



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

October 19, 2017

Mr. Brian T. Hennessey  
SRS Remedial Project Manager  
Infrastructure and Area Completion Division  
U.S. Department of Energy  
Savannah River Operations Office  
P.O. Box A  
Aiken, South Carolina 29802



**EPA Comments for the Fifth Five-Year Remedy Review Report for Savannah River Site Operable Units with Engineered Cover Systems (U), Aiken, South Carolina (SRNS-RP-2016-00609, Revision 1, August 2017 (Redline Pages)), Savannah River Site, Aiken, South Carolina**

Dear Mr. Hennessey,

The U.S. Environmental Protection Agency, Region 4 (EPA), has reviewed the R1 Redline Fifth Five-Year Remedy Review Report for Savannah River Site Operable Units with Engineered Cover Systems. EPA accepts the response to comments sent previously, and enclosed are additional comments from our Regional Counsel.

If you have any questions or require additional information, please contact me at (404) 562-8648.

Sincerely,

A handwritten signature in black ink, appearing to read "Jon Richards".

Jon Richards  
Acting FFA RPM  
Superfund Division

ec: C.L. Bergren, SRNS-ACP  
Susan Fulmer, SCDHEC

**GENERAL COMMENT:**

1. The selected remedy included LUCs and/or specific LUC objectives for each of the following OUs: D-Area Burning/Rubble Pits (431-D and 431-1D), F-Area HWMF (904-41G, 904-42G, 904-43G), Ford Building Seepage Basin (904-91G), H-Area HWMF (904-44G, 904-45G, 904-46G, 904-56G), M-Area HWMF (904-51G, 904-112G), Metallurgical Laboratory HWMF (904-110G), and the Mixed Waste Management Facility (643-28E). However, the FYR appendix for each of these OUs does not discuss whether a unit-specific Land Use Control Implementation Plan (LUCIP), or other appropriate unit-specific post-ROD document, containing the federal facility LUC checklist items (\*including the checklist statement regarding required CERCLA 120(h) deed notices/restrictions) has been prepared for each of the OUs. Please indicate in the remedy technical assessment section whether a unit-specific LUCIP governing the specific details of LUC implementation, maintenance, monitoring and enforcement has been prepared. If not, please indicate when a LUCIP, or other appropriate unit-specific post-ROD LUC implementation document, will be prepared for each of these OUs. If a unit-specific LUCIP has not been prepared, the FYR should include this requirement in the recommendations section.

\* See, e.g., LUC Checklist items, including Property transfer language regarding deed restrictions: "Each transfer of fee title from the United States will include a CERCLA 120(h)(3) covenant which will have a description of the residual contamination on the property and the environmental use restrictions, expressly prohibiting activities inconsistent with the performance measure goals and objectives.

**DRAFT:1/20/10**  
**FEDERAL FACILITY LAND USE CONTROL ROD CHECKLIST**

Land Use Control Implementation Plan (LUCIP)  
 For the \_\_\_\_\_ OUs/Disposal Sites  
 Savannah River Site NPL Site South Carolina (SRS)  
 CERCLIS Numbers: \_\_\_\_\_

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As agreed to in the FFA, SRS provides the LUC implementation details in two (2) post-ROD enforceable documents. The first post-ROD document is the Land Use Control Implementation Plan (LUCIP), which provides the implementation details at the \_\_\_\_\_ OU, and is submitted concurrently with the RAIP. The second post-ROD document is the Post Construction Report, which provides a surveyed plat of the \_\_\_\_\_ OU boundaries.

Region 4 will use the concepts and provisions similar to the samples provided in numbers 10-19 of the Headquarters checklist when the \_\_\_\_\_ OU LUCIP is submitted.

LAND USE CONTROL ROD CHECKLIST WITH SUGGESTED LANGUAGE	WHERE FOUND IN THE ROD & LUCIP
1. ____ Map/Figure showing boundaries of the land use controls	
2. ____ Document risk exposure assumptions and reasonably anticipated land uses, as well as any known prohibited uses which might not be obvious based on the reasonably anticipated land uses. (For example, where “unrestricted industrial” use is anticipated, list prohibited uses such as on-site company day-care centers, recreation areas, etc.)	
3. ____ Describe the risks necessitating the LUCs.	
4. ____ State the LUC performance objectives. We have had comments on these because several of the objectives have not been clear. The following are some examples of what we have been looking for: <ol style="list-style-type: none"> <li>1. Prevent access or use of the groundwater until cleanup levels are met.</li> <li>2. Maintain the integrity of any current or future remedial or monitoring system such as monitoring wells, impermeable reactive barriers.</li> <li>3. Maintain the 12 inch vegetative soil layer to limit ecological contact.</li> <li>4. Prohibit the development and use of property for residential housing, elementary and secondary schools, child care facilities and playgrounds.</li> </ol>	

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For the Early Construction and Operational Disposal Sites  
(ECODS) L-1, N-2, P-2 and R-1A, 1B, -1C Operable Unit (OU)(U)  
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CERCLIS Numbers: 22**

<p>5. ___ Generally describe the LUC, the logic for its selection and any related deed restrictions/notifications. (See also #16, below)</p>	
<p>6. ___ Duration language: "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>	
<p>7. ___ Include language that the [federal agency] is responsible for implementing, maintaining, reporting on, and enforcing the land use controls. This may be modified to include another party should the site-specific circumstances warrant it.</p>	
<p>8. ___ Where someone else will or the federal agency plans that someone else will ultimately be implementing, maintaining, reporting on, and enforcing land use controls, the following language should be included:</p> <p>"Although the [federal agency] may later transfer [has transferred] these procedural responsibilities to another party by contract, property transfer agreement, or through other means, the [federal agency] shall retain ultimate responsibility for remedy integrity."</p>	n/a
<p>9. ___ <b>[ONLY INCLUDE IN NON-AF RODS]</b> Refer to the remedial design (RD) or remedial action work plan (RAWP) for the implementation actions. Because this is a new idea (i.e., including the LUC implementation actions in either or both of these two primary documents), to ensure that the requirement is clear and enforceable, we developed the following language where it makes sense:</p> <p>"A LUC Remedial Design will be prepared as the land use component of the Remedial Design. Within 90 days of ROD signature, the [federal agency] shall prepare and submit to EPA for review and approval a LUC remedial design that shall contain implementation and maintenance actions, including periodic inspections." Another option is to refer to</p>	n/a

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the enforceable schedule in the IAG for the RD or RAWP.”	
<p><b>10.</b> ___ Commitment by federal agency to address any situation that may interfere with the effectiveness of LUC:</p> <p>“Any activity that is inconsistent with the IC objectives or use restrictions, or any other action that may interfere with the effectiveness of the ICs will be addressed by the [federal agency] as soon as practicable, but in no case will the process be initiated later than ___ days [10 days suggested] after the [federal agency] becomes aware of the breach.”</p>	

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<p><b>11.</b> ___ Commitment by federal agency to notify EPA of and address any situation that may interfere with the effectiveness of LUC:</p> <p>“The [federal agency] will notify EPA and [the state] as soon a practicable but no longer than ten days after discovery of any activity that is inconsistent with the IC objectives or use restrictions, or any other action that may interfere with the effectiveness of the ICs. The [federal agency] will notify EPA and [the state] regarding how the [federal agency] has addressed or will address the breach within 10 days of sending EPA and [the state] notification of the breach.”</p>	
<p><b>12.</b> ___ Notification to EPA and the state regarding land use changes: [For closing base]:[We are seeing in federal agency RODs language requiring the property transferee to notify EPA and the state prior to notifying the federal agency about possible land use changes. We have switched that around so that the federal agency reviews the proposal first. This should save EPA some resources.]</p> <p>“Prior to seeking approval from the EPA and [the state] the recipient of the property must notify and obtain approval from the [federal agency] of any proposals for a land use change at a site inconsistent with the use restrictions and assumptions described in this ROD.”</p> <p>[For active base]:</p> <p>“The [federal agency] shall notify EPA and state ___ days [45 days suggested] in advance of any proposed land use changes that are inconsistent with land use control objectives or the selected remedy.”</p>	
<p><b>13.</b> ___ Notification regarding transfers and federal-to-federal</p>	<p>second ¶</p>

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<p>transfers:</p> <p>“The [federal agency] will provide notice to EPA and [the state] at least six (6) months prior to any transfer or sale of [OUs at issue] so that EPA and [the state] can be involved in discussions to ensure that appropriate provisions are included in the transfer terms or conveyance documents to maintain effective ICs. If it is not possible for the facility to notify EPA and [the state] at least six months prior to any transfer or sale, then the facility will notify EPA and [the state] as soon as possible but no later than 60 days prior to the transfer or sale of any property subject to ICs. In addition to the land transfer notice and discussion provisions above, the [federal agency] further agrees to provide EPA and [the state] with similar notice, within the same time frames, as to federal-to-federal transfer of property. The [federal agency] shall provide a copy of executed deed or transfer assembly to EPA and [the state].”</p>	
<p><b>14.</b>___ Concurrence language: “The [federal agency] shall not modify or terminate Land Use Controls, implementation actions, or modify land use without approval by EPA and the [state]. The [federal agency] shall seek prior concurrence before any anticipated action that may disrupt the effectiveness of the LUCs or any action that may alter or negate the need for LUCs.”</p>	
<p><b>15.</b>___ Monitoring and reporting language. Note that Regions may alter the monitoring frequency based on site-specific needs.</p> <p>“Monitoring of the environmental use restrictions and controls will be conducted annually by the [federal agency].</p>	

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<p>The monitoring results will be included in a separate report or as a section of another environmental report, if appropriate, and provided to the USEPA and the [the state]. The annual monitoring reports will be used in preparation of the Five Year Review to evaluate the effectiveness of the remedy.</p> <p>The annual monitoring report, submitted to the regulatory agencies by the [federal agency], will evaluate the status of the ICs and how any IC deficiencies or inconsistent uses have been addressed. The annual evaluation will address whether the use restrictions and controls referenced above were communicated in the deed(s), whether the owners and state and local agencies were notified of the use restrictions and controls affecting the property, and whether use of the property has conformed with such restrictions and controls.”</p>	
<p><b>16.</b> ___ A comprehensive list of LUCs. The LUC should not be confused with the LUC objectives. The term LUC refers to the actual LUC instrument which is used to accomplish the objectives. The LUCs are likely to be a legal mechanism or administrative measure used to impose use restrictions (e.g. permits, orders, restrictive covenants, zoning), but they may also include measures such as fences and guards. If the description of the LUCs in #5 above is comprehensive, it could substitute for #16's listing of LUCs.</p>	
<p><b>17.</b> ___ For active facilities, a description of the internal procedures for implementing the LUCs (e.g., orders, instructions, Base Master Plan) and a commitment by the [federal agency] to notify EPA in advance of any changes to the internal procedures that would affect the LUCs. Generally, #s 18 and 19 apply at a BRAC installation, but they may have application elsewhere.</p>	

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<p><b>18.</b> ___ Other property transfer language:</p> <p>a. <u>“Deed Restrictions:</u> “Each transfer of fee title from the United States will include a CERCLA 120(h)(3) covenant which will have a description of the residual contamination on the property and the environmental use restrictions, expressly prohibiting activities inconsistent with the performance measure goals and objectives.</p> <p>The environmental restrictions are included in a section of the CERCLA 120(h)(3) covenant that the United States is required to include in the deed for any property that has had hazardous substances stored for one year or more, known to have been released or disposed of on the property. Each deed will also contain a reservation of access to the property for the [federal agency], USEPA, and [the State], and their respective officials, agents, employees, contractors, and subcontractors for purposes consistent with the [federal agency] Installation Restoration Program (“IRP”) or the Federal Facility Agreement (“FFA”). The deed will contain appropriate provisions to ensure that the restrictions continue to run with the land and are enforceable by the [federal agency].”</p> <p>b. <u>“Lease Restrictions:</u> “ During the time between the adoption of this ROD and deeding of the property, equivalent restrictions are being implemented by lease terms, which are no less restrictive than the use restrictions and controls described above, in this ROD. These lease terms shall remain in place until the property is transferred by deed, at which time they will be superceded by the institutional controls described in this ROD.”</p> <p>c. <u>“Notice:</u> “Concurrent with the transfer of fee title from the</p>	
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<p>[federal agency] to transferee, information regarding the environmental use restrictions and controls will be communicated in writing to the property owners and to appropriate state and local agencies to ensure such agencies can factor such conditions into their oversight and decision-making activities regarding the property.”</p>	
<p><b>19.</b>___ Ensure that the document adequately describes pre-transfer LUCs, not just post-transfer LUCs.</p>	