



0070231

Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

06-AMRC-0296

JUL 7 2006

Mr. Nicholas Ceto, Program Manager
Office of Environmental Cleanup
Hanford Project Office
U.S. Environmental Protection Agency
309 Bradley Boulevard, Suite 115
Richland, Washington 99352

Ms. Jane A. Hedges, Program Manager
Nuclear Waste Program
State of Washington
Department of Ecology
3100 Port of Benton Boulevard
Richland, Washington 99354

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Addressees:

RESPONSE TO REGULATOR COMMENTS ON HANFORD FEDERAL FACILITY
AGREEMENT AND CONSENT ORDER (HFFACO) TRI-PARTY AGREEMENT CHANGE
NOTICE TPA-CN-151 MODIFICATION TO THE SITEWIDE INSTITUTIONAL CONTROLS
PLAN PER 221-U RECORD OF DECISION COMMITMENT

The purpose of this letter is to transmit RL's response to the regulators comments on the modifications to the Sitewide Institutional Controls Plan for the Hanford Site as proposed in Tri-Party Agreement change notice 151. DOE has reviewed the comments submitted on May 12, 2006, by the regulators and revised the change notice accordingly. The regulators are requested to review the attached revised change notice as RL considers the update to the Sitewide Institutional Controls Plan as complete with Ecology and EPA comments having been addressed in the revised change notice.

If you have questions, please contact me or your staff may contact Joe R. Franco, Assistant Manager for the River Corridor, on (509) 376-6628.

Sincerely,


For Keith A. Klein
Manager

AMRC:JPS

Attachments (3)

cc w/attachs: See page 2

HANFORD PROJECT OFFICE

JUL 14 2006

U.S. EPA

Addressees
06-AMRC-0296

-2-

cc w/attachs:

G. Bohnee, NPT

F. J. Bond, Ecology

C. E. Cameron, EPA

L. L. Fritz, FHI

S. Harris, CTUIR

J. E. Hyatt, FHI

R. Jim, YN

T. Martin, HAB

K. Niles, ODOE

R. E. Piippo, FHI

J. B. Price, Ecology

D. J. Ranade, FHI

E. F. Yancey, FHI

K. R. Fecht, WCH

B. L. Vedder, WCH

Administrative Record, H6-08, Institutional Controls Plan

Environmental Portal, H6-08

ATTACHMENT

**Tri-Party Agreement Change Notice TPA-CN-151
Proposed Changes**



**Change Notice for Modifying Approved Documents/ Workplans
In Accordance with the Tri-Party Agreement Action Plan,
Section 9.0, *Documentation and Records***

A new section A.5 will be added to the Sitewide Institutional Controls (IC) Plan as follows:

A.5 221-U Facility ROD Institutional Control Requirements

This section presents the institutional controls required by the 221-U Facility ROD. A process for implementing the project-specific institutional controls applicable through the time of completion of remedy construction can be found in the Remedial Action Work Plan and Surveillance & Maintenance Plan. A process for implementing the project-specific institutional controls applicable after construction of remedial action can be found in the 221-U Facility Operation and Maintenance Plan.

The institutional control requirements for the 221-U Facility are presented in the following tables:

Table A.5.1. 221-U Facility ROD Institutional Control Requirements (Required Through the Time of Completion of Remedy Construction).

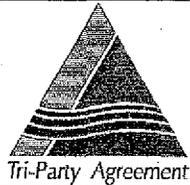
Table A.5.2. 221-U Facility ROD Institutional Control Requirements (Required After Construction of the Remedial Action).



**Change Notice for Modifying Approved Documents/ Workplans
In Accordance with the Tri-Party Agreement Action Plan,
Section 9.0, Documentation and Records**

**Table A.5.1. 221-U Facility ROD Institutional Control Requirements
(Required Through the Time of Completion of Remedy Construction)**

Institutional Control Number	Institutional Controls	Implementing Mechanism*	Objective
1	DOE shall control access to prevent unacceptable exposure of humans to contaminants at the 221-U Facility site addressed in the scope of this ROD until remedy construction is complete. Visitors entering any site areas are required to be badged and escorted at all times. See Figure 7 for a site map showing the extent of the 221-U Facility site and the boundaries of the land use controls. A more detailed map will be developed and included in the RD/RA workplan to be approved by EPA and Ecology.	<ul style="list-style-type: none"> • Entry Restrictions • Warning Signs • Land Use Management 	To prevent unacceptable exposure of humans to contaminants at the 221-U Facility site addressed in the scope of this ROD.
2	No intrusive work shall be allowed at the 221-U Facility site unless the EPA and Ecology have approved the plan for such work and that plan is followed.	<ul style="list-style-type: none"> • Land Use Management (S&M activities involving intrusive work are allowed if they are identified in an approved S&M Plan) 	To prevent unacceptable exposure of humans to contaminants at the 221-U Facility site addressed in the scope of this ROD.
3	DOE shall prohibit well drilling at the 221-U Facility site except for monitoring, characterization, or remediation wells authorized in EPA and Ecology approved documents.	<ul style="list-style-type: none"> • Land Use Management 	To prevent unacceptable exposure of humans to contaminants at the 221-U Facility site addressed in the scope of this ROD.



**Change Notice for Modifying Approved Documents/ Workplans
In Accordance with the Tri-Party Agreement Action Plan,
Section 9.0, Documentation and Records**

**Table A.5.1. 221-U Facility ROD Institutional Control Requirements
(Required Through the Time of Completion of Remedy Construction)**

Institutional Control Number	Institutional Controls	Implementing Mechanism*	Objective
4	Groundwater use at the 221-U Facility site is prohibited, except for limited research purposes and monitoring and treatment authorized in EPA and Ecology approved documents. This prohibition applies until drinking water standards are achieved and EPA and Ecology authorize removal of restrictions. Decision documents for the 200-UW-1 source operable unit and 200-UP-1 groundwater operable unit as well as the Sitewide Institutional Controls Plan will contain the institutional controls and implementing details prohibiting well drilling and groundwater use in the U Plant Area and portions of the 200 West Area as defined in those decision documents.	<ul style="list-style-type: none"> • Groundwater Use Management 	To prevent unacceptable exposure of humans to contaminants at the 221-U Facility site addressed in the scope of this ROD.
5	DOE shall post and maintain warning signs along access roads which caution site visitors and workers of potential hazards from the 221-U Facility site.	<ul style="list-style-type: none"> • Entry Restrictions • Warning Signs 	To prevent unacceptable exposure of humans to contaminants at the 221-U Facility site addressed in the scope of this ROD.
6	In the event of any unauthorized access to the site, such as trespass, DOE shall report such incidents to the Benton County Sheriff's Office for investigation and evaluation of possible prosecution.	<ul style="list-style-type: none"> • Entry Restrictions • Warning Signs 	To implement institutional controls identified in this ROD.

*A detailed description of these mechanisms can be found in Chapter 2.0.



**Change Notice for Modifying Approved Documents/ Workplans
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**Table A.5.2. 221-U Facility ROD Institutional Control Requirements
(Required After Construction of the Remedial Action)**

Institutional Control Number	Institutional Controls	Implementing Mechanism*	Objective
1	DOE shall ensure that use of the 221-U Facility site as well as any activities at the site are restricted to industrial use only, consistent with the exposure assumptions used in establishing risk-based cleanup levels for radionuclides and the use of MTCA Method C to calculate industrial cleanup levels for chemicals. A surveillance program shall be maintained to document that risk- and ARAR-based cleanup levels (and the exposure durations upon which they are based) are not exceeded. Furthermore, DOE shall prohibit the development and use of the 221-U Facility site for residential housing, elementary and secondary schools, child care facilities, and playgrounds. (The Land Use Controls will be maintained until the concentration of hazardous substances in the soil and groundwater are at such levels to allow for unrestricted use and exposure.)	<ul style="list-style-type: none"> • Land Use Management 	To prevent unacceptable exposure of humans to contaminants at the 221-U Facility site addressed in the scope of this ROD.
2	Activities that would disrupt or lessen the performance of the engineered surface barrier are to be prohibited. The engineered surface barrier is anticipated to cover the area delineated in Figure 6 of the 221-U Facility ROD. The Land Use Controls will be maintained until the concentration of hazardous substances in the soil and groundwater are at such levels to allow for unrestricted use and exposure.	<ul style="list-style-type: none"> • Entry Restrictions • Warning Signs • Land Use Management • Groundwater Use Management 	To prevent unacceptable exposure of humans to contaminants at the 221-U Facility site addressed in the scope of this ROD.
3	DOE shall maintain an effective vegetative soil layer to promote the succession of native plants as a feature of the evapotranspiration surface barrier and prohibit activities that would lessen the effectiveness of the vegetation, barrier, and run on/run off controls. These infiltration control measures shall be	<ul style="list-style-type: none"> • Entry Restrictions • Warning Signs • Land Use Management 	To prevent unacceptable exposure of humans to contaminants at the 221-U Facility site addressed in the scope of this ROD.



**Change Notice for Modifying Approved Documents/ Workplans
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**Table A.5.2. 221-U Facility ROD Institutional Control Requirements
(Required After Construction of the Remedial Action)**

Institutional Control Number	Institutional Controls	Implementing Mechanism*	Objective
	maintained unless (or until) DOE can demonstrate that the proposed activity or change in maintenance will result in no negative impact on groundwater or river water quality from any potential release of contamination from the site and EPA and Ecology approve the change.		
4	No irrigation will be permitted for agriculture or landscaping on the 221-U Facility site. This infiltration restriction shall be maintained unless (or until) DOE can demonstrate that the proposed irrigation will have no negative impact on groundwater or river water quality from any potential release of contamination from the site and EPA and Ecology approve the change.	<ul style="list-style-type: none"> • Entry Restrictions • Warning Signs • Land Use Management 	To prevent unacceptable exposure of humans to contaminants at the 221-U Facility site addressed in the scope of this ROD.
5	No intrusive work shall be allowed at the 221-U Facility site unless the EPA and Ecology have approved the plan for such work and that plan is followed. (The Land Use Controls will be maintained until the concentration of hazardous substances in the soil and groundwater are at such levels to allow for unrestricted use and exposure.)	<ul style="list-style-type: none"> • Land Use Management 	To prevent unacceptable exposure of humans to contaminants at the 221-U Facility site addressed in the scope of this ROD.
6	DOE shall prohibit well drilling at the 221-U Facility site except for monitoring, characterization, or remediation wells authorized in EPA and Ecology approved documents. (The Land Use Controls will be maintained until the concentration of hazardous substances in the soil and groundwater are at such levels to allow for unrestricted use and exposure.)	<ul style="list-style-type: none"> • Land Use Management 	To prevent unacceptable exposure of humans to contaminants at the 221-U Facility site addressed in the scope of this ROD.



**Change Notice for Modifying Approved Documents/ Workplans
In Accordance with the Tri-Party Agreement Action Plan,
Section 9.0, Documentation and Records**

**Table A.5.2. 221-U Facility ROD Institutional Control Requirements
(Required After Construction of the Remedial Action)**

Institutional Control Number	Institutional Controls	Implementing Mechanism*	Objective
7	Groundwater use is prohibited at the 221-U Facility site, except for limited research purposes and monitoring and treatment authorized in EPA and/or Ecology approved documents. This prohibition applies until contaminant concentrations in the groundwater are at or below drinking water restrictions and EPA and Ecology authorize removal of restrictions. Decision documents for the 200-UW-1 source operable unit and 200-UP-1 groundwater operable unit as well as the Sitewide Institutional Controls Plan will contain the institutional controls and implementing details prohibiting well drilling and groundwater use in the U Plant Area and portions of the 200 West Area as defined in those decision documents.	<ul style="list-style-type: none"> • Groundwater Use Management • Land Use Management • Revision of the Sitewide Institutional Control Plan as required by the RODs for these operable units 	To prevent unacceptable exposure of humans to contaminants at the 221-U Facility site addressed in the scope of this ROD.
8	DOE shall prohibit activities that would damage the monitoring system and its components (e.g., monitoring wells). (The Land Use Controls will be maintained until the concentration of hazardous substances in the soil and groundwater are at such levels to allow for unrestricted use and exposure.)	<ul style="list-style-type: none"> • Land Use Management 	To prevent unacceptable exposure of humans to contaminants at the 221-U Facility site addressed in the scope of this ROD.
9	DOE shall establish and maintain a records system or database that tracks locations and estimated quantities of residual contamination left in place. (The Land Use Controls will be maintained until the concentration of hazardous substances in the soil and groundwater are at such levels to allow for unrestricted use and exposure.)	<ul style="list-style-type: none"> • Updating the Waste Information Data System 	To maintain information on locations and estimated quantities of residual contamination left in place.
10	DOE shall report the location of residual contamination in deed notices and other informational devices. In addition, a copy of any material documenting the location and quantity of residual contamination shall be given to any prospective	<ul style="list-style-type: none"> • Recording the restriction on the property deed • Notification to EPA and Ecology 	<ul style="list-style-type: none"> • To transfer the information and inform the prospective owner/manager of the restrictions.



**Change Notice for Modifying Approved Documents/ Workplans
In Accordance with the Tri-Party Agreement Action Plan,
Section 9.0, Documentation and Records**

**Table A.5.2. 221-U Facility ROD Institutional Control Requirements
(Required After Construction of the Remedial Action)**

Institutional Control Number	Institutional Controls	Implementing Mechanism*	Objective
	<p>purchaser/transferee before any transfer or lease. Measures that are necessary to ensure the continuation of land use restrictions or other institutional controls (e.g., proprietary controls such as property easements or covenants) shall be taken before any transfer or lease of the property. DOE shall notify EPA and Ecology at least 6 months before any transfer, sale or lease of any property subject to institutional controls required by a CERCLA decision document so that EPA and Ecology can be involved in discussions to ensure that appropriate provisions are included in the conveyance documents to maintain effective institutional controls. If it is not possible for DOE to notify EPA and Ecology at least 6 months before any transfer, sale, or lease, then DOE will notify EPA and Ecology as soon as possible, but no later than 60 days before the transfer, sale, or lease of any property subject to institutional controls. (The Land Use Controls will be maintained until the concentration of hazardous substances in the soil and groundwater are at such levels to allow for unrestricted use and exposure.)</p>		<ul style="list-style-type: none"> • To keep EPA and Ecology informed as required by this ROD.
11	<p>DOE shall report on the effectiveness of institutional controls for this remedy in an annual report, or on an alternative reporting frequency specified by EPA and Ecology. Such reporting may be for this site alone or may be part of a Hanford sitewide report. (The Land Use Controls will be maintained until the concentration of hazardous substances in the soil and groundwater are at such levels to allow for unrestricted use and exposure.)</p>	<ul style="list-style-type: none"> • Unit Managers Meeting 	<p>To keep EPA and Ecology informed of the effectiveness of ICs as required by the ROD.</p>

*A detailed description of these mechanisms can be found in Chapter 2.0.



**Change Notice for Modifying Approved Documents/ Workplans
In Accordance with the Tri-Party Agreement Action Plan,
Section 9.0, *Documentation and Records***

The Sitewide IC Plan is scheduled to receive a major revision (draft on September 30, 2006). Chapter 2.0 of the Sitewide IC Plan will be reorganized to include discussion on:

- The activities that protect the ICs including engineered barrier.
- IC requirement to maintain an effective vegetative soil layer

Section 2.2.3 of the Sitewide IC Plan will be modified as follows:

2.2.3 Land-Use Management

DOE will restrict the use of land on waste sites and prohibit unapproved excavation in accordance with the institutional control requirements of the CERCLA decision documents and as described in applicable work plans. DOE shall prohibit activities that would damage monitoring systems and their components identified in the CERCLA decision documents. Such monitoring systems could include wells and systems monitoring engineered barrier performance.

Section 2.2.4 of the Sitewide IC Plan will be modified as follows:

2.2.4 Groundwater Use Management

DOE will restrict well drilling and groundwater use in accordance with the institutional control requirements of the CERCLA decision documents and as described in applicable work plans. Groundwater use on the Hanford Site generally is restricted, except for limited research purposes and monitoring and treatment, as approved by the EPA or Ecology or as authorized in EPA or Ecology approved documents. Groundwater use also is controlled through excavation permits and the land-use process (as described earlier). A summary of current groundwater use management in the four NPL sites is provided in Figure 2-7.

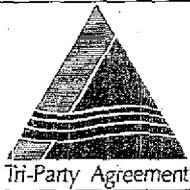


**Change Notice for Modifying Approved Documents/ Workplans
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Section 9.0, *Documentation and Records***

The last paragraph of Section 4.2 of the Sitewide Institutional Controls Plan will be revised as follows:

4.2 Assessment and Reporting

Initially, the Sitewide IC assessments were conducted on an annual basis. However, based upon the results of the annual IC assessments and the ongoing review of ICs by individual projects, it has been determined that a sitewide review of ICs is most appropriately conducted in conjunction with the sitewide CERCLA Five-Year Review. DOE will continue to conduct IC assessments as required by the CERCLA decision documents. The ongoing review of the ICs by individual projects will also continue. The Sitewide IC assessment, in conjunction with the CERCLA Five-Year Review, will be a 'roll up' of these assessments and will serve as a means to evaluate effectiveness of the ICs. An update on the ICs will be provided to EPA/Ecology at the Area Unit Managers Meetings every September.



**Change Notice for Modifying Approved Documents/ Workplans
In Accordance with the Tri-Party Agreement Action Plan,
Section 9.9, Documentation and Records**

TPA-CN-151	<p align="center">Document Submitted Under Tri-Party Agreement Milestone <u>NONE</u></p>	<p align="center">Date: March 8, 2006</p>
<p>Document Number and Title: DOE/RL-2001-41, Rev 0, Sitewide Institutional Controls Plan</p>		<p>Date Document Last Issued: July 2002</p>
<p>Originator: John P. Sands U.S. DOE-RL</p>	<p>Phone: (509) 372-2282</p>	
<p>Description of Change: Include institutional controls required by the 221-U Facility (Canyon Disposition Initiative) Record of Decision (221-U Facility ROD) in the Sitewide Institutional Controls (IC) Plan and change the frequency of the comprehensive sitewide assessment.</p>		
<p>Approval of this change notice will add Tables A.5.1 and A.5.2 to the Sitewide IC Plan. These tables represent the institutional controls required by the 221-U Facility ROD.</p>		
<ul style="list-style-type: none"> • Table A.5.1. 221-U Facility ROD Institutional Control Requirements (Required Through the Time of Completion of Remedy Construction) • Table A.5.2. 221-U Facility ROD Institutional Control Requirements (Required After Construction of the Remedial Action). 		
<p>These tables include the text of the institutional control requirements contained in the 221-U Facility ROD. A paragraph which identifies the project-specific implementing documents for the institutional controls identified in Tables A.5.1 and A.5.2 will be added to Section A.5 of the Sitewide IC Plan.</p>		
<p>The following sections of the Sitewide IC Plan will be updated:</p>		
<ul style="list-style-type: none"> • Section 2.2.3 will be revised to include text about protecting monitoring systems and their components. • Section 2.2.4 will be revised to add language about the exception for limited research purposes. • Section 4.2 will be revised to adjust the frequency of future assessments to support CERCLA Five-Year Reviews. 		
<p align="center">See Attachment for details on the changes.</p>		
<p>Justification:</p> <p>This modification is made to the Sitewide IC Plan in order to implement the requirements of the 221-U Facility ROD and to adjust the frequency of future assessments based upon the results of past assessments. The <i>Record of Decision 221-U Facility (Canyon Disposition Initiative) Hanford Site, Washington</i>, was approved by EPA on September 30, 2005. The 221-U Facility ROD requires in Section 2.12.2.3, that the <i>Sitewide Institutional Controls Plan for Hanford CERCLA Response Actions</i>, DOE/RL-2001-41, be updated within 180 days with the institutional controls contained in the ROD. This update will keep the Sitewide IC Plan current with the latest institutional controls approved in the 221-U Facility ROD.</p> <p>DOE is currently working on developing the Hanford Intranet (limited to Hanford users only) website for the Hanford Long-Term Stewardship program. It is anticipated that this project will be completed by the end of fiscal year 2006. The Sitewide Institutional Control Plan will be posted on the Long-Term Stewardship Intranet website by March 31, 2007. Lessons learned from this project will be used to create a Hanford Internet website (open to general public) for the Hanford Long-Term Stewardship program. However, any document that is posted on the internet website must have security clearance. The Sitewide Institutional Control Plan will be evaluated for security clearance for posting on the Internet website.</p>		



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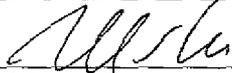
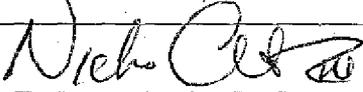
Impacts of Changes:

As a result of this modification to the Sitewide IC Plan, the following documents will be impacted:

- Sitewide Institutional Control Plan (DOE/RL-2001-41, Rev 1)
- Surveillance and Maintenance Plan for 221-U Facility
- Future Remedial Design & Remedial Action Work Plans for 221-U Facility
- Future Operation & Maintenance Plan for 221-U Facility.

The 221-U facility will be required to maintain institutional controls identified in the Record of Decision for the 221-U Facility (Canyon Disposition Initiative) through the time of completion of remedy construction and after construction of the remedial action.

Approvals: send approved form to FH TPA, H8-12 & Administrative Record, H6-08

 RL Manager <i>for K. K. K.</i>	<u>7/7/06</u> Date	<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Disapproved	
 Environmental Protection Agency Program Manager	<u>7/17/06</u> Date	<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Disapproved	
 Washington Department of Ecology Program Manager	<u>7/20/06</u> Date	<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Disapproved	