UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 8

FILED	
8/25/2023	
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U.S. EPA REGION 8 HEARING CLERK	

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IN THE MATTER OF:) Docket No. RCRA-08-2023-0008
Westinghouse Electric Company LLC) ADMINISTRATIVE ORDER
1000 Westinghouse Drive	ON CONSENT PURSUANT TO
Cranberry Township, PA 16066,	SECTION 7003 OF RCRA
Western Zirconium Facility,)
•)
Respondent.	
)

I. JURISDICTION

- 1. This Administrative Order on Consent (AOC) is entered into voluntarily by the United States Environmental Protection Agency Region 8 (EPA) and Westinghouse Electric Company LLC (Respondent) and is issued pursuant to the authority granted to the Administrator of the United States Environmental Protection Agency by Section 7003 of the Solid Waste Disposal Act, as amended (commonly referred to as the Resource Conservation and Recovery Act, or RCRA, 42 U.S.C. § 6901 *et seq.*), 42 U.S.C. § 6973 (Section 7003).
- 2. The Administrator has delegated the authority to issue orders under Section 7003 to the Regional Administrators through Delegation 8-22 (January 18, 2017). This authority was redelegated to the Manager of the RCRA and OPA Enforcement Branch on October 6, 2020.

II. INTRODUCTION

- 3. Respondent manufacturers nuclear grade zirconium metal alloy at its Western Zirconium facility in Ogden, Utah (Facility), which is used to fabricate nuclear fuel rods and components for use in commercial nuclear fuel, civil aviation, and medical applications.
- 4. As more fully described below, the EPA has determined Respondent has handled "solid waste" within the meaning of Section 1004(27) of RCRA, 42 U.S.C. § 6903(27), at the Facility.
- 5. As more fully described below, the EPA has determined that Respondent has contributed or is contributing to the past or present handling, storage, treatment, transportation, or disposal of solid waste at the Facility in a manner that may present an imminent and substantial endangerment to health or the environment within the meaning of Section 7003.
- 6. Respondent's agreement to enter into this AOC shall not constitute or be construed as an admission of liability. Respondent neither admits nor denies the factual allegations and legal conclusions set forth in this AOC.
- 7. Pursuant to Section 7003(a) of RCRA, the EPA notified Deborah Ng, Program Manager, Hazardous Waste and Used Oil, Utah Department of Environmental Quality, of this action on July 19, 2023.

- 8. Pursuant to Section 7003(c) of RCRA, the EPA notified Michela Harris, Deputy Director, Weber-Morgan Health Department of this action on August 22, 2023.
- 9. Attachment 1 to this AOC is an index of the documents comprising the EPA's administrative record for this action.
- 10. Respondent agrees to undertake and complete all actions set forth in this AOC. Subject to paragraph 6, Respondent agrees not to contest the authority or jurisdiction of the undersigned to issue or enforce this AOC and agrees not to contest the validity of this AOC, or its terms or conditions, in any action by the EPA or the United States to enforce this AOC.

III. PARTIES BOUND

- 11. This AOC shall apply to and be binding upon Respondent, its employees, agents, successors, and assigns.
- 12. Respondent shall provide a copy of this AOC to all contractors, subcontractors, laboratories, and consultants retained to conduct or monitor any portion of the work performed pursuant to this AOC within 2 business days of the date of Respondent's receipt of this AOC or date of retention and shall condition all such contracts on compliance with the terms of this AOC.
- 13. Respondent shall give notice to the EPA 30 or more days prior to transfer of ownership or operation of the Facility.

IV. DEFINITIONS

- 14. If a term used in this AOC is defined in RCRA, the RCRA definition shall apply, except that the terms listed below are defined as follows for the purposes of this AOC:
 - A. "Acceptable" means the quality of submissions or completed work is sufficient to warrant EPA review to determine whether the submission or work meets the requirements of this AOC. A determination by the EPA that a submission or work is acceptable, does not necessarily mean the submission or work meets the requirements of this AOC. Approval by the EPA of a submission or work, however, establishes that the submission was prepared, or work was completed in a manner acceptable to the EPA.
 - B. "AOC" means this Administrative Order on Consent, any amendments thereto, and any documents incorporated by reference into this AOC.
 - C. "Administrative Record" means the administrative record compiled by the EPA in support of the EPA's issuance of this Order. An index to the Administrative Record is attached to this AOC as Attachment 1. The Administrative Record is maintained at the EPA Region 8 offices located at 1595 Wynkoop Street, Denver, CO 80202. The Administrative Record may be updated after issuance of this AOC.
 - D. "Business Day" means a day other than a Saturday, Sunday, or federal holiday.

- E. "Day" means a calendar day unless expressly stated otherwise.
- F. "Effective Date" is 2 business days after the date this AOC is filed with the EPA Regional Hearing Clerk and received by the Respondent, whichever is later.
- G. "Facility" means all premises of the nuclear grade zirconium metal production facility located at 10000 West 900 South, Ogden, Utah 84404, owned and operated by Westinghouse Electric Company, LLC.
- H. "Inspection" means the inspection conducted by EPA and UDEQ inspectors at the Facility on April 25 and April 26, 2023.
- I. "Record" includes all documents, reports, data, photographs, and other information, both in paper and electronic form, generated or produced during implementation of this AOC.
- J. "State" means the State of Utah.
- K. "UDEQ" means the Utah Department of Environmental Quality.

V. EPA FINDINGS OF FACT

- 15. Westinghouse Electric Company, LLC is a corporation incorporated in the State of Delaware. Westinghouse Electric Company, LLC is headquartered at 1000 Westinghouse Drive, Cranberry Township, PA 16066. Westinghouse Electric Company, LLC owns and operates the Facility.
- 16. The Facility is a nuclear grade zirconium metals production facility that manufactures zirconium nuclear fuel rod shells and zirconium products.
- 17. The production process generates off-specification (off-spec) zirconium "sponge" which is a pyrophoric material. Zirconium sponge is known to spark, burn, or smolder, typically from friction-based ignition.
- 18. Off-spec zirconium sponge is stored in 55-gallon drums on-site. Some off-spec sponge generated during production operations currently is being purchased for use off-site. Drums of off-spec sponge awaiting purchase are stored within a shipping container at the Facility.
- 19. Other off-spec sponge also is stored in drums. Facility personnel stated that accumulation of drums containing this type of off-spec zirconium sponge started in 2016, and Respondent has stated that one sale of this off-spec sponge occurred in 2020. On or about June 5, 2023, Facility personnel stated that 638 such drums currently are being stored at the Facility. These drums also contain a heterogenous mixture of burnt material, salts, floor sweeps, metal fines, and/or sponge that otherwise does not meet customer specifications. (These 638 drums are referred herein to as the 638 Drums.) The 638 Drums are stored outside of buildings 17 and 37 and were previously, but are no longer, stored inside building 110 (known as the residue building) and are stacked on wooden pallets, up to three high. The 638 Drums have no meaningful labeling and Respondent did not keep an inventory or other form of tracking approach for them.

- 20. On April 25 and April 26, 2023, EPA conducted an unannounced inspection of the Facility along with representatives from UDEQ (Inspection). During the Inspection, EPA observed, among other things, the storage of the 638 Drums and the condition of many of the 638 Drums. Many of the 638 Drums were observed to be rusted and deteriorating. Many have lids that are not secure. Several drums were observed to be so rusted that the contents were open to the elements and light could be seen through the drum. Off-spec sponge and other materials from these drums was observed to be spilling onto the pallets and floor.
- 21. During the Inspection the inspectors observed that approximately 520 of the 638 Drums were stored in building 110 and that building 110 does not have a fire suppression system.
- 22. On or about June 5, 2023, Respondent stated that 161 of the 638 Drums are deteriorating and need to be repackaged.
- 23. During the Inspection the inspectors also observed that Respondent is storing burnt zirconium resulting from failed production runs in two large crucibles covered with plastic sheets at the Facility. (These two crucibles are referred to herein as the 2 Crucibles).
- 24. Respondent has indicated that the burnt material in the 2 Crucibles contains 72% zirconium and is contaminated with nitrides. The nitride contamination makes the burnt zirconium unusable in the production process. The burnt material has been stored in the 2 Crucibles for approximately 4 years.

VI. CONCLUSIONS OF LAW

- 25. Respondent is a "person" within the meaning of Section 1004(15) of RCRA, 42 U.S.C. § 6903(15).
- 26. The waste in the 638 Drums and the waste in the 2 Crucibles are "solid waste" as defined in Section 1004(27) of RCRA, 42 U.S.C. § 6903(27).
- 27. Respondent has contributed and/or is contributing to the handling, storage, treatment, transportation, or disposal of solid waste at the Facility within the meaning of Section 7003(a) of RCRA, 42 U.S.C. § 6973(a).
- 28. Respondent's handling of solid waste in the 638 Drums and 2 Crucibles at the Facility may present an imminent and substantial endangerment to health or the environment within the meaning of Section 7003(a) of RCRA.

VII. ORDER

29. Based on the above, and on other information contained in EPA's Administrative Record for this AOC, the EPA has determined that the activities required by this AOC are necessary to protect health or the environment. The EPA, therefore, hereby orders Respondent to perform the work specified in this AOC in the manner and by the dates specified herein. All work undertaken pursuant to this AOC shall be performed in a manner consistent with this AOC, including all documents incorporated herein pursuant to this AOC, and all applicable laws.

VIII. WORK TO BE PERFORMED

30. CORRECTIVE MEASURES

- A. Respondent shall evaluate all corrective measures necessary to protect health and the environment at the Facility and develop a proposed work plan and submit such work plan to the EPA for approval within 30 calendar days of the Effective Date of this AOC. The proposed work plan shall describe:
 - i. the specific objectives of the work, which include, but are not limited to:
 - a. transferring wastes from compromised Drums into uncompromised and appropriate containers as quickly and safely as possible (criteria for determining whether a Drum is compromised is subject to EPA approval),
 - b. immediate storage of the wastes in the 638 Drums and the 2 Crucibles out of the elements, and in compliance with hazardous waste storage requirements to the degree possible as soon as possible thereafter,
 - c. final disposition of the wastes in the 638 Drums and the 2 Crucibles as quickly as possible considering the safety of the public, the environment, and Facility employees, and
 - c. any necessary or appropriate clean-up in the present storage locations;
 - ii. options for completing some or all of the work, options proposed by Respondent may include treatment of waste stored in some of the 638 Drums on-site;
 - iii. the specific corrective measures Respondent proposes to implement;
 - iv. all other relevant information, including additional information supporting the specific corrective measures Respondent proposes to implement; and
 - v. the names and qualifications of the personnel and contractor(s) to be used in carrying out the work required by this AOC. The Work Plan shall demonstrate that the personnel and contractor(s) possess all appropriate qualifications.

31. APPROVAL OF WORK PLAN(S)

- A. The EPA will either (a) approve the work plan as submitted, (b) notify Respondent in writing of any comments it may have on the work plan which must be incorporated into the work plan by Respondent before it can be approved, (c) approve the work plan with EPA modifications incorporated into the approved work plan, or (d) reject the work plan as not Acceptable. To the extent that EPA rejects the work plan or any portion of it, EPA agrees to provide a brief explanation of its basis for doing so, and Respondent may initiate dispute resolution.
- B. If the EPA provides comment on the work plan, Respondent shall incorporate EPA's comments into the work plan, propose reasonable alternatives and /or revise and resubmit the work plan to EPA within 5 business days of receipt of EPA's comments.

- C. Upon receipt of the revised work plan, the EPA will notify Respondent in writing of its approval, approval with modifications, or disapproval of the work plan. If approved with modifications, the EPA notification correspondence shall serve as an addendum to the Work Plan and shall be part of the Work Plan.
- D. Upon receipt of the EPA's written approval or approval with modifications, Respondent shall implement the corrective measures in accordance with the procedures and schedules contained in the Work Plan as approved by the EPA. Generally, the Work Plan should require that work begin the first business day after EPA approval. (Work plans as approved by EPA are referred to herein as the Work Plan.)
- E. If the EPA concludes it must disapprove the proposed work plan after Respondent has had the opportunity to incorporate and/or address EPA's comments, the EPA may choose to draft a work plan which EPA will transmit to Respondent as the approved Work Plan. The EPA may also choose to request that a court order Respondent take action as necessary to protect health or the environment at the Facility.

32. EMERGENCY ACTION

- A. In the event Respondent identifies a significant threat to health or the environment at the Facility related to the 638 Drums or 2 Crucibles at any time during implementation of this AOC which warrants more immediate action than pursuant to any requirement of this AOC, Respondent shall orally notify the EPA Project Coordinator not more than 24 hours after discovery and notify the EPA, and UDEQ in writing not more than 3 business days after such discovery, summarizing the nature, immediacy and magnitude of such threat(s), and actions taken to abate the threat.
- B. Proper notification as required in this paragraph, does not relieve Respondent of any other notification responsibility Respondent may have under any other federal or state law.

33. REPORTING

- A. Commencing the first day of the first full month after the effective date of this AOC, Respondent shall provide the EPA and UDEQ with progress reports which shall include, at a minimum, the following information:
 - i. activities conducted at the Facility relating to the waste in the 638 Drums and 2 Crucibles in the previous period;
 - ii. summaries of any problems encountered in implementing the Work Plan during the previous month and how any such problems were or are being addressed;
 - iii. changes in work performed at the Facility from that projected in the previous progress report; and
 - iv. projected work for the next reporting period.
- B. Progress reports are to be submitted by the tenth calendar day of the month following the reporting period.

- C. The progress reporting requirement above becomes a quarterly reporting requirement after Respondent has completed the safe storage work at the Facility pursuant to the Work Plan. The first quarterly report will be due on the tenth calendar day of the first January, April, July, or October after Respondent submits a monthly report confirming completion of such work.
- D. Within 15 business days of completing the work as set forth in the Work Plan, except any ongoing operations and maintenance, Respondent shall provide a written corrective measures summary report (CMSR) to the EPA detailing the completion of the activities conducted pursuant to the Work Plan, and compliance with the Work Plan objectives, including confirmation through photographic evidence.
- E. The EPA shall notify Respondent as soon as possible after receipt of the CMSR whether the CMSR is accepted and all work, except ongoing operations and maintenance work, is completed under this AOC.
- F. All analytical results of sampling conducted pursuant to the Work Plan, or to determine compliance with the Work Plan, shall be submitted to the EPA within 3 business days of Respondent's receipt of such results unless the next progress report is due within 5 business days of the date of receipt of the analytical results, in which case the results shall be submitted with the progress report. The EPA may request any and all information related to any of Respondent's sampling and analysis efforts relating to the environmental conditions at the Facility, including quality assurance and quality control information. Respondent must provide such information within 3 business days of receipt of EPA's request.

34. ADDITIONAL WORK

- A. The EPA may determine, or Respondent may propose, that certain tasks are necessary in addition to or in lieu of the tasks included in any Work Plan when such additional work is necessary to meet the objectives of this AOC. The EPA will specify, in writing, the basis for its determination that any additional work is necessary.
- B. Within 5 business days after the receipt of such determination, Respondent shall have the opportunity to meet or confer with the EPA to discuss any additional work. The EPA may modify or withdraw its request for additional work after such conference.
- C. If the EPA determines that Respondent must conduct additional work, Respondent shall submit for EPA approval a work plan for any additional work within 10 business days of Respondent's receipt of EPA's determination that any additional work is necessary, or according to an alternative schedule established by the EPA (Additional Work Plan). The EPA shall review the Additional Work Plan pursuant to paragraph 31 above.
- D. Upon EPA approval of an Additional Work Plan, Respondent shall implement the Additional Work Plan in accordance with the schedule and provisions contained therein. The Additional Work Plan shall be incorporated by reference into this AOC upon approval by the EPA.

35. PUBLIC PARTICIPATION

- A. Because EPA has determined that the waste in the 638 Drums and 2 Crucibles poses a continuous threat to human health or the environment, EPA does not anticipate making the draft work plan available for public review prior to approval. EPA plans to post the Work Plan or non-confidential portions of the Work Plan on its website for public review after approval and may require modifications to the approved Work Plan on the basis of any information received from the public within 10 business days following the posting of the approved Work Plan on EPA's website.
- B. Unless exigent circumstances exist at the time of submittal and subject to Respondent's right to claim material as confidential business information under 40 C.F.R. Part 2, Subpart B, the EPA may make any other work plan or other document, including EPA's determination that work required under this AOC is complete, available to the public for review and comment for an appropriate period prior to taking final action on such document.

VIII. CERTIFICATION

36. Any notice, report, certification, data presentation, or other document submitted by Respondent pursuant to this AOC which discusses, describes, demonstrates, or supports any finding or makes any representation concerning Respondent's compliance or noncompliance with any requirement of this AOC shall be signed by a duly authorized representative of Respondent. A person is a "duly authorized representative" only if: (1) the authorization is made in writing; (2) the authorization specifies either an individual or position having responsibility for overall operation of the Facility (a duly authorized representative thus may be either a named individual or any individual occupying a named position); and (3) the written authorization is submitted to the EPA Project Coordinator designated below.

37. The certification shall be in the following form:

I certify that the information contained in or accompanying this document is true, accurate, and complete. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering such information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature and Date: Printed Name: Title:

IX. ACCESS

- 38. Respondent shall permit full access to the EPA and UDEQ and their authorized representatives or agents, as may be necessary for the purposes of oversight of and implementation of this AOC.
- 39. Respondent shall provide access at all reasonable times to the EPA, EPA's contractors, and UDEQ to all records and documentation in its possession or control, including those records and documents in the possession or control of Respondent's contractors and employees, related to the conditions at the Facility and the actions conducted pursuant to this AOC.
- 40. EPA and EPA's contractors agree to abide by the Facility's health and safety protocols to the degree possible while at the Facility, provided that
 - A. Respondent submits its health and safety protocols to EPA within seven calendar days of the effective date;
 - B. Respondent submits revised health and safety protocols within three business days of changes in such protocols; and
 - C. Respondent agrees to have immediately available and supply any safety equipment required to enter the Facility upon arrival of EPA representatives.
- 41. Pursuant to this Section, any denial of access to the EPA, EPA contractors and oversight officials, and UDEQ, at reasonable times, to any portion of the Facility where such access is related to implementation or oversight of implementation of this AOC, is a violation of this AOC.
- 42. Where action under this AOC is to be performed in areas owned by, or in possession of, a person or entity other than Respondent, Respondent shall use its best efforts to obtain all necessary access agreements as quickly as practicable, but in all events, within 45 days of approval of any work plan for which access is necessary or appropriate. Any such access agreement shall provide for access by the EPA, EPA contractors and oversight officials, and UDEQ to move freely in order to conduct actions that EPA determines to be necessary.
- 43. The access agreement shall specify that Respondent is not EPA's representative for any purpose, including, but not limited to compliance with this Order.
- 44. Respondent shall provide EPA's Project Coordinator with a copy of each fully executed access agreement entered into by Respondent relating to compliance with this AOC.
- 45. Respondent shall notify the EPA immediately if, after using its best efforts, Respondent is unable to obtain necessary access agreements within the time required. Best efforts, as used in this paragraph, shall include, at a minimum, a certified letter from Respondent to the present owner of such property requesting access agreements to permit Respondent, the EPA, EPA contractors and oversight officials, and UDEQ to enter such property, and the offer of payment of reasonable sums of money in consideration of granting access. Respondent shall, within 10 days of its receipt of a denial of access, submit in writing, a description of its efforts to obtain access. The EPA may, at its discretion, assist

Respondent in obtaining access. In the event the EPA obtains access, Respondent shall undertake the Work on such property.

46. Nothing in this AOC shall be construed to limit the EPA's right of access, entry, inspection, and information gathering pursuant to applicable law.

X. GENERAL PROVISIONS

- 47. All plans and documents submitted under any Section of this AOC shall, upon approval by the EPA, be incorporated by reference into this AOC as if set forth fully herein.
- 48. Respondent shall perform all actions required pursuant to this AOC in accordance with all applicable local, State, and federal laws and regulations. Respondent shall obtain or cause its representatives to obtain all permits and approvals necessary under such laws and regulations in a timely manner so as not to delay the Work required by this AOC.
- 49. Respondent shall employ sound scientific, engineering, and construction practices and principles in implementing the requirements of this AOC.
- 50. If the date for submission of any item or notification required by this AOC falls upon a weekend, or State or federal holiday, the time period for submission of that item or notification is extended to the next Federal working day following the weekend or holiday.

XI. AVAILABILITY AND RETENTION OF INFORMATION

- 51. Respondent shall make available to the EPA, and shall retain, during the pendency of this AOC and for a period of 5 years after its termination, all records and documents in its possession, custody, or control, or in the possession, custody or control of their contractors and subcontractors, which relate to the performance of this AOC, including but not limited to documents reflecting the results of any sampling, tests, or other data or information generated or acquired by Respondent, or on Respondent's behalf, with respect to the implementation of this AOC.
- 52. All documents pertaining to implementation of this AOC shall be stored by Respondent in a centralized location at the Facility, or an alternative location mutually approved by Respondent and the EPA, to promote easy access by the EPA and the UDEQ and their authorized representatives or agents.
- 53. After the 5-year document retention period, Respondent shall notify the EPA at least 90 calendar days prior to the destruction of any such records, and, upon request by the EPA, shall deliver the records to the EPA. Notification shall be in writing and shall reference the effective date, caption, and docket number of this AOC. All documents subject to these retention provisions may be retained in electronic form.

XII. CONFIDENTIALITY OR PRIVILEGE CLAIMS

- 54. Respondent may assert confidentiality claims pursuant to 40 C.F.R. Part 2. Information determined to be confidential by the EPA will be afforded the protection specified in 40 C.F.R. Part 2, subpart B. If no such claim accompanies the information when it is submitted to the EPA, the public may be given access to such information without further notice to Respondent. Respondent shall have the burden of demonstrating that the information meets the definition of confidential business information protected by 40 C.F.R. Part 2, subpart B at the time the claim is made.
- 55. Each claim of confidentiality made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other documents or information evidencing conditions at or around the Facility that are the subject of this AOC must be submitted with all supporting information or argument at the time the information is submitted and the claim made.
- 56. No documents, reports or other information required to be generated pursuant to the requirements of this AOC shall be withheld from the EPA on the grounds that they are privileged. If Respondent asserts such a privilege in lieu of providing other documents to the EPA, Respondent shall provide the EPA with the following: the title of the document, record, or information; the date of the document, record, or information; the author's name and title; the name and title of each addressee and recipient; a description of the contents; and the privilege asserted by Respondent.
- 57. All data, information, and records created or maintained relating to the 638 Drums and 2 Crucibles handled by Respondent at the Facility shall be made available to the EPA upon request unless Respondent asserts a claim that such documents are legally privileged from disclosure pursuant to the paragraph immediately above. Respondent shall have the burden of demonstrating to the EPA such privilege exists at the time the privilege is asserted.
- 58. No claim of privilege shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other documents or information evidencing conditions at or around the Facility that are the subject of this AOC.

XIII. AVAILABILITY OF ADMINISTRATIVE RECORD

59. The EPA's administrative record supporting this AOC shall be available for public review upon arrangements made with the EPA Project Coordinator at EPA Region 8, 1595 Wynkoop Street, Denver, CO 80202 from 8 a.m. to 5 p.m.

XIV. NOTICES, CONTACTS, AND PROJECT COORDINATORS

60. Whenever under the terms of this AOC, notice is required to be given, and/or a report or other document is required to be forwarded by one party to another, such correspondence shall be sent by email to the extent possible to the following individuals at the addresses specified below. The following EPA person is designated as the Project Coordinator for the EPA for this AOC. The following representative of Respondent is designated as the Project Coordinator for the Respondent for this AOC.

Copies of documents required to be sent to UDEQ under this AOC shall be delivered to the following representative of UDEQ.

Ms. Jacquelyn Vega EPA Region 8, ECAD-ROEB 1595 Wynkoop Street Denver, CO 80202-1129 (303) 312-6681 Vega.Jackie@epa.gov

As to Westinghouse Electric Company, LLC:

Todd Stokes
Tech Services Manager
Western Zirconium Plant
10,000 West 900 South
Ogden Utah 84404
Desk (801) 732-2436
Cell (801) 821-7204
stokeste@westinghouse.com

As to UDEQ:

Douglas J. Hansen, Director Division of Waste Management and Radiation Control PO Box 144880 Salt Lake City, UT 84114-4880 djhansen@utah.gov

XV. RESERVATION OF RIGHTS, INDEMNIFICATION, OTHER CLAIMS

- 61. Nothing in this AOC shall limit the information gathering, access, and response authority of the United States under any other applicable law, nor shall it limit the authority of the EPA to issue additional orders to Respondent as may be necessary.
- 62. This AOC shall not be construed as a covenant not to sue, release, waiver or limitation of any rights, remedies, powers and/or authorities which the EPA has under RCRA or any other applicable law.
- 63. The EPA hereby reserves all of its statutory and regulatory powers, authorities, rights, remedies, both legal and equitable, which may pertain to Respondent's failure to comply with any applicable laws and regulations and with any of the requirements of this AOC, including but not limited to, the right to disapprove of work performed by Respondent, to request that Respondent perform additional tasks, and the right to perform any portion of the work herein.
- 64. Compliance by Respondent with the terms of this AOC shall not relieve Respondent of its obligation to comply with RCRA and/or any other applicable State, Federal, or other law, regulation, permit, or other requirement.

- 65. Respondent agrees to indemnify, save and hold harmless the United States, its officials, agents, contractors, employees, and representatives from any and all claims or causes of action arising from, on account of, or in any way relating to acts or omissions of Respondent, Respondent's directors, officers, employees, agents, successors, assigns, heirs, trustees, receivers, contractors, or consultants in carrying out actions pursuant to this AOC; and for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Respondent and any persons for performance of Work.
- 66. The parties agree that they will bear their own costs, attorneys' fees, expenses in the prosecution or defense of this matter or any related matters, arising prior to discussion of this AOC.
- 67. In any subsequent administrative or judicial proceeding initiated by the EPA or the United States for injunctive or other appropriate relief relating to the Facility, Respondent shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, *res judicata*, collateral estoppel, issue preclusion, claim-splitting, or other defense contending that the claims raised by the United States in the subsequent proceeding were, or should have been, raised in this AOC.

XVII. MODIFICATION

- 68. Except for modification of Work as described in this AOC, this AOC only may be modified by the mutual agreement of the EPA and Respondent. Each agreed modification shall be in writing, be signed by both parties and have as its effective date the date on which it is signed by the EPA.
- 69. No informal advice, guidance, suggestion, or comment by the EPA regarding Work, including reports, plans, specifications, schedules, or any other writing submitted by Respondent shall relieve Respondent of its obligation to obtain such formal approval as required by this AOC, and to comply with all requirements of this AOC, unless it is formally modified.
- 70. Deliverables required by this AOC are Work and are incorporated into and enforceable under this AOC upon approval by the EPA. If at any time during the implementation of the Work, Respondent identifies a need for a compliance date modification or revision of the Work Plan, Respondent shall submit a request documenting the need for the modification or revision to the EPA Project Coordinator. The EPA in its discretion will determine if the modification or revision is warranted and may provide written approval or disapproval. Modifications approved by the EPA are incorporated by reference into this AOC on the date of approval.

XVIII. DISPUTE RESOLUTION

- 71. Respondent shall raise any disputes concerning Work required under this AOC to the EPA Project Coordinator in writing within 7 days after receiving written notice from the EPA regarding any aspect of the Work required under this AOC that Respondent disputes.
- 72. Under all circumstances, the EPA and Respondent shall expeditiously and informally attempt to resolve any disagreements.
- 73. The Project Coordinators shall first confer in an effort to resolve the dispute. If the Project Coordinators are unable to informally resolve the dispute within 3 business days of the first conference,

Respondent shall notify the signatory for the EPA below, within 5 business days, in writing, of its objections. Written objections shall identify Respondent's objections, the basis for those objections, and provide all data, analyses and information relied upon by Respondent.

- 74. The EPA and Respondent then have an additional 14 days from EPA's receipt to reach agreement. If an agreement is not reached within this period, Respondent may request in writing, within 5 days, a determination resolving the dispute by the EPA Region 8 Enforcement and Compliance Assurance Division Director (ECAD Director). The request should provide all information that Respondent believes is relevant to the dispute, in particular, any information that was considered during the prior dispute resolution steps, but not included in the submission made under paragraph 70 above.
- 75. If such request is timely submitted, the ECAD Division Director shall issue a determination in writing. The decision of the EPA shall be incorporated into and become an enforceable part of this AOC and shall no longer be subject to dispute pursuant to this AOC.
- 76. If Respondent does not agree to perform or does not actually perform the Work in accordance with EPA's decision, The EPA reserves the right in its sole discretion to conduct the Work itself, seek reimbursement from Respondent, seek enforcement of this AOC, seek stipulated penalties, or any other appropriate relief. Respondent agrees that disputes arising under this AOC are not subject to judicial review until such time as the EPA seeks to enforce this AOC.
- 77. If the EPA and Respondent reach agreement on the dispute after initiation of formal dispute under paragraph 70, the agreement shall be set forth in writing and shall, upon signature of both parties, be incorporated into and become an enforceable part of this AOC.
- 78. The existence of a dispute and EPA's consideration of matters placed in dispute shall not excuse, toll, or suspend any compliance obligation or deadline required pursuant to this AOC during the pendency of the dispute resolution process except as agreed by EPA in writing. The invocation of dispute resolution does not stay the accrual of stipulated penalties under this AOC, but payment of any such stipulated penalties is stayed pending resolution of the dispute.

XIX. PENALTIES

- 79. Pursuant to Section 7003(b) of RCRA and 40 C.F.R. Part 19, failure by Respondent to comply with this AOC subjects Respondent to civil penalties of not more than \$16,307 for each day for each failure to comply with this AOC. *See also*, the Federal Register notice dated January 12, 2022 (87 Fed. Reg. 1686).
- 80. In the event Respondent fails to comply with any requirement set forth in this AOC, Respondent shall pay stipulated penalties, as set forth below, upon receipt of a written demand from the EPA describing the noncompliance and the amount due.

Period of Failure to Comply	Penalty Per Violation Per Day
1st day through 14th day	\$500
15th day through 29 th	\$1000
30th day and each day after that	\$1500

- 81. All stipulated penalties begin to accrue the first day that a violation occurs, or the first day after the date that complete performance is due and continue to accrue through the final day of violation. Separate stipulated penalties for separate violations of this AOC will accrue simultaneously if they occur during the same time period.
- 82. All stipulated penalties owed to the EPA under this section shall be due within 30 calendar days of receipt of a demand for payment unless Respondent invokes the dispute resolution procedures herein.
- 83. All stipulated penalty payments shall be made using any method provided on the following website https://www.epa.gov/financial/makepayment. Each payment shall reference the name of Respondent and docket number for this matter. Within 24 hours of payment, Respondent must email proof of payment to the EPA Project Coordinator and the EPA Regional Hearing Clerk at r8_hearing_clerk@epa.gov.
- 84. Respondent may dispute EPA's demand for payment of stipulated penalties by invoking dispute resolution. Stipulated penalties continue to accrue, but are not required to be paid, for any alleged noncompliance which is the subject of dispute resolution during the period of dispute resolution. To the extent that Respondent does not prevail upon resolution of the dispute, within 21 calendar days of receipt of EPA's written decision, Respondent shall remit its payment of the stipulated penalty as set forth above.
- 85. The assessment and payment of stipulated penalties set forth in this section fully and completely resolve Respondent's civil liability for violations of this AOC for which stipulated penalties are paid but shall not preclude the EPA from pursuing any other remedies or sanctions that may be available to the EPA by reason of Respondent's failure to comply with any of the requirements of this AOC.
- 86. The EPA in its sole discretion may reduce or waive stipulated penalties.

XX. FORCE MAJEURE

- 87. Respondent agrees to perform all requirements under this AOC within the time limits established under this AOC, unless the performance is delayed by a force majeure. For purposes of this AOC, a force majeure event is defined as any event arising from causes beyond the control of Respondent, or any entity controlled by Respondent or Respondent's contractors, which delays or prevents performance of any obligation under this AOC despite Respondent's best efforts to fulfill the obligation. Force majeure does not include financial inability to complete the Work, increased cost of performance changes in Respondent's business or economic circumstances, or inability to achieve cleanup standards or objectives.
- 88. The requirement that the Respondent exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event and prevent or mitigate the effects of the event, as well as best efforts to address the effects of any potential force majeure event as it is occurring and after the event is complete, and to minimize the delay and other impacts to the greatest extent possible.
- 89. If any event occurs or has occurred that may delay the performance of any obligation under this AOC, whether or not caused by a force majeure event, Respondent shall orally notify the EPA within 48 hours of when Respondent knew or should have known that the event might cause a delay. Such notice shall: identify the event causing the delay, or anticipated to cause delay, and the anticipated duration of

the delay; whether Respondent is asserting that the event is a force majeure event; state the measures taken, or to be taken, to prevent or minimize the delay; estimate the timetable for implementation of those measures; and state whether, in the opinion of Respondent, such event or its impacts may cause or contribute to an endangerment to health or the environment.

- 90. Failure to comply with the notice provision of this paragraph and to undertake best efforts to avoid and minimize the delay shall waive any claim of force majeure by Respondent. Respondent shall be deemed to have notice of any circumstances of which its contractors had or should have had notice.
- 91. If the EPA determines that a delay in performance or anticipated delay in fulfilling a requirement of this AOC is or was attributable to a force majeure, then the time period for performance of that requirement will be extended as determined necessary by the EPA. If the EPA determines that the delay or anticipated delay has been or will be caused by a force majeure, then the EPA will notify Respondent, in writing, of the length of the extension, if any, for performance of such obligations affected by the force majeure. Any such extensions shall not alter Respondent's obligation to perform or complete all other tasks required by this AOC not directly affected by the force majeure.
- 92. If the EPA disagrees with Respondent's assertion of a force majeure, Respondent may elect to invoke dispute resolution. In any such proceeding, Respondent shall have the burden of demonstrating that the delay or anticipated delay has been or will be caused by a force majeure, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that Respondent exercised best efforts to avoid and mitigate the effects of the delay, and that Respondent fully complied with the requirements of this section. If Respondent satisfies this burden, then the EPA will extend the time for performance as the EPA determines is appropriate.

XXI. SEVERABILITY

93. If any provision or authority of this AOC or the application of this AOC to any party or circumstance is held by any judicial or administrative authority to be invalid, the application of such provision to other parties or circumstances and the remainder of this AOC shall not be affected thereby and shall remain in full force.

XXII. EFFECTIVE DATES

- 94. This AOC shall become effective 2 business days after the date this AOC is filed with the Regional Hearing Clerk and received by Respondent, whichever is later.
- 95. Modifications to this AOC are effective on the date such modification is filed with the Regional Hearing Clerk, so long as Respondent is sent a copy by certified mail or Respondent is emailed or hand-delivered a copy of the modification as expeditiously as possible after the modification is filed with the Regional Hearing Clerk.

XXIII. TERMINATION AND SATISFACTION

96. The provisions of this AOC shall be deemed satisfied upon Respondent's receipt of written notice from the EPA that Respondent has demonstrated, to the satisfaction of the EPA, the terms of this AOC, including ongoing operation and maintenance requirements in any approved workplan, or any additional work determined by the EPA to be required pursuant to this AOC, have been satisfactorily completed. This notice, however, shall not terminate Respondent's continuing obligations hereunder, including, but not limited to record retention, reservations of rights, other claims, other applicable laws, and notice of non-liability of the EPA. To the extent that the parties disagree as to whether Respondent has satisfied its obligations under this AOC, Respondent may invoke the dispute resolution provisions herein.

XXVII. SIGNATORY AUTHORITY

The undersigned representatives of the parties certify that they are fully authorized to enter into the terms and conditions of this AOC and to bind their respective organizations.

IT IS SO ORDERED:
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 8
Janice Pearson, Director
RCRA and OPA Enforcement Branch
AND AGREED:
WESTINGHOUSE ELECTRIC COMPANY LLC
David Colburn, Plant Manager
Western Zirconium Plant

Attachment 1

Index to the EPA Administrative Record for the RCRA Section 7003 Administrative Order on Consent Westinghouse Electric Company LLC (Western Zirconium Facility)

As of August 22, 2023

Document Title	Date
EPA inspection report	Inspection April 25-26, 2023
Facility Overview Presentation	Undated
Facility Process Flow Diagrams, with handwritten notes	Undated
RCRAInfo View Source Record: Western Zirconium	June 6, 2023
Western Zirconium Plant Map	August 11, 2022
Delaware Department of State: Division of Corporations – Western	May 15, 2023
Zirconium (DE) No Results	
Utah Business Search: Western Zirconium Results	May 15, 2023
Utah Business Search: Western Zirconium, Inc. Summary	May 15, 2023

May 19, 2023, Western Zirconium Correspondence to EPA – Binder 1

Document Title	Date
Email to Ms. Jacquelyn Vega, U.S. EPA from David Colburn,	May 19, 2023
Western Zirconium: Response to Request for Documents	
Westinghouse Electric Company LLC Western Zirconium Plans	
(Claimed CBI)	
IN-OP2104: Western Zirconium, Zirconium Sponge Inspection	February 6, 2020
(Claimed CBI)	
ML-OP0109: Explanation of Sponge Identification Scheme and	September 20, 2013
Critical Concerns (Claimed CBI)	
ML-OP0204: Release of Sponge Runs/Blends (Claimed CBI)	March 9, 2015
ML-OP0506: Western Zirconium Entering Data in the Sponge	May 8, 2020
Inventory Program (Claimed CBI)	
ML-OP0510: Western Zirconium Packaging Sponge for Shipment	October 25, 2022
(Claimed CBI)	
ML-OP0825: Western Zirconium 5000 Ton Press Compacting Sponge	April 20, 2022
& Recycle (New Controls) (Claimed CBI)	
RD-OP0118: Removing Sponge From a Crucible After Distillation	August 8, 2006
(Claimed CBI)	
RD-OP0138: Western Zirconium Removing a Grid Plate and Cleaning	June 24, 2021
a Sponge Run (Claimed CBI)	
RD-OP0154: Western Zirconium Redistillation of Zr Sponge	July 6, 2016
(Claimed CBI)	
RD-OP0206: Western Zirconium Screening TIMET Sponge (Claimed	August 30, 2022
CBI)	
Letter to Mr. Doug Hansen, Utah Division of Waste Management and	March 15, 2023
Radiation Control (UDWMRC): Low pH (AOC-1) Pilot Work Plan	
(Claimed CBI) (includes several figures and attachments)	
Figure 1: Regional Overview Map	
Figure 2: pH Isoconcentration Map	

Figure 4: Zirconium Isoconcentration Map Figure 5: Conceptual Hydrogeological Cross Section Table 1: Rising Head Test Results Attachment 1: Western Zirconium Summary of Release Attachment 2: Low pH Plume – Aquifer Evolution Summary Report (with additional attachments) Letter to Mr. Doug Hansen, UDWMRD: Release at Western Zirconium's Facility (Claimed CBI) CL-OP2006: Western Zirconium Jacuzzi Operation (Claimed CBI) E-12: Western Zirconium Safety Management Procedure – Plant Drain Line Management (Claimed CBI) SE-OP5008: Western Zirconium Separations PCD Drains to Jacuzzi (Claimed CBI) ICP-A12: Western Zirconium Emergency Contingency Plan Hazards Analysis (Claimed CBI) Letter to Kevin Merchel, Western Zirconium from Pace Analytical Services, Inc.: Project: L-ORDER 100418 Pace Project No.: 3024375 (Claimed CBI) Letter to Mr. Gregory W. Clarke, Westinghouse Electric Co. LLC from Stresau Laboratory Inc (Claimed CBI) Laboratory Report No. 08031: Preliminary Screen Test April 30, 2008 Waste Material Profile Sheet Clean Harbors Profile No. CH206331 (Claimed CBI) Waste Material Profile Sheet Clean Harbors Profile No. CH206331 (Claimed CBI) Waste Material Profile Sheet Clean Harbors Profile No. GM97-0789B (Claimed CBI) Waste Material Profile Sheet Clean Harbors Profile No. GM97-0789B (Claimed CBI) Waste Material Profile Sheet Clean Harbors Profile No. CH1055693 (Claimed CBI) Waste Material Profile Sheet Clean Harbors Profile No. CH1055693 (Claimed CBI) Waste Material Profile Sheet Clean Harbors Profile No. AP2288413 (Claimed CBI) Waste Material Profile Sheet Clean Harbors Profile No. AP2288413 (Claimed CBI) Waste Material Profile Sheet Clean Harbors Profile No. CH788521 March 8, 2023		
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(Claimed CBI) ICP-A12: Western Zirconium Emergency Contingency Plan Hazards Analysis (Claimed CBI) Letter to Kevin Merchel, Western Zirconium from Pace Analytical Services, Inc.: Project: L-ORDER 100418 Pace Project No.: 3024375 (Claimed CBI) Letter to Mr. Gregory W. Clarke, Westinghouse Electric Co. LLC from Stresau Laboratory Inc (Claimed CBI) Laboratory Report No. 08031: Preliminary Screen Test Waste Material Profile Sheet Clean Harbors Profile No. GM00-0372 (Claimed CBI) Waste Material Profile Sheet Clean Harbors Profile No. CH206331 (Claimed CBI) Waste Material Profile Sheet Clean Harbors Profile No. CH141043 (Claimed CBI) Waste Material Profile Sheet Clean Harbors Profile No. GM97-0789B (Claimed CBI) Waste Material Profile Sheet Clean Harbors Profile No. CH1055693 (Claimed CBI) Waste Material Profile Sheet Clean Harbors Profile No. CH1055693 (Claimed CBI) Waste Material Profile Sheet Clean Harbors Profile No. AP2288413 (Claimed CBI) Waste Material Profile Sheet Clean Harbors Profile No. AP2288413 (Claimed CBI) Waste Material Profile Sheet Clean Harbors Profile No. CH788521 March 25, 2010 March 25,	Line Management (Claimed CBI)	_
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Analysis (Claimed CBI) Letter to Kevin Merchel, Western Zirconium from Pace Analytical Services, Inc.: Project: L-ORDER 100418 Pace Project No.: 3024375 (Claimed CBI) Letter to Mr. Gregory W. Clarke, Westinghouse Electric Co. LLC from Stresau Laboratory Inc (Claimed CBI) Laboratory Report No. 08031: Preliminary Screen Test Waste Material Profile Sheet Clean Harbors Profile No. GM00-0372 (Claimed CBI) Waste Material Profile Sheet Clean Harbors Profile No. CH206331 (Claimed CBI) Waste Material Profile Sheet Clean Harbors Profile No. CH141043 (Claimed CBI) Waste Material Profile Sheet Clean Harbors Profile No. GM97-0789B (Claimed CBI) Waste Material Profile Sheet Clean Harbors Profile No. CH1055693 (Claimed CBI) Waste Material Profile Sheet Clean Harbors Profile No. CH1055693 (Claimed CBI) Waste Material Profile Sheet Clean Harbors Profile No. AP2288413 (Claimed CBI) Waste Material Profile Sheet Clean Harbors Profile No. AP2288413 (Claimed CBI) Waste Material Profile Sheet Clean Harbors Profile No. CH788521 March 25, 2010 March 25, 2010 April 30, 2008 April 30, 2008 December 29, 2022 (Claimed CBI) February 5, 2019 Claimed CBI January 12, 2023 (Claimed CBI) Waste Material Profile Sheet Clean Harbors Profile No. CH1055693 (Claimed CBI) Waste Material Profile Sheet Clean Harbors Profile No. CH788521 March 8, 2023	(Claimed CBI)	
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,	(Claimed CBI)	
(Claimed CBI)	Waste Material Profile Sheet Clean Harbors Profile No. CH788521	March 8, 2023
((Claimed CBI)	

May 19, 2023 Western Correspondence to EPA – Binder 2

Document Title	Date
Draft Request for Documentation Response	
Waste Material Profile Sheet Clean Harbors Profile No. CH2473020	September 13, 2022
(Claimed CBI)	
Letter to Mr. Mark Bowman, Western Zirconium from Daniel	January 31, 2023
Walkowski, Clean Harbors (Claimed CBI)	-
Clean Harbors Quote for Off Grade Zirconium Sponge Disposal	January 31, 2023
(Claimed CBI)	·

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RD-OP0156: Western Zirconium Repackaging of Dry Off-Grade	July 1, 2019
Sponge (Claimed CBI)	A 11.10 2022
RD-OP0223: Western Zirconium Transferring Off-Grade Sponge into Roll-Off (Claimed CBI)	April 19, 2022
JSA-RD-0156: Repackaging of Dry Off-Grade Sponge (Claimed CBI)	May 13, 2019
Summary Statement: Baghouse Waste Determinations (Claimed CBI)	
Safety Data Sheet Barton Garnet Abrasives (Claimed CBI)	Revised April 22, 2022
Safety Data Sheet Zirconium Oxide (Claimed CBI)	November 15, 2016
Material Safety Data Sheet (Ervin) (Claimed CBI)	December 5, 2012
SE-OP2006: Western Zirconium Solvent Still Operation (Claimed	December 8, 2021
CBI)	, , ,
Table including item ID, item title, user ID, active user names,	
assignment date, and required date (Claimed CBI)	
Table including expiration date, days remaining, organization ID, job	
location ID, job code ID, employee status, manager ID, and manager	
name (Claimed CBI)	
Training Attendance Roster: Emergency Response Team Training –	May 16, 2022
HAZMAT Operations & Drill (Claimed CBI)	
Training Attendance Roster: Emergency Response Team Training –	May 20, 2022
HAZMAT Operations & Drill (Claimed CBI)	
Training Attendance Roster: Emergency Response Team Training –	August 8, 2022
HAZMAT Drill, Medical Response, Assembly Drill, SCBA Challenge	
(Claimed CBI)	
Training Attendance Roster: Emergency Response Team Training –	August 12, 2022
HAZMAT Drill, Medical Response, Assembly Drill, SCBA Challenge	
(Claimed CBI)	
Training Attendance Roster: Emergency Response Team Training –	October 31, 2022
BLT Fire Review, Incident Command System, Fitness Test and	
Medical Training (Claimed CBI)	
Training Attendance Roster: Emergency Response Team Training –	November 4, 2022
BLT Fire Review, Incident Command System, Fitness Test and	
Medical Training (Claimed CBI)	
Who Knows How To (Procedure/Training) (Claimed CBI)	May 30, 2023
Certification of Achievement Awarded to Austin Storey in Hazmat	February 8, 2022
Ground Shipper Certification (DOT) Webinar (Claimed CBI)	
RD-OP0187: Western Zirconium Disposition of Distillation Waste	February 11, 2016
Magnesium Chloride (Claimed CBI)	
RD-OP8000: Western Zirconium Reduction Waste Management	April 28, 2023
(Claimed CBI)	24 24 24 2
PGE-100: Western Zirconium Chemical Hygiene Plan (Claimed CBI)	May 24, 2018
Attachment A – Laboratory Non-Routine Testing/Work	
Permit (Claimed CBI)	
Controlled Document Record of Revisions (Claimed CBI)	
Training Checklist for Standards Preparation (Claimed CBI)	