



State of Ohio Environmental Protection Agency

**STREET ADDRESS:**

1800 WaterMark Drive  
Columbus, OH 43215-1099

TELE: (614) 644-3020 FAX: (614) 644-2329

**MAILING ADDRESS:**

P.O. Box 1049  
Columbus, OH 43216-1049

October 4, 1995

Re: Director's Final Findings & Orders  
United States Department of Energy  
Battelle Columbus Laboratories  
Decommissioning Project  
Columbus, Ohio  
Federal Facility Compliance Act of 1992  
Site Treatment Plan

**CERTIFIED MAIL**

Mr. James W. Thomas, Project Manager  
Battelle Columbus Laboratories Decommissioning Project  
United States Department of Energy  
505 King Avenue  
Columbus, Ohio 43201-2693

Dear Mr. Thomas:

Transmitted herewith are Final Findings & Orders of the Director concerning the matter indicated.

Sincerely yours,

Thomas E. Crepeau, Manager  
Data Management Section  
Division of Hazardous Waste Management

TEC/dhs

cc: Mark Navarre, Legal Supervisor  
Michael Savage, Asst. Chief, DHWM  
Tom Winston, Chief, SWDO  
Bruce Coleman, Chief, CDO  
Andy Kubalak, DHWM, CDO  
Gloria Walach, Esq., Chicago Operations Office, USDOE  
Tom Baillieul, BCLDP, USDOE

c:\hwcvr\rl1(54)



Issue Date: October 4, 1995

Effective Date: October 4, 1995

**BEFORE THE  
OHIO ENVIRONMENTAL PROTECTION AGENCY**

**In the Matter Of:**

**United States Department of Energy  
Battelle Columbus Laboratories  
Decommissioning Project Office  
505 King Avenue  
Columbus, Ohio 43201-2693**

**: Director's Final  
: Findings and Orders  
:  
:  
:  
:**

**Respondent**

It is hereby agreed by and among the parties hereto as follows:

**OHIO E.P.A.  
OCT -4 95**

**ENTERED DIRECTOR'S JOURNAL**

**I. JURISDICTION**

These Director's Final Findings and Orders ("Orders") are issued to the United States Department of Energy ("Respondent" or "DOE") pursuant to the authority vested in the Director of Environmental Protection ("Director") under Chapters 3734. and 3745. of the Ohio Revised Code ("ORC").

**II. PARTIES BOUND**

These Orders shall apply to and be binding upon the Respondent, its assigns, and successors in interest. No change in ownership or operation of the Facilities will in any way alter the Respondent's responsibilities under these Orders; provided, however, nothing in these Orders shall preclude the transfer of any real property interest in the Facilities nor do they affect Respondent's contractual obligations with the owner of the Facilities. Except as otherwise expressly provided herein, the Respondent's obligations under these Orders may be altered only by written approval of the Director.

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

OCT 4 1985

OHIO E.P.A.

### III. DEFINITIONS

Unless otherwise stated below, all terms used in these Orders shall have the same meaning as used in Chapter 3734. of the ORC and the regulations promulgated thereunder.

#### Revision:

A "revision" is a change to the approved STP which requires, for those affected portions of the STP, public notice by the Ohio EPA of availability of the revised STP, and consultation by Ohio EPA with affected states and U.S. EPA, pursuant to these Orders and Section 105 of the Federal Facility Compliance Act, 42 U.S.C. Section 6939c(b)(4). A revision shall include: (a) the addition or deletion of a treatment facility or a treatment technology with respect to the approved STP; and (b) an extension of milestone for a period greater than sixty (60) days. However, changes in waste volume, the addition or deletion of wastes or waste types, extensions of milestones for a period less than or equal to sixty (60) days, or changes to target dates shall not, by themselves, constitute revisions.

#### Unavoidable Delay:

An event of "unavoidable delay" means any event beyond the control of DOE which prevents or delays performance of any obligation required by the approved STP and these Orders, and which could not be overcome by due diligence on the part of DOE.

### IV. FINDINGS OF FACT

1. The United States Department of Energy ("Respondent or DOE") and its predecessor agencies, from 1943 to 1985 had commissioned the performance of atomic energy research and development activities at the Battelle Memorial Institute's two (2) Central Ohio facilities, located at 505 King Avenue, in Columbus, Franklin County, Ohio, and at 12345 State Route 142, in West Jefferson, Madison County, Ohio ("Facilities"). Respondent is substantially funding the decontamination and decommissioning of the Facilities.
2. The Battelle Memorial Institute, a charitable trust, is the owner of the Facilities.
3. The Respondent is a "person" as defined in Sections 1.59 and 3734.01 of the

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

OCT 4 1995

OHIO E.P.A.

ORC and rule 3745-50-10 of the Ohio Administrative Code ("OAC").

4. At the Facilities, the Respondent generates "hazardous waste" as that term is defined by Section 3734.01 of the ORC and rules 3745-50-10 and 3745-51-03 of the OAC.
5. Mixed waste is defined as waste containing both a hazardous waste subject to the Resource Conservation and Recovery Act of 1976, 42 U.S.C. Section 6901 et seq, as amended ("RCRA"), and a source, special nuclear, or by-product material subject to the Atomic Energy Act of 1954, 42 U.S.C. Section 2011 et seq, as amended ("AEA").
6. The Ohio EPA received final authorization from the U.S. Environmental Protection Agency to regulate the hazardous waste component of mixed waste on June 30, 1989 (54 FR 27173).
7. At the Facilities, Respondent has generated and continues to generate mixed wastes subject to OAC rules 3745-59-30 (solvent wastes), 3745-59-32 (California list wastes), 3745-59-33 (first third wastes), 3745-59-34 (second third wastes), and 3745-59-35 (third third wastes), hereinafter referred to as land disposal restricted ("LDR") mixed wastes.
8. The Respondent has represented to the Ohio Environmental Protection Agency ("Ohio EPA") that the treatment capability or capacity for these LDR mixed wastes is presently inadequate or unavailable.
9. No mixed waste at the Facilities is currently being stored in violation of the LDR requirements of OAC rule 3745-59-50.
10. Section 105 of the Federal Facility Compliance Act of 1992 ("FFCA"), 42 U.S.C. Section 6939c, enacted October 6, 1992, requires the Secretary of Energy to develop and submit to the Ohio EPA, for review and approval, approval with modifications, or disapproval, a plan for the development of treatment capacities and technologies to treat all of the mixed waste at the Facilities. Section 105 of the FFCA further provides for the Ohio EPA to consider the need for regional treatment facilities, to consult with the Administrator of the United States Environmental Protection Agency ("U.S. EPA") and any other state in which a facility affected by the plan is located, and to consider public comments in making its determination on the plan.

OCT 4- 95

OHIO E.P.A.

Section 105 of the FFCA further provides for the Ohio EPA to approve, approve with modifications, or disapprove the plan within six (6) months after receipt of the plan (hereinafter, "Site Treatment Plan" or "STP").

11. Section 102(a) of the FFCA, 42 U.S.C. Section 6961(a), provides that each department, agency, and instrumentality of the executive, legislative, and judicial branches of the Federal Government (1) having jurisdiction over any solid waste management facility or disposal site, or (2) engaged in any activity resulting, or which may result, in the disposal or management of solid waste or hazardous waste shall be subject to, and comply with, all Federal, State, interstate and local requirements, both substantive and procedural, respecting control and abatement of solid waste or hazardous waste disposal and management in the same manner, and to the same extent, as any person is subject to such requirements, including the payment of reasonable service charges. Section 102(a) also provides that the United States expressly waives any immunity otherwise applicable to the United States with respect to such substantive or procedural requirements.

Further, Section 102(c) of the FFCA provides that, until October 6, 1995, the waiver of sovereign immunity contained in Section 102(a) of the FFCA, with respect to civil, criminal, and administrative penalties and fines, shall not apply to departments, agencies, and instrumentalities of the executive branch of the Federal Government for violations of Section 3004(j) of the Solid Waste Disposal Act ("SWDA"), 42 U.S.C. Section 6924(j), involving storage of mixed waste that is not subject to an existing agreement, permit, or administrative or judicial order, so long as such waste is managed in compliance with all applicable requirements.

Section 102(c) of the FFCA further provides that, after October 6, 1995, the waiver of sovereign immunity contained in Section 102(a) of the FFCA, with respect to civil, criminal, and administrative penalties and fines, shall apply to departments, agencies, and instrumentalities of the executive branch of the Federal Government for violations of Section 3004(j) of the SWDA, 42 U.S.C. Section 6924(j), involving storage of mixed waste, except that such waiver of sovereign immunity shall not apply after October 6, 1995 for violations by the Respondent of Section 3004(j) of the SWDA, involving storage of mixed waste, so long as the Respondent is in compliance with both: a plan that has been submitted and approved pursuant to Section 105 of the FFCA, 42 U.S.C. Section 6939c, and which is in effect; and an order requiring compliance with

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

such plan which has been issued pursuant to Section 105 of the FFCA, and which is in effect.

12. On April 6, 1993, Respondent published a *Federal Register* notice (58 FR 17875) describing its proposed process for developing the Site Treatment Plan ("STP") in three phases: the conceptual site treatment plan ("CSTP"), the draft site treatment plan ("DSTP"), and a proposed site treatment plan ("PSTP").
13. On November 1, 1993 and September 6, 1994, the Respondent submitted to the Ohio EPA a CSTP and a DSTP, respectively.
14. By letter dated February 17, 1994, the Ohio EPA provided comments to Respondent on the CSTP.
15. By letters dated October 19, 1994 and November 1, 1994, the Ohio EPA provided comments to Respondent on the DSTP.
16. On April 4, 1995, Respondent submitted to Ohio EPA the PSTP for the Facilities.
17. On April 26, 1995, the Ohio EPA published a notice of availability of the PSTP, and has made the PSTP available to the public upon request. The Ohio EPA did not receive any public comments on Respondent's PSTP.
18. The Ohio EPA has reviewed the PSTP, has considered the need for regional treatment facilities and has consulted with U.S. EPA and states in which a facility affected by the PSTP is located. Based upon such review, consultation, and consideration, the Ohio EPA transmitted written comments on the PSTP to Respondent on June 22, 1995.
19. On October 3, 1995, the Respondent submitted an amended PSTP to Ohio EPA in an effort to address Ohio EPA's comments on the PSTP.
20. The Background Volumes of the PSTP and Amended PSTP contain background information and underlying assumptions regarding the schedules and treatment technologies proposed in the PSTP and amended PSTP.
21. The Ohio EPA has reviewed the Respondent's amended PSTP, has considered the need for regional treatment facilities and has consulted with U.S. EPA and

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

other affected states, regarding the Respondent's PSTP.

22. The Respondent's submittal of the PSTP and the amended PSTP, the Director's approval of the amended PSTP, and the Director's issuance of these Orders fulfill the requirement of section 105(b) of the FFCA, 42 U.S.C. Section 6939c(b) with respect to the Facilities.

### V. ORDERS

The Director hereby issues the following Orders:

1. The Compliance Plan Volume of the amended PSTP submitted to Ohio EPA on October 3, 1995 (Attachment 1) is hereby approved, subject to the terms and conditions specified in these Orders. The Compliance Plan Volume of the amended PSTP will hereafter be referred to as the "approved STP". Respondent shall implement and comply with the approved STP, in accordance with the approved schedules contained therein, and shall comply with the following terms and conditions:

A. Covered Matters:

The approved STP and these Orders address the generation and treatment of all mixed wastes at the Facilities, which are not being accumulated in accordance with the timeframes established in OAC Chapter 3745-52 or with the LDR requirements of OAC rule 3745-59-50, whether such wastes were generated or accumulated in the past, are currently generated or accumulated, or will be generated or accumulated in the future.

B. Compliance Schedules:

i. Establishment of Compliance Schedules:

Compliance Schedules are established in the approved STP. As newly generated mixed waste at the Facilities become a Covered Matter in accordance with Order 1.A. above, DOE shall notify the Ohio EPA and shall propose to amend the approved STP in accordance with the provisions of Order I.D. Amendments.

ii. Categories of Compliance Schedules:

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

By: *Marie C. ...*

The categories of activities for which compliance schedules are established in the approved STP are listed in the following table.

Depending upon the status of the facility or treatment options chosen certain compliance schedules may not be necessary, or an alternative activity that is more appropriate to the facility or treatment approach may be designated, as agreed to by the Parties.

The compliance schedule dates for b), c) and d) of Table 1 below may be measured by another event, e.g. within a certain number of days of receiving the site agreement to ship the waste.

Table 1. Typical schedule for mixed wastes to be shipped off-site for treatment

Examples of Types of Activity Selected for Compliance Scheduling:	
a)	submit shipment agreement request to off-site facility
b)	notify Ohio EPA of receipt of shipment agreement
c)	initiate preparation of wastes for transport
d)	complete shipment of mixed wastes for off-site treatment

- iii. Notwithstanding the Table of Order 1.B.ii, the provisions of Section 4 of the approved STP shall apply to Transuranic Waste (TRU) which may be generated at the West Jefferson Facility.
- iv. For newly identified mixed waste streams generated at the Facilities, the notification of a need to amend the approved STP need only identify the waste streams. If sufficient information on the newly identified mixed waste streams is not currently available to DOE, including those mixed waste streams that are not sufficiently characterized to allow identification of appropriate treatment in order to submit an amended STP within the timeframes set out in accordance with Order I.D.iii of these Orders, DOE in its written notification may propose an alternative schedule for submitting the amended STP that addresses the proposed amendment, including a proposed schedule for characterization where necessary. The final compliance schedule date of the characterization schedule will be the requirement for Respondent to identify the method and location for the treatment of such wastes and a proposed schedule for that to occur.

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

By: Mary Carver Date 10-4-95

- v. For mixed wastes that need technology adaptation, the notification of a need to amend the approved STP shall contain proposed schedules for identifying: (1) the necessary treatment adaptation; and (2) the method and location for the treatment of such waste and a proposed schedule for that to occur.

C. Annual Report:

On or before the 31st day of December, of each year these Orders remain in effect, DOE shall submit to Ohio EPA a written STP Annual Report for the previous federal fiscal year, and an updated STP which incorporates all approved amendments of the approved STP made during the previous fiscal year, for the Facilities. The STP Annual Report shall include the following information: an accounting of the status of the projects described in the approved STP, an updated Table 3 - "Low-Level Mixed Waste Streams" from the Background Volume of DOE's amended PSTP; a statement regarding compliance with the compliance schedules contained in the approved STP; a description of any projected difficulties in achieving compliance with future compliance schedules; an index or chart that clearly indicates all pages of the approved STP affected by approved amendments of the approved STP; a summary of new waste streams generated or identified within the previous fiscal year; and a summary of any additional waste characterization information regarding existing, new or projected waste streams. DOE may, at its option, delay submittal of its updated Table 3 - "Low-Level Mixed Waste Streams" from the Background Volume of DOE's amended PSTP until the 31st day of March of each year following a federal fiscal year for which an STP Annual Report is required to be submitted pursuant to these Orders.

Amendments:

- i. If Respondent or Ohio EPA identifies a need for DOE to amend the approved STP, except for changes in volume of wastes identified in the Background Volume of the amended PSTP, or in the approved STP, the Respondent or Ohio EPA shall provide written notification within 30 days of the identification of such need and the reasons therefor. The notification shall be of sufficient detail to fully explain the rationale for an amendment of the approved STP, including an accounting of the circumstances that justify an STP amendment. If sufficient information on the proposed amendment is not currently available to DOE in order to submit an amended STP within the timeframes set out in accordance with Order 1.D. iii below, DOE, in its written notification, may propose an alternative

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

By: Marilyn Carson Date 10-4-95

OCT -4 95

OHIO E.P.A.

- schedule for submitting the amended STP that addresses the proposed amendment.
- ii. Ohio EPA agrees to consider, in its review, all reasons provided by DOE in its proposal to amend the approved STP.
  - iii. DOE shall submit an amended STP: a) within thirty (30) days from the date of the written notification of a proposed extension of a compliance schedule, or a proposed change of a treatment facility or treatment technology; b) within ninety (90) days from the date of the written notification of any other aspect of the approved STP; and c) annually, (with the annual report pursuant to Order 1.C.) to address changes in volumes of waste identified in the Background Volume of the amended PSTP or in the approved STP.
  - iv. If DOE disagrees with an Ohio EPA notification of the need to amend the approved STP, DOE shall, within 30 days, so notify the Ohio EPA, in writing of the reasons for such disagreement. If DOE and the Ohio EPA are unable to resolve their disagreement, either DOE or Ohio EPA may invoke the dispute resolution procedures of Section IX. During the pendency of the dispute resolution process as set forth in Section IX for a good faith dispute over the Ohio EPA notification of the need to amend the approved STP, the time period for completion of work affected by the 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 Section IX.
  - v. The Ohio EPA will determine whether the Respondent's amended STP constitutes a "revision" of the approved STP, within the meaning of Section 105 of the FFCA, 42 U.S.C. Section 6939c(b)(4) and as further defined in Section III of these Orders. If the Ohio EPA determines that the amended STP constitutes a "revision" of the approved STP, within the meaning of Section 105 of the FFCA, 42 U.S.C. Section 6939c(b)(4) and as further defined in Section III of these Orders, the Ohio EPA will in a timely manner, 1) publish a notice of the proposed revision of the approved STP and 2) notify the Respondent, in writing, of such determination.
  - vi. Based on the Ohio EPA's review of the proposed revision to the STP, the Ohio EPA's consideration of the need for regional treatment facilities, the Ohio EPA's consultation with U.S. EPA and other affected states, and the Ohio EPA's consideration of all public comments received by Ohio EPA regarding the revised STP, the Ohio EPA will approve, approve with

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

By: Mary Carver Date 10-4-95

modifications, or disapprove the revised STP, in a timely manner, and will notify Respondent accordingly.

- vii. If the Ohio EPA determines that the Respondent's amended STP does not constitute a "revision" of the approved STP, within the meaning of Section 105 of the FFCA, 42 U.S.C. Section 6939c(b)(4) and as further defined in Section III of these Orders, the Ohio EPA will in a timely manner, provide written notification to Respondent of Ohio EPA's approval, approval with modifications, or disapproval of the proposed amended STP.
- viii. Prior to approving with modifications or disapproving a proposed amendment to the approved STP, Ohio EPA will consult with DOE regarding the proposed amendment. DOE and Ohio EPA shall attempt to resolve any disagreement with respect to a proposed amendment, including a proposed extension of a compliance schedule, pursuant to the provisions of Section IX, Dispute Resolution. Determinations by Ohio EPA to approve with modifications or to disapprove a proposed amendment will be accompanied by a written statement detailing the reasons for modifications or disapproval.

**E. Duty to Perform; Extensions**

- i. Except as expressly provided in these Orders, DOE shall cause all work to be performed in accordance with the compliance schedules established in the approved STP.
- ii. Pursuant to Order 1.D. of these Orders, DOE may request that a compliance schedule be extended. Upon receipt of a proposed amendment to the approved STP that requests that a compliance schedule be extended, the Ohio EPA will determine whether good cause for the requested compliance schedule extension exists, and shall approve the proposed STP amendment if good cause for the requested compliance schedule extension exists.
- iii. For purposes of Order 1.E. of these Orders, good cause for an extension of a compliance schedule may include a delay caused by, or likely to be caused by: (a) an event of unavoidable delay; (b) Ohio EPA's failure to timely take any action contemplated by these Orders; (c) the good faith invocation of dispute resolution or the initiation of administrative or judicial action; (d) the Ohio EPA's approval of a proposed STP amendment to extend another compliance schedule; (e) additional work agreed to by DOE

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

By: Mary Carver Date 10-4-95

OCT 4 1995

OHIO E.P.A.

and Ohio EPA; (f) an inconsistency or conflict between such compliance schedule and the requirements of any other existing agreement, order or permit to which DOE is a party; (g) the failure of an off-site treatment facility (identified as a preferred option in the approved STP) to accept or treat wastes subject to these Orders as scheduled in the approved STP; or (h) the failure of a mobile treatment facility (identified as a preferred option in the approved STP) to become available for treatment of wastes subject to these Orders as scheduled in the approved STP.

- iv. The Ohio EPA's determination of whether good cause for extension of a compliance schedule exists is necessarily a fact specific determination. The foregoing examples of circumstances that may constitute good cause for extension of a compliance schedule shall not be construed to create a presumption that such circumstances will, in any particular instance, be determined by Ohio EPA to constitute good cause for extension of a compliance schedule.

#### **VI. LIMITATIONS OF DIRECTOR'S APPROVAL**

These Orders shall not be construed as the Ohio EPA's authorization to Respondent to construct or operate facilities or to initiate treatment activities as may be proposed in the approved STP, unless otherwise expressly stated in Order number 1. Nothing in these Orders shall be construed as limiting applicable laws regarding the construction of facilities, operation of treatment facilities associated with the approved STP, or regarding approvals required for such construction of facilities, operation or treatment activities.

#### **VII. NOTICE**

All documents to be submitted pursuant to these Orders shall be submitted to the following persons at the following addresses:

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

OCT 4-1996

OHIO E.P.A.

Ohio EPA:

Ohio Environmental Protection Agency  
Central District Office  
Division of Hazardous Waste Management  
3232 Alum Creek Drive  
Columbus, Ohio 43207-3461  
Attn: RCRA Group Leader and Project Manager

and

Ohio Environmental Protection Agency  
Division of Hazardous Waste Management  
Attn: Michael A. Savage, Assistant Chief  
1800 WaterMark Drive  
Columbus, Ohio 43215-1099

DOE:

U.S. DOE, Battelle Columbus Laboratories  
Decommissioning Project Office  
BCLDPO Manager  
505 King Avenue  
Columbus, Ohio 43201-2693  
Attn: Mr. James W. Thomas

or to such persons and addresses as may hereafter be otherwise specified in writing.

### **VIII. PROJECT MANAGERS**

Within ten (10) business days of the effective date of these Orders, Ohio EPA and DOE shall each designate a Project Manager. Each Party shall notify the other party in writing of the designated Project Manager. Either Party may change its designated Project Manager by notifying the other Party, in writing, ten (10) business days before the change, if possible.

Each Project Manager shall be the primary contact regarding the implementation of these Orders. Except as otherwise provided in Section VII of these Orders, communications between the Parties concerning these Orders shall be directed through

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

the Project Manager, for further dissemination to the respective Project Manager's organization.

The Project Managers shall represent their respective organization regarding the implementation of these Orders, including changes to schedules and requirements, except as otherwise provided in Order 1.D. (Amendments), or Section IX (Dispute Resolution). The Project Managers shall meet periodically, as appropriate, to discuss progress and problems regarding the implementation of these Orders.

#### **IX. DISPUTE RESOLUTION**

- A. If a dispute arises regarding the approved STP or these Orders, the procedures of this Section shall apply. For purposes of this Section, the term "Parties" means DOE and Ohio EPA.
- B. Respondent and Ohio EPA shall make reasonable efforts to informally resolve any good faith dispute regarding these Orders at the Project Manager level, within thirty (30) days following the occurrence of the actions or circumstances giving rise to the dispute. If resolution cannot be achieved informally, the disputing party may elevate the dispute for resolution pursuant to this section. If Respondent does not submit a written notification of dispute to Ohio EPA within thirty (30) days following the occurrence of the actions or circumstances giving rise to the dispute, Respondent shall be deemed to have accepted the position of the Ohio EPA.
- C. To initiate formal dispute resolution, the disputing party shall submit to the other party a written notification of any good faith dispute regarding these Orders. The written notification of dispute shall specify the nature of the dispute, the work affected by the dispute, the disputing party's position with respect to the dispute and the information the disputing party is relying upon to support its position. The Project Managers and designated representatives of the Parties shall attempt to resolve such dispute within thirty (30) days of written notification of the dispute. For DOE, the designated representative shall include the Manager of the DOE-Battelle Columbus Laboratories Decommissioning Project Office. For Ohio EPA, the designated representatives shall include the Chief of the Division of Hazardous Waste Management.
- D. If the Project Managers and designated representatives of the Parties are unable

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

to resolve such dispute, within thirty (30) days of written notification of the dispute, then either Party may submit a written statement of the dispute to the Ohio EPA's Deputy Director of Programs (the Director's designee, duly delegated with the authority to resolve disputes under this Section of these Orders). The Deputy Director may meet with the Project Managers and designated representatives of the Parties, and may request additional information regarding the nature of the dispute and the respective positions of the parties. Within thirty (30) days of receipt of the written statement of dispute, the Deputy Director will consult with the Manager of the DOE Chicago Operations Office (or the Manager's designee) and will notify the Project Managers and designated representatives of the Parties in writing of the Director's final decision regarding the dispute. Final decision shall be signed by the Director and shall be binding on the Parties, subject to administrative or judicial appeal or review according to applicable law.

- E. Except as provided in this Section, the Respondent shall maintain compliance with these Orders. However, if the Parties agree that there is a good faith dispute, the time period for completion of work affected by dispute shall be extended for a period of time not to exceed the actual time taken to resolve such good faith dispute in accordance with this Section. The time periods designated in this Section of these Orders may be extended by mutual written agreement of the Parties. The Parties may consult with Battelle Memorial Institute and consult with and invite the participation of U.S. EPA and other states affected by a dispute during the dispute resolution process, as appropriate.
- F. Unless timely appeal is sought, DOE shall incorporate the resolution and final decision of the Ohio EPA into the appropriate plan, schedule or procedure and shall proceed with implementation in accordance with Order 1.D. (Amendments) and the amended plan, schedule or procedure, within thirty (30) days of such resolution and final decision.

## X. FUNDING

DOE shall take all necessary steps to obtain sufficient funding to comply with the provisions of the approved STP and these Orders. Ohio EPA will consider funding availability in reviewing DOE proposals for establishing and amending compliance schedules pursuant to these Orders.

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

## XI. OTHER APPLICABLE LAWS

Nothing in these Orders shall be construed as waiving or compromising in any way the applicability and enforcement of any other statutes or regulations applicable to the Respondent's activities at the Facilities. The Ohio EPA reserves all rights and privileges except as specified herein.

## XII. RESERVATION OF RIGHTS

Nothing contained herein shall be construed to prevent the Ohio EPA from seeking legal or equitable relief to enforce the terms of these Orders or from taking other administrative, legal or equitable action as deemed appropriate and necessary, including seeking penalties against the Respondent for noncompliance with these Orders. Nothing contained herein shall be construed to prevent the Ohio EPA from exercising its lawful authority to require the Respondent to perform additional activities at the Facilities pursuant to Chapter 3734. of the ORC or any other applicable law in the future. Nothing in these Orders shall be construed to limit the authority of the Ohio EPA to seek relief for violations not addressed in these Orders. Nothing herein shall restrict the right of the Respondent to raise any administrative, legal or equitable claim or defense with respect to such further actions which the Ohio EPA may seek to require of the Respondent. Nothing contained herein shall restrict the right of the Respondent to raise any administrative, legal or equitable claim or defense (including lack of authority) with respect to any administrative or judicial appeal or review of any Ohio EPA notification of need to amend the approved STP. The Director reserves the right to revoke these Orders upon a finding that such revocation is necessary to protect human health or safety or the environment. DOE reserves the right to seek administrative or judicial review of any such revocation.

Ohio EPA and Respondent acknowledge that Section 102(c) of the FFCA provides that, after October 6, 1995, the waiver of sovereign immunity contained in Section 102(a) of the FFCA, with respect to civil, criminal, and administrative penalties and fines, shall apply to departments, agencies, and instrumentalities of the executive branch of the Federal Government for violations of Section 3004(j) of the SWDA, 42 U.S.C. Section 6924(j), involving storage of mixed waste, except that such waiver of sovereign immunity shall not apply after October 6, 1995 for violations by the Respondent of Section 3004(j) of the SWDA, involving storage of mixed waste, so long as the Respondent is in compliance with both: a plan that has been submitted and approved pursuant to Section 105 of the FFCA, 42 U.S.C. Section 6939c, and which is in effect; and an order requiring compliance with such plan which has been

issued pursuant to Section 105 of the FFCA, and which is in effect.

It is the position of the Ohio EPA that the federal Anti-Deficiency Act, 31 U.S.C. Section 1341, as amended, does not apply to any obligations set forth in these Orders, and except as otherwise provided in these Orders, obligations hereunder are unaffected by the Respondent's failure to obtain adequate funds or appropriations from Congress. It is Respondent's position that the obligations set forth in these Orders are subject to the provision of the Anti-Deficiency Act and are subject to funding availability. The Parties agree that it is premature to raise and resolve the validity of such positions at this time.

### **XIII. MODIFICATION**

Except as provided in Section XII - Reservation of Rights, regarding revocation of these Orders, these Orders may be modified only by mutual agreement of Respondent and Ohio EPA. Any modification of these Orders shall be in writing, shall be effective upon signature and issuance by the Director, and shall be incorporated into these Orders and be enforceable in the same manner as any requirement of these Orders. In February of 1999, and periodically (e.g., every three (3) years) thereafter, as appropriate, unless DOE and Ohio EPA mutually agree that no modification of these Orders is warranted, DOE and Ohio EPA shall conduct a good faith dialogue to determine whether the compliance schedule and funding structure of these Orders should be modified. Such dialogue shall consider the experiences and perspectives of DOE and Ohio EPA regarding the implementation of these Orders during the previous three federal fiscal years, the most recent information on current and projected funding availability, and the status of major technical issues that are expected to affect the management of the Facilities mixed waste. If DOE and Ohio EPA agree that modification of these Orders is warranted, DOE and Ohio EPA shall endeavor to complete and implement such modifications within six (6) months of the initiation of such dialogue. Subject to the first paragraph of this Section, if DOE and Ohio EPA disagree as to whether modification of these Orders is warranted, or regarding the extent to which these Orders should be modified, either DOE or Ohio EPA may invoke formal dispute resolution, pursuant to Section IX to facilitate agreement.

### **XIV. TERMINATION**

The Respondent's obligations under these Orders shall terminate when the Respondent demonstrates in writing and certifies to the satisfaction of the Ohio EPA

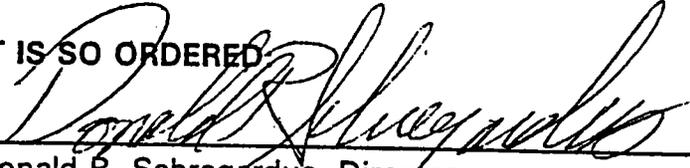
I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

that all obligations under these Orders have been performed or that all mixed wastes subject to these Orders are being accumulated and will continue to be accumulated in compliance with OAC Chapter 3745-52 and OAC Rule 3745-59-50, and the Ohio EPA Division of Hazardous Waste Management acknowledges, in writing, Ohio EPA's acceptance of this demonstration and certification.

#### XV. OTHER CLAIMS

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 signatory to these Orders, for any liability arising out of or relating to the operation of the Facilities.

IT IS SO ORDERED

  
\_\_\_\_\_  
Donald R. Schregardus, Director

October 4, 1995

Date

#### XVI. SIGNATORIES

Each undersigned representative of a party signatory to these Orders certifies that he or she is fully authorized to enter into the terms and conditions of these Orders and to legally bind such signatory to this document.

#### XVII. WAIVER

The Respondent agrees that these Orders are lawful and reasonable and that the times provided for compliance herein are reasonable. The Respondent, by acceptance of these Orders, agrees to comply with all conditions of these Orders and acknowledges that the Respondent's failure to do so may result in immediate revocation of these Orders and further legal action by Ohio EPA.

The Respondent hereby waives the right to appeal or otherwise challenge the issuance of these Orders. Nothing in these Orders shall affect DOE's rights to seek administrative or judicial review of final decisions by the Ohio EPA Director pursuant to Section IX (Dispute Resolution), or final actions by the Director pursuant to ORC Section 3745.04 or other applicable law.

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

The Ohio EPA and the Respondent agree that in the event that these Orders are appealed by any other party to the Environmental Board of Review, or any court, the Respondent retains the right to intervene and participate in such appeal in support of these Findings and Orders. In such event, the Respondent shall continue to comply with these Orders notwithstanding such appeal and intervention unless these Orders are stayed, vacated, or modified.

**IT IS SO AGREED:**

**United States Department of Energy**

By: *James W. Thomas*

9/28/95  
Date

Project Manager  
Title

**Ohio Environmental Protection Agency**

*Donald R. Schregardus*  
Donald R. Schregardus, Director

October 4, 1995  
Date

OHIO E.P.A.

OCT -4 95

ENTERED DIRECTOR'S JOURNAL

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

By: *Mary Cassin*

Date 10-4-95

**XVIII. ACKNOWLEDGEMENT**

Each undersigned representative of an acknowledging signatory to these Orders certifies that he or she is fully authorized to acknowledge the terms and conditions of these Orders.

The undersigned hereby acknowledges Respondent's obligations under these Orders and agrees to facilitate compliance by Respondent with these Orders, subject to applicable contractual arrangements with Respondent.

**Battelle Memorial Institute**

By: V. E. Castberry

October 2, 1995  
Date

Program Manager, BCLDP  
Title

*generic.doe*

OHIO E.P.A.

OCT -4 95

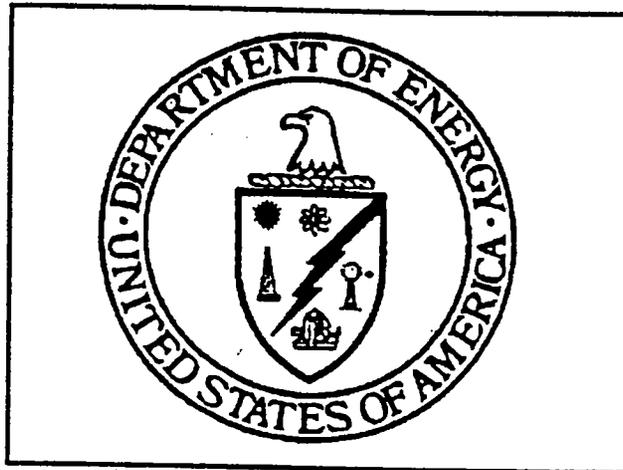
ENTERED DIRECTOR'S JOURNAL

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

10 11 95



October 1995



RECEIVED  
OHIO EPA  
OCT 03 1995  
DIV. OF HAZARDOUS WASTE MGT.

**U.S. DEPARTMENT OF ENERGY  
BATTELLE COLUMBUS LABORATORIES  
DECOMMISSIONING PROJECT**

**AMENDED PROPOSED SITE TREATMENT PLAN**

**COMPLIANCE PLAN VOLUME**

October 1995

OHIO E.P.A.

OCT -4 95

ENTERED DIRECTOR'S JOURNAL

**BATTELLE COLUMBUS LABORATORIES**

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

By: *Maria Carlin* Date 10-4-95

# CONTENTS

	<u>Page</u>
1.0 PURPOSE AND SCOPE .....	1
2.0 IMPLEMENTATION OF THE SITE TREATMENT PLAN .....	2
3.0 LOW-LEVEL MIXED WASTE STREAMS .....	2
3.1 Mixed Waste Streams for Which Technology Exists .....	2
3.1.1 Lab Packs (Inorganic) BC-W .....	3
3.1.2 Lab Packs (Organic) BC-W002 .....	3
3.1.3 Elemental Lead BC-W003 .....	3
3.1.4 Mercury Contaminated Particulate/Debris from Ductile Iron Drain Lines BC-W004 .....	4
4.0 TRU MIXED WASTE STREAMS .....	4
4.1 Description of Waste Streams .....	4
4.2 Strategy for Managing TRU Mixed Waste .....	4

OHIO E.P.A.

OCT -4 95

ENTERED DIRECTOR'S JOURNAL

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

By: Mary Gavin Date 10-4-95

## ACRONYMS

As Low As Reasonably Achievable	ALARA
Battelle Columbus Operations	BCO
Battelle Columbus Laboratories Decommissioning Project	BCLDP
Battelle Memorial Institute	BMI
Decontamination and Decommissioning	D&D
Draft Site Treatment Plan	DSTP
Environmental Restoration	ER
Environmental Management	EM
Environmental Management Advisory Board	EMAB
Environmental Assessment	EA
Federal Facility Compliance Act	FFCA
Land Disposal Restriction	LDR
Low Level Waste	LLW
Mixed Waste Inventory Report	MWIR
National Environmental Policy Act	NEPA
National Governor's Association	NGA
Oak Ridge	OR
Ohio Environmental Protection Agency	OEPA
Programmatic Environmental Impact Statement	PEIS
Proposed Site Treatment Plan	PSTP
Resource Conservation and Recovery Act	RCRA
Richland	RL
Savannah River	SR
Scientific Ecology Group	SEG
Site Treatment Plan	STP
Solid Waste Operations Complex	SWOC
Transuranic	TRU
Treatment Storage and Disposal Facility	TSDF
U.S. Department of Energy	DOE
U.S. Environmental Protection Agency	EPA
Waste Isolation Pilot Project	WIPP
Westinghouse Hanford Company	WHC

OHIO E.P.A.

OCT -4 95

ENTERED DIRECTOR'S JOURNAL

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

By: Mary Cassin Date 10-4-95



## 2.0 IMPLEMENTATION OF THE SITE TREATMENT PLAN

Implementation of this Plan is defined in the Director's Findings and Orders which has been issued by the Ohio Environmental Protection Agency, as described in Section 1.1.

## 3.0 LOW-LEVEL MIXED WASTE STREAMS

### 3.1 Mixed Waste Streams for Which Technology Exists

This section describes the plans and schedules to treat 4 low-level mixed waste streams at the BCLDP. The *Background Volume* of this report describes each waste stream and the preferred treatment option for that waste stream. The completion of decontamination and decommissioning activities at the King Avenue facility area anticipated by October 1996. By this time, it is projected that the majority of EM wastes will have been generated and shipped off-site for treatment and disposal. The completion of D&D activities at the West Jefferson is uncertain at this time. It is estimated that mixed waste generation will culminate at this site by the year 2003.

The scheduled completion of D&D activities at the West Jefferson site is uncertain at this time. The schedule for initiation and completion of decontamination of the West Jefferson site is dependent on the funding received in fiscal year 1997 and beyond. Currently, two funding scenarios are being considered which result in significantly different schedules. At the "Target" funding level (presently the planning assumption), only surveillance and maintenance would be performed at the West Jefferson site between FY 1997 and FY 1999. Actual decontamination work would be deferred until the year 2000, with completion planned for 2003. The second funding scenario assumes that sufficient resources can be applied to accelerate work at the West Jefferson site, consistent with a DOE strategy to eliminate its liability at a number of small or privately owned sites as rapidly as possible. Under this accelerated funding scenario, decontamination work will begin in FY 1997, allowing completion by the end of FY 1999.

The scope for the decontamination activities is defined in a baselined project plan. A detailed work plan will be prepared for each fiscal year's activity, based on the funding available. These annual work plans will form the basis of any notice to the State regarding changes to the project which may be relevant to this STP.

OHIO E.P.A.

OCT -4 95

**3.1.1 Lab Packs (Inorganic) BC-W001**

3.1.1.1 This waste stream will be accumulated in satellite accumulation areas until such time that the waste quantity exceeds limits specified in 40 CFR 262.34(c)(1) or when the process generating this waste stream is terminated. Within 72 hours, the waste will be transferred to a less than 90 day storage area as in the case of the King Avenue site or a less than 180 storage area as in the current case of the West Jefferson facility. This chain of events will initiate scheduling for shipment to an offsite TSDF.

**3.1.2 Lab Packs (Organic) BC-W002**

3.1.2.1 This waste stream will be accumulated in satellite accumulation areas until such time that the waste quantity exceeds limits specified in 40 CFR 262.34(c)(1) or when the process generating this waste stream is terminated. Within 72 hours, the waste will be transferred to a less than 90 day storage area as in the case of the King Avenue site or a less than 180 storage area as in the current case of the West Jefferson facility. This chain of events will initiate scheduling for shipment to an offsite TSDF.

**3.1.3 Elemental Lead BC-W003**

3.1.3.1 This waste stream will be accumulated in satellite accumulation areas until such time that the waste quantity exceeds limits specified in 40 CFR 262.34(c)(1) or when the process generating this waste stream is terminated. Within 72 hours, the waste will be transferred to a less than 90 day storage area as in the case of the King Avenue site or a less than 180 storage area as in the current case of the West Jefferson facility. This chain of events will initiate scheduling for shipment to an offsite TSDF.

ENTERED DIRECTOR'S JOURNAL

OCT -4 95

OHIO E.P.A.

### 3.1.4 Mercury Contaminated Particulate/Debris from Ductile Iron Drain Lines BC-W004

- 3.1.4.1 This waste stream will be accumulated in satellite accumulation areas until such time that the waste quantity exceeds limits specified in 40 CFR 262.34(c)(1) or when the process generating this waste stream is terminated. Within 72 hours, the waste will be transferred to a less than 90 day storage area as in the case of the King Avenue site or a less than 180 storage area as in the current case of the West Jefferson facility. This chain of events will initiate scheduling for shipment to an offsite TSDF.

FILED DIRECTOR'S JOURNAL

OCT -4 95

OHIO E.P.A.

## 4.0 TRU MIXED WASTE STREAMS

### 4.1 Description of Waste Streams

Transuranic (TRU) wastes identified by the BCLDP are the debris and residue of examination/testing of spent nuclear fuel. However, TRU mixed wastes are not anticipated based on process knowledge; therefore, generation of TRU mixed-waste by the BCLDP is speculative at this time. Further characterization of the JN-1 hot cells at the West Jefferson site is required to validate this assumption. Possible future sources of TRU mixed waste are contaminated lead shielding, and hydraulic fluids in hot cell doors and major equipment. Because of radiation levels, and inaccessibility, these items cannot be characterized until the hot cell clean-up is nearly complete, now scheduled for post-1999. Decontamination processes, such as chemical cleaning and filtration are likely to be effective in minimizing or preventing the generation of mixed TRU wastes.

### 4.2 Strategy for Managing TRU Mixed Waste

Nearly all of the TRU waste in the hot cells derives from examination of spent nuclear fuel and will require remote handling techniques. The current plan is to ship all TRU waste off site for interim storage as the Waste Isolation Pilot Project (WIPP) is not scheduled to begin receiving remote-handled waste until after 2002. Any TRU mixed waste which may be generated will also be sent off site for appropriate treatment and/or storage. There will be no long-term on site storage of TRU mixed waste inconsistent with OAC 3734-59-50. The specific site for interim storage or treatment will be identified once the characteristics of any mixed TRU waste is established.

---

In the event that a TRU mixed waste stream is identified during the decontamination effort at the West Jefferson site, the BCLDP will notify the Ohio EPA in accordance with the provisions of the Directors Findings and Orders. Both parties will determine whether the identification of a new mixed waste stream necessitates a formal revision to the Site Treatment Plan. The notification of the Ohio EPA will include the nature of the TRU mixed waste stream, and the proposed treatment/storage site. The State may be requested to enter into discussions with the proposed receiving state regarding access.

DOE shall include information regarding progress in the national TRU mixed waste management program in the update to the STP required by the Director's Findings and Orders issued by OEPA of this Compliance Plan. This will include, as applicable and appropriate, the status of the no-migration variance petition, and information related to characterization, packaging, and/or treatment capabilities or plans for TRU mixed waste related to WIPP waste acceptance criteria.

OHIO E.P.A.

OCT -4 95