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# EXPLANATION OF SIGNIFICANT DIFFERENCES WELDON SPRING SITE

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**U.S. Department of Energy  
Office of Legacy Management**

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SUPERFUND RECORDS

## EXPLANATION OF SIGNIFICANT DIFFERENCES WELDON SPRING SITE

### I Introduction

This document is an Explanation of Significant Differences (ESD) for three Records of Decision (RODs) for the Weldon Spring site located in St. Charles County, Missouri. These RODs were signed by the U.S. Department of Energy (DOE) and the U.S. Environmental Protection Agency (EPA). The RODs addressed by this ESD are the following:

- Chemical Plant Operable Unit (CPOU) ROD, signed in September 1993. This ROD addressed soil and structural contamination as well as Raffinate Pit sludge at the Chemical Plant. It also addressed radioactively contaminated soil at numerous vicinity properties outside the boundaries of the Chemical Plant. This ESD also presents changes to the response action for the Southeast Drainage as part of the change to the CPOU ROD. This response action was documented in an engineering evaluation/cost analysis (EE/CA) report entitled *Engineering Evaluation/Cost Analysis for the Proposed Removal Action at the Southeast Drainage Near the Weldon Spring Site, Weldon Spring*, which was issued in August 1996. A decision document for this response action was issued by DOE in November 1996.
- Quarry Residuals Operable Unit (QROU) ROD, signed in September 1998. This ROD addressed contaminated soil and groundwater that remained after the completion of the Quarry Bulk Waste Operable Unit (OU) remedial action. The QROU was implemented as the follow-on action to the Bulk Waste OU ROD.
- Chemical Plant Groundwater Operable Unit (GWOU) ROD, signed in January and February 2004. This ROD addressed groundwater contamination at the Chemical Plant area.

This ESD, prepared in accordance with Section 117(c) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and with Part 300, Section 435(c)(2)(I) of Title 40 of the *Code of Federal Regulations* [40 CFR 300.435(c)(2)(I)], documents significant differences to the selected remedies in the three RODs. In the RODs and EE/CA identified above, the DOE and EPA made assumptions as to the anticipated future use of the land and other natural resources potentially impacted by contamination released at the site and selected response actions that are protective for those uses. However, the RODs and EE/CA in some cases did not specify particular use restrictions necessary for those actions to remain protective over the long term. Thus far, the actual land and natural resource uses have been consistent with the assumptions made in the RODs, and DOE and EPA believe the selected remedies remain protective. However, to assure land and resource uses remain consistent with these assumptions over the long term, institutional controls based upon specific use restrictions are necessary. The purpose of this ESD is to identify the specific use restrictions necessary for all site areas affected by these response actions. The specific institutional controls (ICs) needed to implement these use restrictions will be identified, evaluated, and adopted pursuant to the Long-Term Surveillance and Maintenance (LTS&M) Plan, currently under development. DOE is responsible

for implementing, maintaining, reporting on, and enforcing the institutional controls. Although DOE may transfer these procedural responsibilities to another party by contract, property transfer agreement, or through other means, DOE shall retain ultimate responsibility for remedy integrity.

This ESD will become part of the Administrative Record for the Weldon Spring site and will also be available at the following Web site: <http://www.gio.doe.gov>. The Administrative Record is at the following location: Interpretive Center (for the Weldon Spring site)  
7295 Highway 94 South  
St. Charles, MO 63304  
Hours: Monday to Friday, 9 A.M. – 5 P.M.

## **II Summary of Site History, Contamination Problems, and Selected Remedy**

The Weldon Spring site is located in St. Charles County, Missouri, about 48 km (30 mi) west of St. Louis. The site consists of two nearby but geographically distinct properties – the Weldon Spring Chemical Plant and Raffinate Pit sites (Chemical Plant) and the Weldon Spring Quarry (Quarry). Both properties are under the jurisdictional control of DOE. Jurisdictional control refers to the federal jurisdiction and control that DOE exerts as the federal land-holding agency with jurisdiction over specific property on land owned by the United States. The Army has federal jurisdiction in a similar manner over its property on land owned by the United States.

The Chemical Plant area was part of a larger area used by the U.S. Department of the Army from 1941 to 1945 to manufacture trinitrotoluene (TNT) and dinitrotoluene (DNT). This resulted in contamination of soil, sediment, and some off-site springs with nitroaromatic compounds. The Chemical Plant area was later transferred to the U.S. Atomic Energy Commission (AEC) in 1956 for construction of the Weldon Spring Uranium Feed Materials Plant, which is now referred to as the Chemical Plant. The plant processed uranium ore concentrates, and the wastes that were generated were stored in the four Raffinate Pits located on the Chemical Plant property. The uranium processing operations resulted in radiological contamination of some locations generally within the areas previously contaminated by Army operations.

The Quarry was originally mined for limestone aggregate used to construct the nearby former ordnance works. The Army subsequently used the Quarry for burning wastes from the manufacture of explosives and for the disposal of rubble contaminated with TNT during the operation of the ordnance works. These activities resulted in contamination of the soil and groundwater with nitroaromatic compounds. The AEC also disposed of radioactive wastes and rubble that came from demolition of a facility previously used to process radioactive materials located in St. Louis, Missouri (known as the Destrehan Street Plant) in the Quarry.

The EPA placed the Quarry and the Chemical Plant on the National Priorities List (NPL) in 1987 and 1989, respectively. A Federal Facility Agreement was signed by the EPA and DOE in 1986, and it was amended in 1992.

Cleanup of the Weldon Spring site was implemented through a series of response actions that included removal actions to address immediate risks and stabilize conditions. Work that

remained was subsequently organized into four OUs. The Quarry Bulk Waste action was an interim measure, and the QROU was designed to address the final response actions for the Quarry area. Therefore, all necessary use restrictions for the Quarry area are addressed by the QROU ROD and the clarifications to the QROU ROD provided in this ESD.

The remedial actions undertaken and the post-remedial action site conditions at the Chemical Plant Area and the Quarry Area are summarized in Sections IIA through IIC below. The Southeast Drainage removal action is addressed under Section IIA Chemical Plant OU. The summaries focus primarily on describing the current site conditions and the basis for the use restrictions identified in Attachment A.

## **IIA Chemical Plant OU**

The remedial action completed for the CPOU addressed the conditions at 44 buildings and structures, including foundations; the dewatering and dredging of four Raffinate Pits; and the removal of contaminated soil and sediment within the boundaries of the Chemical Plant (including soil beneath the area now consisting of the disposal cell and buffer zone and areas at Frog Pond and Ash Pond). Removal of contaminated soil was also conducted at numerous vicinity properties outside the Chemical Plant. The contaminated soil and other wastes generated from the cleanup are now permanently disposed of at an engineered disposal cell constructed at the Chemical Plant. Wastes generated from cleanup of the Quarry area have also been disposed of in the disposal cell. At the time of its closure, the cell contained approximately 1.13 million m<sup>3</sup> (1.48 million yd<sup>3</sup>) of waste.

The 1993 CPOU ROD specifies that “perpetual care be taken of the committed land within the disposal cell footprint because waste would retain its toxicity for thousands of years.” It stipulates that the cell cover be inspected and that the groundwater be monitored. This ROD also specified that “following completion of the site cleanup activities, an assessment of the residual risks based on actual site conditions will be performed to determine the need for any future land use restrictions. This assessment would consider the presence of the on-site disposal cell, the buffer zone, the adjacent Army site, and any other relevant factors necessary to ensure that appropriate measures are taken to protect human health and the environment for the long term.”

As part of the remedy selected for the CPOU, soil contamination was cleaned up by removing to depth and disposing of contaminated soils in the on-site disposal cell. Soil cleanup goals were established in the CPOU ROD that were intended to be as low as reasonably achievable given the design limitations pertaining to safe field excavation techniques and field survey capabilities. Recreational use was considered to be the reasonably anticipated future land use. A standard conservative recreational visitor scenario as defined in the CPOU Baseline Risk Assessment was considered to be representative of recreational use. The exposure assumptions used were consistent with those recommended for a recreational scenario in EPA Risk Assessment Guidance for Superfund (RAGS). Risk calculations based on the soil cleanup goals showed cumulative risk to the recreational visitor was within the acceptable risk range. Recognizing that the actual post cleanup conditions might be different than what was anticipated by the cleanup goals, the ROD specified that a post-remediation risk assessment would be performed following

cleanup and that a final decision on the need for any future land use restrictions would be based on the actual residual condition.

The soil excavations were conservatively designed to remove contamination to depth to achieve the established cleanup goals or better. The post-remediation risk assessment used post cleanup confirmation data to evaluate the cumulative risk posed by exposure to soils from all contaminants. The assessment is believed to overestimate risks because it did not take into consideration the backfilling and reworking of the soils following excavation. The assessment confirmed that the potential risks to recreational visitors are within the acceptable risk range.

The post-remediation risk assessment also evaluated the risk to a suburban resident. A standard conservative suburban residential scenario as defined in the CPOU Baseline Risk Assessment was used. Following recommendations in EPA guidance (RAGS, Exposure Factors Handbook), the exposure assumptions (e.g., contact rate, exposure frequency and duration variables) used as input to this estimate were based on statistical data representing the 95<sup>th</sup> or, if not available, the 90<sup>th</sup> percentile value for these variables. This approach provides risk estimates for reasonable maximum exposure (RME) to a resident receptor. The calculated risk to the suburban resident was generally greater than  $1 \times 10^{-4}$  but less than  $1 \times 10^{-3}$  and therefore slightly exceeds the acceptable risk range. However, the risk to the suburban resident from exposure to naturally occurring background concentrations of radionuclides in soils is  $5.3 \times 10^{-4}$  or essentially the same risk posed by residual concentrations in the remediated areas. In other words, there is no significant incremental increase in risk from exposure to the remediated areas for a suburban resident. For purposes of this site and this ESD, the standard conservative suburban residential scenario is considered representative of unlimited use and unrestricted exposure (UUUE), the EPA policy threshold for determining whether ICs are appropriate.

These calculated risks are cumulative of all contaminants; however, the risks are primarily due to the radionuclides associated with the uranium ores. The CPOU ROD considered the standards for residual Ra-226 found in 40 CFR 192, Subpart B to be relevant and appropriate (RAR) to the cleanup of these radionuclides. The ROD was issued in 1993 prior to the issuance of EPA Directive 9200.4-25, Use of Soil Cleanup Criteria 40 CFR 192 as Remediation Goals for CERCLA Sites. A review of the expectations set forth by EPA in this guidance confirms 1) these standards would still be considered RAR were the decision to be made today, i.e., the contamination and its distribution was consistent with the outlined expectations; and 2) the actual residual concentrations for radium and thorium combined are much less than the concentrations identified in the guidance as meeting the health-based standard.

For the above reasons, DOE concludes that there is no need to restrict land use in the Chemical Plant Area on the basis of exposure to soils. This assessment applies to land use only. The groundwater pathway and the appropriate use restrictions for groundwater are addressed in Section IIC Chemical Plant Area Groundwater OU, below. This assessment does not apply to the soils and sediments in the Southeast Drainage, which are addressed below.

Although there is no reason to restrict land use in the Chemical Plant Area to prevent exposure to soils, it is necessary to restrict land use in the buffer area to protect the long-term effectiveness of the remedy. Missouri Regulation 10 CSR 25-7.264(2)(N)2.D providing for a 300 ft buffer zone

between the property line and the actual landfill was identified as relevant and appropriate in the CPOU ROD. This is the basis for the 300 ft buffer zone around the disposal cell. The buffer is intended to provide an area which would only be used for monitoring and maintenance activities. It also provides an area of erosion protection for the cell. Use restrictions are needed to ensure that the buffer zone remains effective for these purposes.

The EE/CA and decision document for the Southeast Drainage specified removal of radioactively contaminated soil and sediment from accessible areas of the Drainage, with the removed soil and sediment to be transported to the Chemical Plant for temporary storage and ultimate disposal in the disposal cell. The removal action was completed in 1999.

The Southeast Drainage is narrow and wooded with limited access and one of the objectives of this cleanup was to limit ecological damage to the drainage. It was determined that the soil cleanup goals developed for the CPOU described above were not appropriate for cleanup of this area and risk-based cleanup goals were developed for the drainage that were designed to be protective for recreational use and for a modified residential scenario involving a child living near the drainage and using it periodically for play activities. Post-cleanup soil and sediment sampling was conducted, and a post-cleanup risk assessment was performed to confirm that the drainage is protective for these uses and therefore protective for any reasonably anticipated land use. However, residual soil and sediment contamination remains in some locations within the drainage at levels exceeding those that would support UUUE as represented in this case by a standard conservative suburban residential exposure scenario described above. Therefore, land use restrictions are needed in the drainage to prevent residential use or other uses inconsistent with recreational use. The Southeast Drainage is located on property owned by state entities.

The length of time it may take soils and sediments to attenuate to levels that support UUUE can not be accurately estimated, and was not anticipated as an eventuality in the removal action. Also, there are no effective means to monitor or verify attenuation of the soils and sediments at this time. Therefore, land use restrictions will need to remain in place for the long term. The width for the restricted area for the Southeast Drainage was estimated to be 200 ft. The width of the restricted area is based on the average width of the drainage used in the modified residential scenario and represents a practical boundary outside which a future resident would not routinely access the drainage.

## **IIB Quarry Residuals OU**

The 1998 QROU ROD was intended to address the residual contamination remaining at the Quarry Area following removal of the waste material from the Quarry proper. The bulk waste was removed and transported to the Chemical Plant Area for permanent disposal in the onsite disposal cell under the 1990 Quarry Bulk Waste Operable Unit ROD. The primary residual concern is the uranium contaminated groundwater beneath the Quarry and its immediate surrounding area north of the Femme Osage Slough. The conditions at the quarry area were determined to be protective for its current and reasonably anticipated future land use (recreational) because exposure to contaminated groundwater is not a concern for these uses. The ROD determined that "institutional controls will be necessary to prevent uses inconsistent

with recreational use, or uses that would adversely affect contaminant migration." A long-term groundwater monitoring network was implemented.

Residual soil contamination in the Quarry Area was remediated to the cleanup goals established by the CPOU ROD described above, except for some inaccessible soils that remain in the cracks and fissures of the Quarry walls and floor. As part of the Quarry restoration, the cracks and fissures were grouted and the Quarry was backfilled with clean borrow soil to an elevation at or above where the waste material had been present. The area is now fully vegetated. Under these conditions, DOE could not identify a plausible exposure scenario which would result in an unacceptable risk. The main purpose for backfilling the Quarry was to address physical safety concerns (e.g., to minimize the risk of someone falling into an open pit), stabilize the north and south highwalls, and to minimize infiltration to groundwater through the Quarry cracks and fissures. To sustain these conditions the backfill material must remain in place over the long-term with a surface grade that promotes surface runoff. Therefore, DOE will monitor the quarry fill and restrict activities that could result in the removal of the fill (e.g., use as a borrow source).

The contaminated groundwater in the Quarry area is confined to the shallow system beneath the quarry and the marginal alluvium north of the slough (see Figure 3 of Attachment A). The impacted groundwater system was determined not to be a potential source of drinking water because of insufficient yields; however, uranium concentrations exceed the drinking water standard and the system is located adjacent to the Missouri River Alluvial aquifer which is currently used as a drinking water source. A two-year study was conducted to investigate the potential effectiveness of installing a groundwater removal and treatment system. This study confirmed the validity of model projections reported in the feasibility study, which had indicated that a groundwater removal and treatment system would not be effective in significantly reducing uranium mass or concentrations in the Quarry Area groundwater.

Uranium concentrations in the groundwater in the marginal alluvium north of the slough decrease rapidly in the direction of the slough and uranium concentrations south of the slough are consistent with background. This indicates the geochemical conditions in this zone north of the slough are favorable for reducing the amount of dissolved uranium in groundwater. Geochemical investigations were performed confirming that processes, including sorption to the soil matrix and precipitation, are acting to reduce uranium and limit uranium migration south of the slough. This area is referred to as the reduction zone. Natural processes in the reduction zone should continue to mitigate migration of uranium toward the well field over the long term. This zone is approximately 4.7 acres in size and is shown in Figure 3 of Attachment A. Drilling, digging, or other construction activities that result in the large-scale removal or exposure of soils in the reduction zone should be restricted so that the natural characteristics, (e.g., oxidation potential) are not changed. The geochemical investigation established that this reduction zone begins at a depth of approximately 5 feet.

Installation of pumping wells in the proximity of the contaminated area should be restricted to limit the potential for contaminant migration to be artificially induced or increased. The 220-acre IC boundary shown in Figure 3 of Attachment A is expected to provide a sufficient hydraulic buffer. The size of the area was determined based on the estimated maximum hydraulic capture zone of a pumping well. With the exception of the 9-acre Quarry, which is

under DOE jurisdictional control, the remainder of the restricted area (i.e., 211 acres) is owned by state entities. The time frame for groundwater north of the slough to reach levels that no longer pose a concern for the adjacent alluvial aquifer is expected to be greater than 100 years considering the hydrogeologic characteristics present in this location. It was estimated in the remedial design phase that a uranium concentration of 300 pCi/L or lower in groundwater north of the slough would not cause levels south of the slough to exceed the drinking water standard, on the basis of conservative assumptions postulating the migration of the contaminated groundwater. The evaluation indicated that recharge to the impacted area (quarry area north of the slough) accounts for less than 1% of the total flow to the St. Charles County well field (i.e., at 300 pCi/L, it is expected that no more than 3 pCi/L would be contributed to the well field if it is conservatively assumed that all attenuation mechanisms failed, including the attenuation from the reduction zone discussed above).

### **IIC Chemical Plant Area Groundwater OU**

The selected remedy in the 2004 GWOU Final ROD is monitored natural attenuation (MNA) of the contaminants of concern (COCs) with ICs to prohibit the use of groundwater and spring water as a drinking water source during the period of remediation (or attenuation). The ROD also stipulates that ICs should prohibit uses that could impact groundwater flow in the area of contamination. A monitoring network has been established to evaluate whether the MNA performance goals described in the ROD are being met.

The reasonably expected future land use at the Chemical Plant area is recreational use, which would not make use of groundwater. Also, low groundwater yields and the availability of a municipal drinking water source reduce the likelihood of groundwater being used for residential purposes. Nevertheless, the potential future risk from residential use of the water was evaluated. This evaluation included an assessment of the risk from ingesting the groundwater at quantities typical for a resident scenario. The assessment indicated unacceptable cancer and noncancer risks for a resident from ingesting the contaminated groundwater. Hence, use restrictions need to be specified that will ensure that groundwater is not used as a residential drinking water source until cleanup standards for groundwater are met. The cleanup standards are set at levels that allow for UUUE. The use restrictions should also apply to the contaminated springs identified on Figure 2 of Attachment A as SP-6301, SP-6303, SP-5303, and SP-5304. It is estimated that it would take approximately 100 years for contaminants in groundwater and spring water to naturally attenuate to the cleanup standards.

The buffer area necessary to prevent hydraulic impacts to the area of contamination was defined as extending 1,000 ft from the outer edge of where contaminated groundwater exceeds cleanup standards. The size of the buffer area was conservatively determined by considering the area that would be covered by the hydraulic capture of a well installed in the most transmissive location at the site (the location where the highest water yield could be obtained). The Chemical Plant area affected by the groundwater contamination is on property under the jurisdictional control of DOE and the Army and on property owned by state entities.



### **III Description of the Significant Differences and the Basis for Those Differences**

ICs are being relied upon to protect human health at the Chemical Plant, Quarry, and Southeast Drainage (and within their immediate vicinities) at the Weldon Spring site. As discussed in Section II, although the RODs for three of the four OUs for the Weldon Spring site require implementation of ICs as part of the remedy, additional details are needed to further describe the IC requirements. For example, the specific objectives of the controls or restrictions need to be identified. Hence, this ESD clarifies the specific requirements for each site area that needs use restrictions and establishes how DOE will implement, maintain, and monitor the specific requirements.

The CPOU ROD anticipated that ICs would be necessary to safely manage the disposal cell in perpetuity. However, the ROD lacks details on the specific objectives of the use restrictions. The ROD also defers the final decision on necessary use restrictions pending the outcome of the post-cleanup risk assessment. The ROD is also silent on how specific ICs would be identified and implemented. This ESD clarifies the necessary use restrictions and describes how DOE will identify and implement specific ICs.

The QROU ROD was fairly clear on the need for ICs to prevent uses inconsistent with recreational use and prevent uses that would adversely affect contaminant migration. It also explained that DOE would pursue agreements with the Missouri Department of Conservation (MDOC) and Missouri Department of Natural Resources-Parks (MoDNR-Parks) outlining the terms of the ICs. However, the ROD was not clear on the duration for which or specific location at which use restrictions would need to be applied, and other specific objectives of the use restrictions could be made more clear. Also, the ROD was not clear on how specific ICs would be identified and implemented. This ESD clarifies the necessary use restrictions and describes how DOE will identify and implement specific ICs.

Written more recently than the other RODs, the Groundwater OU ROD describes the necessary use restrictions. However, for the sake of comprehensiveness and consistency, and to do a better job of explaining how specific ICs will be identified and implemented, it is helpful to include the Groundwater OU ROD as an element addressed by this ESD.

The Southeast Drainage EE/CA did not address whether or not use restrictions are necessary. Therefore, this ESD modifies the Chemical Plant ROD to identify necessary use restrictions for the Southeast Drainage and describe the process DOE will use to identify and implement specific ICs.

### **IV Institutional Control Requirements for Specific Site Areas**

Attachment A presents the necessary use restrictions for each site area. It identifies the geographic locations where the use restrictions are needed, the duration for which the use restrictions are needed, and the objectives of the use restrictions. These restrictions are intended to be the objectives that specific ICs will need to meet.

For properties (Chemical Plant and Quarry) that are under DOE jurisdictional control, DOE will notify the EPA and the State of Missouri at least 6 months prior to any transfer, sale, or lease of any property under its jurisdictional control that is subject to ICs. This will ensure that the EPA and the State of Missouri will be involved in discussions so that appropriate provisions to maintain effective ICs will be included in the conveyance documents. In advance of a transfer of ownership or control of property, DOE shall take action within the limitations of its authority to ensure that the controls and restrictions identified in Attachment A will continue after transfer and any successive transfers pursuant to agreement among DOE, EPA, and the State of Missouri. If it is not possible for DOE to notify the EPA and the State of Missouri at least 6 months prior to any transfer, sale, or lease, DOE will notify the EPA and the State of Missouri as soon as possible but no later than 60 days prior to the transfer, sale, or lease of any property under its jurisdictional control. This notice to the EPA and the State also applies to any real property interest (e.g., easement) that DOE may transfer, vacate, or otherwise modify.

DOE is developing a Long-Term Surveillance & Maintenance Plan (LTS&MP) that will address the full scope of the site management activities necessary to assure that the Weldon Spring site remains protective over the long term. In addition to addressing such things as long-term groundwater monitoring and disposal cell maintenance, the LTS&MP will be used to assure that the use restrictions identified in this ESD are properly imposed and maintained. Therefore, the LTS&MP will include an IC implementation plan. The IC implementation plan will include a process for evaluating and identifying specific IC mechanisms that best accomplish the objectives set out in this ESD. Consistent with EPA guidance on selecting ICs, various IC mechanisms will be evaluated, including governmental controls, proprietary controls, enforcement tools, and informational devices. When appropriate, redundant mechanisms will be employed to increase effectiveness. The objective is to incorporate the full range of specific ICs and the manner in which they will be maintained, inspected, and enforced into future revision(s) of the LTS&MP.

Within 90 days of signature of this ESD, DOE shall resubmit to EPA for review and approval the IC implementation plan [as part of the draft final of the LTS&MP which is a primary document under the First Amended Federal Agreement] that shall address IC evaluation, implementation, maintenance, and periodic inspection.

The applicable or relevant and appropriate requirements (ARARs) established in the RODs and the Southeast Drainage EE/CA are not modified by this ESD. The IC requirements established by this ESD are consistent with EPA policy on the use of ICs at federal facilities.

## **V State Agency Comments**

The following paragraph is the MoDNR's position on the ESD:

"The Missouri Department of Natural Resources (MoDNR) supports the U.S. Environmental Protection Agency's (EPA) requirement for this Explanation of Significant Difference (ESD) document. MoDNR agrees it is necessary in order to clarify and define the objective and performance goals of the Institutional Controls (IC) for the previous Records of Decision (ROD) at the Weldon Spring Site (Chemical Plant Operable Unit, Quarry Residuals Operable Unit, and

Groundwater Operable Unit) and the decision document for the Southeast Drainage. While the department is comfortable that the ROD's are protective under current land use conditions, we can not accept the rationale that comparative risk of the residual material will always be equivalent to background levels. Portions of the Chemical Plant site have the potential to be used for a variety of purposes in the future. Therefore, we are concerned that all residual contamination is tracked and managed properly so exposure will not exceed acceptable levels at any given location. The department cannot accept the proposed unlimited use or unrestricted exposure for all areas. Institutional Controls, including restrictive covenants to limit land use to non-residential purposes, are appropriate where residual contamination remains. The department is comfortable with defining the details of these IC's in the Long-Term Surveillance and Maintenance Plan (LTS&M)."

## **VI Public Participation Activities**

DOE will publish a notice of availability and a brief description of this ESD in the local papers (i.e., St. Charles County suburban journals). Similar information will also be posted at the Web site: <http://www.gjo.doe.gov>. For more information regarding this ESD, contact Tom Pauling, U.S. Department of Energy, 2597 B3/4 Road, Grand Junction, CO 81503.

## **VII Affirmation of the Statutory Determination**

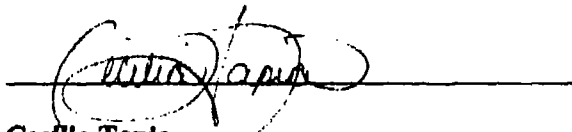
After taking into account the new information that has been developed and the changes that have been made to the selected remedies, the EPA and DOE believe that the remedies (1) remain protective of human health and the environment, (2) comply with federal and state requirements that were identified in the RODs as ARARS to these remedial actions at the time of the original RODs, and (3) are cost effective. In addition, the remedies as revised by this ESD continue to utilize permanent solutions and alternative treatment technologies to the maximum extent practicable for these sites.



**David Geiser**  
**Director of Policy and Site Transition (LM-40)**  
**Office of Legacy Management**  
**U.S. Department of Energy**

**Date**

2/18/05



**Cecilia Tapia**  
**Director of Superfund Division**  
**U.S. Environmental Protection Agency Region VII**

**Date**

2/23/05

**ATTACHMENT A:  
SITE-SPECIFIC USE RESTRICTIONS**

This attachment presents use restrictions for specific areas addressed by the Weldon Spring site Records of Decision (RODs) discussed in this Explanation of Significant Differences (ESD). The general location of these areas is shown in Figure 1. The Long-Term Surveillance and Maintenance Plan (LTS&MP) will be used to ensure that the restrictions or institutional controls (IC) objectives identified in this attachment are implemented and maintained. The specific IC strategy will be designed to maintain the long-term effectiveness of agreements, contracts, covenants, easements, deed records, maintenance, monitoring, and inspection plans, and any other instrument that may be executed to achieve these IC objectives, even if the U.S. Department of Energy (DOE) transfers ownership or control of the property to another entity.

**A1 Chemical Plant Operable Unit ROD, September 1993**

The use restrictions listed below must be met throughout the disposal cell area, including its surrounding 300-ft buffer zone as identified in Figure 2 of this attachment. This area is under federal DOE jurisdictional control. The use restrictions must be maintained until the remaining hazardous substances are at levels allowing for unlimited use and unrestricted exposure (UUUE). Due to the extremely long-lived nature of the radioactive constituents within the disposal cell, these restrictions are expected to be necessary for essentially as long as the disposal cell remains in place. The objectives of the controls or restrictions are as follows:

1. Prevent activities on the disposal cell, such as the use of recreational vehicles that could compromise the integrity of the cell cover (e.g., result in the removal or disturbance of the rip rap).
2. Prevent activities in the buffer zone such as drilling, boring, or digging, that could disturb the vegetation, disrupt the grading pattern, or cause erosion.
3. Retain access to the buffer area for continued maintenance, monitoring, and routine inspections of the cell and buffer area.
4. Prevent construction of any type of residential dwelling or facility for human occupancy on the disposal cell and buffer area, other than facilities to be occupied for activities associated with performing environmental investigation and/or restoration and expansion of the existing Interpretive Center.
5. Maintain the integrity of any current or future remedies or monitoring systems.

**Southeast Drainage Soil and Sediment** - The use restrictions listed below must be met at the approximately 37-acre area shown in Figure 2 covering the 200-ft corridor along the length of the Southeast Drainage. The restricted area is located on property that is owned by state entities. The use restrictions must be maintained until the remaining hazardous substances are at levels allowing for UUUE, which is anticipated to be a period of decades or longer.

1. Prevent the development and use of the Southeast Drainage property for residential housing, schools, child care facilities and playgrounds.

#### **A2 Quarry Residuals Operable Unit ROD, September 1998**

The use restrictions listed below must be met at the specific areas shown in Figure 3 of this attachment. The use restrictions must be maintained until the remaining hazardous substances are at levels allowing for UUUE.

1. Prevent the development and use of the Quarry for residential housing, schools, child care facilities and playgrounds. Prevent drilling, boring, digging, or other activities in the quarry proper that disturb the vegetation, disrupt the grade, expose the Quarry walls, or cause erosion of the clean fill that was used to restore the Quarry. This restriction should be maintained for the long-term. The 9 acre Quarry is under DOE jurisdictional control.
2. Prevent the use of the contaminated shallow groundwater for drinking water purposes. The contaminated shallow groundwater underlies the Quarry and extends to the marginal alluvium north of the slough as indicated on Figure 3. This restriction will need to be maintained over a period of decades or longer.
3. Limit the use of all groundwater within the outlined restricted area shown on Figure 3 to investigative monitoring only. The boundary of the restricted area extends beyond the area of contamination and is intended to provide a buffer against potential hydraulic influences on the area of contamination by preventing such things as pumping wells being located in the proximity of the contaminated area. This restriction includes the shallow groundwater system and also extends vertically to all groundwater systems that underlie the contaminated groundwater. This restriction will need to be maintained over a period of decades or longer, until uranium concentrations in Quarry groundwater north of the slough are at 300 pCi/L or lower. With the exception of the 9-acre Quarry, this restricted area is owned by state entities. This area covers approximately 220 acres.
4. Prevent drilling, boring, digging, construction, earth moving or other activities in the location identified as the Natural Reduction Zone Area that could result in disturbing the soils at this location or exposing subsurface soils (i.e., soils deeper than [about] 5 ft below the surface). This restriction will need to be maintained over a period of decades or longer. The soil in this area at a depth of 5 ft or greater contains geochemical properties that allow reduction processes to naturally occur,

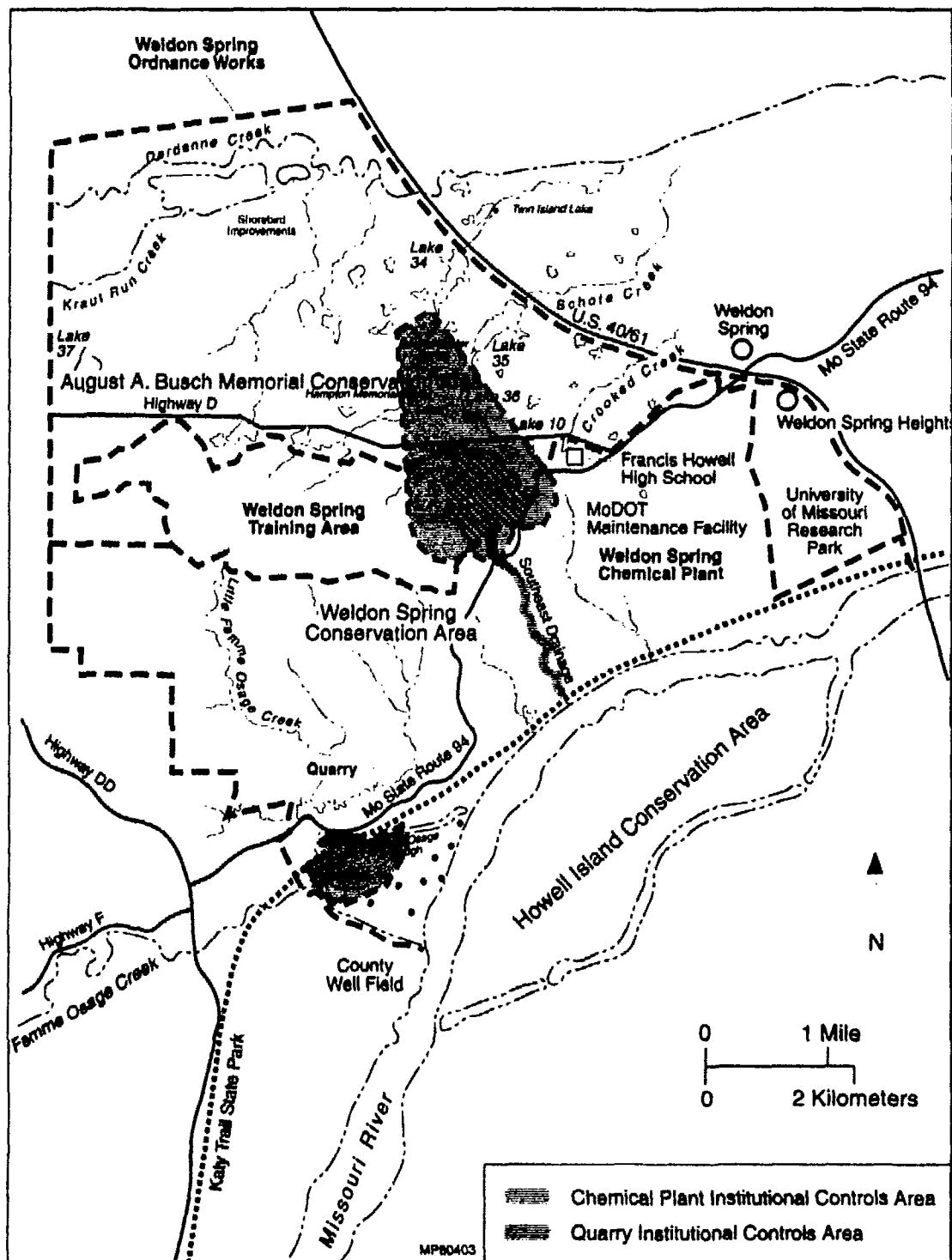
resulting in the precipitation of uranium from Quarry groundwater north of the Femme Osage Slough and thereby minimizing uranium migration to the well field. The restrictions must be maintained over a period of decades or longer, until uranium concentrations in Quarry groundwater north of the slough are at 300 pCi/L or lower. This area is located on property owned by a state entity and is approximately 4.7 acres in size.

5. Retain access to the area for continued monitoring and maintenance of groundwater wells.
6. Maintain the integrity of any current or future remedies or monitoring systems

### **A3 Groundwater Operable Unit (GWOU) ROD, February 2004**

The use restrictions listed below must be met in the entire area of approximately 1,100 acres shown on Figure 2 where groundwater use needs to be restricted until concentrations of the contaminants of concern (COCs) meet drinking water or risk-based standards that allow for UUUE. The period of time necessary for contaminants to attenuate to these levels has been estimated at approximately 100 years. The size of the restricted area includes a 1,000-ft buffer area that accounts for the groundwater gradient and flow conditions at the site. The restricted area includes properties under Federal jurisdictional control (DOE and the Army) as well as properties owned by state entities. The objectives of the controls or restrictions are as follows:

1. Prevent the use of the contaminated shallow groundwater and springwater for drinking water purposes. The contaminated shallow groundwater occurs in the weathered and unweathered portions of the upper limestone unit (Burlington-Keokuk). The contaminated groundwater and springwater system occurs within the limits of the hydraulic buffer zone identified on Figure 2. The springs are identified on the figure as SP-6301, SP-6303, SP-5303, and SP-5304. This restriction will need to be maintained over a period of decades or longer.
2. Limit the use of all groundwater within the outlined restricted area to investigative monitoring only. The boundary of the restricted area extends beyond the area of contamination and is intended to provide a buffer against potential hydraulic influences on the area of contamination by preventing such things as pumping wells being located in the proximity of the contaminated area. This restriction includes the shallow groundwater system and also extends vertically to all groundwater systems that underlie the contaminated groundwater. This restriction will need to be maintained over a period of decades or longer.
3. Retain access to the area for continued monitoring and maintenance of groundwater wells and springs.
4. Maintain the integrity of any current or future remedies or monitoring systems



**FIGURE 1** Location of Institutional Control Areas for the Weldon Spring Site



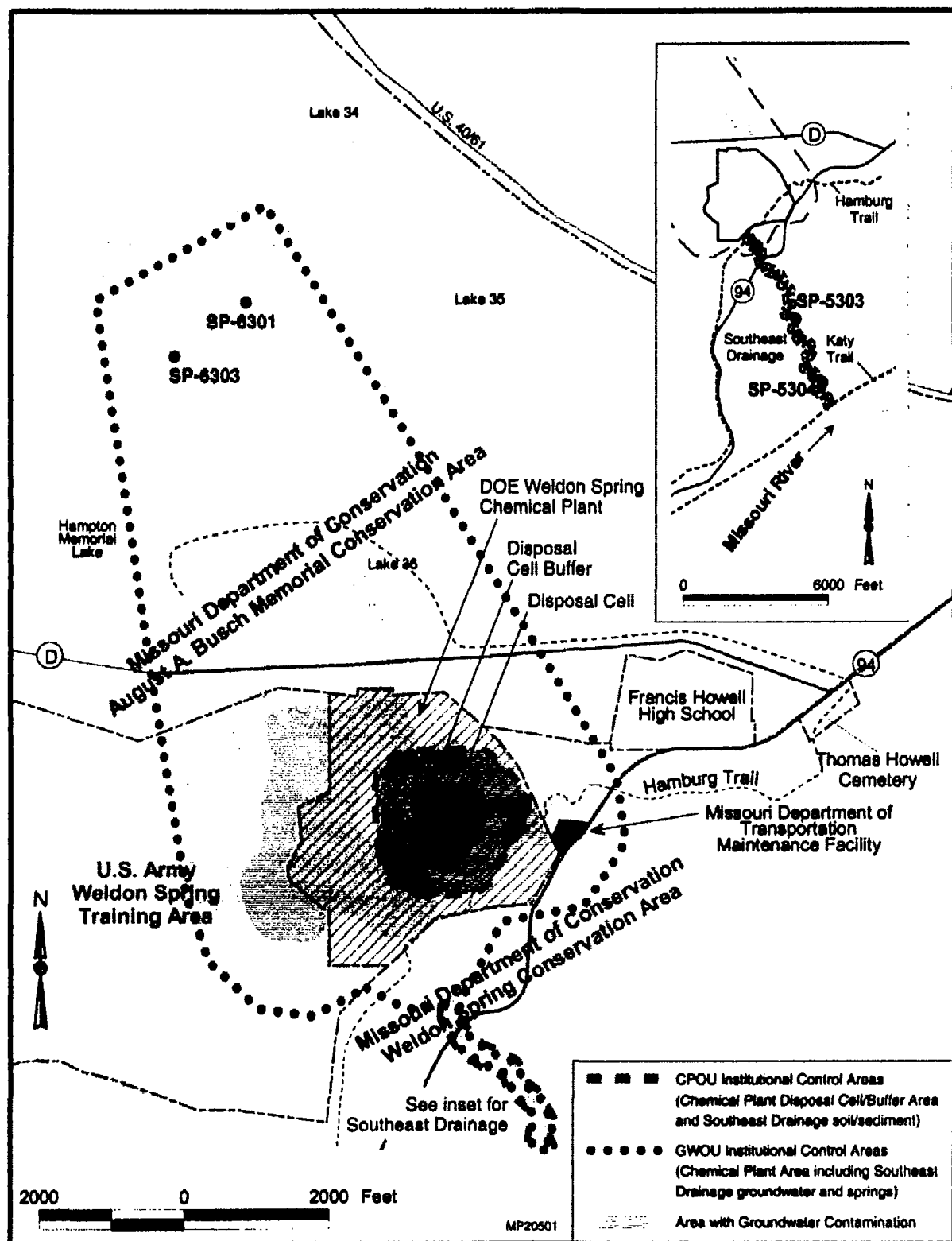


FIGURE 2 Chemical Plant and Southeast Drainage Institutional Control Areas

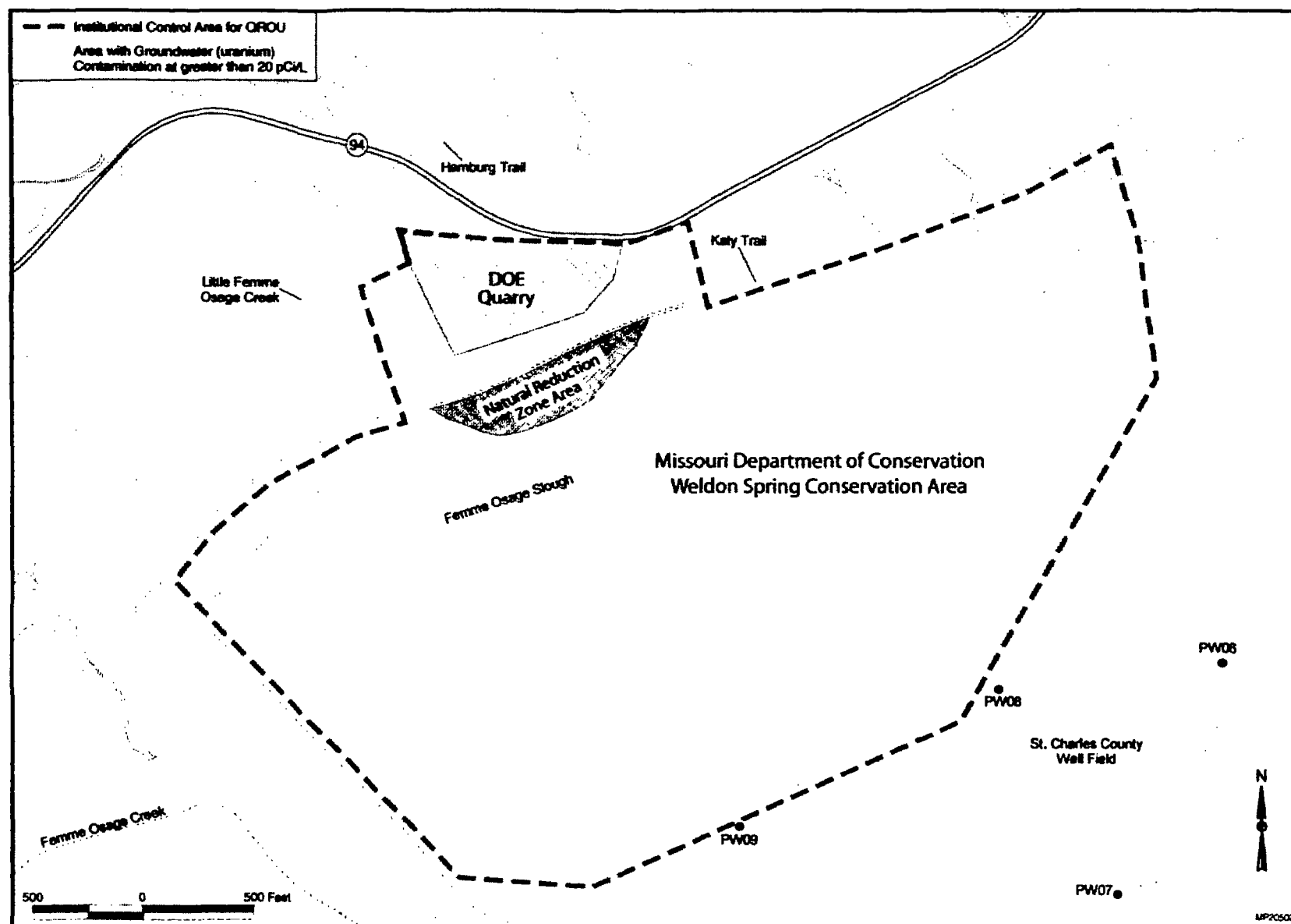


FIGURE 3 Quarry Institutional control Areas

**Administrative Record Index for the Explanation of Significant Differences for the Weldon Spring Site Dated February, 2005**  
 (Note: The ESD will be placed in the AR File upon signature by DOE and EPA.)

Document Number	Subject/Title	Author	Recipient	Date	Type	Section
<b>Chemical Plant Operable Unit</b>						
W-1001-1001-1.01	Data Validation Packages	DOE	Project file	1995 - 2001	report	1001 Data Report and Data QA/QC <sup>A</sup>
W-1001-1001-1.02	WP-437, Confirmation Quality Control Results Report, DOE/OR/21548-930	DOE	addressees	01/03	report	1001 Data Report and QA/QC Summary
W-1001-1001-1.03	WP-437/RU024, Post-Remedial Action Report for the Site Waste Treatment Plant Work Zone, DOE/OR/2548-918	DOE	addressees	06/02	report	1001 Data Report, Summary Statistics
W-1001-1001-1.04	WP-437/RU021, Post-Remedial Action Report for the Raffinate Pit Work Zone, DOE/OR/21548-907	DOE	addressees	05/02	report	1001 Data Report, Summary Statistics
W-1001-1001-1.05	WP-437/RU022, Post-Remedial Action Report for the Temporary Storage Area Work Zone, DOE/OR/21548-914	DOE	addressees	05/02	report	1001 Data Report, Summary Statistics
W-1001-1001-1.06	WP-437/RU025, Post-Remedial Action Report for the Disposal Cell Work Zone, DOE/OR/21548-911	DOE	addressees	02/02	report	1001 Data Report, Summary Statistics
W-1001-1001-1.07	WP-420/RU006, Post Remedial Action Report for Work Package 420, Chemical Plant Area Foundations and Contaminated Soil Removal, Remedial Unit 006, Addendum 2, CU157 and CU158, Addendum 2, DOE/OR/21548-590	DOE	addressees	02/20/02	report	1001 Data Report, Summary Statistics
W-1001-1001-1.08	WP-437/RU015, Post-Remedial Action Report for the Administration Work Zone, DOE/OR/21548-906	DOE	addressees	01/02	report	1001 Data Report, Summary Statistics

Document Number	Subject/Title	Author	Recipient	Date	Type	Section
W-1001-1001-1.09	WP-437/RU020, Post-Remedial Action Report for the Ash Pond Work Zone, DOE/OR/21548-888	DOE	addressees	12/01	report	1001 Data Report, Summary Statistics
W-1001-1001-1.10	WP-437/RU023, Post-Remedial Action Report for the Chemical Stabilization and Solidification (CSS) Work Zone, DOE/OR/21548-898	DOE	addressees	11/01	report	1001 Data Report, Summary Statistics
W-1001-1001-1.11	WP-437/RU019, Post-Remedial Action Report for the Construction Materials Staging Area Work Zone, DOE/OR/21548-892	DOE	addressees	10/01	report	1001 Data Report, Summary Statistics
W-1001-1001-1.12	WP-437/RU016, Post-Remedial Action Report for the Frog Pond Work Zone, DOE/OR/21548-883	DOE	addressees	07/01	report	1001 Data Report, Summary Statistics
W-1001-1001-1.13	WP-437/RU018, Post-Remedial Action Report for the Material Staging Area Work Zone, DOE/OR/21548-874	DOE	addressees	03/01	report	1001 Data Report, Summary Statistics
W-1001-1001-1.14	WP-437/RU017, Post Remedial Action Report for the Asbestos Storage Area, DOE/OR/21548-877	DOE	addressees	03/01	report	1001 Data Report, Summary Statistics
W-1001-1001-1.15	WP-458, Post-Remedial Action Report for Vicinity Properties, DOE/OR/21548-767	DOE	addressees	11/00	report	1001 Data Report, Summary Statistics
W-1001-1001-1.16	WP-519/505F, Post-Remedial Action Report for the Frog Pond Drainage Outlet, DOE/OR/21548-837	DOE	addressees	07/00	report	1001 Data Report, Summary Statistics
W-1001-1001-1.17	WP-471, Post Remedial Action Report, DOE/OR/21548-765	DOE	addressees	03/00	report	1001 Data Report, Summary Statistics
W-1001-1001-1.18	WP-420, Post-Remedial Action Report, Chemical Plant Area Foundations and Contaminated Soil Removal, Remedial Unit 8	DOE	addressees	02/98	report	1001 Data Report, Summary Statistics
W-1001-1001-1.19	WP-420, Post Remedial Action Report, Chemical Plant Area Foundations and Contaminated Soil Removal, Remedial Unit 9	DOE	addressees	01/98	report	1001 Data Report, Summary Statistics

Document Number	Subject/Title	Author	Recipient	Date	Type	Section
W-1001-1001-1.20	WP-253, Post-Remedial Action Report for the Chemical Plant Construction Materials Staging Area	DOE	addressees	01/98	report	1001 Data Report, Summary Statistics
W-1001-1001-1.21	WP-420, Post-Remedial Action Report, Chemical Plant Area Foundation and Contaminated Soil Removal, Remedial Unit 10	DOE	addressees	01/98	report	1001 Data Report, Summary Statistics
W-1001-1001-1.22	WP-420, Post-Remedial Action Report: Remedial Unit 6, Chemical Plant Area Foundations and Contaminated Soil Removal	DOE	addressees	09/97	report	1001 Data Report, Summary Statistics
W-1001-1001-1.23	WP-420, Post-Remedial Action Report: Chemical Plant Area Foundations and Contaminated Soil Removal, Remedial Unit 7	DOE	addressees	09/97	report	1001 Data Report, Summary Statistics
W-1001-1001-1.24	Post-Remediation Sampling Plan for the Southeast Drainage, DOE/OR/21548-616	DOE	addressees	07/97	report	1001 Data Report, Summary Statistics
W-1001-1002-1.01	Post-Remediation Risk Assessment for the Chemical Plant Operable Unit, Weldon Spring Site, St. Charles, Missouri, DOE/OR/21548-910	DOE	addressees	03/02	report	1002 Risk Assessment
W-1001-1002-1.02	Culvert Post-Cleanup Risk Assessment (As attachment to Transmittal letter from M. Picel to T. Pauling, U.S. Department of Energy)	ANL	DOE	03/09/00	letter	1002 Risk Assessment
W-1001-1002-1.03	Southeast Drainage Post-Cleanup Risk Assessment (As attachment to transmittal letter from M. Picel to T. Pauling, U.S. Department of Energy).	ANL	DOE	09/14/99	letter	1002 Risk Assessment
W-1001-1002-1.04	Baseline Assessment for the Chemical Plant Area of the Weldon Spring Site	DOE	addressees	11/92	report	1002 Risk Assessment

Document Number	Subject/Title	Author	Recipient	Date	Type	Section
W-1001-1003-1.01	Decision Document Engineering Evaluation/Cost Analysis for the Proposed Removal Action at the Southeast Drainage Near the Weldon Spring Site, Missouri, Decision Document, DOE/OR/21548-584	DOE	addressees	11/96	report	1003 Decision Document
W-1001-1003-1.02	Engineering Evaluation/Cost Analysis for the Proposed Removal Action at the Southeast Drainage Near the Weldon Spring Site, Weldon Spring, Missouri, DOE/OR/21548-584	DOE	addressees	08/96	report	1003 Evaluation/Decision Document
W-1001-1003-1.03	Record of Decision for Remedial Action at the Chemical Plant Area of the Weldon Spring Site, DOE/OR/21548-376	DOE	addressees	09/93	report	1003 Decision Document
W-1001-1004-1.01	Chemical Plant Operable Unit Remedial Action Report, DOE/OR/21548-491	DOE	addressees	01/04	report	1004 Technical Resource
W-1001-1004-1.02	Closeout Report for Final Site Walkovers, DOE/OR/21548-923	DOE	addressees	10/02	report	1004 Technical Resource
W-1001-1004-1.03	Closure Report for Soil Sampling at the Frog Pond Outlet, Addendum 6 of the Engineering Soil Sampling Plan for Army and MDC Vicinity Properties, DOE/OR/21548-829	DOE	addressees	01/00	report	1004 Technical Resource
W-1001-1004-1.04	Closure Report for the Engineering Soil Sampling Plan for Army and MDC Vicinity Properties	DOE	addressees	09/99	report	1004 Technical Resource
W-1001-1004-1.05	Southeast Drainage Closeout Report Vicinity Properties DA 4 and MDC 7, DOE/OR/21548-772	DOE	addressees	09/99	report	1004 Technical Resource
W-1001-1004-1.06	Closure Report for the Post-Remedial Sampling Plan of the Southeast Drainage, DOE/OR/21548-794	DOE	addressees	07/99	report	1004 Technical Resource
W-1001-1004-1.07	Closeout Report for Vicinity Properties MDC 3, MDC 4, MDC 5, and MDC 10, DOE/OR/21548-789	DOE	addressees	06/99	report	1004 Technical Resource

Document Number	Subject/Title	Author	Recipient	Date	Type	Section
W-1001-1004-1.08	Close-Out Report for Vicinity Properties MDC 6 and MDC 9, DOE/OR/21548-775	DOE	addressees	04/99	report	1004 Technical Resource
W-1001-1004-1.09	WP-437, Confirmation Sampling Plan Details for the Disposal Cell Facility	DOE	addressees	01/98	report	1004 Technical Resource
W-1001-1004-1.10	Chemical Plant Area Cleanup Attainment Confirmation Plan	DOE	addressees	12/95	report	1004 Technical Resource
<b>Quarry Residuals Operable Unit</b>						
W-1002-1001-1.01	Data Validation Packages	DOE	Project file	09/98 – 12/04	report	1001 Data Report and Data QA/QC <sup>A</sup>
W-1002-1001-1.02	Post-Remedial Action Report for the Quarry Proper, DOE/GJ/79491-938	DOE	addressees	12/03	report	1001 Data Report, Summary Statistics
W-1002-1001-1.04	Post-Remedial Action Report for the Quarry Water Treatment Plant Equalization Basin (RU026), DOE/OR/21548-890	DOE	addressees	07/01	report	1001 Data Report, Summary Statistics
W-1002-1002-1.01	Quarry Area Post-ROD Risk Assessment (As attachment to transmittal letter from M. Picel to T. Pauling, U.S. Department of Energy).	ANL	DOE	04/30/03	letter	1002 Risk Assessment
W-1002-1002-1.02	Baseline Risk Assessment for the Quarry Residuals Operable Unit of the Weldon Spring Site, Weldon Spring, Missouri, DOE/OR/21548-594	DOE	addressees	02/98	report	1002 Risk Assessment
W-1002-1003-1.01	Record of Decision for Remedial Action for the Quarry Residuals Operable Unit at the Weldon Spring Site, Weldon Spring, Missouri, DOE/OR/21548-725	DOE	addressees	09/98	report	1003 Decision Document

Document Number	Subject/Title	Author	Recipient	Date	Type	Section
W-1002-1004-1.01	Sampling Plan for the QROU Interceptor Trench Field Study, DOE/OR/21548-843	DOE	addressees	10/02	report	1004 Technical Resource
W-1002-1004-1.02	Completion Report for the Geochemical Characterization Performed in Support of the QROU Field Studies, DOE/OR/21548-919	DOE	addressees	08/02	report	1004 Technical Resource
W-1002-1004-1.03	Quarry Proper Confirmation Plan Addendum 2: Additional Areas Associated with Quarry Reclamation, DOE/OR/21548-866 ADD 2	DOE	addressees	04/02	report	1004 Technical Resource
W-1002-1004-1.04	Quarry Interceptor Trench Field Study - First Year Summary, DOE/OR/21548-897	DOE	addressees	08/01	report	1004 Technical Resource
W-1002-1004-1.05	Quarry Proper Confirmation Plan Addendum 1: Additional Area Associated with Quarry Water Treatment Plant Demolition, DOE/OR/21548-866 ADD 1	DOE	addressees	03/01	report	1004 Technical Resource
W-1002-1004-1.06	Quarry Proper Confirmation Plan, DOE/OR/21548-866	DOE	addressees	07/00	report	1004 Technical Resource
W-1002-1004-1.07	Remedial Design/Remedial Action Work Plan for the Quarry Residuals Operable Unit, DOE/OR/21548-787	DOE	addressees	01/00	report	1004 Technical Resource
W-1002-1004-1.08	Completion Report for the Hydrogeological Field Studies in Support of the Quarry Residual Operable Unit	DOE	addressees	08/99	report	1004 Technical Resource
W-1002-1004-1.09	Hydrogeologic Characterization Report, Quarry Residuals Operable Unit, Task 39	DOE	addressees	03/99	report	1004 Technical Resource



Document Number	Subject/Title	Author	Recipient	Date	Type	Section
<b>Groundwater Operable Unit</b>						
W-1003-1001-1.01	Data Validation Packages	DOE	Project file	03/04 – 12/04	report	1001 Data Report and Data QA/QC <sup>A</sup>
W-1003-1002-1.01	Baseline Risk Assessment for the Groundwater Operable Units at the Chemical Plant Area and the Ordnance Works Area, Weldon Spring, Missouri, DOE/OR/21548-568	DOE	addressees	07/97	report	1002 Risk Assessment
W-1003-1003-1.01	Record of Decision for the Final Remedial Action for the Groundwater Operable Unit at the Chemical Plant Area of the Weldon Spring Site	DOE	addressees	01/04	report	1003 Decision Document
W-1003-1004-1.01	Remedial Design/Remedial Action Work Plan for the Final Remedial Action for the Groundwater Operable Unit at the Weldon Spring Site, DOE/GJ/79491-943	DOE	addressees	07/04	report	1004 Technical Resource
<b>Documentation Applicable for all 3 OUs Above</b>						
W-1000-1004-1.01	Institutional Controls Evaluation (ICE) Report: Summary of Supporting Information for the Identification and Evaluation of Institutional Controls for the Weldon Spring Site	DOE	EPA	09/04	report	1004 Technical Resource
W-1000-1005-1.01	WSCC institutional control summary of viewpoints. (transmittal letter from WSCC to T. Pauling)	WSCC	DOE	02/01/05	letter	1005 Public Participation

Document Number	Subject/Title	Author	Recipient	Date	Type	Section
W-1000-1005-1.03	Summary of Public Meeting on Groundwater Operable Unit Proposed Plan	DOE	public	08/13/03	meeting summary	1005 Public Participation
W-1000-1005-1.04	Summary of Work Session – Focus Area: Monitoring and Maintenance Addressed specific issues on the draft <i>Long-Term Stewardship Plan for the Weldon Spring, Missouri, Site</i> , dated August 9, 2002.	DOE	public	02/05/03	meeting summary	1005 Public Participation
W-1000-1005-1.05	Summary of Work Session – Focus Area: Land Use and Institutional Controls and Homeland Security	DOE	public	12/05/02	meeting summary	1005 Public Participation
W-1000-1005-1.06	Summary of Work Session – Focus Area: Communication and Public Involvement Addressed the five major issues related to the communication and public involvement focus area that were identified from the comments received on the draft Long-Term Stewardship Plan.	DOE	public	10/23/02	meeting summary	1005 Public Participation
W-1000-1005-1.07	Summary of Weldon Spring Long-Term Stewardship Plan Public Workshop	DOE	EPA	08/28/02	meeting summary	1005 Public Participation
W-1000-1006-1.01	MDNR position on the ESD. (transmittal letter from M. Garstang to D. Geiser)	MDNR	DOE	02/17/05	letter	1006 Agency Involvement
W-1000-1007-1.01	Strategy to Ensure Institutional Control Implementation at Superfund Sites. OSWER No. 9355.0-106	EPA	General	09/04	report	1007 Guidance
W-1000-1007-1.02	DOE Policy Subject: Use of Institutional Controls, DOE P 454.1	DOE	General	04/09/03	report	1007 Guidance
W-1000-1007-1.03	Institutional Controls: A Site Manager's Guide to Identifying, Evaluating and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups, EPA 5400-F-00-005	EPA	General	09/00	report	1007 Guidance

Document Number	Subject/Title	Author	Recipient	Date	Type	Section
W-1000-1007-1.04	Use of Soil Cleanup Criteria in 40 CFR Part 192 as Remediation Goals for CERCLA Sites, Directive No. 9200.4-25	EPA	General	02/12/98	report	1007 Guidance
W-1000-1007-1.05	Exposure Factors Handbook, EPA/600/P-95/002A	EPA	General	06/95	report	1007 Guidance
W-1000-1007-1.06	Risk Assessment Guidance for Superfund, Volumes I: Human Health Evaluation Manual (Part A, Interim Final), EPA/540/1-89/001	EPA	General	12/89	report	1007 Guidance

- A Data validation packages containing sampling and testing data, quality control and quality assurance, chain of custody and similar documentation for specific samples identified in data reports included in the Administrative Record are incorporated by reference into the Administrative Record. However, due to the nature of the documents and the burden of maintaining such documents at multiple locations, they are not located in the Administrative Record File at the Site. These records are archived at the Kansas City National Archive Records Administration (NARA). As provided in Section 300.805(b) of the National Contingency Plan, 40 C.F.R. § 300.805(b), upon request DOE will make any of these documents available in the Administrative Record File. For more information about these documents or to make such a request, please contact the DOE Weldon Spring Project Manager, 2597 B<sup>3</sup>/<sub>4</sub> Road, Grand Junction, CO 81503, telephone 970-248-6001 or the Office of Legacy Management, Director of Business and Resource Management (LM-10), 3610 Collins Ferry Road, Morgantown, WV, telephone 304-285-4764.