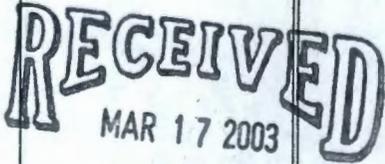


Change Number M-13-93-06	Federal Facility Agreement and Consent Order Change Control Form Do not use blue ink. Type or print using black ink.	Date Jan. 25, 1994																		
Originator K. Michael Thompson		Phone 376-6421																		
Class of Change <input checked="" type="checkbox"/> I - Signatories <input type="checkbox"/> II - Project Manager <input type="checkbox"/> III - Unit Manager																				
Change Title Cleanup Strategy Documents for the Columbia River and Hanford Groundwater																				
Description/Justification of Change <p>Ecology, EPA and DOE agree that, in order to achieve effective and timely remedial decisions and actions concerning the Columbia River and Hanford groundwater, certain strategies must be developed to clearly describe the objectives, goals and technical approaches in these areas.</p> <table border="1" data-bbox="150 860 1309 1212"> <thead> <tr> <th>Milestone</th> <th>Description</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>M-13-80</td> <td>Submit Compendium of Existing Columbia River Contaminant Data to EPA and Ecology</td> <td>Apr. 1994</td> </tr> <tr> <td>M-13-80A</td> <td>Complete Columbia River Contaminant Workshops</td> <td>Jun. 1994</td> </tr> <tr> <td>M-13-80B</td> <td>Submit the Columbia River Comprehensive Impact Assessment to EPA and Ecology (Human Health and Environmental Risk Assessment)</td> <td>TBD</td> </tr> <tr> <td>M-13-81</td> <td>Submit Work Plan on the Hanford Groundwater Remediation Strategy to EPA and Ecology</td> <td>Aug. 1994</td> </tr> <tr> <td>M-13-81A</td> <td>Submit Work Plan on the Hanford Groundwater Protection Management Plan to EPA and Ecology</td> <td>Oct. 1994</td> </tr> </tbody> </table>			Milestone	Description	Date	M-13-80	Submit Compendium of Existing Columbia River Contaminant Data to EPA and Ecology	Apr. 1994	M-13-80A	Complete Columbia River Contaminant Workshops	Jun. 1994	M-13-80B	Submit the Columbia River Comprehensive Impact Assessment to EPA and Ecology (Human Health and Environmental Risk Assessment)	TBD	M-13-81	Submit Work Plan on the Hanford Groundwater Remediation Strategy to EPA and Ecology	Aug. 1994	M-13-81A	Submit Work Plan on the Hanford Groundwater Protection Management Plan to EPA and Ecology	Oct. 1994
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Impact of Change <p>The implementation of this change will select three remedial strategy documents that will be submitted in-lieu of operable unit work plans under TPA Milestone M-13 in 1994. The Documents will describe the overall investigation and remediation objectives, goals and technical approaches for the Columbia River and Hanford groundwater that has been demonstrated to be impacted by Hanford operations.</p>																				
Affected Documents Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Action Plan, Appendix D.																				
Approvals <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved <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="1" data-bbox="58 1768 1001 1952"> <tbody> <tr> <td>John Wagoner DOE</td> <td>January 25, 1994 Date</td> </tr> <tr> <td>Gerald Emison EPA</td> <td>January 25, 1994 Date</td> </tr> <tr> <td>Mary Riveland Ecology</td> <td>January 25, 1994 Date</td> </tr> </tbody> </table>		John Wagoner DOE	January 25, 1994 Date	Gerald Emison EPA	January 25, 1994 Date	Mary Riveland Ecology	January 25, 1994 Date	<div style="text-align: center;">  <p>MAR 17 2003</p> <p>EDMC</p> </div>												
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COLUMBIA RIVER COMPREHENSIVE IMPACT ASSESSMENT

Assessment for cleanup decisions at the Hanford Site requires a comprehensive impact assessment of current and residual Hanford-derived contaminants to the Columbia River and its natural resources. Associated current human health and environmental impacts will be assessed. This process will utilize an ecosystem approach for guiding remedial decisions. 100-Area, 200-Area and 300-Area operable units will continue to assess contaminant sources and remediation. The Columbia River Comprehensive Impact Assessment will address all Columbia River contaminants, risk assessments and remediation. If unacceptable levels of human health or environmental risk are found, appropriate remedial actions will be initiated consistent with the National Contingency Plan and the Tri-Party Agreement through the Hanford Past Practice Strategy. Remedial decisions resulting from the Columbia River Comprehensive Impact Assessment will consider impacts to the environment and natural resources from alternative remedial options as part of the remedial decision process.

The Columbia River Comprehensive Impact Assessment will benefit activities undertaken pursuant to the natural resource damages provisions of CERCLA by providing data that will be of value in such activities.

The initial Columbia River Comprehensive Impact Assessment effort will be the development of a "compendium" of existing data on Columbia River contamination. This will be followed by a workshop, open to the affected American Indian Tribes, The State of Oregon, the Hanford Advisory Board (HAB), and the public, that will give a concise briefing on Columbia River contaminants from Hanford Site operations and resultant human health and environmental impacts. Subsequently, the wealth of data that currently exists will be collected and distributed to Ecology, EPA and the Public Reading Rooms. An analysis of the data by Ecology, EPA and DOE, as well as stakeholders such as affected American Indian Tribes, the State of Oregon, the HAB and other users of the Columbia River who wish to participate will be performed. A determination will be made if human health and environmental risk assessments can be performed with the existing data. Additional data necessary to verify key existing data that may be of inadequate quality to support no action decisions or to fill-in data gaps will be collected under a limited field investigation work plan, with appropriate new TPA milestones. Due to this uncertainty no date is applied to the milestone that falls after the analysis of the existing data base. Data analyses and decisions will undergo peer review by a technically qualified, independent group, acceptable to Ecology, EPA and DOE. Throughout this process, government-to-government consultations on the "compendium" and other related issues will be proceeding between the DOE and the affected American Indian Tribes, supported by the other signatories. The State of Oregon, the HAB, other stakeholder groups and the public will also be provided the opportunity to provide input during this process.

The reporting of existing data on Hanford-derived contamination to the Columbia River and its natural resources has no constraints on downstream boundaries. However, an analysis of the data will be used to determine an appropriate downstream boundary for any subsequent data collection.

HANFORD GROUNDWATER REMEDIATION STRATEGY

The planned initiation of several pilot-scale groundwater pump-and-treat operations in 1994 has resulted in significant public interest in the review of a Hanford groundwater remediation strategy. A concise strategy needs to be documented that describes how Hanford groundwater remediation will be accomplished at Hanford. The objectives/goals, prioritization of actions and technical approaches will be addressed. This strategy document will be submitted in-lieu of an operable unit work plan required by TPA milestone M-13 in 1994.

HANFORD SITE GROUNDWATER PROTECTION MANAGEMENT PROGRAM

Ecology, EPA and DOE agree that there is a need to coordinate measures required to manage and protect groundwater resources at Hanford. A mechanism is needed that coordinates discharge to the ground, groundwater withdrawal and treatment, and the treatment of liquid effluents that are discharged to the soil column. DOE Order 5400.1 requires such a groundwater protection management program. Ecology, EPA and DOE agree that the document describing the Hanford Site Groundwater Protection Management (DOE/RL-89-12) will be revised to incorporate cleanup goals, TPA requirements and permitting concerning discharge to the ground, groundwater withdrawal and treatment, and the treatment of liquid effluents that are discharged to the soil column. The plan will be used to coordinate these efforts and to manage the Hanford Site groundwater resource. It will be submitted in-lieu of an operable unit work plan required by TPA Milestone M-13 in 1994. The plan will be reviewed on an annual basis to determine if amendments are necessary.

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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 D. 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