

SEP 21 REC'D

STATE OF MISSOURI  
**DEPARTMENT OF NATURAL RESOURCES**

Mel Carnahan, Governor • Stephen M. Mahfood, Director

DIVISION OF ENVIRONMENTAL QUALITY

P.O. Box 176 Jefferson City, MO 65102-0176

September 17, 1998

Ms. Sharon Cotner, Project Manager  
Formerly Utilized Sites Remedial Action Project  
Department of the Army  
St. Louis District, Corps of Engineers  
9170 Latty Avenue  
Berkeley, MO 63134

RE: Request for ARARs and TBCs for the North County Record of Decision

Dear Ms. Cotner:

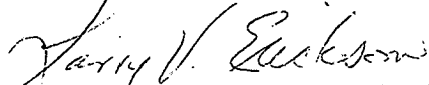
The Federal Facilities Section is enclosing a list of Applicable or Relevant and Appropriate Requirements (ARARs) and To Be Considered (TBCs) guidances for the North County Record of Decision. We believe that the list covers most of the pertinent laws and regulations. If other ARAR's are identified, we will forward those to you.

Other TBC's that are not listed, but may be added, are establishment of cleanup levels, radiological and chemical, and risk assessments associated with the remediation. These issues will need to be coordinated in conjunction with this office and the Missouri Department of Health.

Thank you for accepting these Record of Decision considerations for the North County sites. If you have any questions, or need further information, you may contact Mr. Scott Honig of my staff at (573) 751-3087.

Sincerely,

HAZARDOUS WASTE PROGRAM



Larry V. Erickson, DOE Unit Chief  
Federal Facilities Section

LE:shg

Enclosure

c: Dan Wall, EPA

### DRAFT LIST OF APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS

CITATION	TITLE	APPLICABILITY
USEPA OSWER No. 9200.4-18 "EPA policy on using 40 CFR Part 192 for CERCLA cleanup criteria at radioactive sites, including radium and thorium." USEPA OSWER No. 9200.4-23 "EPA policy for ARAR determination for radioactive sites."	EPA policy directives for CERCLA Sites with Radioactive Contamination.	SLAPS/HISS are CERCLA sites. Use policies to develop cleanup levels for SLAPS/HISS.
10 CSR 20-7.031(5)(D)	Missouri Effluent Regulations, Groundwater (1996)	Groundwater contamination has been documented so it will have to be addressed to meet the requirements of this regulation.
16 USC § 470 40 CFR § 6.301(b) 36 CFR Part 800	National Historic Preservation Act	Act establishes the appropriate procedures for preservation of National Historic Sites.
Sections 253.408 to 253.412 of the Revised Statutes of Missouri (RSMo)	State Historic Preservation Act	Act establishes the appropriate procedures for preservation of State Historic Sites if necessary.
16 USC § 469 40 CFR § 6.301(c)	Archeological and Historical Preservation Act	Act establishes the appropriate procedures for preservation of National Historic Sites if necessary.
16 USC § 470(a)	Archeological Resources Protection Act	Act establishes the appropriate procedures for protection of archeological resources if necessary.
25 USC §§ 3001-3013	Native American Graves Protection and Repatriation Act	Act establishes the appropriate procedures for protection of native American graves if necessary.
Executive Order N. 11988	Floodplain Management and Protection	Portions of SLAPS and HISS are within a floodplain of Coldwater Creek.

CITATION	TITLE	APPLICABILITY
40 CFR 6.302(a) and (b), Appendix A	Floodplain Management and Protection	Portions of SLAPS and HISS are within a floodplain of Coldwater Creek.
40 CFR Part 230 and 231 33 CFR 320-330	Dredge or Fill Requirements (Section 404)	Any work within the waters of U.S. or areas designated, as waters of U.S. need to follow the appropriate requirements. Could be applicable to Coldwater Creek.
COE Engineer Regulation (ER) 1165-2-26, March 30, 1984	COE Implementation of Executive Order 11988 on Flood Plain Management	Portions of SLAPS and HISS are within a floodplain of Coldwater Creek.
Executive Order No. 82-19	Governor's Executive Order, Flood plains	Portions of SLAPS and HISS are within a floodplain of Coldwater Creek.
40 CFR Part 61 Subpart I	Clean Air Act - National Emission Standards for Radionuclide Emissions from Facilities Licensed by the Nuclear Regulatory Commission and Federal Facilities Not Covered by Subpart H.	Establishes limits of radionuclides, which can be emitted to ambient air from facilities owned or operated by any Federal agency other than the Department of Energy.
40 CFR Part 61 Subpart Q	Clean Air Act - National Emission Standards for Radon Emissions from Department of Energy Facilities	Regulation is specific to Department of Energy Facilities only but does establish radon limits for radium containing material. This would apply to any piles on HISS or SLAPS. Establish safe environment for workers and public.

CITATION	TITLE	APPLICABILITY
USEPA, Office of Groundwater Protection, December 1986	Guidelines for Groundwater Classification under the EPA Groundwater Protection Strategy	Establishes the guidelines for classifying the groundwater beneath SLAPS/HISS. Also establish requirements of either monitoring or cleanup levels for the groundwater.
33 CFR Part 230	Procedures for Implementing NEPA: Environmental Assessments and Categorical Exclusions	NPL sites under CERCLA. Also USACE is required to follow the <b>National Environmental Protection Act</b>
40 CFR Part 262, as incorporated by reference in 10 CSR 25-5-262	RCRA Generator Requirements	There is a possibility of the generation of mixed or hazardous waste.
40 CFR Parts 260 and 261, as incorporated by reference in 10 CSR 25-4.261	RCRA Hazardous Waste Characterization	Requirements of characterization of Hazardous waste.
40 CFR 268.7 and 268.32, as incorporated by reference in 10 CSR 25.7.268	RCRA Land Disposal Restrictions	Establishes land disposal restrictions for hazardous waste or mixed waste.
10 CFR Part 40 Subpart A	Criteria for Disposal of Wastes from Processing Source Material	NRC requirements for disposal of radioactive waste. Waste from SLAPS/HISS will be disposed of at a Licensed NRC facility. USACE is responsible for the appropriate disposal of the waste from SLAPS/HISS.
10 CFR Part 61 Subpart C and Subpart D	NRC Licensing Requirements for Land Disposal of Radioactive Waste: Performance Objectives (Subpart C) and Technical Requirements for Land Disposal Facilities (Subpart D)	Envirocare or other disposal site will have to meet these requirements. USACE is responsible for the appropriate disposal of the waste from SLAPS/HISS.

CITATION	TITLE	APPLICABILITY
10 CSR 10-5.090	Restriction of Emission of Visible Air Contaminants	Used to control particulate matter emissions from the remediation activities.
10 CSR 10-6.170	Restriction of Particulate Matter to the Ambient Air Beyond the Premise of Origin	Used to control particulate matter emissions from the remediation activities.
10 CSR 20-7.031(4)(I) 10 CSR 20-7.031(5) and Table A	Missouri Water Quality Standards	Regulation establishes a water quality standard for contaminants of concern.
10 CSR 20-6.200	Storm Water Regulations: Surface Runoff and Erosion Control	Implementation of appropriate best management practices.
10 CSR 25-4.261	Methods for Identifying Hazardous Waste	Test procedures, etc. which will identify if the remediation was is hazardous and regulated under RCRA.
10 CSR 25-5.262	Standards Applicable to Generators of Hazardous Waste	If the remediation waste is classified as hazardous than there are specific requirement which must be followed by USACE.
10 CSR 25-7.268	Land Disposal Restrictions	There are land disposal restrictions, which will apply if the remediation waste is characterized as hazardous.
10 CSR 80-3.010(3)	State Sanitary Landfill Design and Operation: Disposal of Low-Level Radioactive Material in Missouri	Low-Level radioactive material can't be disposed of in Missouri Sanitary Landfills.

CITATION	TITLE	APPLICABILITY
10 CSR 80-3.010(4)	State Sanitary Landfill Design and Operation: Sanitary Landfill Siting Requirements	Necessary design requirements if one of the alternative to be proposed in the Feasibility Study is on-site disposal.
10 CSR 80-3.010(17)	State Sanitary Landfill Design and Operation: Sanitary Landfill Cover Requirements	Necessary design requirements if one of the alternative to be proposed in the Feasibility Study is on-site disposal.
29 CFR Part 1910	OSHA - General Industry Standards	Standard Health and Safety requirements for remediation activities. Either these requirements or appropriate USACE requirements must be documented.
29 CFR Part 1926	OSHA - Safety and Health Standards	Standard Health and Safety requirements for remediation activities. Either these requirements or appropriate USACE requirements must be documented.
29 CFR Part 1904	OSHA - Recordkeeping, Reporting, and Related Regulations	Standard Health and Safety requirements for remediation activities. Either these requirements or appropriate USACE requirements must be documented.
49 CFR Part 171	Hazardous Material Transportation Regulations (HMTR)	Waste will be shipped from St. Louis to Utah or other disposal site.
49 CFR Part 172	HMTR	Waste will be shipped from St. Louis to Utah or other disposal site.

CITATION	TITLE	APPLICABILITY
COE Engineer Regulation (ER) 385-1-80, May 30, 1997	COE Ionizing Radiation Protection	Dealing with radiation and radiological contamination at SLAPS/HISS.
COE Engineer Regulation (ER) 385-1-92, March 18, 1994	COE Safety and Occupational Health Document Requirements for Hazardous, Toxic, and Radioactive Waster (HTRW) and Ordnance and Explosive Waste (OEW) Activities	Possibility of other contamination on-site besides radioactive contamination.
19 CSR 20-10.04C	Maximum Permissible Exposure Limits for Radiation	Establishes limits for radon emissions.
29 CFR 1910: 1910.1000 Subpart Z, Toxic and Hazardous Substances	Occupational Safety and Health Administration Standards	Health and Safety required training for remediation workers, etc.
10 CFR 835	Occupational Radiation Protection	Establishes exposure limits to workers.
19 CSR 20-10.05C	Missouri Radiation Regulations; Protection Against Ionizing Radiation Personnel Monitoring and Radiation Surveys	Establishes procedures for personnel monitoring and radiation surveys.
29 CFR 1910; 1910.96 Subpart G, Ionizing Radiation	Occupational Safety and Health Administration Standards Occupational Health and Environmental Control	Regulations which establishes procedures for minimizing exposure to radiation.
19 CSR 20-10.090	Missouri Radiation Regulations; Protection Against Ionizing Radiation, Disposal of Radioactive Wastes	Establishes appropriate exposure limits from radiation.

CITATION	TITLE	APPLICABILITY
19 CSR 20-10.070	Missouri Radiation Regulations; Protection Against Ionizing Radiation, Storage of Radioactive Materials	Establishes appropriate exposure limits from radiation.
19 CSR 20-10.080	Missouri Radiation Regulations; Protection Against Ionizing Radiation, Control of Radioactive Contamination	Establishes appropriate exposure limits from radiation.
10 CSR 10-5.180, Emission of Visible air Contaminants from Internal Combustion Engines	Missouri Air Pollution Control Regulations; Air Quality Standards and Air Pollution Control Regulations for the St. Louis Metropolitan Area	Establishes limits on particulate matter emissions from Internal Combustion Engines.
10 CSR 20-6.010	Missouri Construction and Operating Permit Regulations	Necessary for any asphalt plant or crusher used on-site.
10 CSR 23-4.050	Missouri General Protection of Groundwater Quality and Resources	USACE must protect the groundwater with respect to AEC/MED activities and contaminates.
10 CSR 20-6.010(13)	Missouri Stormwater Discharge Regulations	Any stormwater collected during remedial activities must meet the discharge regulations.



CITATION	TITLE	APPLICABILITY
40 CFR Part 192	Health and Environmental Protection Standards for Uranium and Thorium Mill Tailings Subpart D, Standards for Management of Uranium Byproduct Materials Pursuant to Section 84 of the Atomic Energy Act of 1954, as amended; Subpart E, Standards for Management of Thorium Byproduct Materials Pursuant to Section 84 of the Atomic Energy Act of 1954, as amended.	Establishes cleanup levels for radioactive contamination specific radium, thorium, and daughter products.
40 CFR 141; 56 FR 33050 July 18, 1991	Safe Drinking Water Act, Proposed National Primary Drinking Water Regulations	Establishes a limit of contaminants in drinking water. Groundwater beneath SLAPS/HISS is available as a drinking water source.
40 CFR 192.02	Groundwater Standards for Remedial Actions at Inactive Uranium Processing Sites	SLAPS/HISS have similar waste as to what is found at Inactive Uranium Processing Sites and establishes levels of contaminate in groundwater.
40 CFR 121.11 and 141.62 10 CSR 60-4.030	Safe Drinking Water Act; National Primary Drinking Water Regulations; Maximum Contaminant Levels; Missouri Drinking Water Regulations, Maximum Inorganic Chemical Contaminant Levels	Establishes contaminate limits in groundwater; uranium, radium, alpha, beta, and radon.
16 USC 469 PL 93-291; 88 Stat. 174	Archeological and Historic Preservation Act	Establishes procedures for archeological and historic preservation.

CITATION	TITLE	APPLICABILITY
10 CSR 23-1.010 through 1.060	Definitions Application to All Wells Type of Wells Qualifications Application for a Permit	Requirements for construction, and abandonment of groundwater monitoring wells.
10 CSR 23-1.090	Permit Requirement Well Registration	Requirements for construction, and abandonment of groundwater monitoring wells.
10 CSR 23-1.105	Permit Renewal	Requirements for construction, and abandonment of groundwater monitoring wells.
10 CSR 23-1.140	Placement of Registration Number	Requirements for construction, and abandonment of groundwater monitoring wells.
10 CSR 23-1.155	Well drilling and Pump Installation Machine Registration	Requirements for construction, and abandonment of groundwater monitoring wells.
10 CSR 23-1.160	Mail and Notification Procedures	Requirements for construction, and abandonment of groundwater monitoring wells.
10 CSR 23-3.020 through 3.080	General Protection of Groundwater Quality & Resources Standards for Construction of Wells Well Casing Seals and Connections Pump Installation Certification and Registration Reports Plastic Well Casing Liners	Requirements for construction, and abandonment of groundwater monitoring wells.
10 CSR 23-3.110	Plugging of Wells	Requirements for construction, and abandonment of groundwater monitoring wells.

CITATION	TITLE	APPLICABILITY
10 CSR 23-4.010-4.08	Monitoring Well Construction Code	Requirements for construction, and abandonment of groundwater monitoring wells.
10 CSR 25-6.263	Standards for Transporters of Hazardous Waste	State requirements for transporters to follow if transporting hazardous waste.
10 CSR 30-2.030	General Land Surveying Requirements	Surveying before and after remediation activities will be done and must follow appropriate standard procedures and be performed by a licensed surveyor.
RSMo 327	Missouri Law Regulating the Practice of Architecture, Professional Engineering and Land Surveying	Engineering Plans and Specifications or Land Surveys need to be performed by a licensed professional.
10 CSR 80-2.010	Definitions Solid Waste Management	Disposal restriction on radioactive material in sanitary landfills.
40 CFR Part 122-125	Clean Water Act - National Pollutant Discharge Elimination System (NPDES)	Water Pollution Control Program is supplying ARARs for SLAPS similar ARARs will be needed for HISS.

Cataloging Form  
{Technical/Project Managers fill in C through G, K through Q. RM completes other fields}

A. Document ID Number: Assigned by database 827 B. Further Information Required?: ☐

C. Operable Unit (Choose One):

USACE	<input type="checkbox"/>
St. Louis Sites	<input type="checkbox"/>
Downtown	<input type="checkbox"/>
North County	<input checked="" type="checkbox"/>
Madison Sites	<input type="checkbox"/>
Inaccessible Areas	<input type="checkbox"/>
PRP	<input type="checkbox"/>
Oversight Committee	<input type="checkbox"/>

D. Site (Optional):

SLDS VPs	<input type="checkbox"/>
Mallinckrodt	<input type="checkbox"/>
SLAPS	<input type="checkbox"/>
SLAPS VPs	<input type="checkbox"/>
CWC	<input type="checkbox"/>
HISS	<input type="checkbox"/>
Madison	<input type="checkbox"/>

E. Area (Optional): \_\_\_\_\_

F. Primary Document Type (Choose One):

Site Management Records	<input checked="" type="checkbox"/> <i>rm</i>	Remedial Action	<input type="checkbox"/>
Removal Response	<input type="checkbox"/>	Public Affairs/Community Relations	<input type="checkbox"/>
Remedial Investigation	<input checked="" type="checkbox"/> <i>rm</i>	Congressional Relations	<input type="checkbox"/>
Feasibility Study	<input type="checkbox"/>	Freedom of Information Act	<input type="checkbox"/>
Record of Decision	<input type="checkbox"/>	Real Estate	<input type="checkbox"/>
Remedial Design	<input type="checkbox"/>	Project Management	<input type="checkbox"/>

G. Secondary Document Type (see back of form): Correspondence

H. Bechtel Number: \_\_\_\_\_ I. SAIC Number: \_\_\_\_\_

J. MARKS Number(Choose One): FN: 1110-1-8100e ☐ FN: 1110-1-8100f ☐ FN: 1110-1-8100g ☐

K. Subject/Title: MDNR Request for list of ARA's to be considered (TBCs) for the North County ROD

L. Author: Larry Erickson M. Author's Company: MDNR

N. Recipient(s): Sharon Cotner O. Recipient(s) Company: PM-R

P. Version (Choose One): Draft ☐ Final ☒ Q. Date: 9/17/98

R. Include in the ARF? ☐ S. Include in the AR? ☐ T. Filed as Confidential/Privileged? ☐

U. Document Format (Choose one):

Paper	<input checked="" type="checkbox"/>	Photographic	<input type="checkbox"/>	Cartographic/Oversize	<input type="checkbox"/>
Electronic	<input type="checkbox"/>	Audio-visual	<input type="checkbox"/>	Microform	<input type="checkbox"/>

V. Filed in AR Volume Number: \_\_\_\_\_

W. Physical Location (Choose One):

Central Files	<input checked="" type="checkbox"/>	Microfilm Vendor	<input type="checkbox"/>	In ARF	<input type="checkbox"/>
Records Holding Area	<input type="checkbox"/>	Department of Energy	<input type="checkbox"/>	In AR	<input type="checkbox"/>

X. Associated with Document(s): \_\_\_\_\_