DOE/OR/21548-926
CONTRACT NO. DE-AC05-86OR21548

FEDERAL FACILITY AGREEMENT QUARTERLY REPORT FOURTH QUARTER FISCAL YEAR 2002

WELDON SPRING SITE REMEDIAL ACTION PROJECT
WELDON SPRING, MISSOURI

NOVEMBER 2002 **REV. 0**

U.S. Department of Energy
Oak Ridge Operations Office
Weldon Spring Site Remedial Action Project

Prepared by MK-Ferguson Company and Jacobs Engineering Group

Printed in the United States of America. Available from the National Technical Information Service, NTIS, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22161.

NTIS Price Codes - Printed Copy: A03
Microfiche: A01

MORRISON KNUDSEN CORPORATION **MK-FERGUSON GROUP** Weldon Spring Site Remedial Action Project Contract No. DE-AC05-86OR21548	Rev. No. 0
PLAN TITLE: Federal Facility Agreement Quarterly Report Fourth Quarter Fiscal Year 2002	

APPROVALS

Environmental Safety and Health Manager	11/6/02 Date
Project Quality Manager	11/6/02 Date
Project Director	11-7-02 Date

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Weldon Spring Site Remedial Action Project

Federal Facility Agreement Quarterly Report Fourth Quarter Fiscal Year 2002

Revision 0

November 2002

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U.S. DEPARTMENT OF ENERGY
Oak Ridge Operations Office
Under Contract DE-AC05-86OR21548

ABSTRACT

The Federal Facility Agreement Fourth Quarter Fiscal Year 2002 progress report provides the current status of project activities, efforts towards project completion, and issues of concern. The report is divided into sections by operable unit and is further divided by response action and studies supporting each operable unit. The report fulfills the requirements of the progress report and the construction progress report.

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1. INTRODUCTION AND PURPOSE

This report is prepared in response to the reporting requirements of the *First Amended Federal Facility Agreement* (FFA) (Docket No. CERCLA-VII-85-F-0057), Paragraph XIV, and summarizes the actions performed by the Weldon Spring Site Remedial Action Project. The report is provided to the U.S. Environmental Protection Agency to apprise them of the status of project activities, efforts toward project completion, studies and sampling activities, and planning dates. This is a historical report covering activities from July 1, 2002, through September 30, 2002, and fulfills the reporting requirements of the *Quarterly Progress Report* (XIV.A) and the *Construction Progress Report* (X.D.1.b.viii).

Recipients are cautioned that all future dates contained in this report are for planning purposes only and were accurate as of September 30, 2002. These dates may not reflect the actual enforceable date established through other documentation.

2. CHEMICAL PLANT OPERABLE UNIT

The selected alternative in the Chemical Plant *Record of Decision* (ROD) consisted of on-site treatment and disposal using a chemical stabilization/solidification plant and an engineered on-site disposal facility. The majority of this work has been completed.

2.1 Chemical Plant Removal Actions

Complete.

2.2 Remedial Actions

2.2.1 Disposal Cell Construction and Waste Removal/Handling

- Actions Completed this Reporting Period
  - Completed seeding of chemical plant area.
  - Completed fence installation on Army west boundary of Train 3.
  - EPA conducted the chemical plant operable unit remedial action inspection on August 29, 2002, with MDNR participation.

- Actions Scheduled but Not Completed
  - Ship off-site to Envirocare in Clive, Utah, incidental quantities of wastes that have been generated since cell closure.

- Actions Scheduled for Next Period
  - Ship off-site to Envirocare in Clive, Utah, incidental quantities of wastes that have been generated since cell closure.

2.3 Chemical Plant Sampling Plans and Activities

- Final Site Walkover Plan
  - Objectives: To identify the areas requiring final walkovers, conduct and document the walkovers, and identify/investigate areas exceeding the action level.
    - Sampling Plan Title: *Final Site Walkover Plan.*
    - Status:
      - The Final Site Walkover Report will be issued during First QTR FY03.

- Disposal Cell Groundwater Monitoring
  - Objectives: Provide long-term detection monitoring activities for the disposal cell.
    - Sampling Plan Title: *Weldon Spring Site Disposal Cell Groundwater Monitoring Plan* (Expected 1st Quarter FY03).
    - Status: Semiannual sampling was conducted June 2002. Resampling was conducted in September 2002 for the parameters that exceeded established

baseline levels. Data from the resampling have not been received. Results will be reported next quarter.

2.4 Additional Information

None.

3. QUARRY RESIDUALS OPERABLE UNIT

The Quarry Residuals Operable Unit (QROU) addresses contamination remaining in the quarry after the water and bulk wastes were removed. The quarry bulk wastes were removed under a separate operable unit.

3.1 Removal Actions

None.

3.2 Remedial Actions

- Action Completed this Reporting Period
  WP-529B, Quarry Restoration Phase II.
  - Demolition of the QITS on July 3, 2002.
  - Removal of Effluent Pond 2 and associated piping on August 17, 2002.
  - Confirmation of soil beneath Effluent Pond 2.
  - Completion of backfill of inner quarry on August 30, 2002.
  - Demobilization of contractor on September 6, 2002.

- Actions Scheduled but not Completed
  - None.

- Actions Scheduled for Next Period
  - Initiate Long-Term Monitoring Program for the Quarry Residuals Operable Unit.

3.3 Quarry Residuals Sampling Plans and Activities

- Geochemical Characterization – QROU Field Studies
  - Objective: Provide geochemical information for the natural soil and groundwater conditions that attenuate uranium in groundwater north of the slough.
  - Sampling Plan Title: *Geochemical Characterization Sampling Plan in Support of the QROU Field Studies*.
    - Status:
      -- Revision 0 was issued on August 23, 2002.

- Interceptor Trench – QROU Field Studies
  - Objective: Obtain data that can be utilized to monitor the performance of the interceptor trench and compare field performance with modeled performance.
  - Sampling Plan Title: Sampling Plan for the QROU Interceptor Trench Field Study.
    - Status:
      -- Field study completed on April 26, 2002.

- Final evaluation of the field study (primary document) is expected in First Quarter FY2003.

3.4 Additional Information

None.

4. SITE GROUNDWATER OPERABLE UNIT

Groundwater at the Weldon Spring Chemical Plant area is chemically and radioactively contaminated as a result of past processing activities. An Interim Record of Decision (IROD), which authorizes treatment of TCE in groundwater utilizing in situ chemical oxidation methods, was approved on September 29, 2000. A final ROD for the remainder of the groundwater at the chemical plant has been delayed pending additional studies to evaluate the feasibility of groundwater extraction for treatment of the remaining contaminants of concern

4.1 Removal Actions

None.

4.2 Remedial Actions

- Actions Completed During Period:
  - Full-scale design under WP-568-In-Situ Chemical Oxidation of TCE in Groundwater-was submitted on July 12, 2002.
  - PMC 90-day sampling was performed from July 11 through July 15, 2002. Meeting with regulators to discuss results of in-situ chemical oxidation pilot-scale testing was held on August 6, 2002.

- Actions Scheduled but Not Completed
  - Revised completion report and revised full-scale design were not submitted by the subcontractor. Both are expected in October.

- Actions Scheduled for Next Period
  None.

4.3 Groundwater Sampling Plans and Activities

- Nitroaromatics Investigation in Frog Pond Area
  - Objective: Identify the source of nitroaromatic impact to groundwater in the vicinity of the former Frog Pond and Army Lagoon.
  - Sampling Plans: *Groundwater Investigation for Nitroaromatics in the Frog Pond Area.*
  - Status:
    - -- Sampling was completed in February 2002.
    - -- Completion report is expected in First Quarter FY 2003.

- TCE Investigation in the Raffinate Pit Area
  - Objective: Determine the areal extent of TCE impact in the southwestern portion of the site and identify preferential migration pathways in the area where Raffinate Pits 3 and 4 were located.

- Sampling Plan: *Groundwater Investigation for TCE in the Raffinate Pit Area.*
- Status:
  - -- Sampling was completed in February 2002.
  - -- Completion report is expected in First Quarter FY 2003.

- Additional Groundwater Pumping Studies
  - Objective: Obtain field data for evaluation of several pump and treat scenarios for possible remediation of groundwater in the southwest portion of the chemical plant. Several variations will be evaluated to determine if contaminant removal can be improved over that of a conventional pump and treat system. Improvement to the system will be determined by comparison of the mass of each contaminant of concern that can be removed under each scenario.
  - Sampling Plan: *Additional Groundwater Pump and Treat Studies in Support of the Feasibility Study for the Groundwater Operable Unit.*
  - Status:
    - -- Revision 0 issued on July 31, 2002.

- Groundwater Sampling for In-Situ Chemical Oxidation Pilot-Scale Testing
  - Objective: Obtain field data to establish baseline conditions and groundwater quality in the study area. Data will also be collected to monitor and identify trends after each injection event.
  - Sampling Plan: *Groundwater Sampling Plan for In-Situ Chemical Oxidation Pilot-Scale Testing.*
  - Status:
    - -- Sampling was completed on July 15, 2002.
    - -- Completion Report is expected in First Quarter FY 2003.

4.4 Additional Information

Groundwater monitoring at locations within and beyond the subcontractor's immediate test area were sampled, and results will be used to determine the extent to which this process affects any other physical or chemical characteristics of the aquifer. The results from the pilot scale injections, as well as subsequent groundwater monitoring results, will be used to assess the technical feasibility of implementing in situ chemical oxidation on a full-scale basis.

5. ACRONYMS

CERCLA	*Comprehensive Environmental Response, Compensation and Liability Act*
DA	Department of Army
DCE	dichlorethylene
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
FFA	Federal Facility Agreement (first amended)
FS	feasibility study
FY	fiscal year (Oct. 1 - Sept. 30)
GWOU	groundwater operable unit
IRA	interim response action
LCRS	leachate collection and removal system
MDC	Missouri Department of Conservation
MDNR	Missouri Department of Natural Resources
MSL	Mean Sea Level
MW	Monitoring Well
ORP	Oxidation Reduction Potential
PMC	Project Management Contractor
QITS	Quarry Interceptor Trench System
QROU	quarry residuals operable unit
QTR	quarter
QWTP	quarry water treatment plant
RI	remedial investigation
ROD	Record of Decision
RP	raffinate pit
RPD	relative percent difference
SWTP	site water treatment plant
TCE	Trichloroethylene
TCLP	toxicity characteristic leaching procedure
VP	vicinity property (Army and Busch properties)
WP	work package
WSSRAP	Weldon Spring Site Remedial Action Project
WWTP	waste water treatment plant

APPENDIX A
Narrative of Active Work Packages

Narrative of Active Work Packages

This appendix contains the narrative description of each open or active work package.

WP-437 Disposal Facility

This work package is for the purpose of construction of the disposal cell and associated restoration tasks.

WP-491 Long Term Surveying Services

Provide crews to perform topographical surveys, boundary surveys, setting monuments, construction layout, and other survey related services.

WP-502 Architect Engineering Services V

Provides architect/engineering services in the areas of surveying and mapping, engineering investigations, studies, reports, final design, and services during construction.

WP-529B Quarry Restoration – Phase II

This subcontract is to provide the design and sequencing of work necessary to remove the quarry interceptor trench field study system and to restore the former QWTP area. Additionally, this package consists of final restoration of the quarry area and development of the southern portion of the Hamburg Trail.

WP-535 Hamburg Hike and Bike Trail

This work package is to construct a Hamburg Hike and Bike Trail from the Quarry to the Borrow Area (including restoration of asphalt road portion).

WP-536 Administration Area Restoration and Landscaping

This work package is to restore the Administration Area to final condition. This includes:

- Demolition and removal of facilities, utilities, and asphalt;
- Construction of new roads and parking areas;
- Seeding and landscaping following final grading.

WP-548 WTP Operators Staff Services

Provide operators to manage remediation water and maintenance services at the WWTP.

WP-554 Interpretive Center Display Design, Fabrication and Installation

Utilizing the conceptual design, the subcontractor will design, fabricate, and install displays as a turnkey effort.

WP-555 West Perimeter Fence Replacement

Install a replacement fence on the DOE/Army west perimeter boundary.

WP-568 In Situ Chemical Oxidation of TCE in Groundwater

This work package will contract the design, testing, construction, and operation of a pilot scale in-situ treatment for TCE in groundwater.

APPENDIX B
FFA Tracking Matrix

Updated: November 2002

OPERABLE UNIT 1
CHEMICAL PLANT

		DAYS ALLOWED			60		20	60	20	90	OPEN	60
A	B	C	D	E	F	G	H	I	J	K	L	M
		ENFORCEABLE DATE FOR DOCUMENT	1st DRAFT TARGET DATE	ACTUAL DATE TO EPA	COMMENTS DUE FROM EPA	Received	EXT. Y/N	DFT FNL &/OR RESPONSE RPT TO EPA	EXT. Y/N	EPA REVIEW & WAITING PERIOD	DISPUTE YES/NO DOE/EPA	DATE OF FINAL DOC
	RD / RA											
	Date EPA signed the ROD	28-Sep-93										
	Substantial Continuous Physical on Site Activity	22-Dec-94										
	Proposal of Deadlines for RD Work Plan	28-Oct-93	28-Oct-93	13-Dec-93	11-Feb-94	NONE	NO					
P	Remedial Design Work Plan (CDR)	31-Mar-94	31-Mar-94	30-Mar-94	29-May-94	06-Jun-94	NO	04-Aug-94	NO	02-Nov-94	NO	01-Jan-94
	Design Schedule			30-Mar-94								
	Detailed Description of Design Activities			30-Mar-94								
	Deadlines for POST-ROD "P" Documents	31-Mar-94	31-Mar-94	30-Mar-94								
	Target Dates for POST-ROD "S" Documents	31-Mar-94	31-Mar-94	30-Mar-94								
P	Remedial Action Work Plan	NONE	21-Apr-95	21-Apr-95	20-Jun-95	NONE	NO	28-Aug-95	NO	26-Nov-95	NO	14-Nov-95
P	CSS Pilot-Scale Final Design Submittal (WP354)		07-Oct-93	07-Oct-93	07-Dec-93	04-Jan-94	NO	10-Mar-94	NO	09-May-94	NO	09-May-94
	Foundation & Soil removal Test 10% Presentation (WP420)		07-Nov-93	07-Nov-93								
	30% Presentation		05-Jan-94	05-Jan-94								
S	60% Design Submittal		24-Mar-94	11-Mar-94	10-May-94	NONE	NO	01-Aug-94	NO			
P	Final Design Submittal	17-Mar-95	17-Mar-95	06-Mar-95	07-May-95	NONE	NO	07-Jul-95	NO	05-Oct-95	NO	07-Jul-95
	CSS Facility 10% Presentation (WP411)		30-Sep-95	14-Sep-95								
	30% Presentation		06-Apr-96	07-Feb-96								
S	60% Design Submittal		31-Oct-96	11-Sep-96	10-Nov-96	05-Nov-96	NO	03-Jan-97	NO			
P	Final Design Submittal	31-Jan-97	31-Jan-97	22-Nov-96	21-Jan-97	02-Jan-97	NO	22-Jan-97	NO	22-Apr-97	NO	29-Jan-97
	Disposal cell (Construction) Design 10% Presentation (WP437)		07-Apr-94	07-Apr-94								
	30% Presentation		11-Aug-94	11-Aug-94								
	30% Presentation		06-Apr-95	05-Apr-95								
S	60% Design Submittal		29-Jul-95	16-Aug-95	15-Oct-95	30-Oct-95	YES	03-Jan-96	NO			
P	Final Design Submittal	11-Oct-96	26-Jan-96	20-Feb-96	20-Apr-96	03-Jun-96	YES	13-Aug-96		11-Nov-96	NO	04-Dec-96
S	**Treatability Studies**											
	Bio-denitrify TSA Soils		30-Jun-96	31-Dec-96	01-Mar-97	NONE						
	Prefinal Inspection by EPA		29-Aug-02	29-Aug-02								
P	Remedial Action Report		03-Mar-03									
P	O & M Plan (LTMS, Inst. Controls) - Entire Site		10-Jul-04									
P	Preliminary Close-out Report - Entire Site		18-Mar-04									

Updated: November 2002

OPERABLE UNIT 1
CHEMICAL PLANT

		DAYS ALLOWED				60	20	60	20	90	OPEN	60
A	B	C	D	E	F	G	H	I	J	K	L	M
		ENFORCEABLE DATE FOR DOCUMENT	1st DRAFT TARGET DATE	ACTUAL DATE TO EPA	COMMENTS DUE FROM EPA	Received	EXT. Y/N	DFT FNL &/OR RESPONSE RPT TO EPA	EXT. Y/N	EPA REVIEW & WAITING PERIOD	DISPUTE YES/NO DOE/EPA	DATE OF FINAL DOC
	RI / FS											
P	RI / FS WORK PLAN											
P	COMMUNITY RELATIONS PLAN		10-Dec-94	10-Dec-94	**							
P	BASELINE ASSESSMENT											01-Nov-92
P	REMEDIAL INVESTIGATION REPORT			07-Feb-91				03-Jun-92	YES	11-Aug-92	NO	01-Nov-92
S	PRELIMINARY ANALYSIS OF ALTERNATIVES											
P	FEASIBILITY STUDY REPORT			07-Feb-91				03-Jun-92	YES	11-Aug-92	NO	01-Nov-92
P	PROPOSED PLAN			03-Jun-92		11-Aug-92	YES					
P	DRAFT ROD	15-Sep-93	07-May-93	06-May-93	06-Jul-93			15-Sep-93	NO	11-Aug-92	NO	28-Sep-93

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OPERABLE UNIT 2
QUARRY BULK WASTES

		DAYS ALLOWED			60		20	60	20	90	OPEN	60
A	B	C	D	E	F	G	H	I	J	K	L	M
	P= Primary S= Secondary	ENFORCEA DATE FOR DOCUMEN	1st DRAFT TARGET DATE	DATE TO EPA	COMMENTS DUE FROM EPA	Received	EXT Y/N	DFT FNL & / OR RESPONSE TO EPA	EXT Y/N	EPA REVIEW & WAITING PERIOD	DISPUTE YES/NO DOE/EPA	DATE OF FINAL DOCUMENT
	RI/FS											
P	RI / FS WORK PLAN		06-Mar-88	25-May-88	24-Jul-88	01-Jul-88	N	29-Aug-88	N			
P	COMMUNITY RELATIONS PLAN											
P	BASELINE ASSESSMENT		06-Mar-89	07-Mar-89	19-Apr-89		N	08-May-88	N		N	
P	REMEDIAL INVESTIGATION REPORT		06-May-89	27-Dec-89	25-Feb-90		N	30-Jun-89	N		N	21-Jan-91
	PRELIMINARY ANALYSIS OF ALTERNATIVES											
P	FEASIBILITY STUDY REPORT			07-Apr-89	06-Jun-89		N	22-Oct-89	N		N	21-Jan-91
P	PROPOSED PLAN											
P	DRAFT ROD			07-Feb-90	11-Jun-90		NO	28-Sep-90	NO		N	07-Mar-91
	RD / RA											
	Date EPA Approved the ROD Alternative											
P	Final Design Package Approval											
P	Remedial Action Work Plan		01-Oct-93	14-Feb-94	15-Apr-94	18-May-94	NO	30-Aug-94	NO	28-Nov-94	N	28-Nov-94
	Detailed Description of Activities		01-Oct-93	14-Feb-94								
	Construction Schedule		01-Oct-93	14-Feb-94								
	Construction Team		01-Oct-93	14-Feb-94								
	Substantial Continuous Physical On-Site Activity	01-Jan-92										
	Pre-Final inspection		31-Aug-95	13-Nov-95								
P	Remedial Action Report	30-Aug-96	30-Aug-96	28-Aug-96	27-Oct-96	22-Nov-96	NO	17-Jan-97	NO	21-Feb-97	NO	21-Feb-97

Updated: November 2002

OPERABLE UNIT 3
QUARRY RESIDUALS

	QUARRY RESIDUALS	DAYS ALLOWED			60	20		60	20	90	OPEN	60
A	B	C	D	E	F	G	H	I	J	K	L	M
	P= Primary S= Secondary	ENFORCEABLE DATE FOR DOCUMENT	1st DRAFT TARGET DATE	DATE TO EPA	COMMENTS DUE FROM EPA	EXT. Y/N	Received	DFT FNL & / OR RESPONSE RPT TO EPA	EXT. Y/N	EPA REVIEW & WAITING PERIOD	DISPUTE YES/NO DOE/EPA	DATE OF FINAL DOCUMENT
	RD / RA											
	Date EPA Approved the ROD Alternative	30-Sep-98										
	Proposal of Deadlines for RD Work Plan	30-Oct-98	14-Oct-98									
P	Remedial Design Work Plan	30-Apr-99	30-Apr-99	05-May-99	04-Jul-99	N	04-Jul-99	15-Oct-99	N	19-Nov-99	N	21-Jan-00
	Design Schedule		30-Apr-99	05-May-99	04-Jul-99							
	Detailed Description of Design Activities		30-Apr-99	05-May-99	04-Jul-99							
	List of POST-ROD "P" Documents	30-Apr-99	30-Apr-99	05-May-99	04-Jul-99							
	List of POST-ROD "S" Documents	30-Apr-99	30-Apr-99	05-May-99	04-Jul-99							
	Designation of required "S" Documents		30-Apr-99	05-May-99	04-Jul-99							
S	Remedial Design QAPP		30-Apr-99	05-May-99	04-Jul-99	N	05-Jul-99	15-Oct-99	N			
S	Contingency Plan		30-Apr-99	05-May-99	04-Jul-99	N	05-Jul-99	15-Oct-99	N			
S	Construction Quality Control Plan		30-Apr-99	05-May-99	04-Jul-99	N	05-Jul-99	15-Oct-99	N			
	Quarry Restoration [WP-513]											
S	10% Presentation		10-Nov-98	10-Nov-98								
S	60 % Design Submittal		10-Feb-99	22-Jan-99	10-Feb-99	N	10-Feb-99	N/A	N			
P	Final Design 100 % Submittal	15-Jun-99	15-Jun-99	15-Jun-99	25-Jun-99	N	25-Jun-99	-	-	-	N	29-Jul-99
	Quarry Interceptor Trench [WP-515]											
S	10% Presentation		07-Apr-99	07-Apr-99								
S	60 % Design Submittal		11-Jun-99	06-Jun-99								
P	Final Design 100 % Submittal	21-Jun-99	21-Jun-99	07-Jul-99	16-Jul-99	N	16-Jul-99	-	-	-	N	02-Sep-99
	QITS / QWTP Restoration [WP-529]											
S	10% Presentation		10-Nov-98	10-Nov-98								
S	60 % Design Submittal		02-Mar-99	02-Mar-99	02-Mar-99	N	02-Mar-99	N/A	N			
P	Final Design 100 % Submittal	25-Oct-01	25-Oct-01	24-Dec-01								
P	Remedial Action Work Plan	30-Apr-99	30-Apr-99	05-May-99	04-Jul-99	N	05-Jul-99	15-Oct-99	N	19-Nov-99	N	21-Jan-00
	Detailed Description of Activities		30-Apr-99	05-May-99	04-Jul-99							
	Construction Schedule		30-Apr-99	05-May-99	04-Jul-99							
	Construction Team		30-Apr-99	05-May-99	04-Jul-99							
P	Evaluation of the Performance of Interceptor Trench	22-Feb-02	22-Feb-02	22-Feb-02	23-Apr-02	N	26-Apr-02					
	Pre-Final Inspection by EPA		04-Dec-02									
P	Remedial Action Report		01-Mar-03									

** The plan was reviewed internally and required no modifications.

Updated: November 2002

OPERABLE UNIT 3
QUARRY RESIDUALS

		DAYS ALLOWED			60	20		60	20	90	OPEN	60
A	B	C	D	E	F	G	H	I	J	K	L	M
	P= Primary S= Secondary	ENFORCEABLE DATE FOR DOCUMENT	1st DRAFT TARGET DATE	DATE TO EPA	COMMENTS DUE FROM EPA	EXT. Y/N	Received	DFT FNL & / OR RESPONSE RPT TO EPA	EXT. Y/N	EPA REVIEW & WAITING PERIOD	DISPUTE YES/NO DOE/EPA	DATE OF FINAL DOCUMENT
	RI/FS											
P	RI / FS WORK PLAN		26-Oct-93	07-Jun-93	06-Aug-93	NO	29-Sep-93	16-Dec-93	NO	16-Mar-94	NO	16-Mar-94
	FIELD SAMPLING PLAN		17-Apr-93	07-Jun-93								
	DATA QUALITY OBJECTIVES		17-Apr-93	07-Jun-93								
	SITE MANAGEMENT PLAN		17-Apr-93	07-Jun-93								
	QUALITY ASSURANCE PROGRAM PLAN		17-Apr-93	07-Jun-93								
	SCHEDULE OF ALL "P" DOCUMENTS	*1	17-Apr-93	07-Jun-93								
	SCHEDULE OF ALL "S" DOCUMENTS		17-Apr-93	07-Jun-93								
P	COMMUNITY RELATIONS PLAN		10-Dec-94	10-Dec-94								
P	BASELINE ASSESSMENT	31-Dec-96	31-Dec-96	09-Dec-96	07-Feb-97	Y	25-Feb-97	25-Apr-97	NO	24-Jul-97	YES(MDNR)	23-Jul-97
P	REMEDIAL INVESTIGATION REPORT	14-Sep-98	31-Dec-96	09-Dec-96	07-Feb-97	Y	25-Feb-97	25-Apr-97	NO	24-Jul-97	YES(MDNR)	23-Jul-97
P	FEASIBILITY STUDY REPORT	01-Apr-97	30-Jun-97	16-Apr-97	15-Jun-97	Y	12-Aug-97	08-Jan-98	Y *2	08-Apr-98	NO	30-Mar-98
S	PRELIMINARY ANALYSIS OF ALTERNATIVES		01-Mar-97	16-Apr-97	15-Jun-97	Y	12-Aug-97					
P	PROPOSED PLAN	01-May-98	30-Jun-97	16-Apr-97	15-Jun-97	Y	12-Aug-97	08-Jan-98	Y *2	08-Apr-98	NO	01-Mar-98
P	DRAFT ROD	01-Apr-98	31-Aug-98	16-Jun-98	18-Aug-98	Y	14-Sep-98	25-Sep-98	NO	25-Oct-98	NO	30-Sep-98

** The community relations plan was reviewed internally and no modifications were required.

NOTES: *1 Request for a schedule extension for the primary submittals was submitted on July 11, 1996. Approved by default.

*2 Request for a schedule extension to 9 Jan 98 for the draft final submittals was submitted on December 11, 1997. Approved by default.

Updated: November 2002

OPERABLE UNIT 4

FINAL SITE GROUNDWATER

	SITE GROUNDWATER	DAYS ALLOWED			60		20	60	20	60+30	OPEN	60
A	B	C	D	E	F	G	H	I	J	K	L	M
	P= Primary S= Secondary	ENFORCEABLE DATE FOR DOCUMENT	1st DRAFT TARGET DATE	DATE TO EPA	COMMENTS DUE FROM EPA	Received	EXT. Y/N	DFT FNL & / GJO RESPONSE RPT TO EPA	EXT. Y/N	EPA REVIEW & WAITING PERIOD	DISPUTE YES/NO DOE/EPA	DATE OF FINAL DOC
	RD / RA											
P	Proposed Plan		08-Feb-03									
P	Final ROD		10-Jul-03									
	Date EPA Approved the ROD Alternative											
	Proposal of Deadlines for RD Work Plan											
P	Remedial Design Work Plan (CDR)											
	Design Schedule											
	Detailed Description of Design Activities											
	List of POST-ROD "P" Documents											
	List of POST-ROD "S" Documents											
	Designation of Required "S" Documents											
S	Remedial Design QAPP											
S	Contingency Plan											
S	Construction Quality Control Plan											
	10% Design Presentation											
	30 % Design Presentation											
S	60 % Design Submittal											
P	Final Design 100 % submittal											
P	Remedial Action Work Plan											
	Detailed Description of Activities											
	Construction Schedule											
	Prefinal Inspection by EPA											
	Remedial Action Report											

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OPERABLE UNIT 4
GROUNDWATER

	SITE GROUNDWATER	DAYS ALLOWED			60		20	60	28	60+30	OPEN	60
A	B	C	D	E	F	G	H	I	J	K	L	M
	P= Primary S= Secondary	ENFORCEABLE DATE FOR DOCUMENT	1st DRAFT TARGET DATE	DATE TO EPA	COMMENTS DUE FROM EPA	Received	EXT. Y/N	DFT FNL & / OR RESPONSE RPT TO EPA	EXT. Y/N	EPA REVIEW & WAITING PERIOD	DISPUTE YES/NO DOE/EPA	DATE OF FINAL DOC
	RI/FS											
P	RI / FS WORK PLAN	20-Jan-95	22-Dec-94	20-Jan-95	21-Mar-95	21-Mar-95	N	18-May-95	N	16-Aug-95	NO	04-Oct-95
	FIELD SAMPLING PLAN		22-Dec-94	20-Jan-95								
	DATA QUALITY OBJECTIVES		22-Dec-94	20-Jan-95								
	SITE MANAGEMENT PLAN		22-Dec-94	20-Jan-95								
	QUALITY ASSURANCE PROGRAM PLAN		22-Dec-94	20-Jan-95								
	SCHEDULE OF ALL "P" DOCUMENTS	20-Jan-95	22-Dec-94	20-Jan-95								
	SCHEDULE OF ALL "S" DOCUMENTS	20-Jan-95	22-Dec-94	20-Jan-95								
P	COMMUNITY RELATIONS PLAN		22-Dec-94	10-Dec-94	**							
P	BASELINE RISK ASSESSMENT (note 1)	30-Sep-96	30-Sep-96	26-Sep-96	25-Nov-96	02-Dec-96	NO	27-Feb-97	Y *1	28-May-97	YES(MDNR)	01-Jul-97
P	REMEDIAL INVESTIGATION REPORT (note 1)	30-Sep-96	30-Sep-96	26-Sep-96	25-Nov-96	02-Dec-96	NO	27-Feb-97	Y *1	28-May-97	YES(MDNR)	01-Jul-97
P	FEASIBILITY STUDY REPORT	01-May-97	30-Jun-97	15-Aug-97	17-Oct-97	21-Oct-97	NO	05-Mar-98	Y *2	03-Jun-98	NO	10-Mar-99
	SUPPLEMENTAL FEASIBILITY STUDY	22-Mar-99	22-Mar-99									
P	PROPOSED PLAN		30-Jun-97	15-Aug-97	17-Oct-97	21-Oct-97	NO	21-May-99	Y *2/*3	30-Jan-00		
P	DRAFT ROD	15-Oct-99	15-Oct-99	23-Sep-99	30-Sep-99	Note 4						

** The Community Relations Plan was reviewed internally and no modifications were required.

NOTES:

*1. Request for schedule extension for the enforceable milestones were submitted on July 11, 1996. Approved by default.

*2. Request for a schedule extension for the draft final submittals was submitted on December 11, 1997. Approved by default.

*3. On Mar 4, 98 a request for renegotiating of the draft final submittal of the proposed plan was transmitted via e-mail.

*4. DOE and MDNR entered into an informal dispute resolution process that was mediated by EPA. On 9/29/2000, an Interim ROD was signed authorizing treatment of TCE-impacted groundwater. Resolution of the remaining contaminants is pending the performance of field studies.

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OPERABLE UNIT 4
INTERIM SITE GROUNDWATER

	SITE GROUNDWATER	DAYS ALLOWED			60		20	60	20	60+30	OPEN	60
A	B	C	D	E	F	G	H	I	J	K	L	M
	P= Primary S= Secondary	ENFORCEABLE DATE FOR DOCUMENT	1st DRAFT TARGET DATE	DATE TO EPA	COMMENTS DUE FROM EPA	Received	EXT. Y/N	DFT FNL & / OR RESPONSE RPT TO EPA	EXT. Y/N	EPA REVIEW & WAITING PERIOD	DISPUTE YES/NO DOE/EPA	DATE OF FINAL DOC
	RD / RA											
P	Final ROD											29-Sep-00
	Date EPA Approved the ROD Alternative	29-Sep-00										
	Proposal of Deadlines for RD Work Plan		08-Jan-01									
P	Remedial Design Work Plan (CDR)	15-Feb-01	15-Feb-01	14-Feb-01	20-Apr-01	11-Apr-01	N	11-May-01	N	10-Jul-01	N	01-Sep-01
	Design Schedule		15-Feb-01	14-Feb-01								
	Detailed Description of Design Activities		15-Feb-01	14-Feb-01								
	List of POST-ROD "P" Documents	15-Feb-01	15-Feb-01	14-Feb-01								
	List of POST-ROD "S" Documents	15-Feb-01	15-Feb-01	14-Feb-01								
	Designation of Required "S" Documents	15-Feb-01	15-Feb-01	14-Feb-01								
S	Remedial Design QAPP		15-Feb-01	14-Feb-01	20-Apr-01	11-Apr-01	N					
S	Contingency Plan		15-Feb-01	14-Feb-01	20-Apr-01	11-Apr-01	N					
S	Construction Quality Control Plan		15-Feb-01	14-Feb-01	20-Apr-01	11-Apr-01	N					
	10% Design Presentation		(2)	23-Mar-01		11-Apr-01						
	30 % Design Presentation		(2)	12-Apr-01		11-Apr-01						
S	Subcontractor Pilot Design											
P	90% Subcontractor Full Scale Design											
P	Remedial Action Work Plan		15-Feb-01	14-Feb-01	20-Apr-01	11-Apr-01	N	11-May-01	N	10-Jul-01	N	01-Sep-01
	Detailed Description of Activities		15-Feb-01	14-Feb-01								
	Construction Schedule	15-Feb-01	15-Feb-01	14-Feb-01								
S	Pre-Final Inspection		21-Oct-02	(3)								

(1) DOE responded to comments received on July 10 in a letter dated July 30, 2001. A revised document was issued on September 14 that incorporated updated information regarding changes in schedule and cost. An additional 30-day review period

(2) Performance based specifications were submitted for review as the 10% and 30% designs. The 60% and 90% design submittals will be the pilot-scale design and full-scale design, respectively, submitted by the specialty subcontractor.

(3) Regulator meeting to present results of groundwater field studies and pilot-scale treatment of TCE using ICO. IROD may be closed out under final GWOU ROD addressing all COC's, including TCE.

MK-Ferguson Company
Weldon Spring Site Remedial Action Project

TRANSMITTAL OF CONTRACT DELIVERABLE

Date: **November 8, 2002** Transmittal No.: **CD –293-00**

Title of Document: **Federal Facility Agreement Quarterly Report Fourth Quarter Fiscal Year 2002**

Doc. Num.: **926** Rev. No.: **0** Date of Document: **November 2002**

Purpose of Transmittal: Request for Department of Energy acceptance of contract deliverable.

In compliance with the Project Management Contract, MK-Ferguson Company hereby delivers the attached document to the U.S. Department of Energy, Weldon Spring Site Office. The document has been reviewed and approved by Project Management Contractor management.

The document will be considered accepted unless we receive written notification to the contrary within 30 days of the date of this transmittal.

Number of copies transmitted: **Twelve**

Scott Anderson
Project Director