadrants of the Site.

21. Currently, the selected remedies are being or have been implemented and ground water monitoring is continuing.

22. On April 13, 2010, Ohio EPA issued administrative orders ("D&D Orders"), with modifications issued on September 12, 2011 and July 16, 2012, to Respondent for removal action and remedial investigation and feasibility study and remedial design and remedial action. In June 2015 Respondent issued the WD ROD that selected the waste disposition remedy including the OSDC. The D&D Orders and the WD ROD authorized Respondent to dispose of D&D waste into the OSDC.

23. Section 12.2 of the WD ROD indicated that the OSDC will require substantial quantities of fill material and that such material may be obtained from the areas referenced below in Paragraphs 25, 30 and 32.

24. On February 13, 2017, the Three Party Order was terminated by agreement of US EPA, US DOE, and Ohio EPA.
25. On November 13, 2017, US DOE submitted a comprehensive remedial design/remedial action workplans for the OSDC. That workplan was later revised on November 21, 2017, and March 29, 2018 (final revision referred to herein as "RD/RA Workplan"). The RD/RA Workplan identifies specific excavation projects which US DOE will complete pursuant the D&D Orders. Those specific excavations include all landfills and plumes within Perimeter Road that are not the subject of these Orders, namely: X-701B Area, X-749/120 Area, X-749 Landfill, 7-Unit Area, 5-Unit Area, X-749A Landfill, X-749B (Peter Kiewit) Landfill, and X-231A Oil Biodegradation Plot.
26. The Site, an area where hazardous substances have been disposed and/or released, is a "facility" as defined in 42 USC §9601(9).
27. Respondent is a "person" as defined in 42 USC §9601(21) and ORC § 1.59(C).
28. There were and are "releases", as defined in 42 USC §9601(22), at the Site that caused impacts to "natural resources", as defined in 42 USC §9601(16). Such releases were to the "environment", as defined in 42 USC §9601(8) and "waters of the state" as defined in ORC § 6111.01(H).
29. Pursuant to 42 USC §9607(f)(2)(B), and as clarified by a letter dated June 30, 2011, the Director of Ohio EPA is a designated official who may act on behalf of the State of Ohio as trustee for natural resources.
30. The X-740 groundwater plume is located in the western portion of the Site that is contaminated with volatile organic compounds. The X-740 groundwater plume was evaluated in the Quadrant III CMS and a remedial decision included in the Quadrant III Decision Document. Multiple remedial actions have been undertaken and a final remedial decision involving Enhanced Anaerobic Bioremediation will be included in the Deferred Units Preferred Plan and Decision Document.
31. Excavation of X-740 and related media is a designated project to resolve impacts to natural resources at the Site. The excavation is a source removal of 14,000 cubic yards of contaminated media based on previous assessments of conditions existing at X-740 and is designed to aid in the efficient restoration of natural resources at X-740.
32. X-231B is a 190,000 cubic yard former Oil Biodegradation Plot located in the southern portion of the Site. Over an eight-year period, 2,000 to 3,500 gallons per year of waste oils were disposed at the X-231B site. The X-231B Oil Biodegradation Plot was evaluated in the Quadrant I CMS and a remedial decision included in the Quadrant I

Decision Document. In October 2001, this hazardous waste management unit underwent closure with the installation of a cap. This unit is an identified contributing source to a volatile organic compounds groundwater contaminant plume.

33. Excavation of X-231B and related media is a designated project to resolve impacts to natural resources at the Site. The excavation of X-231B is based on previous assessments of conditions existing at X-231B and is designed to aid in the efficient restoration of natural resources at X-231B.

34. The natural resource restoration achieved through the excavations facilitates returning the Site to a condition allowing for the community's sought end state of commercial reuse.

V. GENERAL PROVISIONS

35. Objective of the Parties. The objectives of the Parties in entering these Orders are to resolve all impacts to natural resources at the Site by the State for NRD at the Site through specific natural resource restoration actions by the Respondent identified below in Paragraph 38, and to enhance ongoing remediation efforts at the Site in a manner that provides restorative benefits to the natural resources injured at the Site from historic operations. As detailed more fully in Section XVII, the Parties agree that completion by the Respondent of the specific projects identified below in Paragraph 38 represents sufficient natural resource restoration so that the Ohio EPA Director commits not to refer a NRD premised action to the Ohio Attorney General. The parties have also agreed that excavation projects undertaken by US DOE to generate fill material for the OSDC from other contaminated areas including closed landfills and existing groundwater plumes at the Site will also be conducted under the authority provided by the WD ROD. RD/RA Work Plans will support any additional excavation projects and require approval by Ohio EPA consistent with Paragraph 25 of the Performance of the Work by Respondent Section of the April 13, 2010, Ohio EPA issued administrative Orders, with modifications issued on September 12, 2011 and July 16, 2012. These RD/RA Work Plans may be tailored to focus on specific excavation projects by mutual agreement of Respondent and Ohio EPA.

36. Commitment of Respondent. Respondent agrees to undertake natural resource restoration projects involving the excavation of contaminated media at the X-740 plume and X-231B former Oil Biodegradation Plot. Respondent commits to the source removal of 14,000 cubic yards of media from the X-740 plume and removal of 190,000 cubic yards constituting X-231B the former Oil Biodegradation Plot. RD/RA Work Plans will be submitted to Ohio EPA providing project details for both natural resource

restoration excavation projects and incorporated by reference into these Orders upon Ohio EPA approval. Respondent's commitment to undertake these natural resource restoration projects involving the excavation of contaminated media from the X-740 plume and the X-231B former Oil Biodegradation Plot is contingent on the construction and operation of the OSDC. If the OSDC is not utilized as a waste management measure at the Portsmouth site, Respondent and Ohio EPA agree to meet to identify other natural resource restoration projects to satisfy the State's NRD claims.

37. Compliance With Law. All activities undertaken by Respondent pursuant to these Orders shall be performed in accordance with the substantive requirements of all applicable federal, state and local laws and regulations as described in the WD ROD applicable or relevant and appropriate requirements ("ARARs").

VI. PERFORMANCE OF WORK

38. Excavations of X-740 and X-231B. Pursuant to the Commitment of Respondent found above at Paragraph 36, Respondent shall remove 14,000 cubic yards of media from the X-740 plume and 190,000 cubic yards of media from the X-231B former Oil Biodegradation Plot, and may use such excavated media as fill material for future operation of the OSDC. Both X-740 and X-231B currently contain or may contain environmental contaminants that meet applicable Waste Acceptance Criteria ("WAC") and could be beneficially placed within the OSDC.

39. Resolution of Impacts to Natural Resources. Respondent's performance of the work described in Paragraph 38 shall resolve the impacts to the State's natural resources at the Site. The RD/RA Work Plans will describe more specifically the projects for obtaining the fill for placement in the OSDC, and upon excavation of the fill volumes contained above in Paragraph 38, these Orders may be terminated in settlement of the State's known NRD claims. Respondent is permitted to take additional fill volume from any area referenced in Paragraph 35 through the authority provided under the WD ROD.

40. Management of Waste Materials. During this process, Respondent may encounter waste materials interred in X-740 and X-231B and any other additional areas to be excavated under Paragraph 35. Such waste shall be managed according to the substantive requirements of all applicable laws and regulations, and will be placed in the OSDC, assuming it meets the WAC under the WD ROD.

41. Residual Soils. The D&D Orders and Process Building ROD provides for the removal and management of residual soils in the OSDC. Residual soils are described in Paragraph 5(e)(3) and 5(e)(4)(ii) of the D&D Orders as any residual soil which adheres

to the buildings, equipment, structures, piping, concrete foundations, and building contents, and any residual soil which must otherwise be excavated as an integral part of a removal or remedial action pursuant to the D&D Orders.

42. Post-Excavation Treatment. After excavating the amount of contaminated media required under these Orders, Respondent shall render areas X-740 and X-231B, and any other additional areas to be excavated under Paragraph 35, in a condition protective of human health and the environment.

VII. ACCESS

43. Ohio EPA and its contractors shall have access at all times to the Site and any other property to which access is required for the implementation of these Orders, to the extent access to the property is controlled by Respondent. Access under these Orders shall be for the purposes of conducting any activity related to these Orders including but not limited to the following:

- a. Monitoring the Work;
- b. Inspecting and copying records, operating logs, contracts, and/or other documents related to the implementation of these Orders;
- c. Conducting investigations related to the implementation of these Orders; and
- d. Verifying any information submitted to Ohio EPA.

44. Notwithstanding any provision of these Orders, the State of Ohio retains all of its access rights and authorities, including enforcement authorities related thereto, under any applicable statute or regulation including but not limited to ORC §§ 3734.20 and 6111.05.

VIII. DESIGNATED SITE COORDINATORS

45. Within seven (7) days of the effective date of these Orders, the Respondent shall notify Ohio EPA, in writing, of the name, address and telephone number of its designated Site Coordinator and Alternate Site Coordinator. If a designated Site Coordinator or Alternate Site Coordinator is changed, the identity of the successor will be given to the other Party at least seven (7) days before the changes occur, unless impracticable, but in no event later than the actual day the change is made.

46. To the maximum extent practicable, except as specifically provided in these Orders, communications between Respondent and Ohio EPA concerning the implementation of these Orders shall be made between the Site Coordinators. Respondent's Site Coordinator shall be available for communication with Ohio EPA regarding the implementation of these Orders for the duration of these Orders. Each Site Coordinator shall be responsible for ensuring that all communications from the other Party are appropriately disseminated and processed. Respondent's Site Coordinator or Alternate Site Coordinator shall be present on the Site or on call during all hours of Work at the Site.

47. Without limitation of any authority conferred on Ohio EPA by statute or regulation, the Ohio EPA Site Coordinator's authority includes but is not limited to the following:

- a. Observing, requesting photographs, or otherwise recording information related to the implementation of these Orders, including the use of any mechanical or photographic device, so long as all photos taken are reviewed and approved by the US DOE Classification Officer before removal from the Site;
- b. Requesting a work stoppage from Respondent's Site Coordinator whenever the Site Coordinator for Ohio EPA determines that the activities at the Site may create or exacerbate a threat to public health or safety, or threaten to cause or contribute to air or water pollution or soil contamination;
- c. Conducting investigations related to the implementation of these Orders;
- d. Inspecting and copying records, operating logs, contracts and/or other documents related to the implementation of these Orders; and
- e. Assessing Respondent's compliance with these Orders.

IX. PROGRESS REPORTS AND NOTICE

48. Respondent shall submit written reports to Ohio EPA as a part of and consistent with the DFF&O Quarterly Progress Reports already required under the D&D Orders.

X. REVIEW OF SUBMITTALS

49. Ohio EPA shall review the RD/RA Work Plans required to be submitted pursuant

to these Orders. Upon review, Ohio EPA may in its sole discretion: (a) approve the submission in whole or in part; (b) approve the submission upon specified conditions; (c) disapprove the submission in whole or in part, notifying Respondent of deficiencies; or (d) any combination of the above. The results of Ohio EPA's review shall be in writing and provided to Respondent.

50. In the event of approval or approval upon condition by Ohio EPA of any submission, Respondent shall proceed to take any action required by the submission as approved or conditionally approved by Ohio EPA.

51. If Ohio EPA initially disapproves the submission, in whole or in part, and notifies Respondent in writing of the deficiencies, Respondent shall within thirty (30) days, or such longer period of time as specified by Ohio EPA in writing, correct the deficiencies and submit the revised submission to Ohio EPA for approval. The revised submission shall incorporate all of the undisputed changes, additions, and/or deletions specified by Ohio EPA in its notice of disapproval. Any revised submission shall be accompanied by a letter indicating how and where each of Ohio EPA's comments were incorporated into the submission. Any other changes made to a submission by Respondent shall also be identified in the letter. To the extent that Respondent disputes any changes, additions, and/or deletions specified by Ohio EPA, Respondent shall initiate the procedures for dispute resolution set forth in the Dispute Resolution Section of these Orders, within fourteen (14) days after receipt of Ohio EPA's disapproval of a submission. Notwithstanding the disapproval, Respondent shall proceed to take any action required by a non-deficient portion of a submission.

52. If Ohio EPA disapproves a revised submission, in whole or in part, and notifies Respondent in writing of the deficiencies, Respondent shall within thirty (30) days, or such longer period of time as specified by Ohio EPA in writing, correct the deficiencies and incorporate all changes, additions, and/or deletions, and submit a revised submission to Ohio EPA for approval. If Respondent fails to submit a revised submission incorporating all changes, additions, and/or deletions within thirty (30) days, or such period of time as specified by Ohio EPA in writing, Respondent shall be considered in breach and/or violation of these Orders. If Respondent is alleged to be in breach and/or violation of these Orders under the terms of this paragraph, Respondent and Ohio EPA agree to meet to discuss how the natural resource restoration project submission can be revised to allow for Ohio EPA approval. Ohio EPA retains the right to terminate these Orders, and/or enforce the terms of these Orders as provided in the Reservation of Rights Section of these Orders.

53. The RD/RA Work Plans required to be submitted to Ohio EPA under these Orders for the scope defined in Paragraph 36 shall, upon approval by Ohio EPA, be deemed to be incorporated in and made an enforceable part of these Orders. In the

event that Ohio EPA approves a portion of a work plan the approved portion shall be deemed to be incorporated in and made an enforceable part of these Orders.

XI. DISPUTE RESOLUTION

54. The Site Coordinators shall, whenever possible, operate by consensus. In the event that there is a dispute about the adequacy of the RD/RA Work Plans required to be submitted pursuant to Review of Submittals Section of these Orders, or completion and full implementation of the excavation projects as detailed above in Paragraph 38, the procedure of this section shall apply.

55. During the pendency of any dispute, Respondent agrees to continue to implement those portions of these Orders which are not in dispute and which Ohio determines can be reasonably implemented pending final resolution of the issue(s) in dispute. If Ohio EPA determines that all or part of those portions of Work which are affected by the dispute should stop during the pendency of the dispute, Respondent shall discontinue implementing those portions of the Work, so long as it does not impact the schedule for the D&D Orders, or the Consent Decree, as applicable. Ohio EPA and Respondent agree that they shall make reasonable efforts to informally resolve all disputes.

56. Respondent may request a meeting with Ohio EPA within five (5) working days of the date the dispute arises to discuss or dispute any deficiencies specified in the notice of disapproval or a requirement to modify the RD/RA Work Plans. If Respondent fails to request such a meeting within five (5) working days, Respondent shall be deemed to have agreed to the position taken by Ohio EPA. Such meeting shall be held within five (5) working days, if possible, of such request, and may be conducted by telephone unless one of the parties requests a face-to-face meeting. To facilitate such meetings, Respondent and Ohio EPA each shall appoint a Site Coordinator, who shall make reasonable efforts to resolve all disputes or disagreements informally.

57. Disputes not resolved by the Site Coordinators shall be referred to the Submittals Dispute Resolution Committee within five (5) working days, if possible. The Submittals Dispute Resolution Committee shall have four members consisting of one individual designated by Ohio EPA, one designated by Respondent and the two Site Coordinators. The Ohio EPA designee shall be the Ohio EPA Southeast District Manager for the Division of Environmental Response and Revitalization or the Manager's designee, who shall co-chair the Submittals Dispute Resolution Committee with the Respondent's designee, the US DOE Portsmouth Site Lead or the Site Lead's designee.

58. Within three (3) working days of receipt of a disputed matter, the Submittals Dispute Resolution Committee shall meet and attempt resolution. Meetings may be conducted by telephone, unless one of the members requests a face-to-face meeting. Disputed matters not resolved by the Submittals Dispute Resolution Committee within five (5) working days of receipt shall be resolved in accordance with Section XVI of the D&D Orders.

59. The pendency of any dispute under this Section shall not affect Respondent's responsibility for timely performance of the Work required by this Order, except that the time period for completion of the Work affected by such dispute, shall be extended for a period of time not to exceed the actual time taken to resolve any good faith dispute in accordance with the procedures specified herein if the delay will not pose or increase a threat of harm to the public and the environment and if the parties agree that the performance of such Work could not reasonably continue during the pendency of such dispute. All elements of the Work required under this Order which are not affected by the dispute shall continue to be completed in accordance with the RD/RA Work Plans. The opportunity to invoke dispute resolution under the Dispute Resolution Section shall not be available to Respondent unless otherwise expressly stated with respect to a specific provision of these Orders.

60. Within thirty (30) days of resolution of any dispute, Respondent shall incorporate the resolution and final determination into the appropriate plan, schedule, or procedure and proceed to implement this Order according to the amended plan, schedule, or procedure.

61. Resolution of a dispute pursuant to this section of the Orders constitutes a final resolution of any dispute arising under this Order.

62. In any dispute subject to dispute resolution, the parties may by written agreement modify the procedures set forth in this Section, including but not limited to an extension or shortening of the times therein or the waiver of any provision set forth herein.

XII. UNAVOIDABLE DELAYS

63. Respondent shall cause all Work to be performed in accordance with applicable schedules and time frames unless any such performance is prevented or delayed by an event that constitutes an unavoidable delay. For purposes of these Orders, an "unavoidable delay" shall mean an event beyond the control of Respondent that prevents or delays performance of any obligation required by these Orders and that could not be overcome by due diligence on the part of Respondent.

64. Respondent shall notify Ohio EPA in writing within ten (10) days after the occurrence of an event that Respondent contends is an unavoidable delay for one of the natural resource restoration projects specifically identified above in Paragraph 38. Such written notification shall describe the anticipated length of the delay or how the event prevents performance of Work, the cause or causes of the delay, the measures taken and to be taken by Respondent to minimize the delay, and the timetable under which these measures will be implemented. Respondent shall have the burden of demonstrating that the event constitutes an unavoidable delay.

65. If Ohio EPA does not agree that the delay has been caused by an unavoidable delay, Ohio EPA will notify the Respondent in writing. Upon Ohio EPA written notification of disagreement that the delay is unavoidable, Respondent and Ohio EPA agree to meet to discuss how the natural resource restoration project delay can be resolved. Ohio EPA reserves the right to terminate these Orders and/or enforce the terms of these Orders in the event that Ohio EPA determines that the delay has not been caused by an unavoidable delay. If Ohio EPA agrees that the delay is attributable to an unavoidable delay, Ohio EPA will notify Respondent in writing of the length of the extension for the performance of the obligations affected by the unavoidable delay. If Respondent and Ohio EPA agree that performance of work is prevented in one of the natural resource restoration projects specifically identified above in Paragraph 38, Respondent and Ohio EPA will meet to identify other natural resource restoration projects to satisfy the State's NRD claims.

XIII. ACCESS TO INFORMATION

66. Upon request, Respondent shall provide to Ohio EPA within thirty (30) days, copies of all documents and information within their possession or control or that of their contractors or agents relating to events or conditions at the Site including, but not limited to manifests, reports, correspondence, or other documents or information related to the Work.

67. Respondent may assert a claim that documents or other information submitted to Ohio EPA pursuant to these Orders are confidential under the provisions of OAC 3745-50-30(A) or ORC § 6111.05(A). If no such claim of confidentiality accompanies the documents or other information when it is submitted to Ohio EPA, it may be made available to the public without notice to Respondent.

68. Respondent may assert that certain documents or other information are privileged under the attorney-client privilege or any other privilege recognized by state law. If Respondent make such an assertion, they shall provide Ohio EPA with the following: (1) the title of the document or information; (2) the date of the document or

information; (3) the name and title of the author of the document or information; (4) the name and title of each addressee and recipient; (5) a general description of the contents of the document or information; and (6) the privilege being asserted by Respondent.

69. No claim of confidentiality shall be made with respect to any data or reports, including but not limited to laboratory or interpretive reports, and all sampling, analytical, and monitoring data.

70. Respondent shall preserve for the duration of these Orders and for a minimum of ten (10) years after termination of these Orders, all documents and other information within their possession or control, or within the possession or control of their contractors or agents, which in any way relate to the Work notwithstanding any document retention policy to the contrary. Respondent may preserve such documents by microfiche, or other electronic or photographic device. At the conclusion of this document retention period, Respondent shall notify Ohio EPA at least sixty (60) days prior to the destruction of these documents or other information; and upon request, shall deliver such documents and other information to Ohio EPA.

XIV. MODIFICATIONS

71. These Orders may be modified by agreement of the Parties. Modifications shall be in writing, signed by the authorized representative of the Respondent and by the Director, and shall be effective on the date entered in the Journal of the Director of Ohio EPA.

XV. OTHER CLAIMS

72. Nothing in these Orders shall constitute or be construed as a release from any claim, cause of action, or demand in law or equity against any person, firm, partnership, or corporation not a Party to these Orders for any liability arising from, or related to, events or conditions at the Site.

XVI. RESERVATION OF RIGHTS

73. Ohio EPA reserves the right to seek legal and/or equitable relief to enforce its claim for NRD pertaining to the Site in the event Respondent does not complete the Work hereunder. Except as provided herein, Respondent reserves any rights it may have to raise any legal or equitable defense in any action brought by Ohio EPA to enforce its claim for NRD. The remaining Ohio Consent Decree projects, more

specifically described above in Paragraphs 20 and 21 and involving the excavation of contaminated media for use as fill material for the OSDC, will be conducted under the authority provided through those projects' decision documents.

74. Ohio EPA reserves the right to terminate these Orders if the requirements of these Orders are not wholly complied with within the time frames required by these Orders.

75. Ohio EPA reserves the right to take any action against Respondent if conditions at the Site, previously unknown to the State, are discovered after the effective date of these Orders, or information is received, after the effective date of these Orders. Nothing herein shall affect Respondent's obligations pursuant to the Ohio Consent Order, the Ohio Consent Decree, Integration Orders, D&D Orders, and any other relevant order. Respondent reserves all defenses it may have to any of the State actions described in this paragraph, except that Respondent shall not assert, and may not maintain any defense or claim based upon the principles of waiver, laches, res judicata, collateral estoppel, issue preclusion, claim splitting or other defenses based upon any contention that claims raised by the State in a subsequent proceeding were or should have been addressed in this action.

76. Subject to Section XVII, Ohio EPA reserves the right to take any action, including but not limited to any enforcement action, action to recover costs, pursuant to ORC Chapters 3734, 3745, or 6111, or any available legal authority as a result of past, present, or future violations of state or federal laws or regulations or the common law, and/or as a result of events or conditions arising from, or related to, the Site.

XVII. AGREEMENT NOT TO REFER

77. During the implementation of these Orders, and provided Respondent is considered by Ohio EPA to be in compliance with these Orders, Ohio EPA agrees not to refer Respondent to the Ohio Attorney General's Office ("Ohio AG"), or take administrative enforcement action against Respondent, for Work required by these Orders. Upon termination of these Orders pursuant to the Termination Section, and during the term of these Orders so long as Respondent performs the Work pursuant to these Orders, Ohio EPA agrees to not refer Respondent to the Ohio AG, or take administrative enforcement action against Respondent for Work required under these Orders. Ohio EPA agrees that it will not take an administrative enforcement action for a violation of these Orders except in the case that Respondent stops its efforts to comply herewith. With respect to the excavations identified in Paragraph 25, Respondent is subject to underlying regulatory compliance in accordance with the D&D Orders, and any action taken by Ohio EPA in regard to that compliance will be taken separately from

this Order.

XVIII. TERMINATION

78. Respondent's obligations under these Orders shall terminate upon approval in writing of Respondent's written certification to Ohio EPA that all Work required to be performed pursuant Section VI or otherwise authorized in Paragraph 35 of these Orders has been completed. The Respondent's certification shall contain the following attestation: "We certify that the information contained in or accompanying this certification is true, accurate, and complete." This certification shall be submitted by Respondent to Ohio EPA and shall be signed by responsible officials of Respondent. The termination of Respondent's obligations under these Orders shall not terminate the Parties' rights or obligations under the Reservation of Rights, Access to Information, Other Claims, and Agreement Not to Refer Sections of these Orders.

XIX. WAIVER AND AGREEMENT

79. In order to resolve the State's natural resource damages claim, Respondent consents to the issuance of these Orders, and agrees to comply with these Orders.

80. Respondent hereby waives the right to appeal the issuance, terms and conditions, and service of these Orders and Respondent hereby waives any and all rights that it may have to seek administrative or judicial review of these Orders either in law or equity.

81. Notwithstanding the limitations herein on Respondent's right to appeal or seek administrative or judicial review, Ohio EPA and Respondent agree that if these Orders are appealed by any other party to the Environmental Review Appeals Commission, or any court, Respondent retains the right to intervene and participate in such appeal. In such event, Respondent shall continue to comply with these Orders notwithstanding such appeal and intervention unless these Orders are stayed, vacated or modified.

82. Nothing in these Orders shall be construed as a waiver of Respondent DOE's jurisdiction over source, by-product, or special nuclear materials under the Atomic Energy Act, 42 U.S.C. section 2201, et seq. Nothing in the preceding sentence alters Respondents' duty to comply with these Orders.

XX. EFFECTIVE DATE

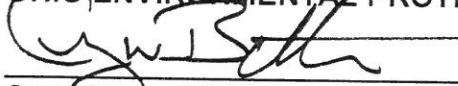
83. The effective date of these Orders shall be the date these Orders are entered in the Journal of the Director of Ohio EPA.

XXI. SIGNATORY AUTHORITY

84. Each undersigned representative of a Party to these Orders certifies that he or she is fully authorized to enter into these Orders and to legally bind such Party to these Orders.

IT IS SO ORDERED AND AGREED:

OHIO ENVIRONMENTAL PROTECTION AGENCY



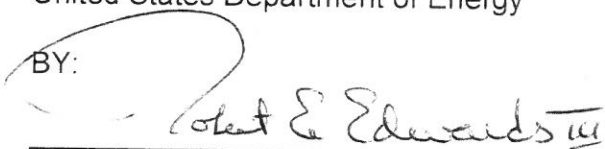
Craig Butler, Director
Ohio Environmental Protection Agency

7/30/18
Date

IT IS SO AGREED:

United States Department of Energy

BY:



Robert E. Edwards III, Manager
U.S. Department of Energy
Portsmouth Paducah Project Office

7/20/18
Date