

<p>Change Number M-15-93-04</p>	<p>Federal Facility Agreement and Consent Order Change Control Form Do not use blue ink. Type or print using black ink.</p>	<p>Date Jan. 25, 1994</p>												
<p>Originator K.M. Thompson</p>		<p>Phone 376-6421</p>												
<p>Class of Change  <input type="checkbox"/> I - Signatories              <input checked="" type="checkbox"/> II - Project Manager              <input type="checkbox"/> III - Unit Manager</p>														
<p>Change Title ESTABLISH MILESTONES FOR A TREATABILITY TEST AT A BURIAL GROUND IN THE 100-B AREA</p>														
<p>Description/Justification of Change          Establish the following target date and milestones:</p> <table border="0"> <tr> <td data-bbox="191 793 386 825">M-15-16A-T01</td> <td data-bbox="410 793 1222 888">Finalize the scope of work for the 100-B Area Burial Ground Treatability Test before starting the test plan.</td> <td data-bbox="1287 793 1563 825">February 15, 1994</td> </tr> <tr> <td data-bbox="191 919 321 951">M-15-16A</td> <td data-bbox="410 919 1206 982">Submit to the EPA and Ecology the 100-B Area Burial Ground Test Plan.</td> <td data-bbox="1287 919 1417 951">May 1994</td> </tr> <tr> <td data-bbox="191 1014 321 1045">M-15-16B</td> <td data-bbox="410 1014 1141 1077">Commence remedial field work for the 100-B Area Burial Ground.</td> <td data-bbox="1287 1014 1466 1045">August 1994</td> </tr> <tr> <td data-bbox="191 1108 321 1140">M-15-16C</td> <td data-bbox="410 1108 1174 1171">Submit to the EPA and Ecology a 100-B Area Burial Ground Field Work Report.</td> <td data-bbox="1287 1108 1417 1140">May 1995</td> </tr> </table> <p style="text-align: center;">Description continued on page 2 of this change form.</p>			M-15-16A-T01	Finalize the scope of work for the 100-B Area Burial Ground Treatability Test before starting the test plan.	February 15, 1994	M-15-16A	Submit to the EPA and Ecology the 100-B Area Burial Ground Test Plan.	May 1994	M-15-16B	Commence remedial field work for the 100-B Area Burial Ground.	August 1994	M-15-16C	Submit to the EPA and Ecology a 100-B Area Burial Ground Field Work Report.	May 1995
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<p>Impact of Change None.</p>		<p style="text-align: center;"><b>RECEIVED</b> MAR 17 2003 <b>EDMC</b></p>												
<p>Affected Documents Hanford Federal Facility Agreement and Consent Order, Action Plan, Appendix D.</p>														
<p>Approvals      <input checked="" type="checkbox"/> Approved      <input type="checkbox"/> Disapproved</p> <p>This change form approved by Amendment Four to the Hanford Federal Facility Agreement and Consent Order executed by the signatories on January 25, 1994.</p> <table border="0"> <tr> <td data-bbox="191 1749 938 1791">John Wagoner DOE</td> <td data-bbox="963 1749 1141 1791">January 25, 1994 Date</td> </tr> <tr> <td data-bbox="191 1812 938 1854">Gerald Emison EPA</td> <td data-bbox="963 1812 1141 1854">January 25, 1994 Date</td> </tr> <tr> <td data-bbox="191 1875 938 1917">Mary Riveland Ecology</td> <td data-bbox="963 1875 1141 1917">January 25, 1994 Date</td> </tr> </table>		John Wagoner DOE	January 25, 1994 Date	Gerald Emison EPA	January 25, 1994 Date	Mary Riveland Ecology	January 25, 1994 Date							
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## ACTION:

Conduct a treatability test at a burial ground in the 100-B Area to obtain additional engineering information for remedial design of burial grounds receiving waste generated from 100 Area removal actions. The test will consist of collecting waste for analysis for development of waste acceptance criteria, evaluations of safety considerations for contingency planning, waste removal and transportation technology, and verification of existing information from historical records.

## BACKGROUND:

The 100 Area burial grounds, such as the 118-B-1, contain a great variety of different waste forms as per historical records. Some of the wastes were segregated into specific trenches during disposal. The waste types range from typical office trash to chemical and radiologically contaminated equipment. The 118-B-1 Burial Ground first received wastes in 1944 and continued to receive wastes until 1973. The 118-B-1 Burial Ground was sampled for radionuclide contaminants in April 1976 and reported by Dorian and Richards (1978).

The 118-B-1 Burial Ground is the preferred site (to conduct a treatability test) as selected by the U.S. Environmental Protection Agency (EPA) and State of Washington Department of Ecology (Ecology).

## SCOPE:

The 118-B-1 Burial Ground is part of the 100-BC-2 Operable Unit. The strategy negotiated between the Tri-Party signatories and being used for burial grounds in the 100 Area relies on existing information and the observational approach to achieve remediation goals. The data generated from the exhumation of selected trenches in the 118-B-1 Burial Ground will help evaluate existing information on waste forms and other engineering information that is useful in planning the remediation. This information includes but is not limited to the following:

- o Types of waste media that will need to be addressed.
- o Amount of overburden covering trenches.
- o Depth of waste material in trenches.
- o Analytical Screening techniques to utilize during remediation.
- o Types of contaminants for Safety planning, removal and transportation equipment, data for treatment or immobilization considerations and Waste Acceptance Criteria development.
- o Segregation, decontamination and volume reduction (compaction).

The exhumation of the test pits in the 118-B-1 Burial Ground will be no less than 5000 cubic yards and up to 10,000 cubic yards. The waste generated from the test pits will be managed as "investigation-derived-waste" or returned to the excavation in a manner that will facilitate final remediation. The majority of the wastes will be handled in a manner similar to test pit wastes. The specifics of the waste management will be detailed in the treatability test plan.

An individual burial ground is heterogeneous and an excavation study may not be sufficient to develop a complete and comprehensive analog for waste acceptance criteria or analogous site strategies. Other contingencies may be found to be necessary in the planning for remediating any burial ground regardless of any prior burial ground knowledge or experience. The proposed tests will, however, serve to help identify the probability of a specific waste scenario to occur during remediation.

ASSUMPTIONS:

- Use field screening techniques for contamination identification with minimal lab samples for confirmation. No high activity samples will be collected.
- Utilize information and techniques from the 100-HR-1 Excavation Treatability Study.
- The Scope of Work including number and location of trenches selected will be negotiated and agreed to by the EPA, Ecology, and the U.S. Department of Energy, Richland Operations Office (RL) before starting the Test Plan.
- Wastes will be returned to the excavation in the reverse order of the removal or will be handled as "investigation-derived-waste".

100-HR-1

IT IS SO AGREED:

Each undersigned representative of a Party certifies that he or she is fully authorized to enter into this Agreement and Action Plan and to legally bind such Party to this Agreement and Action Plan. These change requests and amendments shall be effective upon the date on which this amendment agreement is signed by the Parties. Except as amended herein, the existing provisions of the Agreement shall remain in full force and effect.

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY:

*Gerald Emison*  
Gerald Emison  
Acting Regional Administrator  
Region 10  
U.S. Environmental Protection Agency

1-25-94  
Date

FOR THE UNITED STATES DEPARTMENT OF ENERGY:

*John Wagoner*  
John Wagoner  
Manager  
U.S. Department of Energy  
Richland Operations Office

1/25/94  
Date

FOR THE WASHINGTON STATE DEPARTMENT OF ECOLOGY:

*Mary Riveland*  
Mary Riveland  
Director  
State of Washington  
Department of Ecology

1/25/94  
Date

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