Focus Area Work Session

Land Use and Institutional Controls and Homeland Security

Weldon Spring Site Interpretive Center

December 5, 2002
Agenda

7:00 p.m. Welcome, Pam Thompson, Manager, Weldon Spring

Objective of Work Session, Dave Geiser, Director, DOE Office of Long-Term Stewardship

Results of the October 23, 2002, Work Session on Communication and Public Participation;
Approach to Work Session, Ray Pliesen, Deputy Manager, DOE Grand Junction Office

7:10 p.m. Major Issue 1: Assess Risks From Residual Contamination, Mary Picel, Argonne National Laboratory

7:30 p.m. Major Issue 2: Define Institutional Control Areas and Requirements and Institutional Control Process and Implementation, Pam Thompson
Agenda (continued)

8:00 p.m.  Major Issue 3: Stewardship Activities for Institutional Controls, Ray Plieness
8:20 p.m.  Major Issue 4: Site Security, Dave Geiser
8:40 p.m.  Update on Weldon Spring Project Remedial and Transition Activities, Ray Plieness
8:50 p.m.  Closing Comments, Dave Geiser
9:00 p.m.  Adjourn
Weldon Spring Site Stewardship
Work Session Discussion Plan

Focus Area
Major Issues
Comment Areas
Focus Area

- DOE proposes to have three Focus Area sessions
  - October 23: Communication and Public Participation
  - December 5: Land Use and Institutional Controls and Homeland Security
  - January 2003: Monitoring and Maintenance
Weldon Spring Site Stewardship
Work Session Discussion Plan

• Major Issues
  – Each Major Issue was developed as a means to capture most of the Focus Area comments and consolidate them into a few Major Issues to promote general understanding of concerns and to facilitate communication between DOE and the public on common themes
Weldon Spring Site Stewardship
Work Session Discussion Plan

- Comment Areas
  - Each Comment Area describes significant comments in more detail under a Major Issue, which should allow resolution of the majority of comments without discussing individual comments.
Major Issue 1: Assess Risks From Residual Contamination

Sections 2.4 and 2.5 of Long-Term Stewardship Plan

- Comments relating to this issue: A-58, 67, 69, 79, 82, 87, 89, 138, 184, 186, 195, 279; B-28, 48; E-13, 14; F-18; H-11; J-2, 5, 34, 40, 62, 63; K-11; L-11, 23, 51, 52, 63, 64, 89, and 174

- Comment Areas
  - What are the risks?
  - Is the public safe from the remaining contamination?
Major Issue 2: Define the Institutional Control Areas and Requirements and the Institutional Control Process and Implementation

Section 2.6 of *Long-Term Stewardship Plan*

- Comments relating to Define the Institutional Control Areas and Requirements: A-18, 41, 51, 57, 68, 73, 74, 75, 76, 83, 84, 85, 86, 187, 192, 197, 226, 229; B-14, 15, 24, 25; E-5; H-32, 33; J-13, 27, 38, 41; K-17; L-11, 22, 57, 62, 64, 73, 74, 78, 81, 142, and 165
Major Issue 2 (continued)

- Comment Areas
  - Current State land use and controls, Missouri Department of Natural Resources
  - Current Federal land use and controls
  - Where will institutional controls be required?
  - How will current land use be affected?
Major Issue 2 (continued)

- Comments relating to the Institutional Control Process and Implementation: A-5, 73, 80, 88, 116; B-6, 16, 28; D-1, 4; E-9; J-24, 25, 28, 29, 32, 33; K-6; L-61, 97, 98, 99, and 100

- Comment Areas
  - Process for developing institutional controls
  - Opportunities for stakeholder input
This table is reproduced as it was presented in the August 9, 2002, draft Long-Term Stewardship Plan for the Weldon Spring, Missouri, Site

<table>
<thead>
<tr>
<th>Location</th>
<th>Type</th>
<th>Contaminants</th>
<th>Reference Document</th>
<th>Property Owner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disposal Cell</td>
<td>Soil, building debris, stabilized sludge isolated in an engineered containment system</td>
<td>Uranium, thorium, radium, nitroaromatic compounds, metals, asbestos, PAHs, and PCBs</td>
<td><em>Record of Decision for Remedial Action at the Chemical Plant Area of the Weldon Spring Site (DOE 1993)</em></td>
<td>DOE</td>
</tr>
<tr>
<td>Culverts under County Route D at Frog Pond Outlet, 1.0 mile west of Highway 94 intersection</td>
<td>Bedding material under the culverts and fixed surface contamination on corrugated metal pipe</td>
<td>Uranium</td>
<td><em>Applications for Supplemental Surface Contamination Limits for Southeast Drainage and Frog Pond Drainage Culverts</em> (DOE 2001b)</td>
<td>Missouri Department of Transportation, Missouri Department of Conservation, utilities with easements</td>
</tr>
<tr>
<td>Culvert under State Highway 94 at Southeast Drainage, 1.5 miles south of Route D intersection</td>
<td>Fixed surface contamination on corrugated metal pipe</td>
<td>Uranium</td>
<td><em>Applications for Supplemental Surface Contamination Limits for Southeast Drainage and Frog Pond Drainage Culverts</em> (DOE 2001b)</td>
<td>Missouri Department of Transportation, Missouri Department of Conservation</td>
</tr>
<tr>
<td>Southeast Drainage between the Chemical Plant boundary and Katy Trail</td>
<td>Stream sediments and contaminated spring water</td>
<td>Uranium, thorium, and radium</td>
<td>Southeast Drainage Closeout Report Vicinity Properties DA4 and MDC7 (DOE 1999b)</td>
<td>Missouri Department of Conservation</td>
</tr>
<tr>
<td>Chemical Plant ground water</td>
<td>Ground water in the Burlington-Keokuk Limestone</td>
<td>Uranium, TCE, nitroaromatics, and nitrate</td>
<td>GWOU Record of Decision (pending)</td>
<td>DOE, U.S. Army, Missouri Department of Conservation, Missouri Department of Transportation</td>
</tr>
<tr>
<td>Quarry proper</td>
<td>Soil in inaccessible locations</td>
<td>Uranium, thorium, and radium</td>
<td>Remedial Design/Remedial Action Work Plan for the Quarry Residuals Operable Unit (DOE 2000c)</td>
<td>DOE</td>
</tr>
<tr>
<td>Quarry area north of Femme Osage Slough (reduction zone)</td>
<td>Soil between the Katy Trail and the Femme Osage Slough</td>
<td>Uranium</td>
<td>Completion Report for the Geochemical Characterization Performed in Support of the QROU Field Studies (DOE 2002b)</td>
<td>Missouri Department of Conservation</td>
</tr>
<tr>
<td>Quarry ground water</td>
<td>Ground water in the alluvium, Kimmswick Limestone, Decorah Group, and Plattin Limestone</td>
<td>Uranium and 2,4-DNT</td>
<td>Remedial Design/Remedial Action Work Plan for the Quarry Residuals Operable Unit (DOE 2000c)</td>
<td>DOE, Missouri Department of Conservation</td>
</tr>
</tbody>
</table>

Key: DNT = dinitrotoluene; PAH = polycyclic aromatic hydrocarbons; PCB = polychlorinated biphenyl; TCE = trichloroethylene.
Institutional Control Locations at the Chemical Plant Area
Institutional Control Locations at the Quarry Area
Major Issue 3: Stewardship Activities for Institutional Controls

Sections 2.8 and 3.7 of *Long-Term Stewardship Plan*

- Comments relating to this issue: A-156, 202, 204, 242, 249; B-17, 26, 28, 34, 35, 48, 51, 54; E-12, 16, J-3, 20, 26, 30, 56, 57; K-12, 21; L-107, 121, and 158

- Comment Areas
  - Maintaining public and agency awareness
  - Inspection and monitoring activities
  - Postings and access restrictions
  - Institutional control enforcement
This table is reproduced as it was presented in the August 9, 2002, draft Long-Term Stewardship Plan for the Weldon Spring, Missouri, Site

<table>
<thead>
<tr>
<th>Institutional Controla</th>
<th>Method of Implementationb</th>
<th>Parties to Agreement</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restrict land use at disposal cell, 300-ft buffer area, and area between buffer area and site boundary</td>
<td>Control land use through Federal ownership</td>
<td>DOE</td>
<td>In perpetuity</td>
</tr>
<tr>
<td>Restrict land use in area between buffer area and site boundary to prohibit ground water use and changes to final grading</td>
<td>Restrictive use agreements with possible lessee</td>
<td>Lessee, DOE</td>
<td>In perpetuity, except that ground water use restrictions may be removed when ground water meets standards</td>
</tr>
<tr>
<td>Restrict nonrecreational use in Southeast Drainage</td>
<td>Restrictive easement</td>
<td>Missouri Department of Conservation, DOE</td>
<td>In perpetuity</td>
</tr>
<tr>
<td>Restrict exposure to contaminated ground waterc</td>
<td>Restrictive easements</td>
<td>Missouri Department of Conservation, Department of the Army, possibly others, DOE</td>
<td>Until ground water meets standards and use restrictions are removed</td>
</tr>
<tr>
<td>Restrict consumption of water at Springs 6301, 5301, 5302, 5303, and 5304</td>
<td>Restrictive easements</td>
<td>Missouri Department of Conservation, DOE</td>
<td>Until ground water meets standards and use restrictions are removed</td>
</tr>
<tr>
<td>Restrict exposure to contaminated pipes or soil at culverts under State Highway 94 and County Route D</td>
<td>Notification of roadway or utility improvements</td>
<td>Missouri Department of Transportation, County Public Works Department, utility companies, DOE</td>
<td>Until culverts are replaced</td>
</tr>
</tbody>
</table>

a These institutional controls have not yet been implemented.
b These are typical methods; actual methods have not been identified.
c These institutional controls are tentative and will not be finalized until the Ground Water Operable Unit Record of Decision is approved.

Table 2–12. Summary of Institutional Controls for the Weldon Spring, Missouri, Site
This table is reproduced as it was presented in the August 9, 2002, draft *Long-Term Stewardship Plan for the Weldon Spring, Missouri, Site*

<table>
<thead>
<tr>
<th>Institutional Control&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Method of Implementation&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Parties to Agreement</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarry (see Figure B–2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Restrict non-recreational land use on quarry property</strong></td>
<td>Control land use through Federal ownership</td>
<td>DOE</td>
<td>In perpetuity</td>
</tr>
<tr>
<td><strong>Restrict ground water use in area of ground water contamination and in area south of Katy Trail</strong></td>
<td>Restrictive easement</td>
<td>Missouri Department of Conservation, DOE</td>
<td>Until ground water meets standards</td>
</tr>
<tr>
<td><strong>Restrict land use to prevent physical disturbance of reduction zone</strong></td>
<td>Restrictive easement</td>
<td>Missouri Department of Conservation, DOE</td>
<td>In perpetuity</td>
</tr>
</tbody>
</table>

<sup>a</sup>These institutional controls have not yet been implemented.
<sup>b</sup>These are typical methods; actual methods have not been identified.
<sup>c</sup>These institutional controls are tentative and will not be finalized until the Ground Water Operable Unit Record of Decision is approved.

*Table 2–12 (Continued). Summary of Institutional Controls for the Weldon Spring, Missouri, Site*
Major Issue 4. Site Security

Section 3.9 of *Long-Term Stewardship Plan*

- Comments relating to this issue: A-4, 92, 206, B-7; D-6, and J-67
- Comment Areas
  - Flyover restrictions
  - Restricting access to disposal cell
Response to Focus Area Session Input

- Input from Focus Area sessions will be recorded but specific responses will not be developed after each session. However, responses will be adopted and included either in the revised draft *Long-Term Stewardship Plan* or in a response summary that will identify why the comment is not being adopted. If a response summary is prepared, it will be distributed with the revised draft *Long-Term Stewardship Plan*. 
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 10, 2002</td>
<td>Comments due on draft <em>Long-Term Stewardship Plan for the Weldon Spring, Missouri, Site</em></td>
</tr>
<tr>
<td>October 10, 2002</td>
<td>Responses to comments posted on Internet at <a href="http://www.gjo.doe.gov/programs/ltsm/maps/mo-i.htm">www.gjo.doe.gov/programs/ltsm/maps/mo-i.htm</a> and mailed to requesters</td>
</tr>
<tr>
<td>October 23, 2002</td>
<td>Focus Area Work Session: Communication and Public Participation</td>
</tr>
<tr>
<td>December 5, 2002</td>
<td>Focus Area Work Session: Land Use and Institutional Controls and Homeland Security</td>
</tr>
<tr>
<td>January 2003</td>
<td>Focus Area Work Session: Monitoring and Maintenance</td>
</tr>
<tr>
<td>January 2003</td>
<td>Weldon Spring LTSM Program website</td>
</tr>
<tr>
<td></td>
<td>– On-line viewing of all site documents listed in the Weldon Spring <em>Long-Term Stewardship Plan</em> and key documents contained in the completed Administrative Records</td>
</tr>
<tr>
<td></td>
<td>– On-line viewing of historical water-quality and water-level data for existing wells</td>
</tr>
<tr>
<td>Spring 2003</td>
<td>Issue revised draft <em>Long-Term Stewardship Plan</em></td>
</tr>
<tr>
<td>Spring 2003</td>
<td>Issue draft Proposed Plan for the Ground Water Operable Unit</td>
</tr>
<tr>
<td>Fiscal Year 2003</td>
<td>Add key Weldon Spring documents to the LTSM Program website</td>
</tr>
</tbody>
</table>
Points of Contact

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stewardship@wssrap.com

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