Remedial Design Work Plan

Remediation of PCE Contamination

Griggs and Walnut Ground Water Plume

Superfund Site

Prepared for **City of Las Cruces, New Mexico**

March 2, 2010

Daniel B. Stephens & Associates, Inc.

6020 Academy NE, Suite 100 • Albuquerque, New Mexico 87109

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1. Introduction

At the direction of the City of Las Cruces (CLC) and Doña Ana County, jointly operating as the Joint Superfund Project (JSP), Daniel B. Stephens & Associates, Inc. (DBS&A) has prepared this remedial design (RD) work plan to document the steps to be undertaken in designing the groundwater treatment remedy for the Griggs & Walnut Ground Water Plume Superfund Site (the Site) in Las Cruces, New Mexico. This work is being performed as detailed in Appendix C, *Statement of Work (SOW) of the Unilateral Administrative Order (UAO) for the Griggs Walnut Plume* dated November 30, 2009. The UAO (and this work plan) addresses the RD only; the remedial action (RA) has been explicitly excluded.

1.1 Site Description

The Site contamination is located in the subsurface generally between East Griggs Avenue and East Hadley Avenue, extending east to beyond Interstate 25 (I-25) and west to beyond North Solano Avenue (Figure 1). The property uses in this area are predominantly recreational, light industrial/commercial, and residential.

In 1993, perchloroethylene (PCE), a chlorinated solvent commonly used as a degreaser and as a dry cleaning agent, was detected in CLC wells 21 and 27 during routine sampling performed by the New Mexico Environment Department (NMED). In 2000, PCE was first detected in CLC well 24 at slightly less than 1 µg/L. The Site was added to EPA's National Priorities List (NPL) of Superfund sites on June 14, 2001. At the time of listing, four CLC municipal drinking water supply wells (CLC wells 18, 19, 21, and 27) were known to be affected by PCE contamination at concentrations above the maximum contaminant level (MCL) of 5 micrograms per liter (µg/L) for PCE established by the Federal Safe Drinking Water Act. These wells are all currently off-line.

The CLC and Doña Ana County signed a memorandum of understanding and formed the JSP in response to the EPA's Request to Fund (U.S. EPA, 2005). The remedial investigation (RI) and

Explanation

City of Las Cruces

Project Area

Note: CLC boundary shown may not reflect the most current boundary; only provided as reference.

Source: National Agricultural Imagery Program
August 2009
Downloaded from RGIS

S:/PROJECTS/ES09.0306_GRIGGS-WALNUT/GIS/MXDS/REPORTS/PER/SITE_MAP.MXD 013110

Daniel B. Stephens & Associates, Inc.
01/13/2010 JN ES09.0306

GRIGGS AND WALNUT PLUME
SUPERFUND REMEDIATION PROJECT

Site Location Map

Figure 1

feasibility study (FS) were performed by CH2M HILL under contract to the EPA (CH2M HILL, 2006a, 2006b). The JSP and their consultants, Terracon, John Shomaker Associates, Inc. (JSAI), and DBS&A, commented on all deliverables and worked with EPA in developing a remedy that was satisfactory to the JSP while also being protective of the environment. As part of their technical support, JSAI prepared the groundwater flow and transport model for the site (JSAI, 2006). This model, including several updates (JSAI, 2009), is the basis for the remedial design at the Site.

The Proposed Plan prepared in December 2006 (U.S. EPA, 2006) and the Record of Decision (ROD) issued by EPA on June 14, 2007 set forth the selected remedy for the Site, which involves actions to address contaminated groundwater The ROD (U.S. EPA, 2007) identified Remedial Alternative 4 from the FS (CH2M HILL, 2006b) as the preferred remedy. The major components of this selected remedy are:

- Construction of a treatment plant capable of treating groundwater impacted with volatile organic compounds (VOCs), including PCE, trichloroethylene (TCE), and benzene, toluene, ethylbenzene and toluenes (BTEX), to concentrations below their respective MCLs. This treatment plant will be located near the well house for existing CLC well 18

- Installation of conveyance piping to carry water from the existing CLC well 27 location to the treatment plant

- Installation of conveyance piping to return treated groundwater to the CLC distribution system

1.2 Purpose

The purpose of this RD work plan is to identify the steps to be undertaken during the RD process to ensure that the remedial action objectives (RAOs) set forth in the ROD (U.S. EPA, 2007) are met. The RD is generally defined as those activities to be undertaken by the contractor to develop the final plans and specifications, general provisions, and special requirements necessary to translate the ROD into the remedy to be constructed under the RA phase. This work plan translates EPA's RD SOW into the framework for conducting the RD activities for the Site.

1.3 General Requirements

DBS&A will complete the RD that supports the successful construction of a remedy that meets the RAOs and performance criteria specified in the ROD RD in accordance with the SOW, the *Remedial Design/Remedial Action* [RD/RA] *Handbook* (U.S. EPA, 1995), and appropriate EPA guidance.

DBS&A will prepare a design package, plans, and specifications that address the following elements of the remedy:

- *Installation of a groundwater extraction and treatment system to achieve hydraulic control of the contaminant plume:* The FS prepared by CH2M HILL (2006b) indicated that the extraction of as much as 1,050 gallons per minute (gpm) may be required to capture the groundwater plume and that an additional extraction well, in addition to existing CLC wells 18 and 27, may be required to achieve this objective. Recent work performed by JSAI (2009) indicated that a pumping rate on the order of 300 gpm would be sufficient. Based on these two estimates, a maximum design hydraulic capacity of 500 gpm will be set. The groundwater treatment plant will use technologies consistent with the EPA presumptive remedy guidance for ex situ treatment of contaminated groundwater:

  - Treatment of groundwater to remove VOCs will be accomplished through air stripping.

  - Calculations will be performed to evaluate whether the vapor stream will require polishing to meet numerical limits set by the NMED. Given the average PCE concentrations documented at the site, additional polishing is not anticipated to be required.

  - Although not anticipated, the design will be flexible enough to accommodate metals treatment in the future should the need arise.

- *Conveyance of treated groundwater*: Treated water will be conveyed to a nearby water line and connected to the CLC distribution system for use.

1.4 Recordkeeping Requirements

DBS&A and JSP will maintain all technical records for this project.

2. Objective

The objective of this project is to complete the RD activities for the Site in accordance with the EPA SOW.

3. Project Approach

DBS&A will provide the personnel, services, materials, and equipment required to perform RD development activities under this Project.

3.1 Task 1: Project Planning and Support

The purpose of this task is to plan for the execution and overall management of project tasks. DBS&A's project implementation schedule, with projected dates for completion of each required major activity and submission of each deliverable required by the EPA SOW, is provided in Appendix A. This schedule also includes information regarding timing, initiation, and completion of critical milestones for each major activity and deliverable and the expected review time for EPA and the NMED.

3.2 Task 2: Data Acquisition

Data to be collected during this task includes survey information along the anticipated pipeline routes, both to and from the treatment plant, as well as a detailed ground survey at the proposed treatment plant location. Also, soil samples will be collected within the footprint of the treatment and analyzed for bearing capacity.

Collection of additional water quality data is not anticipated as part of the RD. All existing water quality data will be collated and tabulated for use in the remedial design. Once tabulated, the data will be reduced and anticipated influent concentrations and general water quality, as available, will be provided to potential equipment vendors for design. DBS&A will also design and set up an appropriate database for pertinent information that will be used during the RD.

3.3 Task 3: Draft Remedial Design

A draft RD will initially be prepared and submitted to EPA and the NMED for review and comment. The SOW requires that those elements listed in paragraph 14 through 24 of the SOW be included in the draft RD. Section 3.3.1 summarizes the deliverables that will be included in the draft RD, and Section 3.3.2 summarizes site-specific plans that address SOW requirements that are not applicable to the RD. Where specific requirements of the SOW are addressed, the applicable SOW paragraph is referenced.

3.3.1 Draft Remedial Design Documents

The design documents will include supporting data and documentation that define the functional aspects of the project to prove that the completed project will be effective in meeting the remediation goals and applicable or relevant and appropriate requirements (ARARs). Accordingly, the draft RD (30-percent design) submitted to EPA will include the following:

- Process and instrumentation diagrams (P&IDs) (90 percent complete) of the key elements of the ground water extraction, treatment, and conveyance systems
- A preliminary layout of the treatment plant
- A discussion of the treatment technology
- Engineering drawings that detail all elements of the final design (Paragraph 19)
- Specifications that detail the steps taken to construct the remedial system (Paragraph 19)
- Calculation sets that support the preliminary design

Table 1 provides preliminary lists of the calculation sets, drawings, and specifications that are anticipated to be necessary for completion of the remedial design.

3.3.2 Preparation of Site-Specific Plans

As stated in Section 1, the UAO under which this work is to be performed addresses the RD only. Because of this, the full list of requirements set forth in paragraphs 14 through 33 (including deliverables for both the draft and final RDs) may not be included under this work plan (Appendix B of this RD work plan presents a letter of understanding that summarizes discussions between the EPA and JSP regarding this matter). In addition to the draft P&ID, plans, specifications, and supporting calculations, the following deliverables are specified by the SOW:

- *Health and Safety Plan (Paragraph 14):* This health and safety plan (HSP) is required to be prepared in accordance with Occupational Safety and Health Administration (OSHA) requirements (29 CFR 1910.120) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR 300.150). *However, because no samples will be collected during the RD activities, this HSP will not be prepared.*

- *Remedial Design Sampling and Analysis Plan (Paragraph 15):* Although the SOW requests an RD sampling and analysis plan (SAP), no sampling activities are anticipated, with the exception of shallow geotechnical soil borings in the proposed building footprint. *Because no samples will be collected during the RD activities, this RD SAP will not be prepared.*

- *Community Relations Plan (Paragraph 16):* A community relations plan will be included as an appendix to the draft RD that details the manner in which DBS&A will support EPA in community relations activities.

- *Remedial Design Contingency Plan (Paragraph 17):* A remedial design contingency plan is required to address measures to be undertaken in the event that any action that occurs during the RA causes a release that threatens an emergency or immediate threat to public health or welfare or the environment during the remedial design. *Because no field activities will be performed during the RD activities, this RD Contingency Plan will not be prepared.*

Table 1. Anticipated Calculations, Drawings, and Specifications
Remedial Design for Groundwater Treatment System
Page 1 of 4

Number	Title/Description
Calculations	
1	Estimated volume of contaminated water
2	Pipe head loss
3	Anticipated influent concentrations
4	Scaling factors
5	Air stripper sizing/requirements
6	Emission concentrations
7	Tank sizing
8	Equipment load calculations
Drawings	
T-1	Title sheet
General	
G-1	Index of drawings
G-2	General notes and legend
G-3	Site layout
Civil	
C-1	Civil notes and legend
C-2	Extraction/injection well and piping layout
C-3	Treatment compound site plan
C-4	Plan and profile index
C-5	Plan and profile 1
C-6	Plan and profile 2
C-7	Plan and profile 3
C-8	Plan and profile 4
C-9	Civil details 1
C-10	Civil details 2
C-11	Civil details 3
C-12	Civil details 4
Mechanical	
M-1	Mechanical notes and legend
M-2	Piping and instrumentation diagrams 1
M-3	Piping and instrumentation diagrams 2
M-4	Piping and instrumentation diagrams 3
M-5	Piping and instrumentation diagrams 4
M-6	Treatment building equipment layout
M-7	Treatment building equipment elevation location

Table 1. Anticipated Calculations, Drawings, and Specifications
Remedial Design for Groundwater Treatment System
Page 2 of 4

Number	Title/Description
Drawings (cont.)	
Mechanical (cont.)	
M-8	Treatment building tank elevations
M-9	Treatment building equipment elevations 1
M-10	Treatment building equipment elevations 2
M-11	Treatment building pump elevations
M-12	Pipe support details
M-13	Mechanical details
M-14	Treatment building southeast isometric
M-15	Treatment building northeast isometric
M-16	48 treatment building north isometric 1
M-17	Treatment building north isometric 2
Electrical	
E-1	Electrical notes, legend, details, and extraction well equipment
E-2	Electrical site plan
E-3	Mcc one-line diagram and elevation
E-4	Treatment compound lighting, receptacle circuit, and grounding plan
E-5	Treatment compound power and control plan
E-6	Tank pad power, control, and grounding plan
E-7	Master control plan
E-8	Master control plan elementary 1
E-9	Master control plan elementary 2
E-10	Master control plan elementary and conduit and conductor schedule
E-11	Scada control panel
E-12	Scada control panel elementary
E-13	Elementaries
E-14	Details and schedule
Specifications	
CS	Cover sheet
TOC	Table of contents
Division 1:	*General Requirements*
01000	Scope of work
01100	Measurement and payment
01330	Submittals
01450	Health and safety plan requirements
01590	Field offices and sheds

Table 1. Anticipated Calculations, Drawings, and Specifications
Remedial Design for Groundwater Treatment System
Page 3 of 4

Number	Title/Description
Specifications (cont.)	
Division 1:	*General Requirements (cont.)*
01600	Underground utilities
01610	Product requirements
01700	Contract closeout
Division 2:	*Sitework*
02100	Clearing and grubbing
02153	Pitless adapter units
02154	Submersible pump installation
02300	Earthwork
02324	Trenching
02446	Boring, jacking, and tunneling conduits
02615	High density polyethylene piping materials
02821	Chain link fences and gates
02931	Erosion and sediment control
Division 3:	*Concrete*
03300	Cast-in-place concrete
03480	Precast concrete vaults
Division 5:	*Metals*
05430	Unistrut metal framing
05520	Anchor bolts
Division 11:	*Equipment*
11210	Process pumps
11349	Chemical feed pumps
11376	Vapor extraction and treatment systems
11395	Oil-water separator
Division 13:	*Special structures*
13120	Fiberglass reinforced buildings
13121	Pre-engineered buildings
13205	Single and double walled polyethylene storage tanks
13206	Fiberglass reinforced chemical storage tanks
Division 15:	*Mechanical*
15080	Plumbing insulation
15105	Pipes and tubes for plumbing piping and equipment
15110	General duty valves for plumbing piping
15130	Pressure and vacuum gauges

Table 1. Anticipated Calculations, Drawings, and Specifications
Remedial Design for Groundwater Treatment System
Page 4 of 4

Number	Title/Description
Specifications (cont.)	
Division 15:	*Mechanical (cont.)*
15207	Bolted steel tank
15483	Vapor phase granular activated carbon systems
15491	Air stripper
Division 16:	*Electrical*
16010	Electrical general
16095	Electrical systems identification
16111	Conduits and raceway systems
16120	Wires and cables
16141	Wiring devices
16157	Variable frequency drives
16160	Enclosures
16289	Transient voltage surge suppression
16352	Motor controllers
16400	Incoming services
16402	Underground distribution systems
16450	Electrical grounding
16461	Dry type transformers
16470	Panelboards and circuit protective devices
16510	Lighting equipment
16900	Instrumentation
16902	Miscellaneous electrical controls
16990	Control panels
16991	SCADA central computer

- *Permitting Requirements and Compliance Plan (Paragraph 18):* The Permitting Requirements and Compliance Plan will detail the manner in which DBS&A will ensure that the substantive requirements of permitting laws will be met.

- *Remedial Action Sampling and Analysis Plan (Paragraph 20):* The RA SAP will detail the sampling strategy to be implemented during the RA to ensure that the system is operating as designed. This includes the collection of groundwater influent samples, treated groundwater samples, and vapor samples.

- *Health and Safety Plan (Paragraph 21):* Although listed in the SOW as a deliverable, because the UAO specifically addresses only the RA, the EPA agreed that an RD HSP will not be required until the final equipment has been selected and installed (Appendix B).

- *Operations and Maintenance Plan (Paragraph 22):* Although listed in the SOW as a deliverable, the EPA agreed that an O&M Plan will not be required until the final equipment has been selected and installed (Appendix B).

- *Construction Quality Assurance Plan (Paragraph 23):* A construction quality assurance (CQAP) plan will be prepared detailing the steps that will be undertaken to ensure the overall quality of the site remedy as constructed. Because the UAO specifically excludes the RD, this CQAP cannot outline the responsibility and authority of all organizations during the RA or identify QA personnel and qualifications.

- *Remedial Action Contingency Plan (Paragraph 24):* Because the UAO specifically addresses only the RA, an RA contingency plan will not be prepared at this time (Appendix B)

3.4 Task 4: Final Design

Upon receipt of comments on the draft RD prepared by EPA, NMED, and the JSP, DBS&A will prepare final construction plans and specifications for the remedy in accordance with the EPA

SOW and good engineering practice. The plans will be prepared under the supervision of and sealed by a Professional Engineer licensed in the State of New Mexico.

3.4.1 Prepare Pre-Final/Final Design Specifications

A complete set of specifications (including general specifications, drawings, and schematics) will be submitted at the final RD stage. The specifications will be consistent with the technical requirements of the ARARs.

General correlation between drawings and technical specifications is a basic requirement of any set of working construction plans and specifications. Before submitting the project specifications, DBS&A will review the documents in accordance with its Quality Management Plan (DBS&A, 2009) as well as the project-specific guidelines (DBS&A, 2010).

Project-specified contract documents and technical specifications (special provisions) will be developed to complement the construction drawings. Specifications will be prepared in accordance with the Construction Specification Institute (CSI) format. Quality assurance/quality control (QA/QC) specifications will include both manufacturing and construction requirements.

3.4.2 Prepare Final Drawings

The final RD submittals will include a complete set of D-size construction drawings, as well as a set of half-size reductions of the drawings.

A set of construction drawings suitable for competitive bidding and in conformance with the ROD will be developed. DBS&A will incorporate appropriate design features as identified by review of site conditions and related documents, as well as EPA preferences.

DBS&A will provide plans and specifications to the EPA for review at the final RD level, and EPA's comments will be incorporated into the submittals. Drawings will be generated using AutoCAD 2007. A set of stamped portable document format (PDF) files will also be provided as electronic copies.

The anticipated list of design sheets was the basis for the level of effort estimate used in the draft and pre-final/final RDs:

- Plans and profiles along the corridor of the conveyance lines using the results of the topographic and utility surveys

- Groundwater treatment system, including skids, peripheral components, plumbing and piping, and P&ID

- Civil/electrical, including grading, drainage, foundation, building, power drop, controls, electrical

- Miscellaneous, including details, notes, site plans, well details;

3.4.3 Prepare Pre-Final/Final Remedial Design Report

The pre-final/final RD will address comments generated from the draft RD review and incorporate modifications of the design based on EPA's comments.

4. Quality Control

DBS&A's internal QC process requires review of all Project deliverables to promote technical adequacy and completeness. As detailed in the project's Quality Management Plan (QMP) (DBS&A, 2009), the DBS&A QA Manager will perform internal QC checks of Project activities. Internal QC checks will adhere to both this work plan and DBS&A's QMP. An independent review of all deliverables will be performed throughout the RD process by the QA Official approved for this project. The activities of the QA Official are detailed in the *Application of the DBS&A Quality Management Plan to the Griggs & Walnut Groundwater Plume Superfund Site Remedial Design* (DBS&A, 2010) that has been submitted to and approved by EPA.

References

CH2M HILL. 2006a. *Remedial investigation report, Version 1.2, Griggs and Walnut Ground Water Plume Superfund Site, Las Cruces, New Mexico.* November 2006.

CH2M HILL. 2006b. *Feasibility study report, Version 1.2, Griggs and Walnut Ground Water Plume Superfund Site Las Cruces, New Mexico.* November 2006

Daniel B. Stephens & Associates, Inc. (DBS&A). 2009. *Quality management plan.* December 2009.

DBS&A. 2010. *Application of the DBS&A quality management plan to the Griggs & Walnut Groundwater Plume Superfund Site remedial design.* Prepared for the Joint Superfund Project. January 19, 2010.

John Shomaker and Associates, Inc. (JSAI). 2006. *Ground-water flow and solute- transport model for the Griggs and Walnut Superfund Site, Las Cruces, New Mexico.* Prepared for the Griggs and Walnut Joint Superfund Project (City of Las Cruces and Doña Ana County). November 2006.

JSAI. 2009. *Technical memorandum: Updates to the Groundwater model and recommendations for using City of Las Cruces wells 18 and 27 to capture and contain the Griggs and Walnut Plume*. November 5, 2009.

U.S. Environmental Protection Agency (EPA). 1995. *Remedial design/remedial action handbook.* EPA 540/R-95/059, Office of Solid Waste and Emergency Response, 9355.0-04B. June 1995.

U.S. EPA. 1996. *Presumptive response strategy and ex- situ treatment technologies for contaminated groundwater at CERCLA sites.* EPA 540/R-96/023. OSWER Directive 9283.1-12. October 1996.

U.S. EPA. 2005. Settlement agreement for funding of EPA's Remedial Investigation/Feasibility Study, and Letter from EPA to the City of Las Cruces and Doña Ana County regarding the Involvement of the City of Las Cruces and Doña Ana County in the RI/FS process. April 20, 2005.

U.S. EPA. 2006. *Proposed plan, Griggs and Walnut Ground Water Plume, Las Cruces, NM, Doña Ana County.* December 2006.

U.S. EPA. 2007. *Record of decision, Griggs and Walnut Ground Water Plume Superfund Site.* June 2007.

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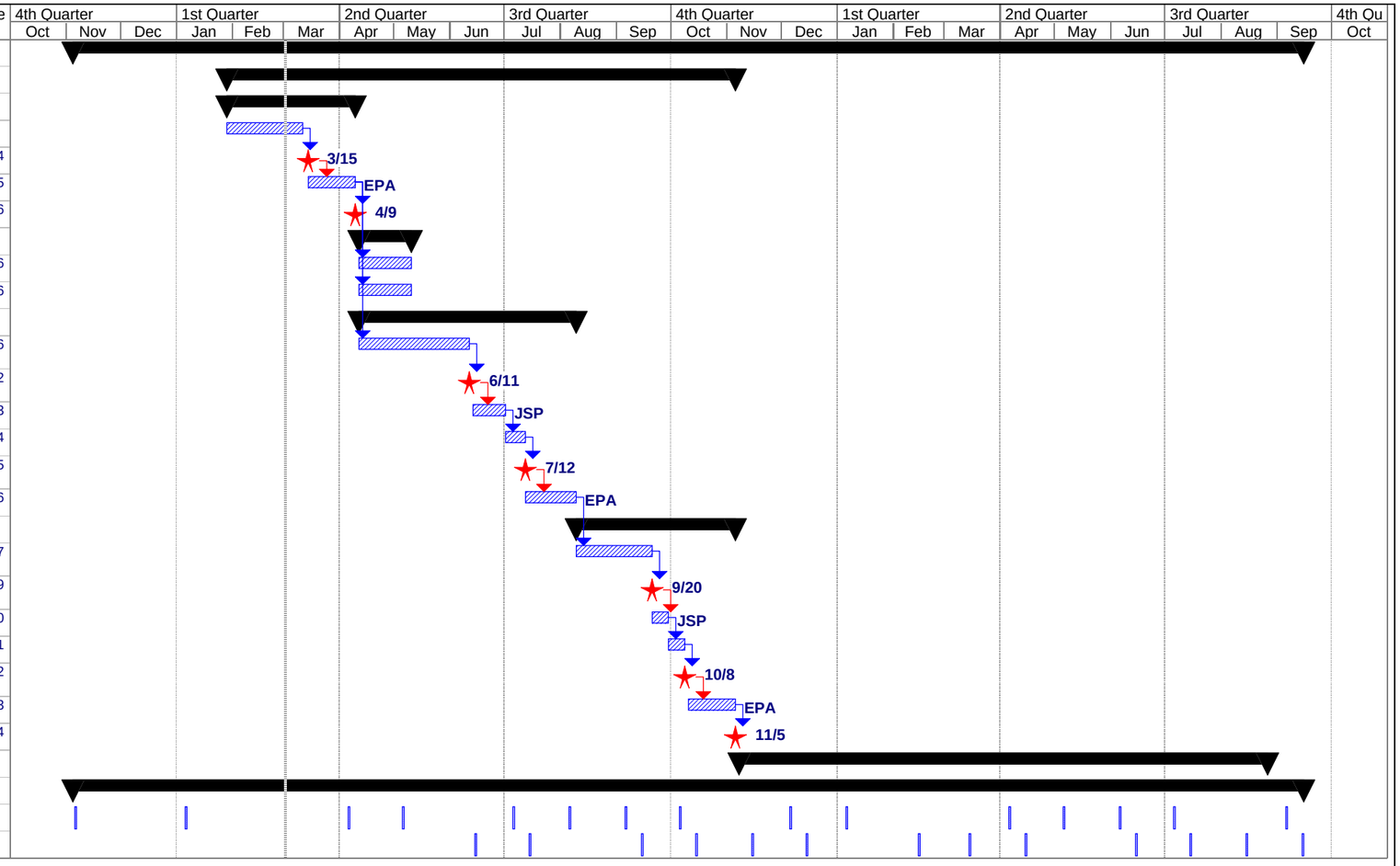
Appendix A

Project Implementation Schedule

ID	Task Name	Duration	Start	Finish	ce
1	**Remediation Project**	**486 days**	**Thu 11/5/09**	**Thu 9/15/11**	
2	**Design Documents**	**201 days**	**Fri 1/29/10**	**Fri 11/5/10**	
3	**Project Planning**	**51 days**	**Fri 1/29/10**	**Fri 4/9/10**	
4	Remedial Design Work Plan	30 days	Fri 1/29/10	Thu 3/11/10	
5	Submittal of Remedial Design Work Plan	0 days	Mon 3/15/10	Mon 3/15/10	4
6	EPA Review	20 days	Mon 3/15/10	Fri 4/9/10	5
7	EPA Appreoval of RD Work Plan	0 days	Fri 4/9/10	Fri 4/9/10	6
8	**Data Acquisition**	**21 days**	**Mon 4/12/10**	**Mon 5/10/10**	
9	Perform Professional Utility Survey	21 days	Mon 4/12/10	Mon 5/10/10	6
10	Perform Professional Land Survey	21 days	Mon 4/12/10	Mon 5/10/10	6
11	**Draft Remedial Design**	**86 days**	**Mon 4/12/10**	**Mon 8/9/10**	
12	Prepare 30% Design Plans & Specifications	45 days	Mon 4/12/10	Fri 6/11/10	6
13	Submittal of 30% Design Plans & Specifications for JSP Review	0 days	Fri 6/11/10	Fri 6/11/10	12
14	JSP Review	14 days	Mon 6/14/10	Thu 7/1/10	13
15	Incorporate JSP Comments	7 days	Fri 7/2/10	Mon 7/12/10	14
16	Submittal of 30% Design Plans & Specifications for EPA Review	0 days	Mon 7/12/10	Mon 7/12/10	15
17	EPA Review	20 days	Tue 7/13/10	Mon 8/9/10	16
18	**Final Remedial Design**	**64 days**	**Tue 8/10/10**	**Fri 11/5/10**	
19	Prepare Final Design Plans & Specifications	30 days	Tue 8/10/10	Mon 9/20/10	17
20	Submittal of Final Design Plans & Specifications for JSP review	0 days	Mon 9/20/10	Mon 9/20/10	19
21	JSP Review	7 days	Tue 9/21/10	Wed 9/29/10	20
22	Incorporate JSP Comments	7 days	Thu 9/30/10	Fri 10/8/10	21
23	Submittal of Final Design Plans & Specifications for EPA review	0 days	Fri 10/8/10	Fri 10/8/10	22
24	EPA Review	20 days	Mon 10/11/10	Fri 11/5/10	23
25	EPA Approval of Final Design	0 days	Fri 11/5/10	Fri 11/5/10	24
26	**Construction**	**210 days**	**Mon 11/8/10**	**Fri 8/26/11**	
33	**Project Management**	**486 days**	**Thu 11/5/09**	**Thu 9/15/11**	
34	**Client updates**	**479 days**	**Thu 11/5/09**	**Tue 9/6/11**	
51	**Progress Reports**	**328 days**	**Tue 6/15/10**	**Thu 9/15/11**	



Griggs & Walnut Plume
Superfund Remediation Project
Schedule

Task | Progress | Summary | External Tasks | Deadline
Split | Milestone | Project Summary | External Milestone

Appendix B

Letter of Understanding

November 30, 2009

Petra Sanchez
US Environmental Protection Agency Region 6
1445 Ross Ave., Suite 1200 (6sf-lt)
Dallas, TX 75202-2733

Re: Letter of Understanding Regarding Deliverables to be Included in the Remedial Design
Griggs & Walnut Groundwater Plume Superfund Site

Dear Petra.

At the direction of the City of Las Cruces and Dona Ana County, acting as the Joint Superfund Project (JSP), Daniel B Stephens & Associates, Inc. has prepared this letter of understanding that we believe summarizes our conversation of November 24, 2009 regarding questions raised by the JSP concerning deliverables to be included in the remedial design (RD) for the Griggs & Walnut Groundwater Plume Superfund Site. Our letter dated November 23 2009 (attached), included a list of typical RD deliverables including a contingency plan, an operations and maintenance (O&M) plan for the groundwater treatment plant, sampling and analysis plans for both the RD and remedial action (RA), and qualifications of the contractor performing the RA. As we discussed, the Unilateral Administrative Order that the JSP hopes to respond to addresses the RD only Furthermore, documents such as the O&M plan are only appropriate once the final equipment has been selected. Because of these facts, you agreed that the JSP does not need to include these deliverables that are more appropriate for the RA.

I trust this is the information you require at this time. If you have any questions, please do not hesitate to call me at (505) 822-9400.

Sincerely,

DANIEL B. STEPHENS & ASSOCIATES, INC.

Douglas W. Reaber, P.G.
Senior Geologist

attachment

cc: Jorge Garcia
Ed Fridenstine
Gundar Peterson
Joshua Rosenblatt
Adrienne Widmer

Daniel B. Stephens & Associates, Inc.
6020 Academy Rd., NE, Suite 100 505-822-9400
Albuquerque, NM 87109-3315 FAX 505-822-8877

November 23, 2009

Petra Sanchez
U.S. Environmental Protection Agency Region 6
1445 Ross Ave., Suite 1200 (6sf-lt)
Dallas, TX 75202-2733

Re: Review of Requirements within the Statement of Work

Dear Petra:

At the request of the City of Las Cruces and Dona Ana County, acting as the Joint Superfund Project (JSP), Daniel B. Stephens & Associates, Inc. (DBS&A) has reviewed the Statement of Work that is Appendix C of the Unilateral Administrative Order (UAO) currently under review and negotiation. In looking at the SOW we have identified a number of areas where we are requesting some clarification. This in large part is a result of the fact that the UAO and associated SOW have been issued to address the remedial design (RD) only Many of the requirements that remain in the SOW pertain to documents that are required for the remedial action, and require information that will not be available at the time that the RD is completed. An example of this would be the operation and maintenance plan for the treatment plant. We would typically see this included in an as-built report.

We have prepared the attached table that identifies some of the deliverables that we believe should be discussed further We would greatly appreciate talking with you about this at your earliest convenience so that the project can proceed smoothly

Sincerely,

DANIEL B. STEPHENS & ASSOCIATES, INC.

Douglas W Reaber, P.G
Senior Geologist

DWR/rpf
cc: Jorge Garcia
Ed Fridenstine
Gundar Peterson
Joshua Rosenblatt
Adrienne Widmer

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Table 1. Elements Within the Statement of Work to be Addressed

Paragraph	Requirement/ Comment
14	Health and Safety Plan (HASP). We would like clarification on the elements being requested. The Contractor will likely run under their own plan.
15	RD Sampling and Analysis Plan/Quality Assurance Project Plan. We believe that the requirement to describe the optimization of the air stripper is premature given that a stripper will not have been selected yet. There is no intention to perform any sampling as part of the RD.
20	Remedial Action SAP. This needs to be clarified. Routine sampling will not be performed by DBS&A under this contract. Furthermore, there is no intent to install an additional extraction well at this time.
21	Second HASP We believe that a HASP for the remedial action is premature.
22	Operation and Maintenance Plan. We believe that we cannot prepare an O&M plan until the system is installed.
23a	Description of the qualifications of the QA Official. We believe this will have already been provided.
23b	Listing of responsibilities of respondents key personnel during construction. This will not be available.
23h	Document retention This needs to come from the JSP
29	Final Construction Schedule Not possible without consent decree.
31	Community Relations Plan. We believe this is the same community relations plan that was previously required.