



2006 Annual Inspection Report for the Weldon Spring, Missouri, Site

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U.S. Department
of Energy

Office of Legacy Management

2006 Annual Inspection Report for the Weldon Spring, Missouri, Site

Summary

The Weldon Spring Site, located in St. Charles, Missouri, was inspected on December 5 and 6, 2006. Due to ice and snow conditions at the site during the inspection, inspection of the disposal cell transects and rock plots was postponed until December 15, 2006. Other inspection items completed on December 15 were additional erosion inspection, inspection of the buffer zone survey monuments, and re-inspection of the repaired survey monument at the Army property. The inspection was conducted in accordance with the *Long-Term Surveillance and Maintenance Plan for the Weldon Spring, Missouri, Site* (July 2005), and associated inspection checklist. Representatives from the U.S. Environmental Protection Agency (EPA) and Missouri Department of Natural Resources (MDNR) participated in the inspection. Representatives from the Weldon Spring Citizens Commission (WSCC) and the Missouri Department of Conservation (MDC) participated in portions of the inspection. During the disposal cell inspection on December 15, 2006, representatives from MDNR and WSCC participated. The Weldon Spring Site is a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) site.

The main areas inspected at the site were areas where future institutional controls will be established, the Quarry, the disposal cell, Leachate Collection and Removal System (LCRS), monitoring wells, and assorted general features.

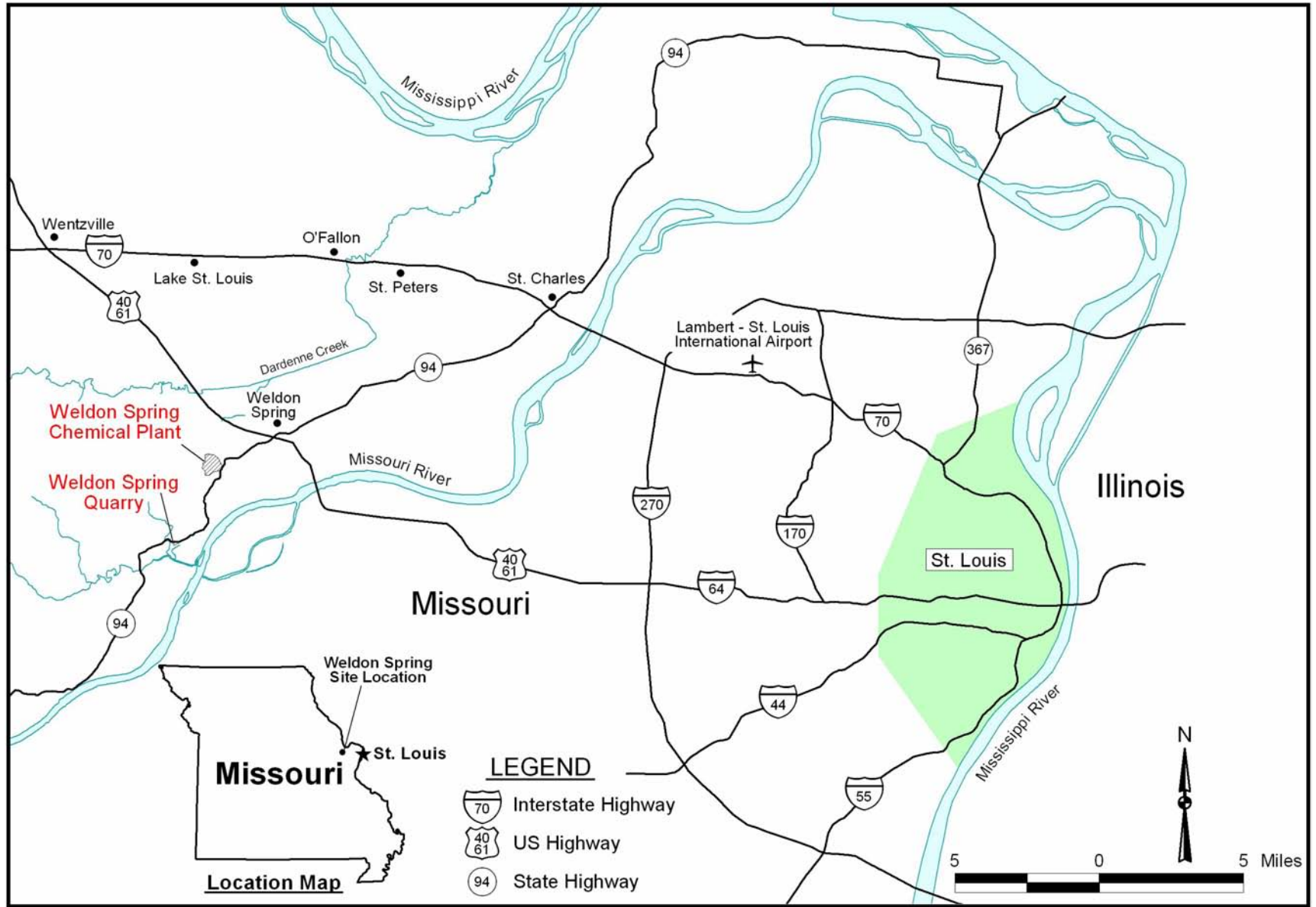
Institutional control areas were inspected to ensure that pending restrictions such as excavating soil, groundwater withdrawal, residential use, etc., were not being violated. Each area was inspected and no indication of violations of future restrictions was observed.

The disposal cell was inspected by walking ten transects over the cell and around the cell perimeter. Hand-held global positioning system (GPS) equipment was used to navigate the ten transects. Five areas of the cell which had been marked and located by GPS survey equipment during the 2003 annual inspection were located and observed for any signs of rock degradation. The LCRS was also inspected and found to be in good condition. Forty-eight of the 119 groundwater-monitoring wells were inspected and were in generally good condition. Other site features including the prairie, site markers, and roads also were inspected.

1.0 Introduction

The Weldon Spring Site is in southern St. Charles County, Missouri, approximately 30 miles west of St. Louis, as shown in Figure 1. The site consists of two main areas, the Weldon Spring Chemical Plant and the Weldon Spring Quarry, both located along Missouri State Route 94.

In 1941, the U.S. Government acquired 17,232 acres (6,974 hectares) of rural land in St. Charles County to establish the Weldon Spring Ordnance Works. From 1941 to 1945, the U.S. Department of the Army (Army) manufactured trinitrotoluene (TNT) and dinitrotoluene (DNT) at the site. These operations resulted in nitroaromatic contamination of soil at the plant site, sediments in drainages originating at the site (Frog Pond Outlet and the Southeast Drainage), groundwater near the site, and some off-site springs.



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Figure 1. Location of the Weldon Spring, Missouri, Site

The former ordnance works property was transferred to the U.S. Atomic Energy Commission (AEC) in 1956 for construction of the Weldon Spring Uranium Feed Materials Plant now referred to as the Weldon Spring Chemical Plant. The plant converted processed uranium ore concentrates to pure uranium trioxide, intermediate compounds, and uranium metal. A small amount of thorium also was processed. Wastes generated during these operations were stored in four raffinate pits located on the plant property. Uranium processing operations resulted in radiological contamination of the same locations previously contaminated by former Army operations.

The Weldon Spring Quarry was mined for limestone aggregate used in construction of the ordnance works. The Army used the Quarry for burning wastes from explosives manufacturing and disposal of TNT-contaminated rubble during the operation of the ordnance works. These activities resulted in nitroaromatic contamination of the soil and in rock fractures at the Quarry, in groundwater under the Quarry, and between the Quarry and Femme Osage Slough.

In 1960, the Army transferred the Quarry to the AEC, who used it from 1963 to 1969 as a disposal area for uranium and thorium residues from the Chemical Plant (both drummed and uncontained), contaminated building rubble, process equipment, and soils from demolition of a uranium processing facility in St. Louis. Radiological contamination occurred in the same locations as the nitroaromatic contamination.

Uranium processing operations ceased in 1966 and the Quarry and Chemical Plant areas were placed on the National Priorities List in 1987 and 1989, respectively. Remediation of the Weldon Spring site was administratively divided into four Operable Units (OUs): Quarry Bulk Waste OU, Chemical Plant OU, Quarry Residuals OU, and Groundwater OU. Records of Decision for each OU have been approved. The Southeast Drainage was remediated as an interim response action through a separate engineering evaluation/cost analysis.

The remedy for the Quarry Bulk Waste OU consisted of excavating and removing bulk waste from the Quarry and transporting it along a dedicated haul road to an engineered temporary storage area located at the Chemical Plant. The Chemical Plant OU remedy included removal of contaminated soils, sludge, and sediment, treatment of wastes as appropriate by chemical stabilization/solidification and disposal of the Chemical Plant and Quarry bulk wastes in an engineered on-site disposal facility. The Quarry Residuals OU addressed residual soil contamination in the Quarry proper, surface water and sediments in the Femme Osage Slough, and contaminated groundwater. The Groundwater OU addresses the groundwater at the Chemical Plant area. The Southeast Drainage was remediated by removal of selected sediment in accessible areas of the drainage.

The final site conditions from the above remedial actions include the following:

- An on-site disposal cell contains 1.48 million cubic yards of contaminated material.
- Residual groundwater contamination remains in the shallow aquifer beneath both the Chemical Plant and Quarry.
- Several springs near the Chemical Plant area discharge residually contaminated groundwater.
- Residual soil and sediment contamination remain in the Southeast Drainage.

- Contamination remains at two culverts, one along Missouri State Route 94 and one along Highway D.
- Residual soil contamination remains at inaccessible locations within the Quarry.

The purposes of the annual inspection were to confirm the integrity of the visible features (such as disposal cell, LCRS, and monitoring wells) at the site, document the site condition subsequent to remediation and restoration, identify changes in conditions that may affect site integrity, determine if institutional controls are adequately implemented, and determine the need, if any, for maintenance or additional inspections and monitoring.

At the time of the inspection seven personnel from S.M. Stoller Corporation (Stoller), the Technical Assistance Contractor at the U.S. Department of Energy (DOE) office in Grand Junction, Colorado, were employed full-time at the site. Also employed at the site were eleven part-time contractor and subcontractor employees. This number has not changed since last year.

This report presents the results of the DOE annual inspection of the Weldon Spring Site. The following personnel from Stoller were the lead inspectors during the inspection:

Dick Johnson, Grand Junction, Colorado
Terri Uhlmeier, Weldon Spring Site

Dick Johnson was one of the lead inspectors for the institutional control areas and for the disposal cell inspection. He has been supporting long-term management activities for DOE low-level radioactive disposal sites for 6 years. Dick currently is serving as the DOE contractor site lead for ten disposal sites located in six states. He inspects at least 11 sites annually and prepares the inspection reports for many of those inspections. He also prepares an annual compliance report, currently addressing 5 disposal sites, to comply with U.S. Nuclear Regulatory Commission general license requirements. Dick has 9 years experience working as a hydrogeologist and performing civil engineering design and construction inspections for an engineering and architectural consulting firm. During the past 16 years his responsibilities have included radiological characterization, engineering design, remediation, demolition, disposal, verification, long-term site management, and compliance documentation for various CERCLA, Uranium Mill Tailings Radiation Control Act (UMTRCA), and Decontamination and Decommissioning projects for DOE contractors. Dick Johnson has a B.S. degree in geology and an M.S. degree in geomorphology, and is a Certified Professional Geologist.

Terri Uhlmeier was one of the lead inspectors for the institutional control areas and for the disposal cell inspection. She also coordinated the inspection and preparation of this report. Terri worked for the U.S. Environmental Protection Agency for 4 years as a Resource Conservation and Recovery Act (RCRA) inspector and compliance officer, and conducted numerous inspections during that time and attended several inspection training courses. She has worked at the Weldon Spring Site for 16 years, and served as the Regulatory Compliance Manager for 11 years and was in charge of inspections at the site. She has also been involved in the CERCLA documentation, waste management, and safety aspects of the project and has prepared many reports and plans for the site. Terri Uhlmeier has a B.S. degree in Petroleum Engineering.

The following support personnel from Stoller participated in the inspection:

Randy Thompson, Weldon Spring Site

The following personnel observed the inspection and provided oversight:

Tom Pauling – DOE
Jane Powell - DOE
Dan Wall – EPA, Region VII
Ben Moore – MDNR
Aaron Schmidt - MDNR
John Vogel – MDC
Joel Porath - MDC
Tom Nelsen – WSCC member

The inspection was conducted in accordance with the *Long-Term Surveillance and Maintenance Plan for the Weldon Spring, Missouri, Site* (LTS&M Plan), dated July 2005.

2.0 Inspection Results

Prior to the inspection, the site inspection agenda (Appendix A) was reviewed with the inspection participants. The order of several items on the agenda was rearranged due to the snow conditions, but the general activities on the agenda were conducted. A safety briefing was also held prior to the inspection and the corrective action report from the 2005 annual inspection was reviewed (Appendix B). Following is a summary of the inspection results. The inspection base map, which includes the locations of the photographs, is included as Figures 2 and 3. The checklist (from Appendix H of the LTS&M Plan) is included in this report as Appendix C.

2.1 Institutional Controls (ICs) Inspection

Section 2.3.4 of the LTS&M Plan states “DOE will conduct a formal annual inspection of the physical locations addressed by ICs. DOE also will evaluate whether the ICs remain effective in protecting human health and the environment and, in coordination with EPA and MDNR, will take appropriate action if evidence indicates the controls are not effective.”

The majority of the instruments for institutional controls are still pending and not yet formally in place. The institutional controls that are in place include a Notation of Land Ownership on the Chemical Plant and Quarry Property which is filed with St. Charles County; the interpretive center; a license granting DOE permission to abandon or install and operate groundwater wells and perform sampling; and a license granting DOE continued operation and maintenance of the effluent discharge pipeline that runs from DOE property to the Missouri River and through the Katy Trail. The final LTS&M lists the following additional ICs that DOE plans to pursue:

- 1) DOE will negotiate with the surrounding affected State agency property owners to acquire easements that implement the groundwater and land use restrictions contained in the Explanation of Significant Differences (ESD), and to further enhance DOE’s access for the purpose of environmental monitoring and for surveillance of the restricted area.

- 2) DOE will coordinate with the Army to revise and reissue the Memorandum of Understanding to specify the groundwater use restrictions contained in the ESD and to further enhance DOE's access for the purpose of environmental monitoring and for surveillance of the restricted area.
- 3) DOE will request designation as a "special area" under the Missouri Well Construction Code (10 CSR 23-3.100) to provide additional drilling protocols and construction specifications to be imposed by MDNR on any future domestic wells within the restricted areas.

During the inspection, the pending institutional control areas were inspected in accordance with the current information in the LTS&M Plan. Figures 4 and 5 are the institutional control location maps from the LTS&M Plan.

The institutional control areas are listed below as they are stated in the inspection checklist:

2.1.1 Land and Shallow Groundwater Use Within the Site Proper Boundary (Outside Disposal Cell Buffer Zone)

Inspect for indications of excavations into soil or bedrock and groundwater withdrawal or use in restricted areas. If any party has been granted use of portions of the Chemical Plant area, inspect to ensure that land use is in compliance with the terms of the restrictions within the notation.

Inspection Results: This area was inspected (Photo 1) and no indications of excavations into soil or bedrock, groundwater withdrawal, or use were observed. MDC use and maintenance of the Hamburg Trail across DOE property is pending final agreement. Lindenwood University has been granted use of the Administration Building and its use is consistent with the agreement. Current land use remains consistent with the planned institutional controls.

2.1.2 Land and Shallow Groundwater Use at DOE Site Proper Disposal Cell and Buffer Zone

Inspect for indications of excavations into soils and bedrock, and for residential use of the shallow groundwater within the buffer zone. Inspect to ensure that the land use continues to be in compliance with the terms of the restrictions within the notation.

Inspection Results: This area was inspected and no indications of excavations into soils and bedrock, and no residential use of the shallow groundwater within the buffer zone were observed. Current land use remains consistent with planned institutional controls. The monument locations are shown in Figure 4. During the inspection all of the buffer zone survey monuments (WS23, WS26, WS28, WS32, WS35 and WS37) were located with the use of the GPS. The survey pin, WS34P, which is next to an area of repaired erosion was also located and inspected.

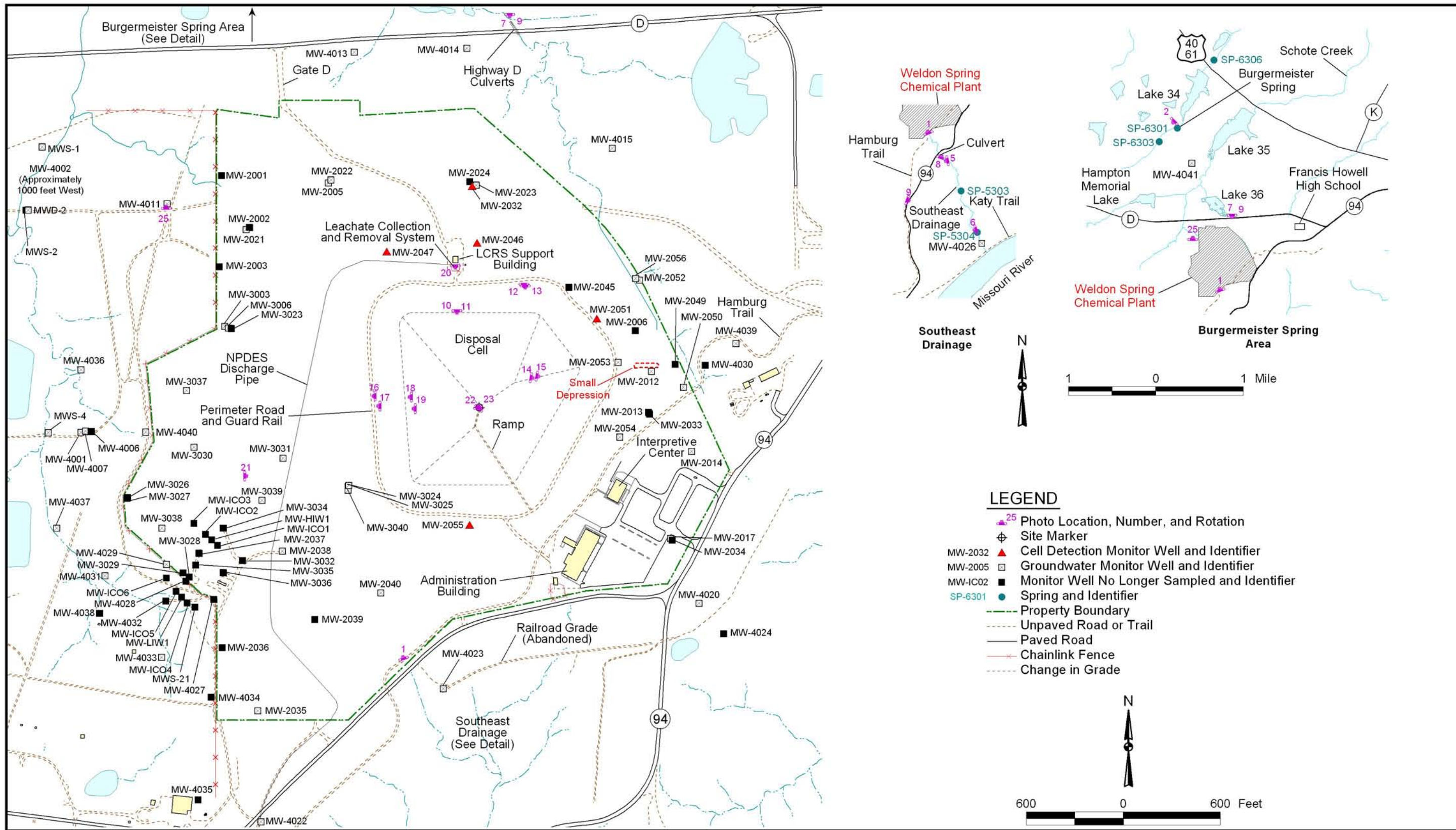


Figure 2. 2006 Inspection Map for the Chemical Plant Area of the Weldon Spring, Missouri, Site

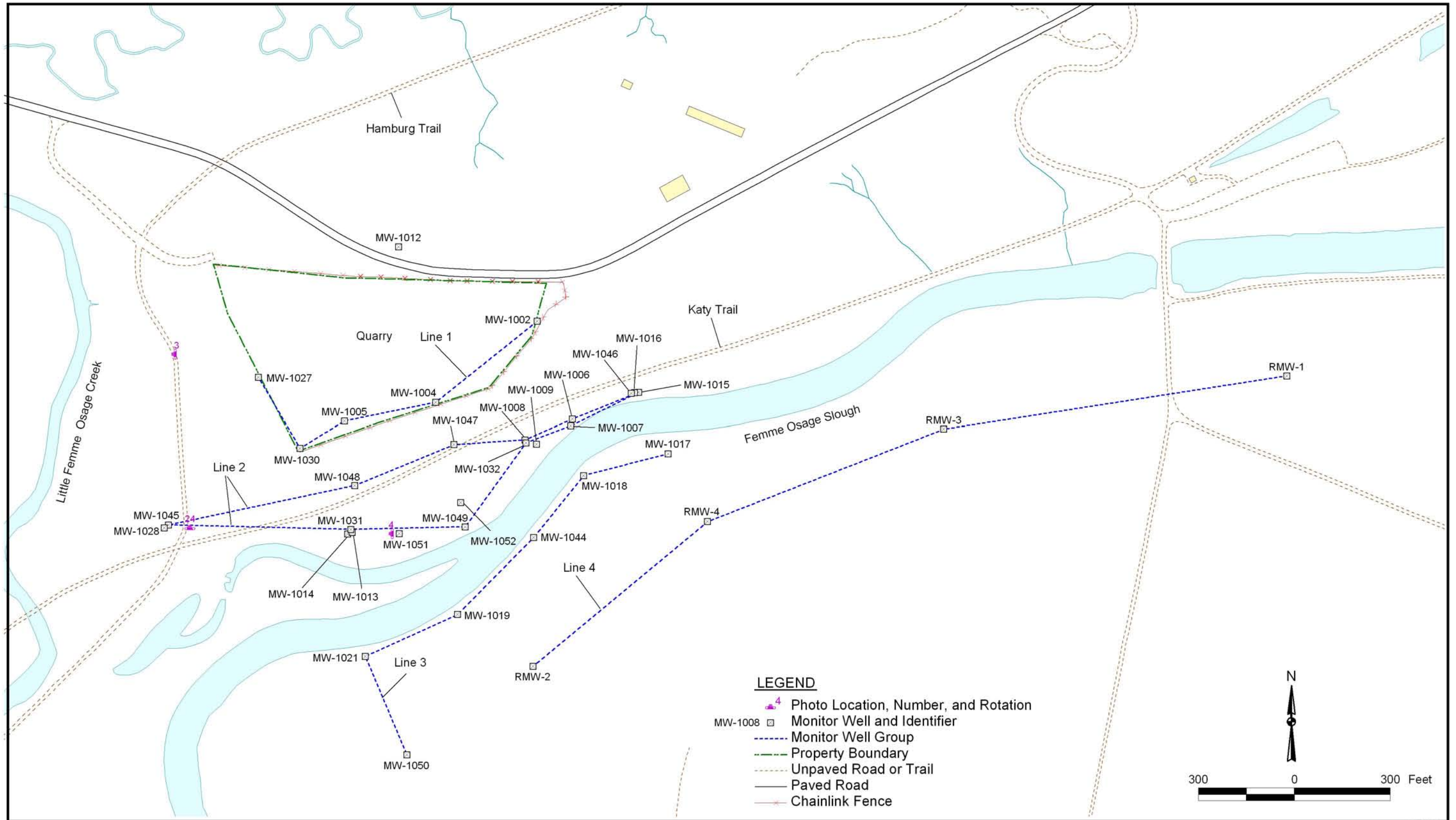


Figure 3. 2006 Inspection Map for the Quarry Area of the Weldon Spring, Missouri, Site

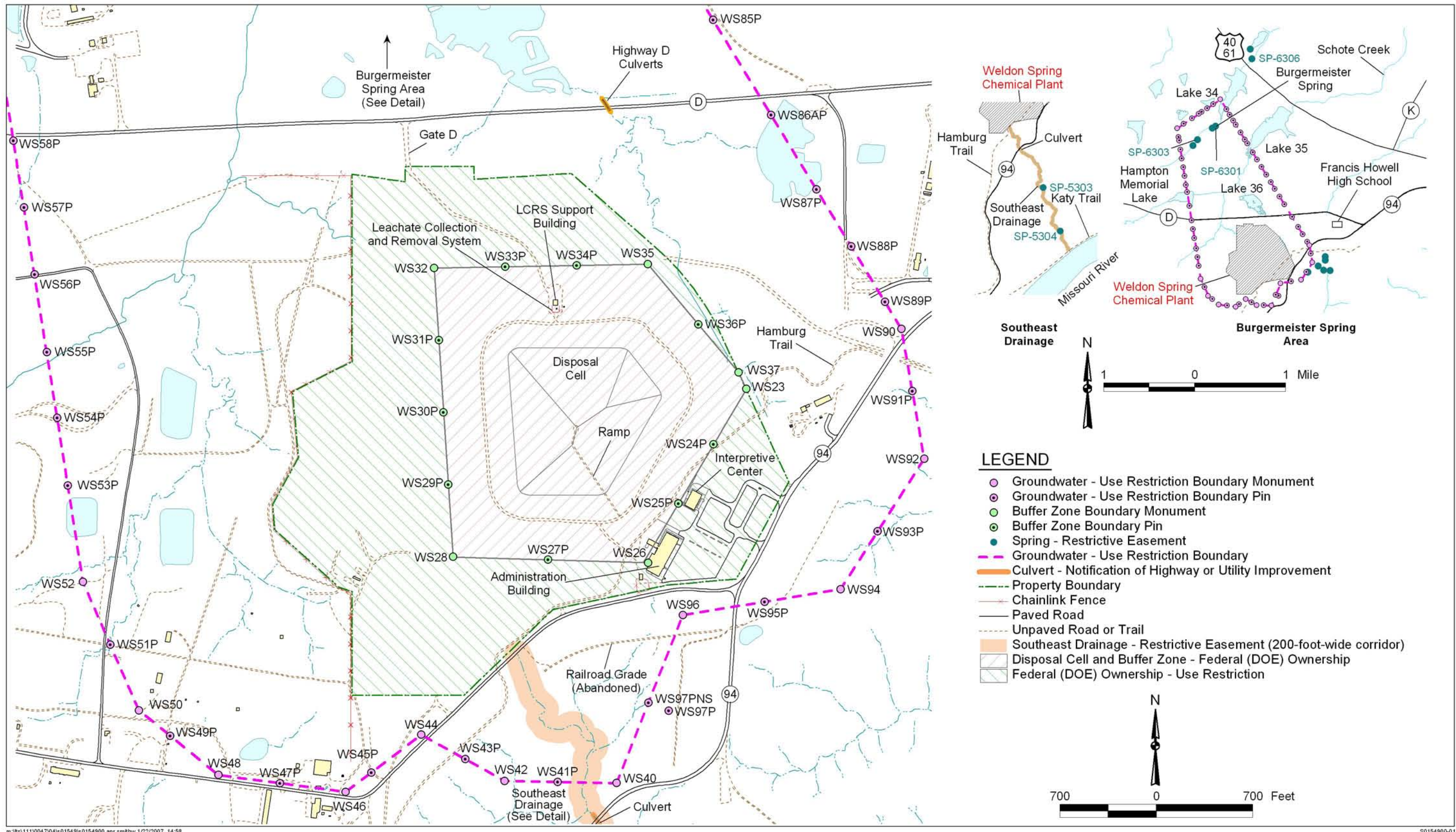


Figure 4. Institutional Controls Location Map for the Chemical Plant Area of the Weldon Spring, Missouri, Site

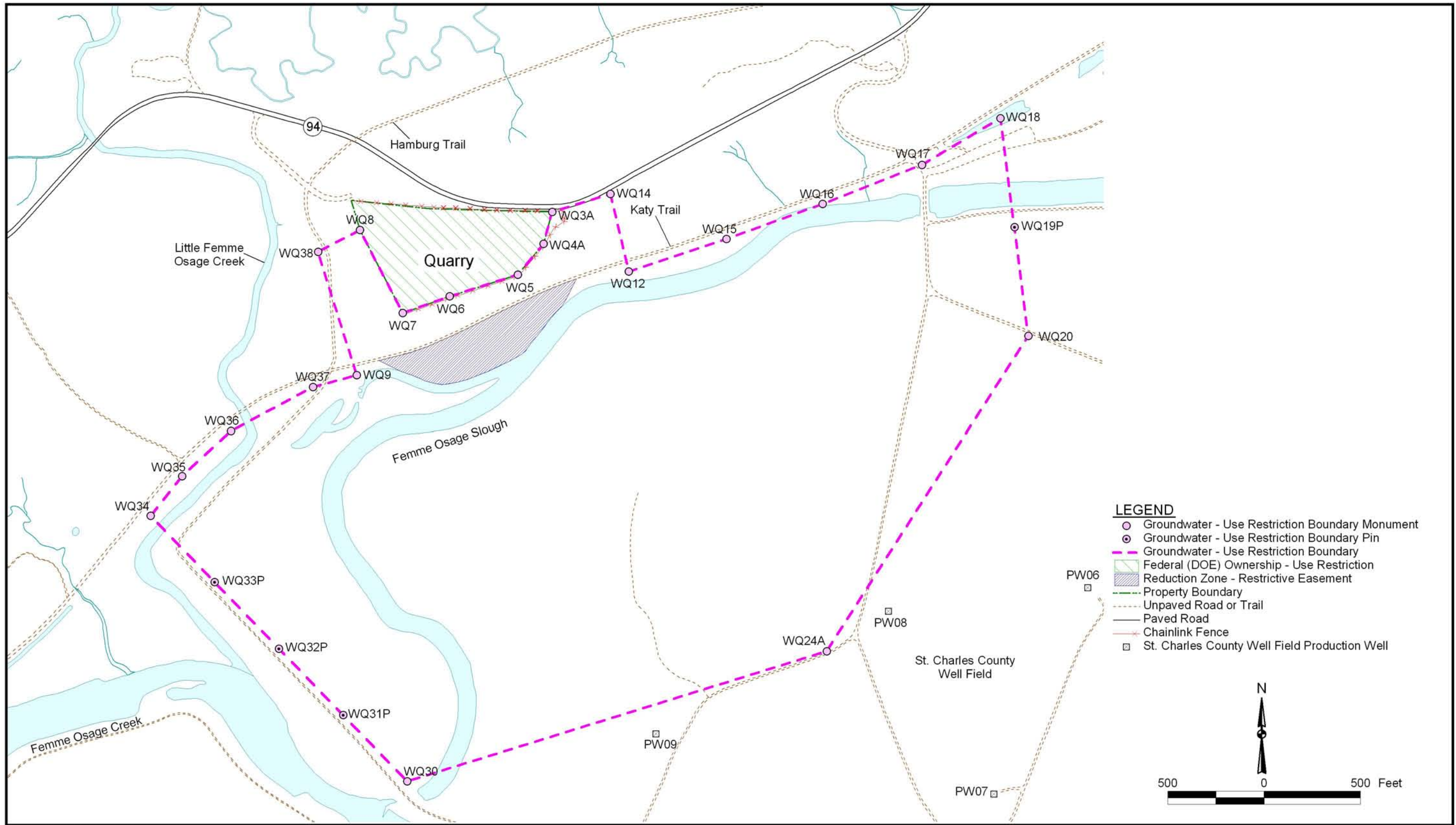


Figure 5. Institutional Controls Map for the Quarry Area of the Weldon Spring, Missouri, Site

2.1.3 Groundwater Use in Areas Surrounding the Chemical Plant

Groundwater use will be restricted in this area. Inspect affected areas for evidence of groundwater or spring water use (Burgermeister Spring and Spring 6303). Inspect to ensure that land use continues to be in compliance with the terms of the license, easement, or permit and the restrictions contained therein.

Inspection Results: The surrounding area where groundwater use will be restricted was inspected. This includes property owned by the MDC and the Army. No evidence of groundwater use was observed and current land use remains consistent with planned institutional controls on both properties. Burgermeister Spring 6301 (Photo 2) and Spring 6303 on MDC property were inspected and there were no indications of spring water use. On the Army property, survey monument WS46, noted as broken during the 2005 inspection and subsequently repaired (see Appendix B), was inspected. The Chemical Plant groundwater restriction area boundary monuments are shown in Figure 4.

2.1.4 Land and Shallow Groundwater Use on the DOE Quarry Property

Inspect for indications of excavations into soil or bedrock and groundwater withdrawal or use in restricted areas. If any party had been granted use of portions of the Quarry area, inspect to ensure that land use is in compliance with the terms of the restrictions within the notation.

Inspection Results: The Quarry Property was inspected (Photo 3) and no indications of excavation into soil or bedrock or groundwater withdrawal or use were observed. Also, no party has been granted use of portions of the Quarry area. Quarry backfill continues to provide positive drainage from the Quarry to the Little Femme Osage Creek and vegetative cover remains well established. Current land use remains consistent with planned institutional controls.

2.1.5 Groundwater (Quarry)

Groundwater use is restricted in certain areas. Inspect affected areas for evidence of groundwater withdrawal or use in the area of impact. Inspect to ensure that land use continues to be in compliance with the terms of the license and the restrictions contained therein.

Inspection Results: The groundwater-restricted area was inspected and no evidence of groundwater withdrawal or use in the area was observed. The Quarry groundwater restriction area boundary survey monuments are shown in Figure 5.

2.1.6 Land Use in Quarry Area Reduction Zone

A naturally occurring reduction zone exists in soil south of the Katy Trail and north of the Femme Osage Slough. Inspect for indications of excavations into soils and bedrock in the uranium reduction zone. Inspect to ensure that land use continues to be in compliance with the terms of the easement and the restrictions contained therein.

Inspection Results: The Quarry reduction zone area was inspected and no indications of excavation into soils and bedrock were observed. As required by the final LTS&M Plan, information signage and contact numbers were posted on monitoring wells at the Quarry Area reduction zone. The labels indicate no digging is allowed in this area and include contact

numbers for DOE and MDC. The red ink on the labels was observed to be badly faded (Photo 4) during the inspection and some recommendations to improve the labels were discussed. Land use remains consistent with planned institutional controls.

2.1.7 Southeast Drainage

Check for indications of residential use or construction in the Southeast Drainage (200-foot-wide-corridor), or other activity that would indicate non-recreational use of the area. Check Springs 5303 and 5304 for residential, commercial, or agricultural use of spring water.

Inspection Results: The inspectors walked down the entire Southeast Drainage (Photo 5) and no indications of residential use, construction, or any other activity that would indicate non-recreational use of the area were observed. The springs also were inspected and no indications of residential, commercial, or agricultural use of the springs were observed (Photo 6). Current land use remains consistent with planned institutional controls.

2.1.8 Highway D Culvert

Check for signs of disturbance of the affected region where the Frog Pond outlet culverts pass beneath Highway D and in the utility rights-of-way in the affected area.

Inspection Results: The Highway D culverts were inspected (Photo 7). The gravel on top of the culverts that had been placed by MDOT last year to stabilize the erosion was still in place.

2.1.9 State Route 94 Culvert

Check for signs of disturbance of the affected region where the culvert passes beneath State Route 94 and in the utility rights-of-way in the affected area.

Inspection Results: The State Route 94 culvert was inspected (Photo 8) and it was noted that the condition had not changed from previous years' inspections.

2.1.10 Pipeline from LCRS to Missouri River

Inspect the entire length of the pipeline and outfall for any disturbance or maintenance needs.

Inspection Results: The pipeline area was inspected. GPS surveying equipment was used to find the locations of the manholes and cleanouts. A map of the pipeline, indicating the manhole locations, is shown in Figure 6. It was noted that there were no on-site disturbances of the pipeline and there were no apparent disturbances in the area of the pipeline or manholes in the off-site areas. A tree was observed to be growing close to one of the manholes (Photo 9) and it is recommended to remove the tree.

2.2 Disposal Cell

The disposal cell was inspected in accordance with the LTS&M Plan and the annual inspection checklist. The cell was divided into ten transects (Figure 7). The inspectors separated into two groups and walked five transects each. The inspectors looked for depressions, shifts of cell plane vertices, and other indications of settlement. Other items for inspection were vegetation, wet areas, apron drains, guardrail, and the stairs. A GPS unit was used during the 2003 inspection to

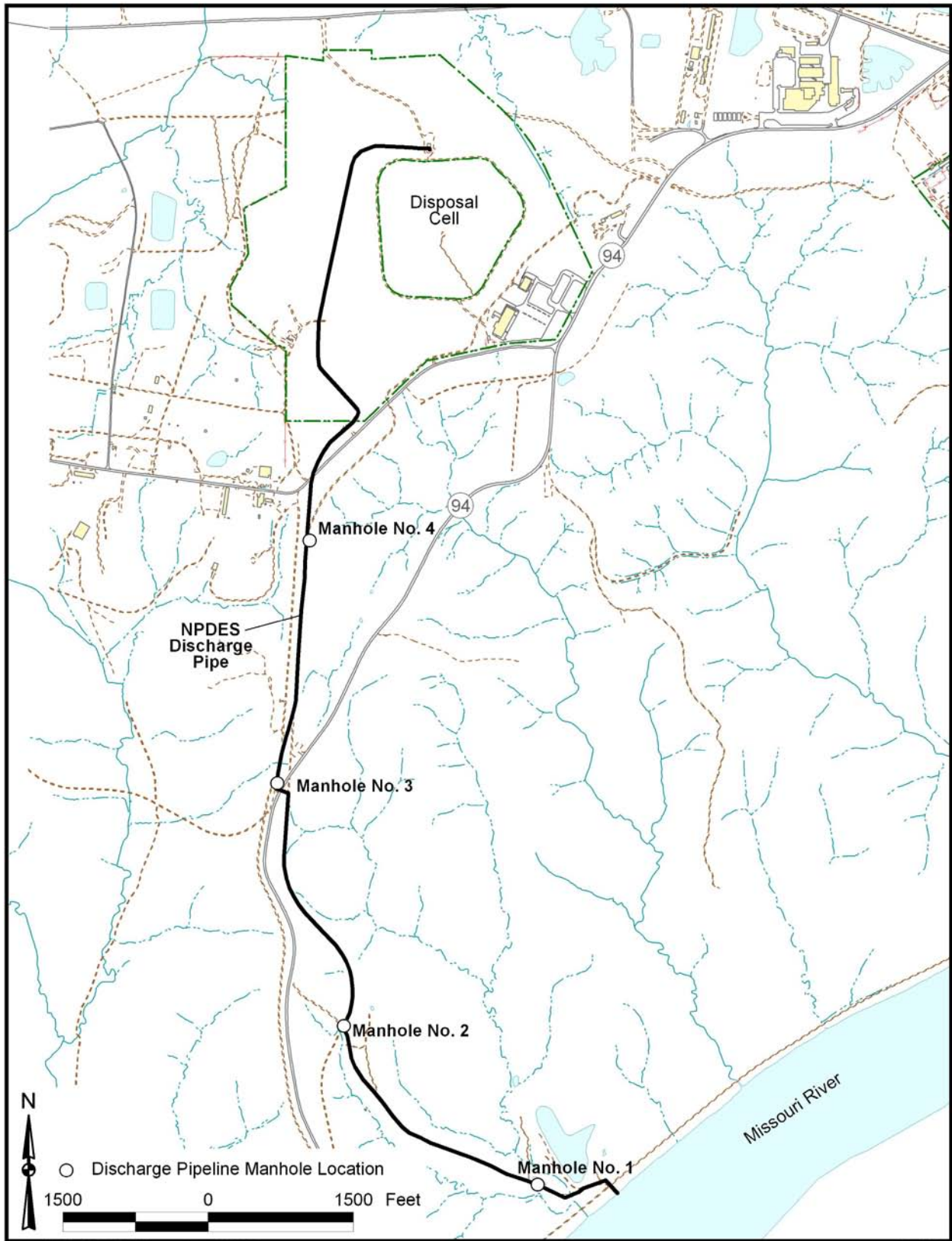
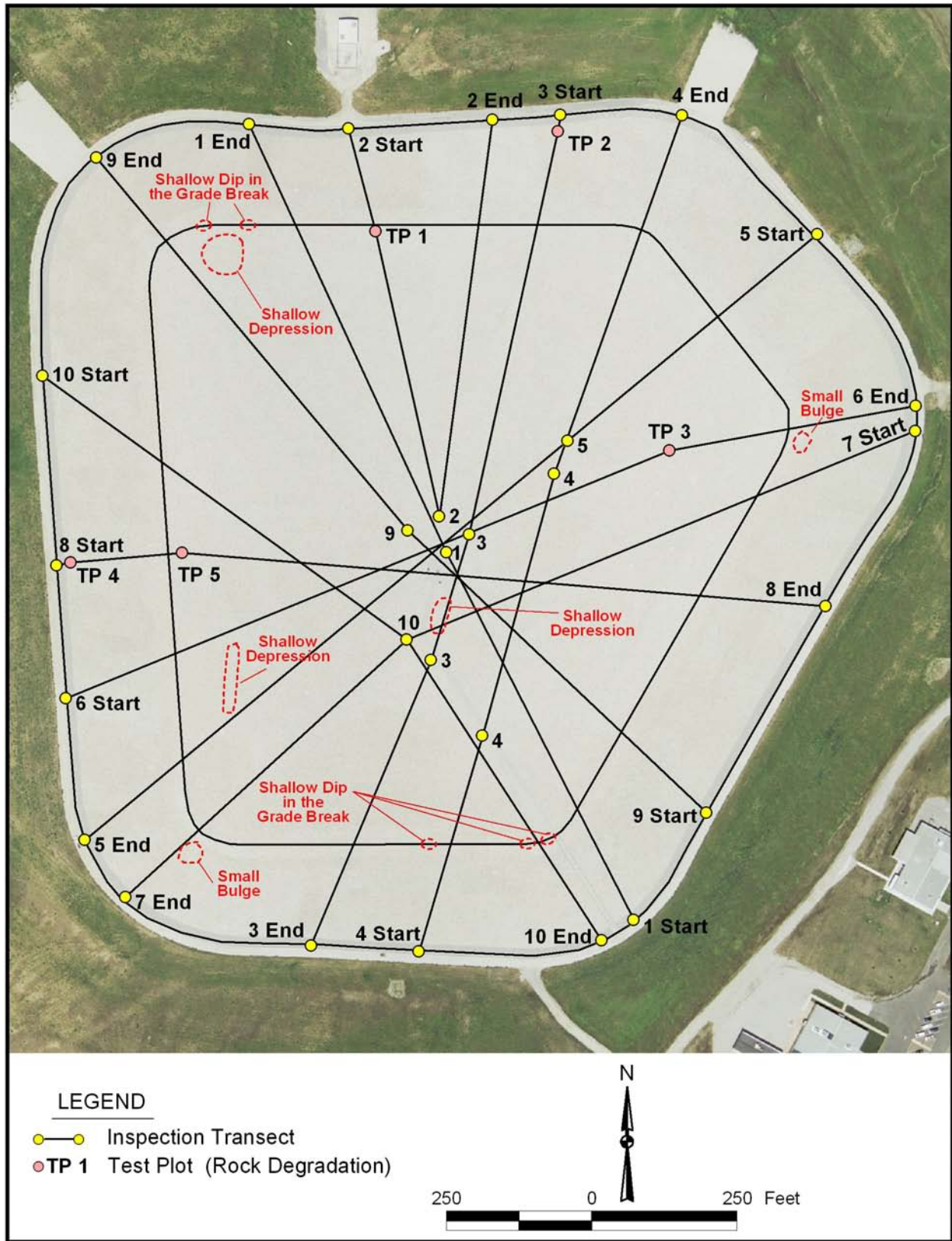


Figure 6. NPDES Discharge Pipeline Between the LCRS Support Building at the Missouri River, Weldon Spring, Missouri, Site



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Figure 7. Disposal Cell Inspection Transects and Rock Test Plot Locations at the Weldon Spring, Missouri, Site

map five areas chosen for rock degradation review (Figure 7). The inspectors took photographs of these and compared them to photographs from the previous inspection of the same areas and observed no rock degradation. These areas are shown from last year and this year for comparison in Photos 10 through 19.

A few small shallow depressions on the cell cover were noted during the inspection. It appeared that the depressions ranged up to approximately 2 or 3 inches deep. The majority of these areas had been identified during the previous inspection(s). These slight depressions are not unexpected for a disposal cell of this type and are not a cause for concern. They will continue to be monitored.

In accordance with the checklist the inspectors also checked for wet areas or water drainage and observed that none were present. The toe and apron drains were inspected and found to be functioning as designed. The guardrail and stairs were in good condition. No vegetation was found on the disposal cell during the inspection.

2.3 Leachate Collection and Removal System (LCRS)

Operations of the LCRS were discussed with site personnel and the system was inspected (Photo 20). The fences and doors were locked and in good condition. The system was functioning as designed. The LCRS data and documentation were reviewed during the document review period of the inspection and the following information was checked and verified that it was available: sampling data, LCRS flow rates, action leakage rate information, “burrito” system flow rates, and leachate data. As required by the LTS&M Plan, the leachate production rates, analytical results, and disposal information are provided in Appendix D.

The DOE continues to exercise its pretreatment contingency process equipment by pretreating the leachate through a system of cartridge filters and ion exchange media that is selective for uranium. The leachate is sampled and continues to be well below the limit for uranium. The leachate will continue to be managed in this manner until the leachate is consistently below the 20 pCi/L level for uranium.

2.4 Erosion

2.4.1 Chemical Plant Area

Areas of erosion in the prairie were identified in the following areas during the inspection: northeast and northwest of the cell close to the drainage areas, west of the cell (Photo 21) and along the Hamburg Trail area. The area northwest of the cell was the only area within the buffer zone and the area west of the cell had the deepest erosion gullies. The other areas were minor at this time. Due to the snowy conditions during the first part of the inspection and the muddy conditions during the December 15 portion of the inspection it is recommended that the prairie be inspected more thoroughly and the erosion areas be located and mapped by GPS and that erosion areas be repaired.

2.4.2 Quarry Area

No erosion areas were noted during the inspection of the Quarry area.

2.5 General Site Conditions

General site conditions as listed in the checklist were inspected and are discussed below.

2.5.1 Roads

The roads consist of asphalt roads leading into the property and a gravel road that extends around the disposal cell and to Gate D. The roads were in good condition.

2.5.2 Vandalism

Some minor vandalism incidents had occurred during the past year. In February, the St. Charles County Sheriff's representative was contacted about vehicles that had driven on parts of the garden and prairie and put ruts into the grass. He had said his officers would do extra patrols and that the site needed to have signs stating that the cell was closed at night. On April 28, 2006, vandalism occurred at the Interpretive Center, which included the destruction of trees in the Native Plant Garden, destruction of a canopy in back of interpretive center, theft of flags and other minor items. The St. Charles County Sheriff was called and they came to the site and wrote up a police report.

During the inspection it was observed that rocks on the cell are being moved around and this activity seems to be increasing (Photo 22). A historical marker (#10) also was shot up by small pellets. The sign is still readable. This sign was also vandalized in July 2005. The markers will continue to be routinely inspected.

2.5.3 Personal Injury Risks

No personal injury risks were observed.

2.5.4 Site Markers (Four Information Plaques on Top of Cell, Historical Markers, and Other Information Markers)

The four information plaques on top of the cell were generally in good condition. The pedestal on the south side of the viewing platform was eroded under the southeast corner (Photo 23) after it had been repaired from the previous inspection (See Appendix B). The historical markers were inspected during the inspection and found to be in good condition with the exception of Marker #10 which had been shot at with pellets. Photos were taken of each marker. Marker #10 is shown in Photo 24.

The plan also states that signs are posted on the LCRS fence to inform the public that trespassing is forbidden and that persons may call the DOE 24-hour security telephone number (970-248-6070 or 877-695-5322) for information. During the 2006 inspection, it was noted that these signs were posted on the LCRS fence.

2.6 Monitoring Wells

Monitoring wells in the Disposal Cell Monitoring Well Network, Chemical Plant Monitoring Well Network, and Quarry Monitoring Well Network were inspected (Photo 25). The inspection checklist required all the disposal cell wells to be inspected, and greater than 10 percent of the

Chemical Plant and Quarry wells to be inspected. The checklist required the wells to be inspected to ensure they are properly secured and locked, in good condition, and to check if they need maintenance and have the proper ID number on the well. All of the wells that were inspected met these requirements. It should be noted that each well is inspected at least quarterly during the year when static water levels are recorded. The wells are listed below for identification purposes.

2.6.1 Disposal Cell Monitoring Well Network

Each well in the disposal cell network was inspected and is listed below:

MW-2032, 2046, 2047, 2051, 2055.

2.6.2 Chemical Plant Area Monitoring Well Network

The inspection checklist requires at least 10 percent of the wells be inspected from the Chemical Plant monitoring well network. The monitoring well network consists of 87 wells. Only forty-seven wells are monitored for the groundwater remedy of monitored natural attenuation. The remaining wells are monitored quarterly for static water levels only. The wells that were inspected are listed below:

MW-2012, 2023, 2024, 2032, 2045, 2046, 2051, 2053, 3025, 3039, 3040, 4001, 4006, 4007, 4011, 4027, 4034, 4036, 4040, 4041, ICO4, ICO5, LIWI .

2.6.3 Quarry Monitoring Well Network

The inspection checklist requires greater than 10 percent of the wells in the Quarry monitoring well network be inspected. The monitoring well network consists of 29 wells. The wells that were inspected are listed below:

MW-1002, 1004, 1005, 1006, 1007, 1008, 1009, 1013, 1014, 1015, 1016, 1027, 1028, 1030, 1031, 1032, 1045, 1046, 1047, 1048, 1049, 1051, 1052.

2.7 On-site Document and Record Verification

The following on-site documents and records were verified:

- Surveillance and Maintenance Plan: (*Long-Term Surveillance and Maintenance Plan for the Weldon Spring, Missouri, Site*, July 2005)
- As-Built Drawings: disposal cell
- Maintenance log
- Contingency Plan/Emergency Response Plan: (Office of Land and Site Management Project Safety Plan, June 2005)
- NPDES permit(s): (#MO-0107701, revised March 5, 2004). It was discussed that the expiration date for this permit was July 13, 2005. The DOE had sent in an application to MDNR for a renewed permit in January 2005, but has not received a renewed permit to date. The site currently operates under the existing permit until MDNR issues a renewed permit.

- Metropolitan St. Louis Sewer District (MSD) agreement and records
- Groundwater monitoring records
- Leachate records
- Interpretive Center sign-in logs
- Telecons and interview records

2.8 Contacts

Several stakeholders were notified prior to the inspection in accordance with the checklist. These included:

- St. Charles County Sheriff
- Cottleville Fire District
- Francis Howell High School
- Francis Howell School District
- Simplex-Grinnel Alarm System
- Weldon Spring Citizens Commission
- St. Charles County
- Middendorf-Kriedell Library

The institutional control contacts were also contacted in regard to the inspection and to maintain annual contact with the representatives in regard to institutional controls. In the future, when the institutional controls are established, this annual contact will be used to verify cognizance of the institutional controls and the requirements and/or restrictions with each representative. The representatives contacted are listed below.

- John Vogel – Missouri Department of Conservation
- Joel Porath – Missouri Department of Conservation
- Cynthia Green – Missouri Department of Conservation
- Jennifer Frazier – Missouri Department of Natural Resources – Parks
- Nelson Jones – Army
- Barry McFarland – Army
- Tom Blair – Missouri Department of Transportation

The St. Charles Planning and Zoning Department also was contacted and they verified that no planning and zoning activities were currently taking place within one-quarter mile of the Chemical Plant and Quarry Property. The Notation of Land Ownership was verified to be filed and present at the St. Charles Recorder of Deeds office by checking the county website at www.saintcharlescounty.org.

The Stoller Project Manager, Yvonne Deyo, and Environmental Data Manager, Randy Thompson, were interviewed as required by the inspection checklist.

All conversations and interviews were recorded on an Interview Record form from the EPA *Comprehensive Five-Year review Guidance*. The forms for each of these contacts and interviews are attached as Appendix E.

2.9 Operation and Maintenance (O&M) Costs

The fiscal year (FY) 2006 long-term surveillance and maintenance costs for the Weldon Spring Site were budgeted at \$1,253,355. The actual costs were \$1,136,627.

2.10 Environmental Monitoring Data

The environmental data from the Weldon Spring Site are available on the following DOE website: www.gjo.doe.gov/LM. A quarterly internal report is issued which includes validated environmental data results for each quarter. The report includes site summary, data trending, chain-of-custody information, adequacy of quality control sample results, data assessment summaries, information on data that are outside the range of historical concentrations, and data that merit explanation or follow-up action, sampling and analytical schedules, trip reports, and sampling location maps.

Results of all environmental monitoring data are summarized and included in the Annual Site Environmental Report. The report includes data trending information and also reports on other aspects of the project including status and regulatory information. The Annual Site Environmental Report for 2006 will be available in July 2007.

2.11 Prairie Maintenance

Section 2.6 of the Final LTS&M Plan states that routine maintenance of the prairie completed during the previous 12 months will be summarized in the annual inspection report. This summary is as follows:

A variety of prairie maintenance activities have been completed throughout the previous 12 months. Prescribed burning was performed in March in the drainage outlet areas, the southwest portion of the site between the disposal cell and Hamburg Trail, and selected areas of the native plant garden. Due to a relatively small fuel load, burning using traditional techniques was marginally effective, however, greater success was achieved with an alternative burning technique utilizing agricultural equipment designed to burn alfalfa fields.

Later in the growing season, spot-spraying individual *Sericea lespedeza* and *Robinia pseudoacacia* plants with herbicide was performed as part of on-going efforts to reduce numbers and control encroachment of invasive weed species throughout the prairie area. The map of infested areas that was developed during FY 2005 was utilized during this spot-spraying effort in order to streamline fieldwork and to track the effectiveness of the eradication program.

A garden of plants native to the state of Missouri was designed and constructed to surround the Interpretive Center and build awareness about the Weldon Spring Site. Garden maintenance consisting of manual weeding and occasional irrigation was performed throughout the growing season. Dried seed heads from forbs were harvested and will be utilized for hand overseeding on the prairie area of the site in January 2007. Volunteers continued to perform garden maintenance activities throughout this period. A total of five large garden beds have been adopted by volunteers who are responsible for their maintenance.

3.0 Findings and Recommendations

1. **Finding:** Erosion areas were identified on the Chemical Plant Property.

Corrective Action: Identify and locate by GPS all areas of erosion in the prairie. Repair erosion areas.

Target Date: September 2007

2. **Finding:** The red ink on the “No Dig” labels on the wells in the quarry reduction zone was badly faded.

Corrective Action: Make new labels with only black ink and reapply.

Target Date: March 2007

3. **Finding:** A tree was growing near manhole number 3 of the LCRS pipeline.

Corrective Action: Remove tree.

Target Date: May 2007

4. **Finding:** Increased vandalism is evidenced by disturbances of rock on the disposal cell.

Corrective Action: Develop a plan to attempt to curtail this activity and implement.

Target Date: June 2007

5. **Finding:** The pedestal on the south side of the viewing platform was eroded under the southeast corner after being repaired in 2006.

Corrective Action: Determine a more permanent repair and apply.

Target Date: June 2007

6. **Recommendation:** The documents in the library need to be assessed, rebound, and indexed.

Corrective Action: Remove items from library, assess what is in the collection, and rebind the comb-bound documents for easier access. Return revised collection to the library and include an index of what is returned.

Target Date: July 2007

7. **Recommendation:** Communicate with MDNR-Parks regarding any safety concerns that they have.

Corrective Action: Contact the MDNR-Parks contact and attempt to set up a meeting with their representative.

Target Date: July 2007

4.0 Photographs



Photo 1. The prairie and disposal cell viewed from the Hamburg Trail south of the cell.



Photo 2. Burgermeister Spring



Photo 3. Quarry and Historical Marker 9 along the Hamburg Trail.



Photo 4. A faded “Do Not Dig” warning label on monitoring well MW-1051 in the Quarry reduction zone.



Photo 5. Inspectors walking the Southeast Drainage.



Photo 6. Spring SP-5304 in the Southeast Drainage.



Photo 7. Highway D culverts.



Photo 8. Highway 94 culvert outlet in the Southeast Drainage.



Photo 9. Manhole No. 3 on the NPDES discharge pipe. Note tree next to the manhole.



Photo 10. Cell cover rock test plot TP1; north edge of north facet (2005 Inspection).



Photo 11. Cell cover rock test plot TP1; north edge of north facet (2006 Inspection).



Photo 12. Cell side slope rock test plot TP2; bottom of north side slope (2005 Inspection).



Photo 13. Cell cover rock test plot TP2; bottom of north side slope (2006 Inspection).



Photo 14. Cell cover rock test plot TP3 northeast ridgeline (2005 Inspection).



Photo 15. Cell cover rock test plot TP3; northeast ridgeline (2006 Inspection).



Photo 16. Cell cover rock test plot TP4; located on lower west side (2005 Inspection).



Photo 17. Cell cover rock test plot TP4; located on upper west side (2006 Inspection).



Photo 18. Cell cover rock test plot TP5; located on upper west side (2005 Inspection).



Photo 19. Cell cover rock test plot TP5; located on lower west side (2006 Inspection).



Photo 20. LCRS sump manhole.



Photo 21. Erosion area in the prairie west of the cell.



Photo 22. View from top of cell facing northwest. Shows disturbance of rocks.



Photo 23. Corner of Pedestal on the SE Corner. Shows erosion under the bottom that had been repaired last year, but is reoccurring.



Photo 24. Historical Marker #10



Photo 25. Monitoring well MW-4011 on the Army Property.

Appendix A
Inspection Agenda

WSSRAP ANNUAL INSPECTION
AGENDA

Tuesday, December 5, 2006

8:30 – 9:00 am

Conference Room 3A planning meeting. Review agenda, inspection teams, and safe work issues. Review inspection report and findings on last year's inspection. Inspectors/observers divide into 2 separate groups to cover 5 transects each on the disposal cell. The Team Leaders will be Terri Uhlmeier and Dick Johnson

9:00 – 11:30 am

Disposal Cell Inspection – Potential settlement, rock degradation, vegetation
Team 1: Walk 5 Transects
Team 2: Walk 5 Transects

11:30 am – 12:30 pm

Lunch (on your own)

12:30 pm – 1:00 pm

Teams 1 & 2: reconvene in Room 3A for trip to LCRS.

1:00– 3:00 pm

Inspection of LCRS (No confined space entry planned).
Walk disposal cell buffer zone inspecting for erosion issues.

3:00 – 4:00 pm

Document and paperwork review

4:00 – 4:30 pm

Meeting in Room 3A: discuss day-1 inspection results

Wednesday, December 6, 2006

8:30 – 9:00 am

Meeting in Room 3A to review next inspection objectives. Inspectors/observers will divide into 2 separate groups. Team 1 (Team Leader - Terri Uhlmeier) will cover the Chemical Plant Area. Team 2 (Team Leader – Dick Johnson) will cover the Southeast Drainage and the Quarry Area.

9:00 – 11:30 am

Team 1: Inspect land & shallow groundwater use on Army property and DOE property:

- Monitoring wells along Army property roads
- Drive all Army roads in proposed IC area and note any land disturbance
- Disposal Cell buffer zone
- Monitoring wells on DOE Chemical Plant property

Team 2: Inspect land & shallow groundwater use on Missouri Department of Conservation property, Weldon Spring Conservation Area:

- Southeast Drainage from Army Road to Hwy 94
- Hwy 94 culvert
- Southeast Drainage from Hwy 94 to Missouri River, incl Springs 5303 & 5304

11:30 am – 12:30 pm

Lunch (On your own)

12:30 – 4:00 pm

Team 1: Inspect land & shallow groundwater use on Missouri Department of Conservation property, August A. Busch Conservation Area:

- Burgermeister Spring
- Spring 6303
- Monitoring wells along MDC roads
- Hwy D Culvert

Team 2: Inspect land & shallow groundwater use on Missouri Department of Conservation property, Weldon Spring Conservation Area and DOE property:

- DOE Quarry Property (Quarry rim wells)
- DOE Quarry Property (Quarry proper)
- Reduction zone area
- Public Water District #2 well field area

4:00 – 4:30 pm

Debriefing for DOE and Stoller management of preliminary inspection findings

Appendix B
2005 Corrective Action Report

Completed Findings, Recommendations and Corrective Actions from 2005 Weldon Spring LTSM Annual Inspection

1. **Finding:** The boundary monument WS-46 was broken off.

Corrective Action: Coordinate repair of the monument.

Target Date: June 2006

Response: The monument was repaired. See Photos 1, 2 and 3.

Completion Date: March 2006
2. **Finding:** Six wells on the Army property did not have the contact label applied.

Corrective Action: Apply contact labels to wells.

Target Date: March 2006

Response: The contact labels were applied to the wells.

Completion Date: March 2006
3. **Finding:** Additional signs need to be placed around the site stating that the viewing platform at the top of the disposal cell is closed at night.

Corrective Action: Purchase and install signs.

Target Date: May 2006

Response: New signs were purchased and installed. See Photos 4 through 7.

Completion Date: April 2006
4. **Finding:** A few small depressions were observed on the disposal cell.

Corrective Action: Use the GPS equipment to locate the areas. Continue to monitor these areas.

Target Date: May 2006

Response: These areas were located by GPS and will be monitored in the future inspections.

Completion Date: May 2006

5. **Finding:** The pedestal on the south side of the viewing platform was eroded under the southeast corner.

Corrective Action: Repair the erosion.

Target Date: June 2006

Response: The erosion under the pedestal was repaired. See Photo 8.

Completion Date: April 2006

6. **Recommendation:** The telephone number for the site was not located in all local phone directories and the telephone number was hard to locate in some directories.

Corrective Action: Contact telephone directories and ensure the telephone number is listed correctly.

Target Date: May 2006

Response: Only 1 out of 4 telephone directories did not list the site. This directory was contacted and the number was listed under two different names. (Weldon Spring Site Interpretive Center and Department of Energy Weldon Spring Site.)

Completion Date: April 2006



Photo 1: Monument WS-46 Repair. Located on Army Property.



Photo 2: Monument WS-46 Repair. Located on Army Property.



Photo 3: Repaired WS-46 Monument. Located on Army Property.



Photo 4: New sign posted at access road to disposal cell.



Photo 5: New sign posted at access road to disposal cell.



Photo 6: New sign posted at bottom of cell at access stairway.



Photo 7: New signs posted at bottom of disposal cell at access stairway.



Photo 8: Repair of the erosion under the corner of the pedestal on top of the disposal cell.

Appendix C
Inspection Checklist

Annual Site Inspection Checklist

Purpose of the Checklist

This checklist has been developed from the EPA guidance document *Comprehensive Five Year Review Guidance* dated June 2001 (OSWER No. 9355.7-03B-P) and from Section 2.3 of the *Long-Term Surveillance and Maintenance Plan for the Weldon Spring, Missouri, Site*. The checklist was modified to site-specific conditions as recommended by the guidance document. The checklist will be completed annually during the Weldon Spring Site annual surveillance and maintenance inspection. The checklist will also be used to assist in compiling information for the five-year review.

I. SITE INFORMATION			
Site name: DOE Weldon Spring Site	Date(s) of inspection: 12/5/06, 12/6/06, 12/15/06		
Location: St. Charles, MO	EPA ID: MO6210022830		
Agencies accompanying DOE for portions of the annual inspection: <input checked="" type="checkbox"/> EPA, Region 7 <input checked="" type="checkbox"/> MDNR <input checked="" type="checkbox"/> Other (list) MDC, WSCC	Weather: Cold 30-40° ice and snow covered ground Partly sunny		
Remedy Includes: Disposal Cell Institutional controls Monitored Natural Attenuation Long Term Monitoring Other _____			
Inspectors <u>Terril Uhlmeier, Dick Johnson</u>			
Participants <u>Tom Pauling, Jane Powell, Randy Thompson, Dan Zell, Ben Moore *</u>			
Attachments: <input checked="" type="checkbox"/> Inspection team roster attached <u>report</u> <input checked="" type="checkbox"/> Site map attached (<u>report</u>)			
II. INTERVIEWS (Check all that apply)			
1. Local Site Manager	<u>Yvonne Deyo</u> Name	<u>Project Mgr, Stoller</u> Title	<u>12/4/06</u> Date
Interviewed <input type="checkbox"/> at site <input checked="" type="checkbox"/> at office <input type="checkbox"/> by phone Phone no. <u>636-300-0012</u>			
Problems, suggestions; <input checked="" type="checkbox"/> Report attached <u>APPE</u>			
2. Environmental Data Manager	<u>Randy Thompson</u> Name	<u>Data Mgr, Stoller</u> Title	<u>11/15/06</u> Date
Interviewed <input type="checkbox"/> at site <input checked="" type="checkbox"/> at office <input type="checkbox"/> by phone Phone no. <u>636-926-7040</u>			
Check to ensure that environmental data is reviewed and trended.			
Problems, suggestions; <input checked="" type="checkbox"/> Report attached <u>APPE</u>			
3. Other Staff (as applicable)	<u>N/A</u> Name	 Title	 Date
Interviewed <input type="checkbox"/> at site <input type="checkbox"/> at office <input type="checkbox"/> by phone Phone no. _____			
Problems, suggestions; Report attached _____			

4. **Local response agencies:** Contact to notify of annual inspection and to determine if there are any concerns or issues.

Agency: St. Charles County Sheriff
Contact Captain Jim Hudson Captain 12/4/06 636-949-~~3005~~⁷³²⁵
Name Title Date Phone no.
Problems; suggestions; Report attached App. E

Agency: Cottleville Fire Department
Contact Mark Boehle Asst. Fire Chief 11/28/06 636-447-6655
Name Title Date Phone no. K8703
Problems; suggestions; Report attached App. E

Agency: SimplexGrinnel (LCRS and Interpretive Center Alarm Company)
Contact Cindy _____ 11/15/06 888-746-7539
Name Title Date Phone no.
Problems; suggestions; Report attached App. E

Agency: _____
Contact _____
Name Title Date Phone no.
Problems; suggestions; Report attached _____

5. **Stakeholders:** Contact to notify of annual inspection and to determine if there are any concerns or issues.

Agency: Francis Howell School District **Contact Name:** Mr. Pat Houlihan, Exec. Dir. of Admin. Services

Contact Name Current yes no

Phone Number Current yes no 636-851-6172 (new phone no. if applicable)

Contact Rick Pavia Project Mgr. 11/21/06 636-851-4046
Name (if different than above) Title Date Phone no.

Problems; suggestions; Report attached Also contacted new high school principal for Francis Howell High School - Chris Greiner on 11/14/06

Agency: Weldon Spring Citizens Commission **Contact Name:** Helene Diller, Admin. Assistant

Contact Name Current yes no

Phone Number Current yes no 636-300-0037 (new phone no. if applicable)

Contact same same 11/14/06 636-926-7061
Name (if different than above) Title Date Phone no.

Problems; suggestions; Report attached

Agency: St. Charles County **Contact Name:** Mike Duvall, Dir. of Env. Service

Contact Name Current yes no

Phone Number Current yes no _____ (new phone no. if applicable)

Contact same same 11/15/06 636-949-7583
Name (if different than above) Title Date Phone no.

Problems; suggestions; Report attached

6. **Other Interviews** (Prior to inspection, determine if any citizens or groups have expressed any concerns or interests in the site. Check site email and Grand Junction contact phone logs) : Report attached.

1. Anna Sylvan, Documents Manager, Middendorf-Kredell Library. Contacted 11/20/06 Phone: 636-978-7926

III. ON-SITE DOCUMENTS & RECORDS VERIFIED (Check all that apply)

1. **Documents**

<input checked="" type="checkbox"/> Surveillance and Maintenance Plan	<input checked="" type="checkbox"/> Readily available	<input checked="" type="checkbox"/> Up to date	<input type="checkbox"/> N/A
<input checked="" type="checkbox"/> As-built drawings	<input checked="" type="checkbox"/> Readily available	<input checked="" type="checkbox"/> Up to date	<input type="checkbox"/> N/A
<input checked="" type="checkbox"/> Maintenance logs	<input checked="" type="checkbox"/> Readily available	<input checked="" type="checkbox"/> Up to date	<input type="checkbox"/> N/A

Remarks _____

2. **Site-Specific Health and Safety Plan**

<input checked="" type="checkbox"/> Contingency plan/emergency response plan	<input checked="" type="checkbox"/> Readily available	<input checked="" type="checkbox"/> Up to date	<input type="checkbox"/> N/A
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Remarks _____

3.	Permits and Service Agreements	<input checked="" type="checkbox"/> NPDES Permits	<input checked="" type="checkbox"/> Readily available	<input checked="" type="checkbox"/> Up to date*	<input type="checkbox"/> N/A
		<input checked="" type="checkbox"/> MSD agreement and records	<input checked="" type="checkbox"/> Readily available	<input checked="" type="checkbox"/> Up to date	<input type="checkbox"/> N/A
		<input type="checkbox"/> Other permits	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input type="checkbox"/> N/A
	Remarks: * The NPDES permit which is a contingency permit for the LCDS pipe line expired 7/2005. DOE submitted a renewal application in Jan 2004, but MDNR *				
4.	Groundwater Monitoring Records		<input checked="" type="checkbox"/> Readily available	<input checked="" type="checkbox"/> Up to date	<input type="checkbox"/> N/A
	Remarks: _____				
5.	Leachate Records		<input checked="" type="checkbox"/> Readily available	<input checked="" type="checkbox"/> Up to date	<input type="checkbox"/> N/A
	Remarks: _____				
6.	Interpretative Center Sign-In Logs		<input checked="" type="checkbox"/> Readily available	<input checked="" type="checkbox"/> Up to date	<input type="checkbox"/> N/A
	Remarks: _____				
IV. O&M COSTS					
1.	Organization				
	<input type="checkbox"/> DOE	<input checked="" type="checkbox"/> Contractor for DOE			
	<input checked="" type="checkbox"/> Other participants (list organizations) _____				
2.	O&M Cost Records (This information may be reviewed and completed prior to the inspection)				
	Original O&M cost estimate \$1,253,355 <input type="checkbox"/> Breakdown attached				
	Total annual cost for prior federal fiscal year:				
	From 10/1/2005	To 9/30/2006	\$1,136,627	<input type="checkbox"/> Breakdown attached	
	Date	Date	Total cost		
3.	Unanticipated or Unusually High O&M Costs During Review Period				
	Describe costs and reasons: <u>N/A</u>				

* has not yet acted on the application. The original permit is still in force at this time.

V. INSTITUTIONAL CONTROLS

Institutional Control (IC) Inspections

1. **Land and Shallow Groundwater Use within the Chemical Plant Site and Quarry Property**

Inspect for indications of excavations into soil or bedrock and groundwater withdrawal or use in restricted areas. If any party has been granted use of portions of the Chemical Plant or Quarry area, inspect to ensure that land use is in compliance with the terms of the restrictions within the notation.

Note any observations: No indications of excavations or groundwater withdrawal or use. Inspected buffer zone survey monuments.

2. **Groundwater Use in Areas Surrounding the Chemical Plant**

Groundwater use is restricted in areas. Inspect affected areas for evidence of groundwater or spring water use (Burgermeister Spring and Spring 6303). Inspect to ensure that land use continues to be in compliance with the terms of the license, easement, or permit and the restrictions contained therein.

Note any observations: Inspected relevant areas on Army - MDC property. No evidence of gw or springwater use. No land use changes. Checked repaired survey marker. WS 46.

3. **Groundwater (Quarry)**

Groundwater use is restricted in areas. Inspect affected areas for evidence of groundwater withdrawal or use in the area of impact. Inspect to ensure that land use continues to be in compliance with the terms of the license and the restrictions contained therein.

Note any observations: No evidence of groundwater withdrawal or use. No land use changes.

4. **Land Use in Quarry Area Reduction Zone**

A naturally occurring reduction zone exists in soil south of the Katy Trail and north of the Femme Osage Slough. Inspect for indications of excavations into soils and bedrock in the uranium reduction zone. Inspect to ensure that land use continues to be in compliance with the terms of the easement and the restrictions contained therein.

Note any observations: No indications of excavations into soils or bedrock. No land use changes. The "No digging" labels were faded and need to be replaced.

5. **Southeast Drainage**

Check for indications of residential use or construction in the Southeast Drainage (200-foot-wide corridor), or other activity that would indicate nonrecreational use of the area. Check Springs 5303 and 5304 for residential, commercial, or agricultural use of spring water.

Note any observations: No indications of residential use or construction in the SE Drainage or any other activity that would indicate nonrecreational use. No indications of use of springwater.

<p>6. Highway D Culvert Check for signs of disturbance of the affected region where the Frog Pong outlet culverts pass beneath Highway D and in the utility rights-of-way in the affected area.</p> <p>Note any observations: <u>The top of the culverts which had been exposed were still covered by riprap.</u></p> <p>_____</p> <p>_____</p> <p>_____</p>
<p>7. State Route 94 Culvert Check for signs of disturbance of the affected region where the culvert passes beneath State Route 94 and in the utility rights-of-way in the affected area.</p> <p>Note any observations: <u>No changes</u></p> <p>_____</p> <p>_____</p> <p>_____</p>
<p>8. Pipeline from LCRS to Missouri River Inspect the entire length of the pipeline and outfall for any disturbances or maintenance needs.</p> <p>Note any observations: <u>The pipeline area was not disturbed. A tree was observed growing near manhole # 3.</u></p> <p>_____</p> <p>_____</p> <p>_____</p>

C. Institutional Control Annual Contact Log

In accordance with the LTS&M Plan, the following will be contacted to verify cognizance of institutional controls and real estate agreements. Fill in all that apply.

1. **Agency:** Missouri Department of Conservation **Contact Name:** Joel Porath, Wildlife Regional Supv.
Address: August A. Busch Memorial Conservation Area, 2360 Highway D, St. Charles, MO 63304
Institutional Control and Real Estate Licenses to Verify: Chemical Plant Groundwater Use Restriction, Quarry Area Groundwater Use Restriction, Quarry Reduction Zone Land Use Restriction, Southeast Drainage Residential Use Restriction, North Gate Access, Well Sampling Access Agreement, Effluent Discharge Pipeline, Hamburg Trail Use Agreement.
Contact Name Current yes no
Phone Number Current yes no same (new phone no. if applicable)

Contact same same 11/17/06 636-441-4554
Name (if different than above) Title Date Phone no.

Problems; suggestions; Report attached
Also contacted John Vogel, Area Manager at Busch Conservation on 11/17/06 at 636-300-1953 x318.

2. **Agency:** Missouri Department of Conservation **Contact Name:** Cynthia Green, Realty Spec.
Address: P.O. Box 180, Jefferson City, MO 65102
Institutional Control and Real Estate Licenses to Verify: See No. 1
Contact Name Current yes no
Phone Number Current yes no same (new phone no. if applicable)

Contact same same 11/21/06 573-751-4115
Name (if different than above) Title Date Phone no.

Problems; suggestions; Report attached

3. **Agency:** Missouri Department of Natural Resources **Contact Name:** Jennifer Frazier, Parks Operation Off.
Address: P.O. Box 176, Jefferson City, MO 65102
Institutional Controls and Real Estate Licenses to Verify: Quarry Area Groundwater Use Restriction, Southeast Drainage Residential Use Restriction, Well Sampling Access Agreement, Effluent Discharge Pipeline
Contact Name Current yes no
Phone Number Current yes no same (new phone no. if applicable)

Contact same same 11/21/06 573-751-7987
Name (if different than above) Title Date Phone no.

Problems; suggestions; Report attached

4. **Agency:** Missouri Department of Transportation **Contact Name:** ~~Don Wichem, Asst. District Engineer~~
Address: 1590 Woodlake Dr., Chesterfield, MO 63017
Institutional Controls to and Real Estate Licenses to Verify: Chemical Plant Groundwater Use Restriction, and question MoDOT regarding Missouri State Highway 94 Culvert and Highway D culverts about plans for repairs/replacements.
Contact Name Current yes no
Phone Number Current yes no 314-340-4203 (new phone no. if applicable)

Contact Tom Blair Asst. Dist. Eng. 11/20/06 314-340-4202
Name (if different than above) Title Date Phone no.
Problems; suggestions; Report attached Mr Blair is a new contact. I updated him on the site + culverts and DOE sent a letter w/ relevant documents.

5. **Agency:** U.S. Dept. of Army **Contact Name:** Roy Stevenson, Facility Manager
Address: Weldon Spring Training Area, 7301 Hwy 94 S. St. Charles, MO 63304
Institutional Controls to and Real Estate Licenses to Verify: Chemical Plant Groundwater Use Restriction, Effluent Discharge Pipeline, Well Sampling Access Agreement
Contact Name Current yes no
Phone Number Current yes no same (new phone no. if applicable)

Contact Nelson Jones 11/20/06 636-329-1200
Name (if different than above) Title Date Phone no.
Problems; suggestions; Report attached Roy Stevenson is still the correct contact but Nelson was asking for him at the time I called. Also contacted Barry McFarland of the 8th Regional Business Command on 11/17/06 at 316-681-1759 x1419

6. **Agency:** St. Charles County Recorder of Deeds
Address: 201 N 2nd, St. Charles, MO 63301
Institutional Controls to and Real Estate Licenses to Verify: Recorded real estate restrictions at the Recorder of Deeds Office or on the Internet at www.saintcharlescounty.org

Contact N/A N/A 11/20/06
Name Title Date Phone no.
Problems; suggestions; Report attached Verified on the website: www.saintcharlescounty.org that the Notation of Land Ownership was filed in Book 3754 Page 419.

7. **Agency:** St. Charles County Planning and Zoning Department **Contact Name:** Wayne Anthony
Address: 201 N 2nd, St. Charles, MO 63301
Institutional Controls to and Real Estate Licenses to Verify: Awareness of Restrictions
Contact Name Current yes no
Phone Number Current yes no same (new phone no. if applicable)

Contact same same 11/20/06 636-949-7900x7221
Name Title Date Phone no.
Problems; suggestions; Report attached Mr. Anthony verified that there were no planning and zoning activities in the quarter mile surrounding the chemical plant and quarry properties.

General	
1.	Land Use Changes On Site <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Remarks _____ _____ _____
2.	Land Use Changes Off Site <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Remarks <u>Not within quarter mile, nor any changes planned as verified by P&E.</u> _____ _____
VI. GENERAL SITE CONDITIONS	
1.	Roads <input checked="" type="checkbox"/> Location shown on site map <input checked="" type="checkbox"/> Roads adequate Remarks _____ _____ _____
2.	Vandalism <input type="checkbox"/> Location shown on site map <input type="checkbox"/> No vandalism noted Remarks <u>Historical marker #10 had been shot at, The rocks on the disposal cell are being moved.</u> <u>- Had a vandalism incident in April which was reported to the police</u> _____ _____
3.	Personal Injury Risks <input checked="" type="checkbox"/> Housekeeping maintained Remarks _____ _____ _____
4.	Site Markers (Four Information Plaques on Top of Cell, Historical Markers, and Other Information Markers) <input checked="" type="checkbox"/> Location shown on site map <input checked="" type="checkbox"/> Legible and Secure Remarks <u>Marker #10 vandalized.</u> <u>The corner of the SE informational plaque on top of the cell is eroding after being repaired.</u> _____ _____
5.	Guard Rail Around Cell <input checked="" type="checkbox"/> Location shown on site map <input checked="" type="checkbox"/> Secure Remarks _____ _____ _____

6.	Stairs to Top of Cell <input checked="" type="checkbox"/> Location shown on site map <input type="checkbox"/> Stairs in good condition <input checked="" type="checkbox"/> Handrail stable and in good condition Remarks _____ <i>Were ice covered during inspection on 12/5 and 12/6.</i> _____ _____
7.	Other Site Conditions: Remarks _____ _____ _____ _____ _____
VII. EROSION	
1.	Chemical Plant Areas <input type="checkbox"/> Location shown on site map <input type="checkbox"/> Erosion not evident Areal extent _____ Depth _____ Remarks <i>During both inspections erosion was noted in a few areas of the prairie. These areas include West, Northwest, Northeast and south east of the cell. An additional inspection of the prairie is recommended.</i> _____ _____
2.	Quarry Area <input type="checkbox"/> Location shown on site map <input checked="" type="checkbox"/> Erosion not evident Areal extent _____ Depth _____ Remarks _____ _____ _____ _____

VIII. CHEMICAL PLANT DISPOSAL CELL

1. **Settlement/Bulges** Location shown on site map Settlement not evident
 Areal extent _____ Depth _____

A. Annually: Walk along the grade break at the top of the side slopes, around the cell perimeter, and along 10 random transects across the cell surface. Inspect for local depressions, regional departures from planar surfaces, and shifts in intersections (vertices) of cell surface planes. Inspect for vertical shear of the cover layers indicated by sudden, abrupt steps that exceed an approximately 6-inch change of surface level over no more than 10 feet distance.

B. During 5-Year Review Inspections (Beginning 2005 and at 5-year Intervals): Conduct an aerial mapping survey with a vertical resolution not less precise than 0.5 feet. Produce and record maps and survey data for the cell surface represented by 1.0 foot contour intervals. Evaluate the data for indications of settlement. Consider the position and spacing of contour lines as indications of elevation change and possible settlement.

Remarks Inspectors walked the ten transects and observed
minor depression areas from previous inspections and
did not observe changes from past inspection.

2. **Rock Cover** Signs of degradation Signs of intrusion

A. Annually: During settlement monitoring inspection also visually inspect for departures from original rock conditions or from the previous inspection. Note observable discoloration on areas larger than 2,500 square feet, presence of finer materials at surface and apparent rock gradation changes. Document rock conditions annually with photographs.

B. During 5-Year Review Inspections (Beginning 2005 and at 5-year Intervals): Inspect cell cover for gradation changes by walking 10 randomly spaced transects across the cell. Concentrations of degraded, split, or weathered pieces of limestone will be mapped, photodocumented and visually assessed as a percentage of rock exposed within each mapped area. If degraded rock is evenly distributed, inspectors will estimate the overall percentage of degraded rock. If the amount of degraded rock appears to be increasing, based on a review of previous annual rock quality assessments, additional monitoring or gradation testing will be performed. If rock does not appear degraded, photodocumentation of several GPS located areas will establish rock conditions for future reference.

Remarks The 5 Rock Test Plots are photographed and inspected/
observed annually. The rocks do not appear degraded.
Photos of 2005 and 2006 are included in report for
comparison.

3. **Vegetative Growth** Weeds Plants

Trees/Shrubs

Remarks No vegetation was observed on the
disposal cell.

4.	Wet Areas/Water Damage <input type="checkbox"/> Wet areas <input type="checkbox"/> Ponding <input type="checkbox"/> Seeps	<input checked="" type="checkbox"/> Wet areas/water damage not evident <input type="checkbox"/> Location shown on site map <input type="checkbox"/> Location shown on site map <input type="checkbox"/> Location shown on site map	Areal extent _____ Areal extent _____ Areal extent _____
Remarks <u>No wet areas or water damage.</u>			
5.	Toe/Apron Drains Remarks <u>The toe/apron drains appeared in good condition.</u>	<input checked="" type="checkbox"/> Proper drainage <input type="checkbox"/> Silting <input type="checkbox"/> Evidence of erosion	
6.	Slope Instability Areal extent _____ Remarks _____	<input type="checkbox"/> Slides <input type="checkbox"/> Location shown on site map <input checked="" type="checkbox"/> No evidence of slope instability	
7.	Leachate Collection and Removal System <input checked="" type="checkbox"/> Properly secured/locked <input checked="" type="checkbox"/> LCRS flow rates <input checked="" type="checkbox"/> Sump Containment System (Burrito) flow rates <input checked="" type="checkbox"/> Alarm system functioning <u>N/A</u> <input checked="" type="checkbox"/> Compliance with MSD Agreement <input type="checkbox"/> Check alarm records (note any issues) <u>removed</u>	<input checked="" type="checkbox"/> Fence/Gates/Locks in good condition <input checked="" type="checkbox"/> Functioning <input checked="" type="checkbox"/> Routinely sampled <input checked="" type="checkbox"/> Review data trending and Action Leakage Rate review <input type="checkbox"/> Flow rate issues <input type="checkbox"/> Burrito flow rate issues <input type="checkbox"/> Methane Detection System functioning <u>N/A</u> <input checked="" type="checkbox"/> Review shipping records	
Remarks _____			
8.	Condition of 300 Ft. Buffer Zone <input checked="" type="checkbox"/> Vegetative growth of woody species (show location) Remarks <u>Some trees No trees noted in buffer zone</u>	<input type="checkbox"/> Evidence of erosion (shown on map)	
9.	Condition of Prairie <input checked="" type="checkbox"/> Evidence of erosion (shown on map) <input type="checkbox"/> Vegetative growth of woody species (show location) Remarks <u>See section VII.1.</u>		
IX. GROUNDWATER MONITORING			
1.	Disposal Cell Monitor Well Network <input checked="" type="checkbox"/> Properly secured/locked <input checked="" type="checkbox"/> Good condition <input checked="" type="checkbox"/> Proper ID on each well <input type="checkbox"/> Any issues with data trends (See Section II.2)	<input checked="" type="checkbox"/> Functioning <input checked="" type="checkbox"/> Sampled in accordance with LTS&M Plan <input type="checkbox"/> Evidence of surface water infiltration at casing <input type="checkbox"/> Acceptable quality of data	<input type="checkbox"/> Needs maintenance
Remarks <u>Inspected all wells.</u>			

2. **Chemical Plant Groundwater Monitor Well Network**
 Properly secured/locked Functioning Sampled in accordance with LTS&M Plan
 Good condition Evidence of surface water infiltration at casing Needs maintenance
 Acceptable quality of data Any issues with data trends (see Section II.2)
 List wells checked by number (> 10% of wells) MW-2012, 2023, 2024, 2032, 2045,
2046, 2051, 2053, 2025, 3039, 3040, 4001, 4006, 4007, 4011, 4027,
4034, 4036, 4040, 4041, 1004, 1005, 11W1
 Remarks _____

3. **Quarry Monitor Well Network**
 Properly secured/locked Functioning Sampled in accordance with LTS&M Plan
 Good condition Evidence of surface water infiltration at casing Needs maintenance
 Acceptable quality of data Any issues with data trends (see Section II.2)
 List wells checked by number (> 10% of wells) MW-1002, 1004, 1005, 1006, 1007,
1008, 1009, 1013, 1014, 1015, 1016, 1019, 1027, 1028, 1030, 1031,
1032, 1045, 1046, 1047, 1048, 1049, 1051, 1052
 Remarks _____

X. OVERALL OBSERVATIONS

A. Implementation of the Remedies
 Describe issues and observations relating to whether the remedies are effective and functioning as designed.
N/A

B. Adequacy of O&M
 Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedies.
N/A

C. Early Indicators of Potential Remedy Problems

Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs that suggest that the protectiveness of one or more of the remedies may be compromised in the future.

N/A

D. Opportunities for Optimization

Describe possible opportunities for optimization in monitoring tasks or the operation of the remedies.

N/A

Appendix D
LCRS Data

**SUMMARY OF HAULED LEACHATE TO ST. LOUIS MSD
FEBRUARY 2002 THROUGH OCTOBER 2006**

		Batch #	L001	L002	L003	L004	L005	L006	L007	L008	L009	L010	L011	L012
		Date Hauled	4-Feb-02	8-Mar-02	5-Apr-02	8-May-02	17-Jun-02	16-Jul-02	6-Aug-02	6-Sep-02	3-Oct-02	31-Oct-02	14-Nov-02	13-Dec-02
Parameter	Units	MSD Limit												
Leachate Volume	gallons	25,000 gal/mo	10,000	11,168	8,557	10,981	11,387	8388	5601	9291	8524	7370	3004	9016
Purge Water Volume	gallons	Combined Total****	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
COD	mg/l	Monitor	27	34	26	24	15	26	36	36	28	25	25	33
TSS	mg/l	Monitor	45	28	16	12	45	53	47	68	48	50	47	12
Arsenic	mg/l	Monitor	0.0015	ND (0.0012)	ND (0.0024)	ND (0.010)	0.004	0.0032	0.0067	0.0086	0.0084	ND (0.0100)	ND (0.010)	ND (0.010)
Barium	mg/l	Monitor	0.592	0.509	0.554	0.511	0.815	0.844	0.407	1.09	1.03	1.03	1.07	0.743
Copper	mg/l	Monitor	ND (0.0054)	ND (0.0014)	ND (0.0019)	0.0074	0.0033	0.0048	ND (0.0077)	ND (0.0077)	ND (0.0077)	ND (0.0250)	ND (0.025)	ND (0.025)
Iron	mg/l	Monitor	14.1	10.1	5.68	5.01	19.4	13.2	17.3	27.9	21.7	23.8	21	4.54
Lead	mg/l	Monitor	ND (0.00099)	ND (0.00099)	ND (0.0021)	ND (0.003)	ND (0.0021)	ND (0.003)	ND (0.0016)	ND (0.0016)	ND (0.0016)	ND (0.0030)	ND (0.003)	ND (0.003)
Chromium	mg/l	Monitor	ND (0.00073)	ND (0.00073)	ND (0.0013)	ND (0.010)	ND (0.013)	ND (0.010)	ND (0.0020)	ND (0.0020)	ND (0.002)	ND (0.0100)	ND (0.010)	ND (0.010)
Mercury	mg/l	Monitor	ND (0.00010)	ND (0.00010)	ND (0.00010)	ND (0.0002)	ND (0.00010)	0.00046	0.00018	ND (0.00010)	ND (0.0001)	ND (0.0020)	ND (0.0002)	ND (0.0002)
Nickel	mg/l	Monitor	0.0107	0.0104	0.0069	0.0087	0.0109	0.0094	ND (0.0120)	ND (0.0120)	ND (0.0120)	ND (0.0400)	ND (0.040)	ND (0.040)
Selenium	mg/l	Monitor	ND (0.0012)	ND (0.0012)	ND (0.0022)	ND (0.005)	ND (0.0022)	ND (0.005)	ND (0.0012)	ND (1.0012)	ND (0.0012)	ND (0.0050)	ND (0.005)	ND (0.0005)
Silver	mg/l	Monitor	ND (0.0070)	ND (0.0017)	ND (0.001)	ND (0.010)	ND (0.0010)	ND (0.0010)	ND (0.0060)	ND (0.0060)	ND (0.0060)	ND (1.0100)	ND (0.010)	ND (0.010)
Zinc	mg/l	Monitor	0.0277	0.0193	0.0126	0.0103	0.0109	0.0197	0.0054	0.0088	0.022	ND (0.0200)	ND (0.020)	ND (0.020)
VOA's	ug/l	Monitor	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gross Alpha	pCi/l	Monitor	57.2 ± 10.0	55.8 ± 5.50	66.7 ± 5.84	64.9 ± 7.69	34.6 ± 4.70	37.7 ± 4.75	62.3 ± 11.2	28.1 ± 3.46	25.8 ± 2.91	16.8 ± 2.16	30.0 ± 3.17	39.9 ± 3.7
Uranium, Total	pCi/l	3000	46.8 ± 0.515	55.7 ± 0.076	57.3	34.0 ± 0.393	40.3 ± 0.745	33.4 ± 0.472	33.9 ± 0.839	31.1 ± 0.765	27.8 ± 0.684	16.0 ± 0.179	40.2 ± 0.567	32.09 ± 0.437
Uranium, Total Filtered	pCi/l	Monitor	47.5 ± 0.525	53.5 ± 0.562	56.3	38.9 ± 4.5	40.9 ± 0.751	35.5 ± 0.435	34.3 ± 0.846	31.0 ± 0.765	29 ± 0.724	18.4 ± 0.203	41.0 ± 0.578	30.3 ± 0.391
Thorium - 228	pCi/l	2000	0.336 ± 0.153	ND(0.291)	0.009 ± 0.102	ND(0.263)	0.040 ± 0.064	0.123 ± 0.133	ND (0.178)	ND (0.146)	ND (0.202)	ND (0.425)	ND (0.132)	ND (0.203)
Thorium - 230	pCi/l	1000	ND(0.620)	0.081 ± 0.113	0.326 ± 0.183	0.269 ± 0.150	ND(0.412)	0.148 ± 0.186	ND (0.318)	ND (0.360)	ND (0.511)	ND (0.780)	ND (0.392)	ND (0.268)
Thorium - 232	pCi/l	250	0.246 ± 0.122	0.051 ± 0.087	0.068 ± 0.085	ND(0.148)	0.060 ± 0.067	0.170 ± 0.129	ND (0.087)	ND (0.143)	ND (0.206)	ND (0.384)	ND (0.132)	ND (0.186)
Radium - 226	pCi/l	10	0.073 ± 0.286	0.162 ± 0.150	0.329 ± 0.265	0.315 ± 0.131	0.195 ± 0.127	0.112 ± 0.095	0.454 ± 0.138	0.497 ± 0.201	0.511 ± 0.169	0.506 ± 0.136	0.430 ± 0.198	0.248 ± 0.132
Radium - 228	pCi/l	30	0.455 ± 0.043	0.635 ± 0.068	0.809 ± 0.046	1.37 ± 0.050	1.31 ± 0.045	0.77 ± 0.047	ND (0.469)	ND (0.469)	ND (0.469)	ND (0.133)	ND (0.133)	1.81 ± 0.050
Americium - 241	pCi/l	150	ND (0.245)	ND(0.749)	ND(0.378)	0.223 ± 0.123	0.063 ± 0.166	0.105 ± 0.093	0.231 ± 0.152	ND (0.233)	ND (0.0879)	ND (0.259)	ND (0.389)	ND (0.332)
Neptunium - 237	pCi/l	150	0.035 ± 0.109	0.755 ± 0.246	0.131 ± 0.098	ND(0.083)	0.157 ± 0.083	0.007 ± 0.075	ND (0.271)	1.01 ± 0.285	ND (0.146)	ND (0.175)	0.882 ± 0.321	0.728 ± 0.202
Plutonium - 238	pCi/l	200	0.077 ± 0.163	ND (0.171)	0.064 ± 0.062	0.058 ± 0.065	0.050 ± 0.084	0.007 ± 0.075	ND (0.343)	ND (0.213)	ND (0.273)	ND (0.645)	ND (0.232)	ND (0.445)
Plutonium - 239/240	pCi/l	150	0.086 ± 0.101	0.975 ± 0.454	0.157 ± 0.073	0.058 ± 0.053	0.054 ± 0.050	0.029 ± 0.054	ND (0.137)	ND (0.246)	ND (0.315)	ND (0.645)	ND (0.307)	ND (0.225)
Technetium - 99	pCi/l	6000	0.770 ± 0.461	0.169 ± 0.240	ND(0.626)	0.523 ± 0.642	0.411 ± 0.487	0.122 ± 0.546	ND (1.42)	ND (1.83)	1.18 ± 0.717	1.33 ± 0.739	ND (1.66)	ND (1.77)
Sum of the Ratios		<1.0	0.020	0.031	0.024	0.017	0.018	0.017	0.016	0.019	0.013	0.010	0.021	0.020

ND = Not Detected

() = Detection Limit

* = Batch monitoring revised to Annual Monitoring by MSD

** = No longer Required by MSD

*** = collected on 5/2/05

**** = revised to 25,000 gallons per month on 9/13/04

**SUMMARY OF HAULED LEACHATE TO ST. LOUIS MSD
FEBRUARY 2002 THROUGH OCTOBER 2006**

		Batch #	L013	L014	L015	L016	L017	L018	L019	L020	L021	L022	L023	L024	L025	L026	L027
		Date Hauled	21-Jan-03	3-Mar-03	1-Apr-03	5-May-03	11-Jun-03	16-Jul-03	26-Aug-03	6-Oct-03	13-Nov-03	18-Dec-03	29-Jan-04	10-Mar-04	22-Apr-04	7-Jun-04	19-Jul-04
Parameter	Units	MSD Limit															
Leachate Volume	gallons	25,000 gal/mo	9,683	8,802	8,887	8,656	8,617	8897	9895	9000	8878	7757	9,076	8,828	8,940	8,736	8,760
Purge Water Volume	gallons	Combined Total****	0	0	0	0	101	0	107	0	88.6	0	0	0	0	206	75
COD	mg/l	Monitor	21	31	29	28	20	23	20	33	30	44	35	26	32	31	22
TSS	mg/l	Monitor	16	38.8	22	21.2	15.7	32.8	25.5	39.5	42.5	34	22	12	30	4	23
Arsenic	mg/l	Monitor	ND (0.010)	0.0043	0.0018	0.0024	0.0015	0.0038	0.0036	0.0075	0.004	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
Barium	mg/l	Monitor	0.803	0.975	0.829	0.811	0.784	0.996	1	1.15	1.16	1.03	1.01	0.883	0.991	0.859	1.1
Copper	mg/l	Monitor	ND (0.025)	0.0019	0.0373	0.0148	0.0013	0.0013	0.001	0.17	D (0.000556)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
Iron	mg/l	Monitor	6.51	18.4	10	10.7	6.14	15.2	12.6	20.5	21.6	14.2	11.7	6.9	10.6	2.82	12.9
Lead	mg/l	Monitor	ND (0.003)	D (0.000111)	D (0.000111)	0.00019	D (0.000111)	0.00087	0.00013	0.0019	0.00048	ND (0.003)	ND (0.003)	ND (0.003)	ND (0.003)	ND (0.003)	ND (0.003)
Chromium	mg/l	Monitor	ND (0.010)	D (0.000889)	D (0.000889)	ND (0.00089)	ND (0.00089)	D (0.000889)	D (0.000889)	ND (0.556)	D (0.000556)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
Mercury	mg/l	Monitor	ND (0.0002)	ND (0.0002)	ND (0.0002)	ND (0.0002)	ND (0.0002)	ND (0.001)	ND (0.0001)	ND (0.0001)	ND (0.0001)	ND (0.0002)	ND (0.002)	ND (0.0002)	ND (0.0002)	ND (0.0002)	ND (0.0002)
Nickel	mg/l	Monitor	ND (0.040)	0.0082	0.0074	0.0063	0.0055	0.0082	0.0057	0.0059	0.0072	ND (0.010)	0.0101	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
Selenium	mg/l	Monitor	ND (0.005)	0.00055	0.00067	0.00051	0.00057	0.00057	0.00042	0.00047	0.00056	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)
Silver	mg/l	Monitor	ND (0.010)	D (0.000111)	0.00052	0.00011	ND (0.00011)	0.0002	0.0003	ND (0.00011)	D (0.000111)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
Zinc	mg/l	Monitor	ND (0.020)	ND (0.00111)	0.0032	ND (0.00089)	ND (0.00089)	(0.000889)	0.0017	ND (0.00178)	ND (0.00178)	ND (0.020)	ND (0.020)	ND (0.020)	ND (0.020)	ND (0.020)	ND (0.020)
VOA's	ug/l	Monitor	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gross Alpha	pCi/l	Monitor	31 ± 3.5	11.1 ± 6.93	14.7 ± 6.68	22.6 ± 6.89	9.48 ± 6.08	18.7 ± 9.38	11.5 ± 6.49	9.67 ± 3.69	7.76 ± 3.58	10.8 ± 5.7	11.5 ± 5.3	16.8 ± 8.1	23.3 ± 9.8	22 ± 10	22 ± 12
Uranium, Total	pCi/l	3000	33.6 ± 0.373	36.3	31.8	30.6	25.6	25.2	21.4	21.4	17.5	13.9	13.94	17.41	16.66	25.704	22.9
Uranium, Total Filtered	pCi/l	Monitor	34.9 ± 0.397	*	*	*	*	*	*	*	*	*	13.06	*	*	*	*
Thorium - 228	pCi/l	2000	0.112 ± 0.061	ND (0.16)	ND ((0.176)	ND (0.083)	ND (0.102)	ND (0.041)	ND (0.013)	ND (0.177)	ND (0.133)	ND (0.41)	ND (0.29)	ND (0.30)	ND (0.19)	ND (0.067)	ND (0.30)
Thorium - 230	pCi/l	1000	ND(0.309)	0.205 ± 0.075	0.199 ± 0.077	0.148 ± 0.054	0.144 ± 0.054	0.181 ± 0.07	0.13 ± 0.059	0.161 ± 0.072	0.294 ± 0.083	ND (0.26)	0.38 ± 0.22	0.29 ± 0.19	0.22 ± 0.16	0.34 ± 0.19	0.36 ± 0.2
Thorium - 232	pCi/l	250	ND (0.161)	ND (0.056)	ND (0.042)	ND (0.024)	ND (0.037)	ND (0.041)	ND (0.058)	ND (0.048)	ND (0.039)	ND (0.30)	ND (0.14)	ND (0.2)	ND (0.12)	ND (0.1)	0.11 ± 0.12
Radium - 226	pCi/l	10	0.359 ± 0.148	0.59 ± 0.11	0.47 ± 0.11	0.39 ± 0.09	0.42 ± 0.1	0.26 ± 0.11	0.59 ± 0.12	0.75 ± 0.12	0.63 ± 0.11	0.60 ± 0.19	0.52 ± 0.25	0.43 ± 0.18	0.69 ± 0.23	0.44 ± 0.16	0.42 ± 0.15
Radium - 228	pCi/l	30	ND (0.133)	1.28 ± 0.54	0.99 ± 0.5	ND (0.89)	ND (0.87)	ND (0.84)	ND (0.92)	0.97 ± 0.49	ND (0.78)	ND (0.98)	ND (0.84)	0.96 ± 0.46	ND (0.48)	ND (0.92)	0.87 ± 0.45
Americium - 241	pCi/l	150	ND (0.544)	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Neptunium - 237	pCi/l	150	ND (0.248)	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Plutonium - 238	pCi/l	200	0.330 ± 0.196	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Plutonium - 239/240	pCi/l	150	ND (0.219)	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Technetium - 99	pCi/l	6000	2.23 ± 0.943	**	**	**	**	**	**	**	**	**	**	**	**	**	**
Sum of the Ratios		<1.0	0.016	0.016	0.013	0.012	0.011	0.010	0.009	0.0103	0.0079	0.0072	0.0069	0.0088	0.0076	0.0106	0.0106

ND = Not Detected

() = Detection Limit

* = Batch monitoring revised to Annual Monitoring by MSD

** = No longer Required by MSD

*** = collected on 5/2/05

**** = revised to 25,000 gallons per month on 9/13/04

**SUMMARY OF HAULED LEACHATE TO ST. LOUIS MSD
FEBRUARY 2002 THROUGH OCTOBER 2006**

		Batch #	L028	L029	L030	L031	L032	L033	L034	L035	L036
		Date Hauled	15-Sep-04	8-Dec-05	7-Mar-05	6-Jun-05	12-Sep-05	12-Dec-06	8-Mar-06	15-Jun-06	2-Oct-06
Parameter	Units	MSD Limit									
Leachate Volume	gallons	25,000 gal/mo	11,630	16,070	17,738	16,325	15,630	16,043	13,807	15,793	15,643
Purge Water Volume	gallons	Combined Total****	41.8	0	57	151	103	37	104	55	15
COD	mg/l	Monitor	15	16	22	21	21	19	21	34	42
TSS	mg/l	Monitor	14	6	<1.0	6	2	4	4	13	9
Arsenic	mg/l	Monitor	0.004	0.002	0.0026	0.032	ND (0.001)	ND (0.002)	ND (0.002)	0.0036	0.0023
Barium	mg/l	Monitor	0.812	0.75	0.681	0.975	0.782	0.681	0.709	0.741	0.843
Copper	mg/l	Monitor	ND (0.010)	0.006	0.007	ND (0.001)	ND (0.001)	0.004	0.0008	ND (0.003)	0.0009
Iron	mg/l	Monitor	4.8	3.25	0.078	2.45	0.319	ND (0.007)	0.399	0.278	2
Lead	mg/l	Monitor	ND (0.002)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0005)	ND (0.002)	ND (0.005)
Chromium	mg/l	Monitor	ND (0.010)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.004)	ND (0.001)	ND (0.003)	ND (0.003)
Mercury	mg/l	Monitor	ND (0.0001)	ND (0.0001)	ND (0.00005)	ND (0.0001)	ND (0.0001)	ND (0.0001)	ND (0.0001)	ND (0.0001)	ND (0.0001)
Nickel	mg/l	Monitor	ND (0.010)	ND (0.007)	0.006	0.0067	0.005	0.006	0.0065	ND (0.008)	0.006
Selenium	mg/l	Monitor	ND (0.005)	ND (0.002)	0.002	ND (0.002)	ND (0.002)	0.002	0.0023	ND (0.003)	0.0012
Silver	mg/l	Monitor	ND (0.010)	ND (0.001)	ND (0.001)	ND (0.0026)	ND (0.0026)	ND (0.002)	ND (0.0002)	ND (0.005)	ND (0.0002)
Zinc	mg/l	Monitor	ND (0.020)	ND (0.009)	ND (0.011)	0.0327	0.005	ND (0.007)	0.012	0.012	0.0047
VOA's	ug/l	Monitor	**	**	**	**	**	**	**	**	**
Gross Alpha	pCi/l	Monitor	ND (5.7)	ND (3.4)	ND (6.4)	ND (5.9)	ND (3.8)	ND (2.8)	ND (2.0)	ND (3.8)	ND (7.3)
Uranium, Total	pCi/l	3000	ND (6.8)	ND (0.41)	0.68	0.286	1	1.97	0.884	1.156	2.24
Uranium, Total Filtered	pCi/l	Monitor	*	*	*	1.0***	*	*	0.884	*	*
Thorium - 228	pCi/l	2000	ND (0.13)	ND (0.16)	ND (0.05)	ND (0.13)	ND (0.021)	ND (0.21)	ND (0.03)	ND (0.07)	ND (0.48)
Thorium - 230	pCi/l	1000	0.17 ± 0.13	0.25 ± 0.16	0.35 ± 0.26	0.14 ± 0.13	0.24 ± 0.15	ND (0.18)	0.5 ± 0.3	0.17 ± 0.13	ND (0.17)
Thorium - 232	pCi/l	250	ND (0.090)	ND (0.024)	ND (0.00)	ND (0.002)	ND (0.018)	ND (0.001)	ND (0.001)	ND (0.06)	ND (0.14)
Radium - 226	pCi/l	10	0.32 ± 0.19	0.58 ± 0.21	ND(0.22)	0.58 ± 0.22	0.32 ± 0.14	0.34 ± 0.16	0.41 ± 0.2	0.26 ± 0.14	0.5 ± 0.2
Radium - 228	pCi/l	30	1.26 ± 0.45	0.52 ± 0.6	1.23 ± 0.69	0.82 ± 0.47	1.07 ± 0.57	0.66 ± 0.41	0.93 ± 0.6	0.54 ± 0.39	0.95 ± 0.42
Americium - 241	pCi/l	150	**	**	**	**	**	**	**	**	**
Neptunium - 237	pCi/l	150	**	**	**	**	**	**	**	**	**
Plutonium - 238	pCi/l	200	**	**	**	**	**	**	**	**	**
Plutonium - 239/240	pCi/l	150	**	**	**	**	**	**	**	**	**
Technetium - 99	pCi/l	6000	**	**	**	**	**	**	**	**	**
Sum of the Ratios		<1.0	0.0041	0.0022	0.0031	0.0026	0.0030	0.0026	0.0030	0.0021	0.0040

ND = Not Detected

() = Detection Limit

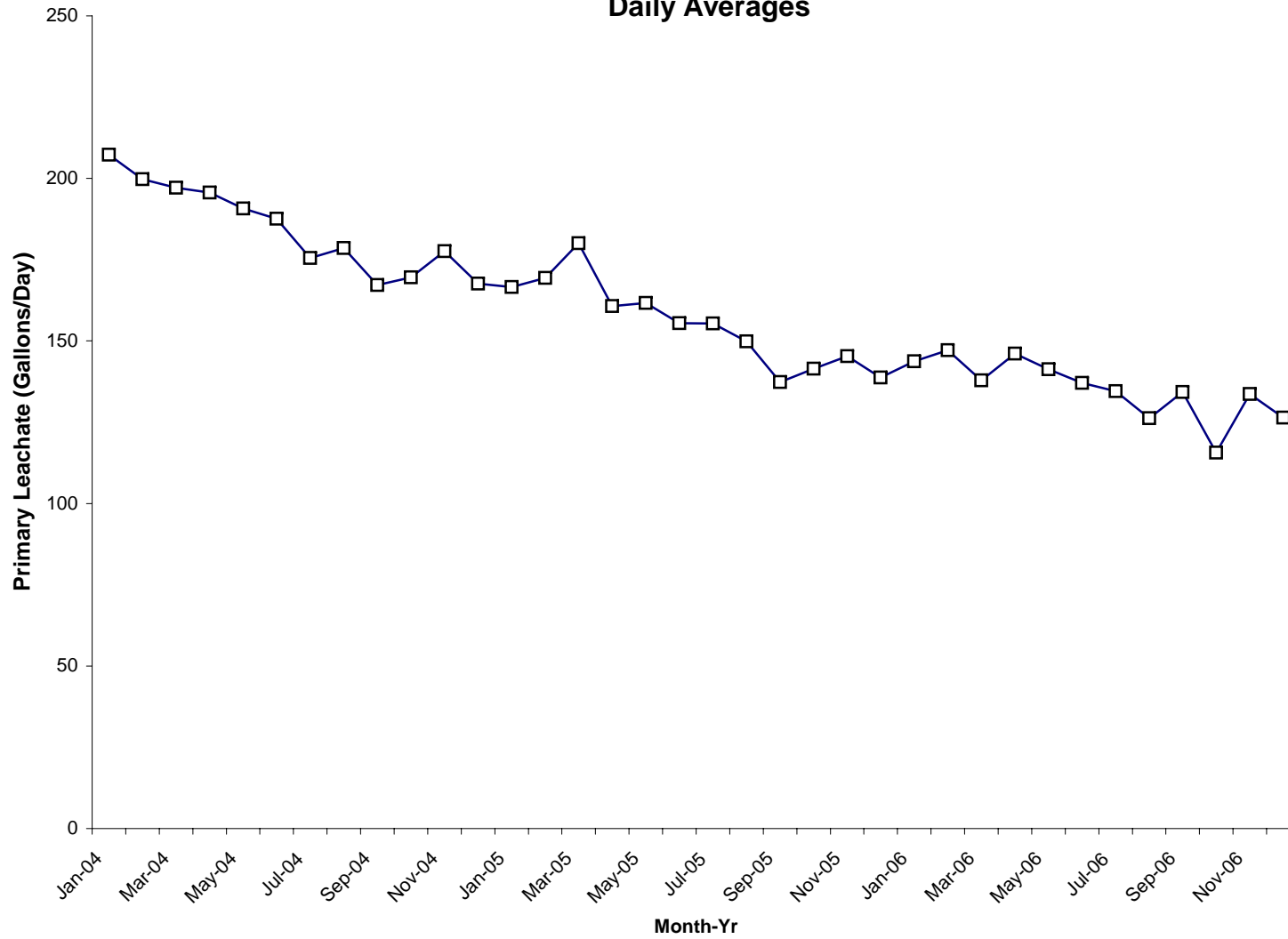
* = Batch monitoring revised to Annual Monitoring by MSD

** = No longer Required by MSD

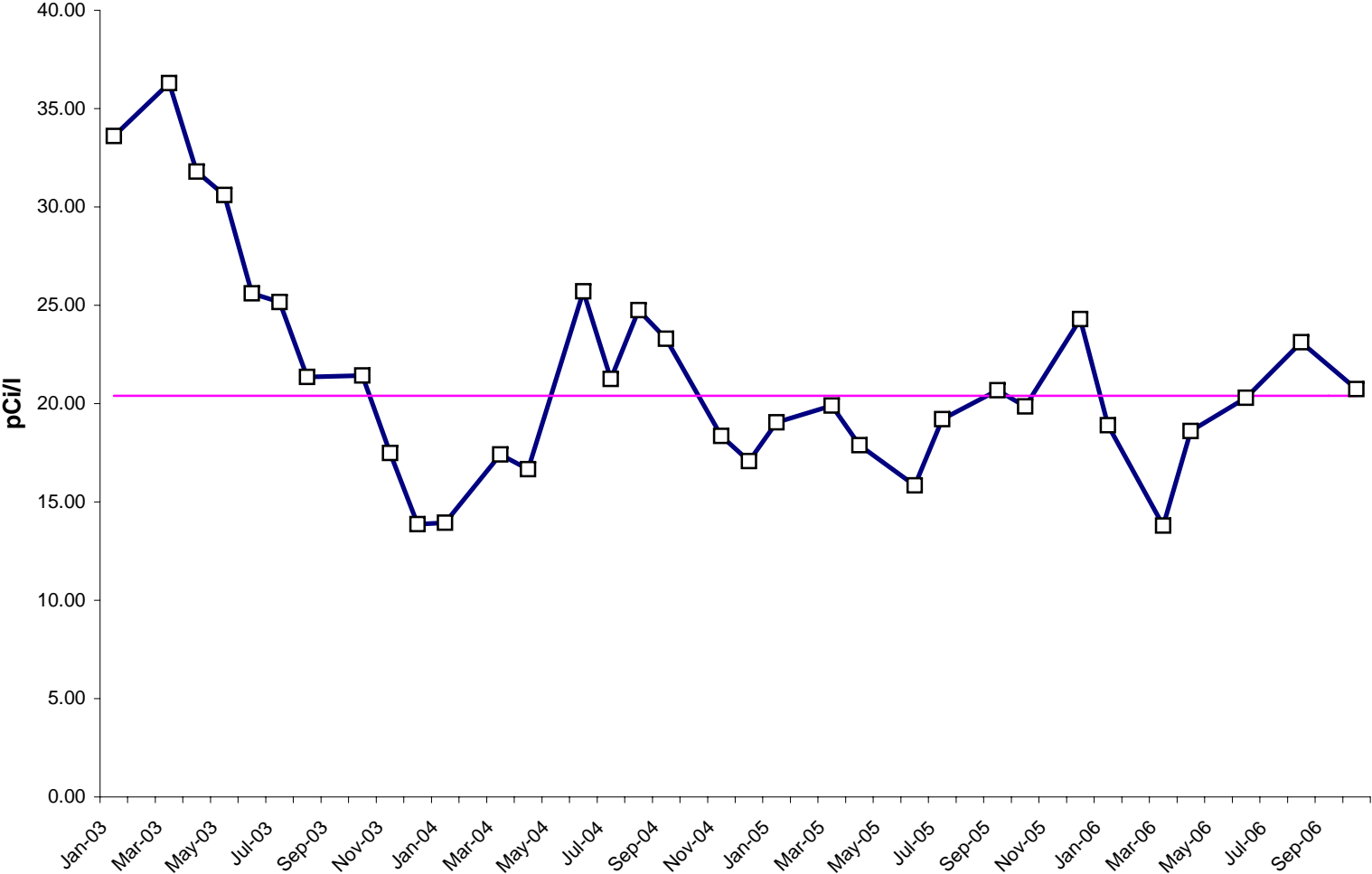
*** = collected on 5/2/05

**** = revised to 25,000 gallons per month on 9/13/04

PRIMARY LEACHATE FLOW Daily Averages



Total Uranium Levels in the Primary Leachate



Appendix E
Interviews and Contacts

INTERVIEW RECORD

Site Name: Weldon Spring Site	EPA ID No.: MO6210022830	
Subject: Annual Inspection	Time: 11:00	Date: 12/4/06
Type: <input type="checkbox"/> Telephone <input checked="" type="checkbox"/> Visit <input type="checkbox"/> Other	<input type="checkbox"/> Incoming <input type="checkbox"/> Outgoing	
Location of Visit: Interpretive Center		

Contact Made By:

Name: Terri Uhlmeyer	Title: Compliance Manager	Organization: S.M. Stoller, Corp.
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Individual Contacted:

Name: Yvonne Deyo	Title: Project Manager	Organization: S.M. Stoller, Corp.
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Telephone No: 636-300-0012	Street Address: 7295 Hwy. 94 South
Fax No: 636-300-0068	
E-Mail Address: yvonne.deyo@gjo.doe.gov	
City, State, Zip: St. Charles, MO 63304	

Summary Of Conversation

I interviewed Yvonne Deyo, the S.M. Stoller Project Manager at the Weldon Spring Site. The interviewing of the Project Manager is a requirement included in the Annual Inspection Checklist. Most of the interview questions were from the CERCLA Five-year Review Guidance.

1. **Current Status of the Project:** Long-term surveillance and maintenance.
2. **Any problems encountered with the remedies?** None at this time.
3. **Are the remedies functioning as expected?** Yes.
4. **Any vandalism or trespassing issues?** Trespassing is not an issue due to the site being completely publicly accessible. Public use of the site continues to rise and minor littering occurs at various locations including at the top of the disposal cell. Minor moving of the rocks on top of the disposal cell also occurs. Defacing of the bronze plaques at the top of the cell has occurred, although this damage was easily repaired. A vandalism incident occurred on April 28 resulting in the theft of site flags, damage of signs and the picnic canopy behind the Interpretive Center, and extensive littering. An upgraded site security system is being evaluated.
5. **What is the current on-site presence? Describe staff and activities.** There are 7 full-time contractor employees and 11 part-time contractor and subcontractor employees. Activities include long-term surveillance and maintenance operations, project management, data evaluation, operation of interpretive center, preparation of site-related regulatory documents, support in development of institutional controls, and general administrative support. Also providing support on other DOE projects, such as Mound and Fernald.
6. **Are there any issues associated with the site at this time?** The high degree of public use has resulted in regular vandalism at the site. Although none of the vandalism to date has been of a serious nature, a proactive approach to discouraging this type of behavior may be warranted in order to prevent future property destruction and reduce possible safety issues for site personnel and visitors. As stated above in question 4, an upgraded site security system is being evaluated.
7. **Any suggestions or comments regarding annual inspection?** None

INTERVIEW RECORD

Site Name: Weldon Spring Site		EPA ID No.: MO6210022830	
Subject: Annual Inspection		Time: 10:30	Date: 11/16/06
Type: <input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Visit <input type="checkbox"/> Other		<input type="checkbox"/> Incoming <input checked="" type="checkbox"/> Outgoing	
Location of Visit:			
Contact Made By:			
Name: Terri Uhlmeyer		Title: Compliance Manager	Organization: SM Stoller, Corp.
Individual Contacted:			
Name: Chris Greiner		Title: Principal	Organization: Francis Howell High School
Telephone No: 636-851-478		Street Address: 7001 Hwy 94 South	
Fax No:		City, State, Zip: St. Charles, MO 63304	
E-Mail Address:			
Summary Of Conversation			
<p>I contacted Chris Greiner, the new principal of Francis Howell High School, and explained that DOE would be conducting an annual Long-Term Surveillance and Maintenance inspection each year and as part of the inspection we would be contacting certain stakeholders, such as the Francis Howell High School to maintain contact with them and to determine if they had any concerns or issues about the site. I gave Mr. Greiner a brief history of the site and asked if he had any issues and concerns about the site and he stated that he did not, but would call if he did. I discussed our educational programs with Mr. Greiner and told him we had many field trips and tours from schools at the site. I gave him my phone number and told him to call me with any concerns or questions he might have. I also informed him about our interpretive center and that he could come over any time to tour it.</p>			

INTERVIEW RECORD

Site Name: Weldon Spring Site		EPA ID No.: MO6210022830	
Subject: Annual Inspection		Time: 10:00	Date: 11/14/06
Type: <input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Visit <input type="checkbox"/> Other		<input type="checkbox"/> Incoming <input checked="" type="checkbox"/> Outgoing	
Location of Visit:			

Contact Made By:

Name: Terri Uhlmeier	Title: Compliance Manager	Organization: SM Stoller, Corp.
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Individual Contacted:

Name: Helene Diller	Title: Administrative Asst.	Organization: WSCC
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Telephone No: 636-300-0037	Street Address: 7295 Hwy. 94 South City, State, Zip: St. Charles, MO 63304
Fax No:	
E-Mail Address:	

Summary Of Conversation

I contacted Helene Diller, the administrative assistant for the Weldon Spring Citizens Commission, to officially notify her of the annual inspection to take place on December 5 and 6, 2006. Helene and the commission had been notified informally of the dates approximately 30 days ago, and by copy of the 30-day notice letter that was sent to the EPA and MDNR.

INTERVIEW RECORD

Site Name: Weldon Spring Site		EPA ID No.: MO6210022830	
Subject: Annual Inspection		Time: 12:45 pm	Date: 11/17/06
Type: <input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Visit <input type="checkbox"/> Other		<input type="checkbox"/> Incoming <input checked="" type="checkbox"/> Outgoing	
Location of Visit:			

Contact Made By:

Name: Terri Uhlmeyer	Title: Compliance Manager	Organization: SM Stoller, Corp.
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Individual Contacted:

Name: Joel Porath	Title: Wildlife Regional Supv.	Organization: August A. Busch Memorial Conservation Area, Missouri Department of Conservation
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Telephone No: 636-441-4554	Street Address: 2360 Hwy D City, State, Zip: St. Charles, MO 63304
Fax No:	
E-Mail Address:	

Summary Of Conversation

I contacted Joel Porath and notified him of the Weldon Spring Site's LTS&M annual inspection on December 5 and 6, 2006. I discussed the pending institutional controls that DOE is working on with the MDC, such as the planned easement and that these are under negotiation at this time. I told him that we would be on MDC property inspecting the Southeast Drainage, Burgermeister Spring, Spring 6303 and MW -4041. I told him that we had been keeping John Vogel informed of the inspection and that he would be participating in portions of the inspection. Joel said that he might also participate and I told him I would send him a copy of the agenda.

INTERVIEW RECORD

Site Name: Weldon Spring Site		EPA ID No.: MO6210022830	
Subject: Annual Inspection		Time: 3:30	Date: 11/15/06
Type: <input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Visit <input type="checkbox"/> Other		<input type="checkbox"/> Incoming <input checked="" type="checkbox"/> Outgoing	
Location of Visit:			
Contact Made By:			
Name: Terri Uhlmeyer		Title: Compliance Manager	Organization: SM Stoller, Corp.
Individual Contacted:			
Name: Mike Duvall		Title: Director, Env. Services	Organization: St. Charles County
Telephone No: 636-949-7583		Street Address: 201 North Second Street, Suite 537	
Fax No:		City, State, Zip: St. Charles, MO 63301	
E-Mail Address:			
Summary Of Conversation			
<p>I contacted Mike Duvall, Director of Environmental Services for St. Charles County to notify him of the annual inspection that was going to take place on December 5 and 6, 2006. I told Mr. Duvall that I would email him a copy of the agenda in case he would like to attend. I asked him if he had any concerns or issues about the site and he stated that in his opinion it was a well conducted and communicated site and that St. Charles County wanted to continue their involvement with the site.</p>			

INTERVIEW RECORD

Site Name: Weldon Spring Site	EPA ID No.: MO6210022830	
Subject: Annual Inspection	Time: 10:00	Date: 11/20/06
Type: <input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Visit <input type="checkbox"/> Other	<input type="checkbox"/> Incoming <input checked="" type="checkbox"/> Outgoing	
Location of Visit:		

Contact Made By:

Name: Terri Uhlmeyer	Title: Compliance Manager	Organization: SM Stoller, Corp.
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Individual Contacted:

Name: Nelson Jones	Title: Facility Manager	Organization: Army
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Telephone No: 636-329-1200	Street Address: 7301 Hwy. 94 South
Fax No:	City, State, Zip: St. Charles, MO 63304
E-Mail Address:	

Summary Of Conversation

I contacted Nelson Jones of the 89th Regional Readiness Command at the Weldon Spring Army site and notified him that DOE would be conducting the annual LTS&M inspection at the Weldon Spring Site on December 5 and 6. I informed Mr. Jones DOE conducts an annual Long-Term Surveillance and Maintenance inspection each year and as part of the inspection we contact certain stakeholders to maintain contact with them and to determine if they had any concerns or issues about the site. In the past I had contacted the Facility Manager, Roy Stevenson, but he was out the day I called I told him we would be driving around on the Army site and inspecting our wells and survey monuments and pins. He said we should check in at the gate. I asked if there was anything going on at the Army during that time that would preclude our inspection and he said there was not. I also asked him if the Army planned to do any road construction or changes or any other construction in the area. He said that there were plans to build a Naval Reserve Building.

INTERVIEW RECORD

Site Name: Weldon Spring Site		EPA ID No.: MO6210022830	
Subject: Annual Inspection		Time: 8:00 am	Date: 11/28/06
Type: <input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Visit <input type="checkbox"/> Other		<input type="checkbox"/> Incoming <input checked="" type="checkbox"/> Outgoing	
Location of Visit:			
Contact Made By:			
Name: Terri Uhlmeyer		Title: Compliance Manager	Organization: SM Stoller, Corp.
Individual Contacted:			
Name: Wayne Anthony		Title:	Organization: St. Charles Planning and Zoning Department
Telephone No: 636-949-7900 x7221		Street Address:	
Fax No:		City, State, Zip:	
E-Mail Address:			
Summary Of Conversation			
<p>I contacted Wayne Anthony of the St. Charles Planning and Zoning Department on November 27, 2006. Mr. Anthony had been the project's previous contact in this department in regards to the county's master plan. I informed Mr. Anthony that DOE would be conducting their annual LTS&M inspection on December 5 and 6 and I asked him if there were any planning and zoning activities currently in the one-quarter mile surrounding the chemical plant and quarry properties. Mr. Anthony said he was pretty sure there were not, but he would check and get back to be. He contacted me the next morning and verified that there were not any such activities in this area at this time.</p>			

INTERVIEW RECORD

Site Name: Weldon Spring Site		EPA ID No.: MO6210022830	
Subject: Annual Inspection		Time: 3:00 pm	Date: 11/15/06
Type: ___ Telephone <input checked="" type="checkbox"/> Visit ___ Other Location of Visit: Weldon Spring Site		___ Incoming ___ Outgoing	
Contact Made By:			
Name: Terri Uhlmeyer	Title: Compliance Manager	Organization: SM Stoller, Corp.	
Individual Contacted:			
Name: Randy Thompson	Title: Data Manager	Organization: SM Stoller, Corp.	
Telephone No: 636-926-7040 Fax No: 636-447-0803 E-Mail Address: randy.thompson@gjo.doe.gov		Street Address: Weldon Spring Site City, State, Zip:	

Summary Of Conversation

I interviewed Randy Thompson, Data Manager at the Weldon Spring Site. The interviewing of the data manager is a requirement included in the Annual Inspection Checklist.

1. **What is the current status of data validation/reporting?** Data validation and review is being completed for data through August 2006. The completion of data validation reports has been issued through March 2006 data. The April through June 2006 and the July through September 2006 reports are in the review process and will be issued soon.
2. **How is the data reported?** After data review and validation the qualification flags are applied and the data is then available on the website the next day. We continue to prepare quarterly data validation reports and the yearly data is summarized in the annual environmental report.
3. **What is the current status of the data on the website? Are we meeting our 90-day commitment as stated in the LTSM?** Yes, we are meeting our 90-day commitment. The data are reviewed and validated through August 2006 and are available online. The October 2006 data is being validated and will be available on the website within the next week or so.
4. **Are there any trends that show contaminants increasing or decreasing?** Some wells are trending up and some are trending down. The quarterly data validation reports briefly discuss trends and a more thorough trend analysis is performed and documented in the annual environmental report.

INTERVIEW RECORD

Site Name: Weldon Spring Site		EPA ID No.: MO6210022830	
Subject: Annual Inspection		Time: 11:00	Date: 11/15/06
Type: <input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Visit <input type="checkbox"/> Other		<input type="checkbox"/> Incoming <input checked="" type="checkbox"/> Outgoing	
Location of Visit:			

Contact Made By:

Name: Terri Uhlmeyer	Title: Compliance Manager	Organization: SM Stoller, Corp.
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Individual Contacted:

Name: Cindy	Title:	Organization: Simplex/Grinnell
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Telephone No: 888-746-7539	Street Address: City, State, Zip:
Fax No:	
E-Mail Address: csdataentry@tycoint.com	

Summary Of Conversation

I contacted Simplex/Grinnell, the alarm company for the project, and talked to Cindy. I verified that they had the correct three people as contacts and that they also had the correct work, home and cell number for each person. Brendan McGhee's home phone number has changed this year, so I told Cindy I would email her the correct phone number

INTERVIEW RECORD

Site Name: Weldon Spring Site		EPA ID No.: MO6210022830	
Subject: Annual Inspection		Time: 9:30	Date: 12/4/06
Type: <input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Visit <input type="checkbox"/> Other		<input type="checkbox"/> Incoming <input checked="" type="checkbox"/> Outgoing	
Location of Visit:			

Contact Made By:

Name: Terri Uhlmeyer	Title: Compliance Manager	Organization: SM Stoller, Corp.
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Individual Contacted:

Name: Jim Hudson	Title: Captain	Organization: St. Charles County Sheriff Office
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Telephone No: 636-949-7325	Street Address: City, State, Zip:
Fax No: 636-949-7525	
E-Mail Address:	

Summary Of Conversation

I contacted Captain Jim Hudson of the St. Charles County Sheriff's Office and informed him that the annual LTS&M inspection would be taking place on December 5-6, 2006. I had talked to Captain Hudson the last couple years and reminded him that we would be contacting the Sheriff's office annually to keep in contact with them and check to see if they had any issues or concerns. Captain Hudson said he did not know of any concerns at this time. We discussed that I had contacted him during the year about vandalism issues at the site and he had recommended that we put up warning signs, etc. and I told him we had put up more signs. I informed him that we had a vandalism incident during the year and had contacted the police and that we were considering additional security at the site. I told him we would keep in contact with him.

INTERVIEW RECORD

Site Name: Weldon Spring Site		EPA ID No.: MO6210022830	
Subject: Annual Inspection		Time: 9:00 am	Date: 11/17/06
Type: <input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Visit <input type="checkbox"/> Other		<input type="checkbox"/> Incoming <input checked="" type="checkbox"/> Outgoing	
Location of Visit: Weldon Spring Site			
Contact Made By:			
Name: Terri Uhlmeier	Title: Compliance Manager	Organization: SM Stoller, Corp.	
Individual Contacted:			
Name: John Vogel	Title: Area Manager	Organization: August A. Busch Memorial Conservation Area, Missouri Dept. of Conservation	
Telephone No: 636-300-1953 ext. 318		Street Address: 2360 Hwy D	
Fax No:		City, State, Zip: St. Charles, MO 63304	
E-Mail Address:			

Summary Of Conversation

I contacted John Vogel, to notify him of the annual inspection that was going to take place on November 5 and 6, 2006. I had previously sent John a copy of the agenda for the inspection. He said rifle season would be over by then and bow hunting would not begin until December 18. He said he would like to participate in the inspection of the Southeast Drainage again. I discussed the status of our pending institutional controls with MDC. I asked John if he knew of any land or groundwater use in the planned groundwater restriction area that had taken place that would affect the future institutional controls in that area and he stated that there had not been any of this activity. He said he did not have any concerns at this time.

INTERVIEW RECORD

Site Name: Weldon Spring Site		EPA ID No.: MO6210022830	
Subject: Annual Inspection		Time: 10:00	Date: 11/20/06
Type: <input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Visit <input type="checkbox"/> Other		<input type="checkbox"/> Incoming <input checked="" type="checkbox"/> Outgoing	
Location of Visit:			
Contact Made By:			
Name: Terri Uhlmeyer		Title: Compliance Manager	Organization: SM Stoller, Corp.
Individual Contacted:			
Name: Anna Sylvan		Title: Documents Manager	Organization: Middendorf-Kredell Library
Telephone No: 636-978-7926		Street Address: 2750 Hwy. K	
Fax No:		City, State, Zip: O'Fallon MO 63366	
E-Mail Address:			
Summary Of Conversation			
<p>I contacted Anna Sylvan, Documents Manager for the Middendorf-Kredell (MK) Library in O'Fallon, Missouri. Ms. Sylvan manages the records and documents that the project issues for public review at the library. The MK library has been closed from June until November 1 for construction and remodeling. I has been in touch with Ms. Sylvan in early August by email regarding the possibility of reorganizing the Weldon Spring Site collection. Some issues that we addressed during our meeting was the lack of a comprehensive list of what the site had sent the library, the use of comb binders for most of the documents which makes documents hard to find and organize and the fact that the LTS&M Plan only requires the project to maintain certain document at the library. Ms. Sylvan and I agreed that I would come back in the next few months and take the documents back to the site. I would review the documents and remove what we felt was not necessary to have at the library. The comb bound documents that we planned to determine would be placed into binders which would be labeled on the outside. I would also provide the library a list of what we were returning. The documents which we would remove would be kept together at the interpretive center which is open 7 days a week.</p>			

INTERVIEW RECORD

Site Name: Weldon Spring Site		EPA ID No.: MO6210022830	
Subject: Annual Inspection		Time: 2:00	Date: 11/17/06
Type: <input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Visit <input type="checkbox"/> Other		<input type="checkbox"/> Incoming <input checked="" type="checkbox"/> Outgoing	
Location of Visit:			
Contact Made By:			
Name: Terri Uhlmeyer		Title: Compliance Manager	Organization: SM Stoller, Corp.
Individual Contacted:			
Name: Barry McFarland		Title: Regional Environmental Program Coordinator	Organization: Army
Telephone No: 316-681-1759 ext. 1419		Street Address: 3130 George Washington Blvd.	
Fax No:		City, State, Zip: Wichita, KS 67219-1598	
E-Mail Address:			
Summary Of Conversation			
<p>I contacted Barry McFarland of the 89th Regional Readiness Command for the Army and notified him that DOE would be conducting the Weldon Spring Site annual LTS&M inspection on December 5 and 6, 2006. I had explained to him last year that this was more of a courtesy notification and we would be conducting this inspection every year and would use this call in the future to keep in contact with the 89th and to find out if they have any concerns or issues and to check on the status of institutional controls. I told him that I had contacted Nelson Jones at the Weldon Spring Army Site and we would contact him when we arrived at the Army site. I discussed the pending institutional controls that DOE is working on with the Corps, such as the revised Memorandum of Understanding (MOU) and the Special Use Area designation.</p>			

INTERVIEW RECORD

Site Name: Weldon Spring Site		EPA ID No.: MO6210022830	
Subject: Annual Inspection		Time: 2:30 pm	Date: 11/21/06
Type: <input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Visit <input type="checkbox"/> Other		<input type="checkbox"/> Incoming <input checked="" type="checkbox"/> Outgoing	
Location of Visit:			
Contact Made By:			
Name: Terri Uhlmeier		Title: Compliance Manager	Organization: SM Stoller, Corp.
Individual Contacted:			
Name: Cynthia Green		Title: Realty Specialist	Organization: Missouri Department of Conservation
Telephone No: 573-522-4115 ext. 3263		Street Address: PO Box 180	
Fax No:		City, State, Zip: Jefferson City, MO 65102	
E-Mail Address:			
Summary Of Conversation			
<p>I contacted Cynthia Green and notified her of the Weldon Spring Site's LTS&M annual inspection on December 5 and 6, 2006. I reminded her that we would be contacting all of the DOE institutional control contacts each year to discuss the ICs and inquire if there are any concerns or issues. I briefly discussed the pending institutional controls that DOE is working on with the MDC, such as the planned easement that is being negotiated between the agencies. I also told her that I had contacted John Vogel and Joel Porath about the inspection and that John would be participating in portions of the inspection</p>			

INTERVIEW RECORD

Site Name: Weldon Spring Site		EPA ID No.: MO6210022830	
Subject: Annual Inspection		Time: 12:15 pm	Date: 11/21/06
Type: <input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Visit <input type="checkbox"/> Other		<input type="checkbox"/> Incoming <input checked="" type="checkbox"/> Outgoing	
Location of Visit:			
Contact Made By:			
Name: Terri Uhlmeier		Title: Compliance Manager	Organization: SM Stoller, Corp.
Individual Contacted:			
Name: Jennifer Frazier		Title: Real Estate Manager	Organization: MDNR-Parks
Telephone No: 573-751-7987		Street Address: PO Box 176	
Fax No:		City, State, Zip: Jefferson City, MO 65102	
E-Mail Address:			
Summary Of Conversation			
<p>I contacted Jennifer Frazier, MDNR-Parks and notified her of the LTS&M annual inspection at the Weldon Spring site on December 5 and 6, 2006. I reminded her that we would be contacting all of the DOE institutional control contacts each year to discuss the ICs and inquire if there are any concerns or issues. Jennifer stated that as far as negotiation of ICs is concerned that Parks still has the concerns that they had previously addressed in correspondence with DOE, including worker safety, etc. She said that MDNR-Parks were going to include some language about this issue in their response to DOE's easement offer letter. I told her we would be available to show their representative where the areas in question were and to meet with them at any time and that they could attend the inspection. I told Ms. Frazier that I would send her a copy of an agenda for the inspection.</p>			

INTERVIEW RECORD

Site Name: Weldon Spring Site		EPA ID No.: MO6210022830	
Subject: Annual Inspection		Time: 4:00	Date: 11/28/06
Type: <input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Visit <input type="checkbox"/> Other		<input type="checkbox"/> Incoming <input checked="" type="checkbox"/> Outgoing	
Location of Visit:			
Contact Made By:			
Name: Terri Uhlmeyer		Title: Compliance Manager	Organization: SM Stoller, Corp.
Individual Contacted:			
Name: Mark Boehle		Title: Assistant Fire Chief	Organization: Cottleville Fire Dept
Telephone No: 636-447-6655 ext. 8703		Street Address: PO Box 385	
Fax No:		City, State, Zip: Cottleville, MO 63338	
E-Mail Address:			
Summary Of Conversation			
<p>I contacted Mark Bailey of the Cottleville Fire Department and informed him that DOE would be conducting the Long-Term Surveillance and Maintenance annual inspection at the Weldon Spring Site on December 5-6, 2006. I told him that as we discussed last year, DOE would be conducting this inspection every year and would use this call in the future to keep in contact with the Cottleville Fire Department and to find out if they have any concerns or issues. He asked about the status of the site and I discussed our current status and what has been going on at the site. I also told him that the fire district would be receiving a letter from the DOE regarding emergency response capabilities for the site in accordance with a DOE ORDER that had recently been codified as 10 CFR 851. He stated that it might be a good idea for the fire district to do some training out here or at least come out at some time.</p>			

INTERVIEW RECORD

Site Name: Weldon Spring Site		EPA ID No.: MO6210022830	
Subject: Annual Inspection		Time: 2:00 pm	Date: 11/21/06
Type: <input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Visit <input type="checkbox"/> Other		<input type="checkbox"/> Incoming <input checked="" type="checkbox"/> Outgoing	
Location of Visit:			
Contact Made By:			
Name: Terri Uhlmeyer		Title: Compliance Manager	Organization: SM Stoller, Corp.
Individual Contacted:			
Name: Rick Pavia		Title: Project Manager	Organization: Francis Howell School District
Telephone No: 636-851-6172		Street Address: 7055 Hwy 94 South	
Fax No:		City, State, Zip: St. Charles, MO 63304	
E-Mail Address:			
Summary Of Conversation			
<p>I contacted Rick Pavia of the Francis Howell School District. I noted that I had contacted Mr. Pavia last year and explained that DOE would be conducting an annual Long-Term Surveillance and Maintenance inspection at the Weldon Spring Site each year and as part of the inspection we would be contacting certain stakeholders, such as the school district to maintain contact with them and to determine if they had any concerns or issues about the site. I informed Mr. Pavia that this year's inspection would be November 5 and 6, 2006. Mr. Pavia stated that he did not have any concerns or issues at this time and I told him to call me with any concerns or questions he might have.</p>			

INTERVIEW RECORD

Site Name: Weldon Spring Site		EPA ID No.: MO6210022830	
Subject: Annual Inspection		Time: 12:30 pm	Date: 11/20/06
Type: <input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Visit <input type="checkbox"/> Other		<input type="checkbox"/> Incoming <input checked="" type="checkbox"/> Outgoing	
Location of Visit:			
Contact Made By:			
Name: Terri Uhlmeyer		Title: Compliance Manager	Organization: SM Stoller, Corp.
Individual Contacted:			
Name: Tom Blair		Title: Assistant District Engineer	Organization: Missouri Department of Transportation
Telephone No: 314-340-4203		Street Address: 1590 Woodlake Dr.	
Fax No:		City, State, Zip: Chesterfield, Mo 63017	
E-Mail Address:			
Summary Of Conversation			
<p>I contacted Tom Blair of the Missouri Department of Transportation. He has replaced our former contact with MoDOT, Tom Ryan. I explained to Tom that DOE conducts an annual Long-Term Surveillance and Maintenance inspection each year and as part of the inspection we would be contacting certain stakeholders to maintain contact with them and to determine if they had any concerns or issues about the site. I informed Mr. Blair that our inspection this year would be on December 5 and 6. Mr. Blair was not very informed about the site or our relationship to MoDOT. I explained to him that we had culverts under the road at Highway D and Highway 94 that have contamination issues and we need to maintain contact with MoDOT in the eventuality that any work or repairs or maintenance goes on with these culverts that we need to be notified. I told him there had been erosion issues with these culverts in the past and MoDOT had addressed those during the past year. I also briefly explained that we had groundwater contamination under the neighboring MoDOT facility and we were negotiating an easement with MoDOT. I told him that I would send him a package of material that would include information about the site, the culverts and the groundwater issues. A letter from DOE was sent to Mr. Blair on November 27, 2006 with copies of the LTS&M Plan and the 2005 Annual Inspection Report.</p>			