

Environmental Quality  
**FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM (FUSRAP)-  
SITE DESIGNATION, REMEDIATION SCOPE,  
AND RECOVERING COSTS**

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DEPARTMENT OF THE ARMY  
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Regulation  
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Environmental Quality  
**FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM (FUSRAP)-  
SITE DESIGNATION, REMEDIATION SCOPE,  
AND RECOVERING COSTS**

1. Purpose. This regulation sets forth the U.S. Army Corps of Engineers (USACE) policy concerning the Corps' roles and responsibilities under FUSRAP in designating new sites, in determining the scope of its cleanup efforts, and in seeking cost recovery or contribution for its cleanup efforts, except as directed otherwise by Congress.

2. Applicability. This regulation applies to all HQUSACE elements and all USACE commands having responsibility for sites and vicinity properties (VPs) where USACE has lead federal agency responsibility for cleanup under FUSRAP subject to the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (CERCLA) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This includes sites added to the FUSRAP program by congressional action and contaminated by hazardous substances with characteristics similar to FUSRAP-related radioactive and related chemical contamination.

3. Distribution Statement. Approved for public release, distribution is unlimited.

4. References.

a. Memorandum of Understanding Between the U.S. Department of Energy and the U.S. Army Corps of Engineers Regarding Program Administration and Execution of the Formerly Utilized Sites Remedial Action Program (FUSRAP), March 17, 1999.

b. FUSRAP Management Requirements and Policies Manual, U.S. Department of Energy, Oak Ridge Operations, Revision 2, May 6, 1997.

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This regulation supersedes **EC 200-2-2, App E** Policy on Eligibility of Vicinity Properties (VPs) Under the Formerly Utilized Sites Remedial Action Program (FUSRAP); **App H** Potentially Responsible Party (PRP) Contribution and Cost Recovery Initiatives Under the Formerly Utilized Sites Remedial Action Program (FUSRAP); **App J** MOU Between the U.S. DOE and the USACE Regarding Program Administrative and Execution of FUSRAP, and **EC 200-2-2** Formerly Utilized Sites Remedial Action Program (FUSRAP) - Policy on Site Remediation of Radioactive and Chemical Contamination

## 5. Background and Definitions

a. **History.** The Department of Energy (DOE) created FUSRAP in the 1970's to identify, investigate, and clean up or control residual contamination remaining at sites where work had been performed as part of the Nation's early atomic energy program. Generally, sites that became contaminated through uranium and thorium operations were decontaminated and released under the regulations in effect at the time. Since then, more stringent standards have been applied in some circumstances. FUSRAP partially funds the additional cleanup required to bring these sites into compliance with today's environmental standards. Most of this remaining contamination consists of low specific activity contaminated soils.

In response to later congressional direction, DOE also added some sites to FUSRAP that were not involved in the Nation's atomic energy program, but were contaminated with materials similar to early atomic energy program materials. As of October 1997, DOE had completed remediation at 24 sites with some ongoing operation, maintenance and monitoring being undertaken by DOE. Remedial action was planned, underway, or pending final closeout at the remaining 22 sites.

b. **Authority.** In fiscal year 1998, the Energy and Water Development Appropriations Act, Pub. L. 105-62, transferred responsibility for the administration and execution of FUSRAP from DOE to USACE. Provisions in the Appropriations Acts for FY1999 and FY2000 (Pub. L. 105-245 and 106-60) clarified Congressional intent that USACE should conduct cleanup work at FUSRAP sites "subject to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. § 9601 *et seq.*), and the National Oil and Hazardous Substances Pollution Contingency Plan (40 C.F.R. Part 300)."

DOE had independent authority under the Atomic Energy Act to clean up sites under its control or jurisdiction. Congress did not extend that authority to USACE when it transferred responsibility for FUSRAP cleanups, but it did confer CERCLA lead agency authority on USACE for selection of remedies. This enables USACE to respond to FUSRAP sites where there is federal responsibility for the contamination on the FUSRAP site, as described in section 6. below. If there is no federal responsibility for the contamination, then consistent with DOE FUSRAP policy, the site is more appropriately referred to other federal or state cleanup programs.

### c. **Definitions.**

(1) **Active FUSRAP site:** any eligible FUSRAP site which is undergoing or is programmed to undergo response actions by USACE under CERCLA, or which is determined to require initial or additional response action in accordance with the provisions of Article III of the MOU between USACE and DOE (Appendix A), or which was placed into FUSRAP pursuant to congressional direction. Response action includes, among other things, steps preliminary to actual cleanup, such as remedial

investigations and feasibility studies. The results of these preliminary steps may result in a decision not to proceed with further cleanup.

(2) Eligible FUSRAP site: any geographic area determined by DOE to have been used for activities in support of the Nation's early atomic energy program and which meets DOE determination of Atomic Energy Act authority. USACE may also be evaluating the site, following notification of eligibility, to determine if there is CERCLA authority for a response action.

(3) Vicinity property: a parcel of land, together with any improvements thereon, which is located outside the boundary of an active FUSRAP site, is adjacent to or near such a site, and is known or suspected to be contaminated with radioactive and/or hazardous material from an active FUSRAP site.

## 6. Policy

a. Designation of an Active FUSRAP Site. For USACE to designate an active FUSRAP site:

(1) Congress must mandate such action in legislation, or

(2) All of the following conditions (a) through (d) must be met, consistent with the Memorandum of Understanding between DOE and USACE (including clarifying correspondence), Reference (a) (included as Appendix A).

(a) DOE must find a site eligible for FUSRAP under Appendix D-1 to the FUSRAP Manual, "FUSRAP Summary Protocol" and "FUSRAP Designation/Elimination Protocol – Supplement No. 1 to FUSRAP Summary Protocol." DOE's eligibility determination indicates a belief that a site could be contaminated with the Nation's early atomic energy program material, based in whole or in part on evaluation of historical documents, and establishes DOE's authority to remediate the site. (Appendix B contains DOE FUSRAP Manual D-1, and Appendix C summarizes these criteria.)

(b) USACE must verify site contamination with hazardous substances at a level sufficient to warrant a CERCLA response action (normally achieved through conduct of a Preliminary Assessment (PA) and a Site Inspection (SI) if necessary);

(c) The hazardous substance contamination must have resulted from the Nation's early atomic energy program activities, i.e., related to Manhattan Engineer District (MED) or Atomic Energy Commission (AEC) activities; and

(d) USACE must have authority to respond under CERCLA. Accordingly, a preliminary legal analysis must show some Federal Government responsibility for the contamination. The analysis should determine whether a reasonable potential for CERCLA liability exists for cleanup of the contamination. The extent of the preliminary

legal analysis should be sufficient to give rise to a reasonable certainty that a more wide-ranging evaluation would likely not alter the conclusion.

This preliminary legal analysis is an initial screening based on a limited review of available information and is intended only as an aid to deciding whether a reasonable basis exists for designating a site as an active FUSRAP site. A finding of a reasonable potential for liability does not constitute an admission of liability. Further detailed analysis of, for example, the nature of the materials or historical contracts controlling the work, will be conducted once the site is designated for cleanup and may dictate a result that differs from the preliminary result.

If the preliminary legal analysis shows no potential for Federal Government responsibility, or if further detailed analysis (potentially occurring during the active FUSRAP site phase) shows no Federal Government liability for the contamination, the site should not be designated for FUSRAP cleanup, and District, Division, and HQ should coordinate notification of appropriate agencies (e.g., DOE, EPA, NRC, state environmental regulator) and congressional interests to facilitate a response action under an appropriate program.

(3) The major subordinate command (MSC) responsible for the eligible FUSRAP site will recommend to HQ Civil Works Program Management Division (CECW-B) whether or not the site should be designated as an active FUSRAP site. If CECW-B agrees with the recommended action, Congress will be notified through appropriate channels, as well as other appropriate federal and state agencies. Sites designated as active FUSRAP sites will be included in future FUSRAP budget requests.

b. Scope of FUSRAP Cleanup

(1) Geographic Area. The DOE determination of the geographic area used for activities in support of the Nation's early atomic energy program forms the basis for any CERCLA response actions undertaken by USACE. The determination is based on historical research and/or other investigation. This geographic area may change based on information or investigations undertaken by USACE during response actions. Such changes will be appropriately documented in the site administrative record.

(a) Vicinity properties (VPs) will be investigated and characterized in accordance with the process established under CERCLA and the NCP. If a VP is determined to be eligible, appropriate action will be taken under FUSRAP as part of the active site.

(b) The determination of eligibility of VPs will be made by the MSC Commander for the geographic area in which the active FUSRAP site is located.

(c) The determination of eligibility will be based on a Preliminary Assessment/Site Inspection (PA/SI) of the property which documents the source, nature and extent of any hazardous substance contamination, and includes relevant information from historical records. The VP is eligible for inclusion in FUSRAP if the PA/SI establishes that hazardous substances from the active FUSRAP site contaminated the property and

that the nature and extent of the contamination is such that response under CERCLA is required.

(d) If the VP is determined to be eligible, the MSC will revise the project cost estimate and schedule for the active FUSRAP site to reflect any additional time or cost for the planned activities at the VP. Copies of the approved revisions shall be furnished by the MSC to HQUSACE.

(e) No further action shall be undertaken at a VP if the PA/SI establishes that the contamination at the VP is unrelated to and not commingled with FUSRAP material at the active FUSRAP site, and has no impact on cleanup activities at the active FUSRAP site.

(2) Eligible Contaminants. The DOE eligibility determination forms the basis for identification of the potential contaminants to be investigated at individual FUSRAP sites. The USACE district will verify the potential contaminants to be hazardous substances under CERCLA. The following types of hazardous substances will be considered within the scope of FUSRAP cleanup activities at FUSRAP sites and VPs:

(a) Radioactive contamination (primarily uranium and thorium and associated radionuclides) resulting from the Nation's early atomic energy program activities, i.e., related to Manhattan Engineer District (MED) or Atomic Energy Commission (AEC) activities, to include hazardous substances associated with these activities (e.g., chemical separation, purification);

(b) Other radioactive contamination or hazardous substances that are mixed or commingled with contamination from the early atomic energy program activities, and

(c) At federally owned FUSRAP sites, all radioactive contamination or hazardous substances are within the scope of the FUSRAP response action. However, on VPs associated with federally owned sites, any proposed remediation of radioactive contamination or hazardous substances not a result of early atomic energy program activities and not mixed or commingled with such contamination must first be approved by HQUSACE.

(d) Other substances may be included where directed by Congress.

(3) Materials not listed in paragraphs 6.b.(2)(a) – (d) above are excluded from the scope of a FUSRAP cleanup.

c. Working With Potentially Responsible Parties

(1) Contribution and Cost Recovery.

(a) USACE is committed to recovering costs (i.e., seeking contribution or cost recovery, as appropriate) from any viable Potentially Responsible Party (PRP) that may

be legally liable for cleanup of any contaminants under FUSRAP, consistent with CERCLA.

(b) Radioactive contamination or hazardous substances remediated by USACE shall be investigated to identify any PRPs for recovering or contributing to costs related to cleanup.

(c) FUSRAP schedules, budgets, and staff resource planning shall incorporate provision for the special requirements associated with such investigative actions. Moreover, consideration of possible PRP contribution or recovery opportunities shall be incorporated as a routine procedure in planning of project activities and schedules.

(d) Schedules established by DOE prior to program transfer to USACE did not include provision for PRP initiatives. In general, USACE opted not to pursue PRP issues at the time of transfer that would delay cleanup activities in progress.

(e) Pursuit of PRP initiatives where warranted requires that schedules be evaluated in light of PRP opportunities existing at a site and adjusted as appropriate in light of potential health, safety and environmental risks. Initiating PRP actions late in the cleanup process increases the potential for the Government's cleanup contribution to exceed its fair share allocation for total site remediation costs and magnifies the complexity associated with resolving subsequent PRP actions.

(f) The timing for pursuit of PRP initiatives at FUSRAP sites is a Division Commander's decision that will depend upon the circumstances surrounding each particular case, with an emphasis on protecting health, safety, and the environment, and should include consultation with counsel. The Division will inform the HQ FUSRAP Program Manager of this decision through a memorandum.

(g) In situations where a PRP refuses to contribute or participate in the remediation process, additional steps are needed to insure the appropriate records are maintained to support legal action.

## (2) Cleanup Responsibility.

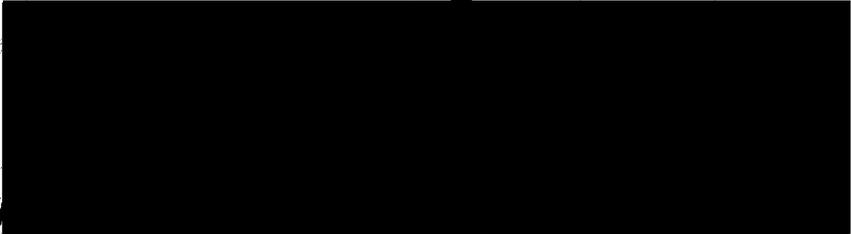
(a) USACE should encourage responsible parties to adopt as much of the cleanup workload as possible, including preparation of CERCLA documents other than those required by law to be prepared by USACE as lead agency.

(b) If private PRP liability is significant, and health, safety, and environmental concerns allow, the project should be halted after the PA (or other phase if the project has proceeded beyond the PA phase) and preliminary legal analysis and the PRP given the opportunity to conduct the cleanup where appropriate.

(c) A qualified private PRP can clean up early atomic energy program contaminants on active FUSRAP sites subject to USACE oversight as lead agency – under a

settlement agreement or a consent decree and court order where needed. Or, depending on government interests, the PRP can remediate subject to other agency oversight (e.g., state, EPA, NRC). If other agency jurisdiction is concurrent with USACE FUSRAP jurisdiction, a Memorandum of Understanding (MOU) or other applicable agreement should identify the terms by which each agency executes its legal responsibilities without imposing duplicate requirements on the cleanup project. See, for example, the MOU between NRC and USACE, Appendix C. Such an MOU should be initiated at the appropriate level within USACE, e.g., MOUs at the national level should be initiated at HQ USACE.

FOR THE COMMANDER



Colonel, Corps of Engineers  
Chief of Staff

## **APPENDIX A**

# **Memorandum of Understanding Between the U.S. Department of Energy and the U.S. Army Corps of Engineers Regarding Program Administration and Execution of the Formerly Utilized Sites Remedial Action Program (FUSRAP), March 17, 1999**

## **APPENDIX B**

**Appendix D-1 to the DOE FUSRAP Manual,  
“FUSRAP Summary Protocol” and “FUSRAP  
Designation /Elimination Protocol – Supplement  
No. I to FUSRAP Summary Protocol,” dated  
January 1986**

## **APPENDIX C**

# **Summary of DOE FUSRAP Site Eligibility Determination Process**

## APPENDIX C

This Appendix summarizes the DOE site eligibility determination process described in the DOE FUSRAP Manual (Appendix B). In the event of a conflict between this summary and Appendix B, the DOE FUSRAP Manual shall prevail.

1. For DOE to find a site eligible for further investigation by USACE, contamination must be the result of Federal Government activity during the Nation's early atomic energy program, not private or commercial activity. Generally speaking, the contamination should be the result of activities occurring roughly in the 1940 to 1974 time frame, and should consist mostly of thorium and uranium residues resulting from ore processing, or similar low activity radioactive materials. Private or commercial materials commingled with FUSRAP materials will not disqualify the site from consideration. The site eligibility determination distinguishes potential FUSRAP sites from the universe of other contaminated sites, such as those eligible for cleanup under other federal or state programs such as NRC decommissioning or EPA Superfund.

2. Additionally, DOE determines if any factors require excluding the site from FUSRAP, and then it determines whether it has authority under the AEA to clean up the site. DOE should not declare a site eligible if the site is:

- a. licensed by the NRC or a state

The site will not be included in FUSRAP if it is already included under some other remedial action program or is under NRC or state license. (DOE FUSRAP Manual, Appendix D-2, *FUSRAP Designation/Elimination Protocol*, page 10);

- b. under the jurisdiction of a remedial action program other than FUSRAP

DOE may terminate investigations and close files on a site if the . . . site is clearly under the jurisdiction of a program other than FUSRAP. (DOE FUSRAP Manual, Appendix D-1, *FUSRAP Summary Protocol*, page 8);

- c. controlled by appropriate restrictions, i.e., "institutional controls"

If DOE . . . determines the site visit and preliminary survey results, along with the historical data are sufficient to verify that the radiological condition of the site is within appropriate guidelines or that the site conditions are controlled by license or appropriate restrictions, the site is eliminated from the program. (DOE FUSRAP Manual, Appendix D-1, *FUSRAP Summary Protocol*, page 10); or

- d. If commercial and government-related activities occurred on a site, and the materials cannot be reliably attributed to either activity

[I]f the site is currently licensed for the same activities conducted under MED/AEC and contamination resulting from licensed work is indistinguishable for that caused by MED/AEC, DOE activities relating to the site will be terminated. (DOE FUSRAP Manual, Appendix D-1, *FUSRAP Summary Protocol*, page 8.)

3. If the site is not subject to the above controls or licenses, authority is established by answers to the following questions. (DOE FUSRAP Manual, Appendix D-2, *FUSRAP Designation/Elimination Protocol*, page 6 and Figure 4.)

a. Was the site/operation owned by a DOE predecessor or did a DOE predecessor have significant control of the operations or site? (The answer must be Yes for DOE to have authority.)

b. Was a DOE predecessor agency responsible for maintaining or ensuring the health, safety, and environment of the site (i.e., were they responsible for cleanup)? (The answer must be Yes for DOE to have authority.)

c. Is the waste, residual, or radioactive material on the site the result of DOE predecessor related operations? (The answer must be Yes for DOE to have authority.)

d. Is the site in need of further cleanup and was the site left in unacceptable condition as a result of DOE predecessor related activities? (The answer must be Yes for DOE to have authority.)

e. Did the present owner accept responsibility for the site with knowledge of its contaminated condition and that additional remedial measures are necessary before the site is acceptable for unrestricted use by the general public? (If the answer is Yes, DOE has no authority.)

## **APPENDIX D**

# **Memorandum of Understanding Between the U.S. Nuclear Regulatory Commission and the U.S. Army Corps of Engineers for Coordination on Cleanup & Decommissioning of the Formerly Utilized Sites Remedial Action Program (FUSRAP) Sites With NRC-Licensed Facilities, July 5, 2001**