

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6

In The Matter Of:)
)
Griggs and Walnut Ground Water Plume)
Superfund Site, Las Cruces, New Mexico)
)
City of Las Cruces, and Doña Ana County,)
Respondents)
)
) U.S. EPA
) Docket No. _06-10-08 _____
)
Proceeding Under Section 106(a) of the)
Comprehensive Environmental Response,)
Compensation, and Liability Act of 1980,)
as amended (42 U.S.C. 9606(a)))

APPENDIX C
STATEMENT OF WORK
GRIGGS AND WALNUT GROUND WATER PLUME SUPERFUND SITE
LAS CRUCES, NEW MEXICO

I. INTRODUCTION

1. This Statement of Work (SOW) is Appendix C to the U.S. Environmental Protection Agency (EPA) unilateral administrative order styled "*In The Matter Of: Griggs and Walnut Ground Water Plume Superfund Site, Las Cruces, New Mexico*, U.S. EPA Docket No. 06-10-08 (hereinafter the Order).

2. Respondents, City of Las Cruces and Doña Ana County (the "Respondents") shall perform the Work described in this SOW. Respondents shall perform the Work to design, construct, operate and maintain the remedy selected by the U.S. Environmental Protection Agency ("EPA") in EPA's June 18, 2007, Record of Decision ("ROD") to address the release of hazardous substances at the Griggs & Walnut Ground Water Plume Superfund Site (the "Site").

3. As explained in Section V (Work to Be Performed) of this SOW, to fulfill the Work requirements of Section IX (Work to be Performed) of the Order) in addition to other Work described in the Order and this SOW, the Respondents shall generally do the following: i) prepare

a written Remedial Design Work Plan; ii) implement the Remedial Design Work Plan, following its approval by EPA, to produce a Draft Remedial Design and if requested by EPA, a Pre-Final Remedial Design (the Pre-Final Design becomes the Final Remedial Design once it is approved by EPA); iii) prepare, and secure EPA's approval of, the written Remedial Action Work Plan, containing plans for the construction of the selected remedy according to the Final Remedial Design, and also containing plans for the continuing operation and maintenance (O&M) of the selected remedy; and iv) construct, operate, and maintain the remedy according to the EPA-approved Remedial Action Work Plan. In general, Respondents shall:

(a) contain the contaminated ground water plume, and extract the contaminated ground water in the plume and treat the water so that the ground water meets Remedial Action Objectives (RAOs) and Remediation Goals set forth in the ROD;

(b) undertake long-term monitoring of the Site ground water to ensure that the remedial action is meeting performance standards, and to produce data that can be used to adjust pumping rates and zones and the treatment activities to meet RAOs;

(c) implement an inter-agency communication plan to protect the remedy, human exposure, and to help prevent future ground water contamination;

(d) operate and maintain the constructed remedy.

II. ROLE OF EPA

4. EPA's approval of deliverables, including submissions, is administrative in nature and allows the Respondents to proceed to the next steps in implementing the Work. EPA's approval does not imply any warranty of performance, nor does it imply that the Work, including without limitation the Remedial Design and Remedial Action, when completed, will meet Performance Standards, nor does EPA's approval of any single submission or deliverable imply that EPA will approve any other submission or deliverable. Pursuant to Section XIV (EPA Approval of Plans and Other Submissions) of the Order, EPA retains the right to disapprove submissions and other deliverables, including submissions associated with the Remedial Design and Remedial Action Work, contractor selection, plans and specifications, work plans, processes, and any other deliverables required by the Order, including this SOW. In many instances, deliverables, including without limitation submissions required by this SOW, are described in very broad terms; however, Respondents shall timely confer with the EPA Remedial Project Manager (RPM) regarding these broadly described deliverables, and Respondents shall complete these deliverables according to written directions given by the RPM.

III. PERFORMANCE STANDARDS

5. Respondents Work shall meet Performance Standards. The Performance Standards for the Work are the standards by which EPA will determine whether Respondents' Work has been satisfactorily completed. The Performance Standards shall include substantive requirements, criteria, and/or limitations that are specified in the ROD, the Order, the SOW, and/or in EPA-approved submissions. Performance standards include the Remedial Action Objectives and Remediation Goals described in Section 8 of the ROD.

IV. RESPONDENTS' KEY PERSONNEL

Respondents' Supervising Contractor

6. Within 10 working days of EPA's authorization to proceed as provided in Section IX (Work to be Performed) of the Order (the effective date of the Order), the Respondents shall initiate their process for procuring the Supervising Contractor who will be primarily involved in performing, directing or overseeing the Work. Within 90 days from the date that the Respondents initiate their procurement process, the Respondents shall notify EPA, in writing, of the name, title, address, and telephone number of those personnel on the staff of the Respondents and the Supervising Contractor who will be primarily involved in performing, directing or overseeing the Work.

7. When necessary as determined by EPA, Respondents shall meet with EPA at the times, dates and places selected by EPA to discuss the performance and capabilities of the Respondents' Supervising Contractor. If the Supervising Contractor's performance is not satisfactory, as determined by EPA, the Respondents shall timely take those actions, as requested by EPA, to correct the deficiency. If, at any time, EPA determines that the Supervising Contractor is unacceptable for any reason, the Respondents, at EPA's request, shall immediately bar the Supervising Contractor from any work under the Order and Respondents shall give notice to EPA of Respondents' selected new Supervising Contractor(s) (whereupon EPA will either issue a notice of disapproval or another authorization to proceed pursuant to Paragraph 50 of the Order), and pursuant to the provisions of paragraph 8 of this SOW, Respondents shall notify EPA of the new Supervising Contractor's key personnel.

The Quality Assurance Official

8. Within 10 working days from the receipt of EPA's initial authorization to proceed as described in paragraph 50 of the Order, the Respondents shall notify EPA in writing of the name, title, address, phone number, and qualifications of Respondents' proposed Quality Assurance Official ("QA Official") who will conduct a quality assurance program as specified in the EPA-approved Quality Management Plan. The QA official may be a City Utilities employee, such as an environmental engineer. Certain specifications of the Quality Management Plan are set forth in paragraph 49 of the Order. At the time of this notification, the Respondents shall also certify to EPA, in writing, that the proposed QA Official is unaffiliated with, and independent from, the Supervising Contractor. Respondents shall use the QA Official to provide confirmation and assurance to the Respondents and to EPA that the Respondents are constructing the selected remedy for the Site to meet Performance Standards. The Supervising Contractor will implement the Remedial Design Quality Assurance Project Plan ("QAPP"). The QA Official will monitor performance and adherence to the QAPP, a submission required by SOW paragraph 15, and the Construction Quality Assurance Plan ("CQAP"), a submission required by SOW paragraph 42, by selectively testing and inspecting the Work of the Supervising Contractor, the Remedial Action (RA) Contractor, and any other contractors.

9. Within 10 working days of EPA receiving the Respondents' Notice regarding the QA Official, as described in the preceding paragraph, EPA will issue a notice of disapproval or an authorization to proceed regarding the QA Official. If at any time thereafter Respondents propose to replace a QA Official, Respondents shall give written notice, including the name, title, address, telephone number, and qualifications of the newly proposed QA Official, to EPA, and Respondents must obtain an authorization to proceed from EPA before the new QA Official performs, directs, or supervises any Work.

10. If, at any time, EPA disapproves Respondents' proposed QA Official, EPA will notify Respondents in writing. Within 30 days of receipt of EPA's disapproval of the identified QA Official, Respondents shall submit to EPA a written list of proposed QA Officials that would be acceptable to Respondents. The Respondents' submission shall include the name, title, address, telephone number, and qualifications of the proposed QA Officials. EPA will provide written notice of the names of any proposed QA Officials that it disapproves and an authorization to proceed with respect to any of the other proposed QA Officials. Respondents may select any QA Official from that list that is not disapproved and shall notify EPA in writing of the name of the proposed QA Official selected as QA Official within 21 days of EPA's authorization to proceed.

11. If any QA Official performance is not satisfactory, as determined by EPA, the Respondents shall timely take those actions, as requested by EPA, to correct the deficiency. If, at any time, EPA determines that the QA Official is unacceptable for any reason, the Respondents, at EPA's request, shall immediately bar the QA Official from performing, directing, or supervising any Work under the Order, and, the Respondents shall submit a list of proposed new QA Officials to EPA and follow the procedures outlined in Paragraph 10 above. Respondents must obtain an authorization to proceed from EPA before any new QA Official performs, directs, or supervises any Work under the Order.

V. Work to Be Performed

Remedial Design Work Plan

12. Within 30 days of receiving EPA's authorization to proceed as provided in paragraph 50 of the Order, Respondents shall submit a written Remedial Design Work Plan to EPA¹ for review and approval pursuant to Section XI (EPA Approval of Plans and Other Submissions) of the Order. In the Remedial Design Work Plan, Respondents shall include detailed written plans for (1) the development of a Remedial Design, including elements associated with the conceptual design for the implementation of the selected remedy described in the ROD; (2) the completion of

¹As required by Section X of this Order, Respondents shall simultaneously submit copies of all submissions to NMED for its review. The EPA will ensure that NMED has had an opportunity to comment on all submissions before they are approved by EPA. EPA will consider all timely comments submitted by NMED. Only for the purposes of NMED comments, comments are "timely" if they are submitted within seven working days for any document under 10 pages long, or within 15 working days for any document 10 pages or longer.

the deliverables described in paragraphs 14 through 31 of this SOW, including a schedule therefore; and (3) a schedule for the completion of the Remedial Design.

Remedial Design

13. Respondents shall submit, for EPA review and approval pursuant to the provisions of Order Section XIV (EPA Review of Plans and Other Submissions), the written Remedial Design, according to the EPA-approved Remedial Design Work Plan including the EPA-approved schedule in the Remedial Design Work Plan.

Respondents shall submit the Remedial Design deliverables in two stages according to the EPA-approved schedule in the Remedial Design Work Plan:

(a) Respondents shall submit a written Draft Remedial Design to EPA for review and approval pursuant to Section XIV (EPA Approval of Plans and Other Submissions) of the Order. In the Draft Remedial Design, Respondents shall include the deliverables described in SOW paragraphs 14 through 24 (Draft Remedial Design Deliverables) and;

(b) After EPA has approved the Draft Remedial Design, Respondents shall submit a written Final Remedial Design to EPA for review and approval pursuant to Section XIV (EPA Approval of Plans and Other Submissions) of the Order. In the Final Remedial Design, Respondents shall include the deliverables described in SOW paragraphs 14 through 31 (Draft Remedial Design Deliverables, and Final Remedial Design Deliverables).

Unless otherwise directed by EPA in writing, after Respondents have submitted the Final Remedial Design (after EPA approves the Draft Remedial Design), Respondents (including Respondents' contractor(s)) shall not perform further Work at the Site unless and until EPA provides Respondents with EPA's written approval of the Final Remedial Design Work Plan pursuant to Section XIV of the Order (EPA Approval of Plans and Other Submissions).

Draft Remedial Design Deliverables

14. Respondents shall submit a written Health and Safety Plan for field design activities that conforms to all applicable Occupational Safety and Health Administration ("OSHA") and EPA requirements, including the OSHA regulations set forth at 29 CFR §1910 (54 Fed. Reg. 9294). In addition, in the Health and Safety Plan, Respondents shall also document specific health and safety procedures, criteria, or protocols, including the following: material safety data sheets for selected contaminants; safety instructions for special equipment; explanations of the use and maintenance of special equipment; records documenting the status of training and medical examinations for field personnel and health and safety officers; and copies of all relevant reports and other health and safety documentation.

15. Respondents shall submit a written Remedial Design Sampling and Analysis Plan (RDSAP) that includes without limitation: (a) a description of the field, sampling, and analytical

activities required to assess the location and the concentrations of contaminants, (b) any additional waste profile information required by a treatment and disposal facility prior to its acceptance of Site material if Site material is to be sent off-site; and (c) a description of the field, sampling and analytical activities required to assess how to design and optimize the air stripping treatment system and the ground water monitoring network. Respondents shall include, in the RDSAP submission, a Quality Assurance Project Plan (QAPP) that is developed in accordance with Section XVI (Quality Assurance, Sampling, and Data Analysis) of the Order.

16. Respondents shall submit a written Community Relations Plan, in which the Respondents describe the actions they will take to support EPA's Community Relations efforts.

17. Respondents shall submit a written Remedial Design Contingency Plan to protect the local affected population in the event of an accident or emergency at the Site during any field activities undertaken during remedial design. Respondents shall include in the Remedial Design Contingency Plan the following: (a) a Spill Prevention, Control and Countermeasures Plan, and (b) an Air Monitoring Plan, to address any complaints about air emissions from the air stripping treatment area. The Air Monitoring Plan shall incorporate worker safety measures to ensure worker protection from air stripping activities.

18. Respondents shall submit a written Permitting Requirements and Compliance Plan. The Respondents' plan shall ensure that all on-site activities meet the substantive (but not the administrative) requirements of all State and Federal environmental permitting laws for on-site activities. The Respondents' Plan shall ensure that all relevant State and Federal environmental permits are obtained for off-site activities. The Permitting Requirements and Compliance Plan shall, pursuant to CERCLA Section 121(d), 42 U.S.C. § 9621(d), set forth the requirements for all Applicable or Relevant and Appropriate Requirements (ARARs) pertaining to the RD/RA as described in the ROD. The Respondents shall also, in the Permitting Requirements and Compliance Plan, describe the permits required for RD/RA, if any (no permits are required for on-site activities, but the substantive requirements must be met), and they shall also describe the activities required to demonstrate compliance with those permits (substantive requirements only for on-site RD/RA activities). Respondents shall update the Permitting Requirements and Compliance Plan to conform to any substantive changes in State and Federal environmental permitting laws, and Respondents shall submit any updated plan to EPA for review and approval.

19. Respondents shall submit all drawings and written specifications for the Final Remedial Design.

20. Respondents shall submit a written Remedial Action Sampling and Analysis Plan (RASAP) designed to measure progress toward meeting remedial action objectives and remediation goals established in Section 8 (Remedial Action Objectives; Remediation Goals) of the ROD. Respondents shall include in the Remedial Action Sampling and Analysis Plan the following:

- a. A description of the confirmatory, field sampling and analytical activities that

Respondents shall perform to evaluate changes in tetrachloroethylene (“PCE”) over time to characterize and monitor the PCE plume, and to estimate the effectiveness of the ground water extraction and treatment to ensure that PCE is being removed in a manner that will meet the performance standards established in the ROD;

b. A description of the confirmatory, field, sampling and analytical activities, including modeling activities that Respondents shall perform to track the plume containment of the dissolved-phase contaminants of concern, and a discussion on how the data will be used to verify performance of the remedy. Analytical data shall include other pertinent data collected, such as any new contaminants detected in the ground water plume, any changes in contaminant ground water hydrology, and estimated reductions over time in the contaminant plume as described in the following parts of the ROD: i) in Section 8 (Remedial Action Objectives; Remediation Goals); ii) in the Section 9 subsections entitled Common Elements, B. Long-Term Monitoring, C. Annual Reviews and Reporting, E. Technical Support, and Alternative 4: Enhanced Ground Water Extraction with Treatment: The Selected Remedy Under This ROD; and iii) Section 12 (Selected Remedy - Enhanced Ground Water Extraction with Treatment);

c. A technical justification supporting the Respondents’ proposed well location selection;

d. A description of the statistical methodologies that Respondents shall use to demonstrate that Remediation Goals have been attained for the entire remedy, including those elements and actions described in SOW paragraph 25 (Remedy Elements and Actions), in accordance with the procedures outlined in Paragraphs 51 through 54 of this SOW;

e. A description of the procedures that Respondents shall use to resample if EPA or Respondents finds that analytical results do not meet data quality objectives or quality assurance criteria (*see* EPA QMP and QAPP guidance documents cited in the Order for definitions of these terms); and

f. A schedule for sampling during the Remedial Action activities.

21. Respondents shall submit a written Health and Safety Plan for Remedial Action activities that conforms to all applicable Occupational Safety and Health Administration (“OSHA”) requirements, including without limitation the OSHA regulations set forth at 29 CFR § 1910 (54 Fed. Reg. 9294), and all applicable EPA Health and Safety requirements.

22. Respondents shall submit a written Operation and Maintenance (O & M) Plan describing measures to be taken to maintain the effectiveness of the constructed Remedial Action, including those elements and actions described in SOW paragraph 25 (Remedy Elements and Actions). The O&M Plan will include a discussion on how the remedy or air stripping unit and ground water extraction system is meeting the performance standards and goals.

23. Respondents shall submit a written Construction Quality Assurance Plan (CQAP) that

describes the Site specific components of their quality assurance program. Respondents' Construction Quality Assurance Plan shall include procedures and observations designed to monitor and test remedy construction as it proceeds to ensure, with a reasonable degree of certainty, that the completed remedy will meet or exceed all Performance Standards. Respondents shall include each of the following in the CQAP:

a. A description of the qualifications of the QA Official to demonstrate that the QA Official possesses the training and experience necessary to fulfill the QA Official's responsibilities as identified in SOW paragraph 8. This may take the form of a resume.

b. A listing of responsibilities and authorities of all of Respondents' key personnel involved in the design of all the remedy elements and actions including those described in SOW paragraph 29 (Remedy Elements and Actions), and a listing of responsibilities and authorities of all of Respondents' key personnel involved in the construction of these elements and actions.

c. Identification of all quality assurance personnel with their qualifications, to demonstrate they possess the training and experience necessary to fulfill their identified responsibilities. This may take the form of resumes and an organization chart.

d. A description of the procedures, observations and tests that Respondents shall use to monitor construction, and a schedule for these observations and tests.

e. A description of all proposed sampling activities that Respondents shall undertake including, but not limited to, sample size, sample locations, frequency of testing, acceptance and rejection criteria, plans for implementing corrective measures as addressed in the plans and specifications, data sheets, problem identification and corrective measures reports, evaluation reports, acceptance reports, and final documentation.

f. A description of the reporting requirements for quality assurance activities including such items as periodic summary reports (with the period determined by EPA), data validation, schedule of data submissions, inspection data sheets, problem identification and corrective measures reports, evaluation reports, acceptance reports, and final documentation.

g. A description of the formatting for all data acquired during the Remedial Action, including the methods of electronic data preservation of all reports and raw data, and the methods for graphical presentation of data using Geographic Information System (GIS) software or other appropriate software.

h. A description of the arrangements that Respondents shall make for final storage of all records and documents, consistent with requirements of Section XXI (Record Preservation) of the Order.

24. Respondents shall prepare a written Remedial Action Release Prevention/Contingency

Plan that conforms to paragraph 66 of the Order and this SOW, and that explains in detail the actions that Respondents shall take in the event of any action or occurrence during the performance of the remedy which causes or threatens to cause a release of Waste Material at or from the Site that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment. Respondents shall design the plan to protect the local population in the event of an accident or emergency at the Site. In the Remedial Action Release Prevention/Contingency Plan, Respondents shall include:

- a. An Air Monitoring Plan to ensure that there are no dangerous releases of chlorinated solvents into ambient air that exceed a statistically significant threshold or air quality standards on or near the Site;
- b. A Spill Prevention, Control and Countermeasures ("SPCC") Plan, as specified in 40 CFR Part 112;
- c. The name and telephone number of the person or entity that the Respondents designate as responsible for responding in the event of an emergency incident;
- d. A plan for a local emergency response coordination meeting on a date specified in the plan. Respondents shall use their best efforts to ensure that the meeting is attended by representatives of local emergency responders, including without limitation fire department, police, and hospital representatives, along with New Mexico Environment Department ("NMED") and EPA officials; and
- e. Appropriate and applicable first aid and medical information relevant to any likely exposure.

Final Remedial Design Deliverables

25. **Remedy Elements and Actions.** Respondents shall submit, for EPA review and approval pursuant to the provisions of Order Section XIV (EPA Review of Plans and Other Submissions), detailed written plans and specifications for the construction and implementation of the selected remedy described in the ROD including all of the remedy elements and actions described in this SOW paragraph. The selected remedy includes the common elements described in section 9 of the ROD. These common elements are described in the following subsections of section 9: Common Elements, A. Institutional Controls, B. Long-Term Monitoring, C. Annual Reviews and Reporting, D. Monitoring of Uranium Levels Pursuant to the Safe Drinking Water Act, and E. Technical Support. The selected remedy also includes the elements and actions described in the subsection of section 9 entitled Alternative 4: Enhanced Ground Water Extraction with Treatment: The Selected Remedy Under This ROD. The selected remedy also includes those elements and actions described in ROD Section 12 (Selected Remedy - Enhanced Ground Water Extraction with Treatment).² Respondents shall perform all elements and actions of the selected

² The identified parts of ROD section 9 and ROD section 12 describe elements of selected remedy but the remedy is

remedy described in the ROD including the following:

a. Respondents shall extract water from any municipal supply wells that are in acceptable locations for containing and reducing the PCE ground water plume and that will support meeting the RAOs for the site as determined by EPA. Respondents shall submit information to EPA regarding the acceptability of the municipal supply well locations and EPA will determine whether the locations are acceptable. Respondents shall undertake extraction at the wells that EPA identifies as acceptable.

b. Respondents shall convey extracted water to a central treatment plant which they shall construct within the plume boundaries.

c. Respondents shall treat extracted water using air-stripping to remove concentrations of PCE that exceed the Maximum Contaminant Limit (MCL) of 5 µg/L. That is, Respondents shall remove from the extracted water concentrations of PCE that are greater than 5 µg/L.

d. Respondents shall discharge treated water to the municipal water supply system of the City of Las Cruces, meeting MCLs for all contaminants.

e. Respondents shall put into effect the following institutional controls:

(i) Restrictions prohibiting the completion of ground water wells on the Site that would detrimentally affect the ground water remedy, performed under the authority of the State Engineer.

(ii) Procedures for interagency communication and notification of contaminant releases and mitigation efforts to avoid future co-mingling of contaminants and further expansion of the affected ground water plume.

f. Respondents shall monitor, according to a schedule approved by EPA, the PCE-contaminated ground water plume by sampling the selected wells as described in the RASAP once the RASAP is approved by EPA. Respondents shall monitor any municipal water supply ground water wells and monitoring wells necessary to characterize the extent of the plume, and Respondents shall also collect data that reflects the current Site conditions.

g. Respondents shall include the following information in the written progress reports as described in the EPA approved Work Plan that Respondents submit under paragraph 72 of the Order:

i. Respondents shall provide written analysis of any sampling data collected under SOW paragraph 25(g), and explain whether the data indicates progress toward meeting the RAOs.

ii. Respondents shall report current status of activities, results of any data collected for that period, including any modeling analysis of the plume, or problems encountered and how they are being resolved.

iii. Respondents shall provide a statistical analysis on an annual basis of any data collected to date, using data trends to support how data was applied in plume management and in meeting project goals including RAOs.

described throughout other parts of the ROD as well.

- iv. Respondents shall describe any technical problems encountered, and shall also describe how the problems were resolved. Respondents shall also explain if any problems remain unresolved.
 - v. Respondents shall provide a summary describing quality assurance and data validation activities that took place during the preceding month as well as the number of data packages reviewed year-to-date (as of the date of the progress report in question), with the results of the validation.
 - h. Respondents shall, beginning one year from the effective date of the Order, submit written annual reports (in addition to the monthly progress reports), which shall describe the rate and extent of progress toward meeting the RAOs and Remediation Goals, and explain how plume expansion is being mitigated or prevented. These annual reports should also describe how the data trends are being used to manage extraction and treatment to reduce the PCE plume.
26. Within 15 days of EPA's approval of the Draft Remedial Design Report, Respondents shall schedule a meeting with EPA to discuss the Draft Remedial Design Report.
27. Within 30 days of the meeting with EPA, Respondents shall submit, for EPA review and approval pursuant to Order Section XIV (EPA Approval of Plans and Other Submissions), a written Final Remedial Design Report. The Final Remedial Design Report will include a cover letter explaining in detail how the Respondents' Remedial Design complies with Performance Standards (including without limitation the remedial action objectives and remediation goals described in Section 8 (Remedial Action Objectives; Remediation Goals) of the ROD), and addressing all issues and comments which EPA raised to Respondents during the design process.
28. Respondents shall submit, for EPA review and approval pursuant to Order Section XIV (EPA Approval of Plans and Other Submissions), a Data Management Plan that includes a description of the formatting for all data acquired during the RA, including the methods of electronic data preservation of all reports and raw data, and the methods for graphical presentation of data (GIS). The Data Management Plan shall include a discussion on the security measures, method of database protection and maintenance, and method of maintaining public availability of information.
29. Respondents shall submit, for EPA review and approval pursuant to Order Section XIV (EPA Approval of Plans and Other Submissions), a written Final Construction Schedule for construction of the Remedial Action.
30. Respondents shall submit, for EPA review and approval pursuant to Order Section XIV (EPA Approval of Plans and Other Submissions), a written plan for providing access to the Site for EPA's Remedial Project Manager (RPM), State Officials including without limitation NMED officials, EPA Oversight Officials, State Contractors, and other agencies with jurisdictional

interest pursuant to Order Section XIX (Access to Site Not Owned By Respondents and Order Section XIX (Site Access and Data/Document Availability).

31. Respondents shall submit, for EPA review and approval pursuant to Order Section XIV (EPA Approval of Plans and Other Submissions), a written Community Relations Plan. In the Community Relations Plan the Respondents shall describe actions which Respondents shall take to support EPA's Community Relations efforts and provide active communication between the community and the Respondents.

Remedial Action Work Plan

32. Within 30 days of EPA's approval of the Final Remedial Design, Respondents shall submit a Remedial Action Work Plan for EPA's review and approval pursuant to Section XIV (EPA Approval of Plans and Other Submissions) of the Order. In the Remedial Action Work Plan, Respondents shall describe Respondents' detailed plans, including without limitation a schedule for the completion of the deliverables described in the EPA-approved Final Remedial Design and in SOW paragraphs 35 through 49 (Remedial Action and O&M Deliverables). That is, the Respondents shall develop a Remedial Action Work Plan that describes the manner in which Respondents shall implement the design described in the Final Remedial Design to complete the selected remedy described in the ROD, including all of the remedy elements and actions described in SOW paragraph 25 (Remedy Elements and Actions).

33. Respondents, in the Remedial Action Work Plan, shall describe the manner in which they will perform the Remedial Action to meet the Remediation Goals of the ROD (*see* ROD Section 8 (Remedial Action Objectives; Remediation Goals)), and to operate and maintain the completed remedy.

34. Respondents, in the Remedial Action Work Plan, shall describe the manner in which Respondents shall complete the deliverables described in SOW paragraphs 35 through 50 (Remedial Action and O&M Deliverables).

Remedial Action and O&M Deliverables

36. Respondents shall submit, for EPA review and approval pursuant to Order Section XIV (EPA Approval of Plans and Other Submissions), written plans for the completion of the Remedial Action according to the Final Remedial Design including the execution of the contract for construction.

37. Respondents shall submit, for EPA review and approval pursuant to Order Section XIV (EPA Approval of Plans and Other Submissions), written Remedial Action Schedule which shall set deadlines for Respondents' completion of the Remedial Action according to the Final Remedial Design including without limitation the construction activities necessary to support the

selected remedy described in the ROD including all of the remedy elements and actions described in SOW paragraph 25 (Remedy Elements and Actions).

38. Respondents shall submit, for EPA review and approval pursuant to Order Section XIV (EPA Approval of Plans and Other Submissions), written plans in their Field Sampling Plan for identification of and satisfactory compliance with substantive permitting requirements (but not administrative permitting requirements) for on-site Remedial Action activities, and for permitting requirements (substantive and administrative) for any off-site activities that require a permit.

39. Respondents shall identify in writing Respondents' key Remedial Action personnel including without limitation any contractor personnel. The identification shall include names, addresses, titles, telephone numbers, descriptions of duties, and lines of authority (an organizational chart is sufficient to indicate lines of authority).

40. Respondents shall submit, for EPA review and approval pursuant to Order Section XIV (EPA Approval of Plans and Other Submissions), a clear and concise written description of the roles, relationships, and assignment of responsibilities among the Respondents' Project Coordinator, QA Official, Supervising Contractor, Remedial Design Team. This may take the form of an organization chart.

41. Respondents shall submit, for EPA review and approval pursuant to Order Section XIV (EPA Approval of Plans and Other Submissions), a written Transportation and Disposal Plan which establishes procedures for any contaminated material that is to be transported off-site for disposal. The Transportation and Disposal Plan shall be consistent with the Off-site Rule, 40 CFR § 300.440, shall meet all Applicable or Relevant and Appropriate Requirements (ARARs), shall meet any applicable U.S. Department of Transportation regulations, and shall meet the requirements of Order paragraph 78.

42. Respondents shall submit, for EPA review and approval pursuant to Order Section XIV (EPA Approval of Plans and Other Submissions), a written strategy and a schedule for implementing the following plans which are part of the Remedial Design:

- a. Remedial Action Sampling and Analysis Plan
- b. Health and Safety Plan
- c. Operation & Maintenance Plan
- d. Construction Quality Assurance Plan
- e. Remedial Action Release Prevention/Contingency Plan.

43. Respondents shall submit, for EPA review and approval pursuant to Order Section XIV

(EPA Approval of Plans and Other Submissions), written procedures that describe the manner in which Respondents shall develop and submit to EPA monthly written Remedial Action Status Reports. Monthly updates regarding the completion of the selected remedy described in the ROD, including all of the remedy elements and actions described in SOW paragraph 25 (Remedy Elements and Actions) should describe progress to date.

44. Respondents shall submit, for EPA review and approval pursuant to Order Section XIV (EPA Approval of Plans and Other Submissions), written procedures that describe the manner in which Respondents shall develop and submit to EPA Annual Remedial Action Reports for treatment of ground water and the ground water monitoring remedy component. That is, Respondents shall describe the manner in which they shall collect and organize ground water treatment and monitoring data to report Respondents' progress toward attaining Performance Standards. Respondents shall submit written Annual Remedial Action Reports, for EPA review and approval pursuant to Order Section XIV (EPA Approval of Plans and Other Submissions). In the annual Remedial Action Reports, Respondents shall summarize the Remedial Action activities completed during the preceding year, and shall provide an analysis of the ground water data acquired during the preceding year that supports progress toward the remedial goals. Respondents shall submit the first Annual Remedial Action Report to EPA one year from EPA's approval of the RA Work Plan, and Respondents shall submit subsequent Annual Remedial Action Reports to EPA on the anniversary of the first report.

45. Respondents shall submit, for EPA review and approval pursuant to Order Section XIV (EPA Approval of Plans and Other Submissions), written procedures for a Pre-Final Inspection and a Final Inspection that the Respondents shall carry out when the Work described in the Order, in the SOW, and in EPA-approved submissions has been completed. The purpose of this Pre-Final Inspection is to assess whether all aspects of the plans and specifications have been implemented at the Site for the Remedial Action. As a result of this inspection, Respondents shall generate a Checklist that specifies which outstanding items still require completion or correction, if any, and Respondents shall submit this checklist, for EPA review and approval pursuant to Order Section XIV (EPA Approval of Plans and Other Submissions). The purpose of the Final Inspection is to ensure that all outstanding items included on the Checklist have been addressed. EPA will not notify the Respondents that the Remedial Action is Operational and Functional within the meaning of Order paragraph 60 until all checklist items are complete.

46. Respondents shall submit, for EPA review and approval pursuant to Order Section XIV (EPA Approval of Plans and Other Submissions), written procedures that Respondents shall use to develop a Remedial Action Report for the entire remedy including those elements and actions described in SOW paragraph 25. In these written procedures, Respondents shall explain the manner in which they shall collect and organize information to show that the elements and actions described in SOW paragraph 25 (Remedy Elements and Actions) have been completed. Respondents shall make the procedures consistent with the requirements of Paragraph 55 of this SOW.

47. Respondents shall submit, for EPA review and approval pursuant to Order Section XIV (EPA Approval of Plans and Other Submissions), written procedures that Respondents shall use to develop a Certification of Completion of the Work for the entire remedy (including those elements and actions described in SOW paragraph 25 (Remedy Elements and Actions)) pursuant to Order paragraph 55, and Section V of this SOW. In these written procedures, Respondents shall explain the manner in which they shall collect and organize information to show that the Remedial Action is complete and that Operation and Maintenance has begun.

48. Preconstruction Conference. Within 30 days of EPA's approval of the Remedial Action Work Plan, and prior to the start of construction of the Remedial Action selected in the ROD, the Respondents shall schedule and conduct a pre-construction conference, to discuss the various details associated with the implementation of the Remedial Design. Respondents shall use their best efforts to ensure that participants in the conference include: representatives of the Respondents, the Respondents' Project Coordinator, the EPA Remedial Project Manager and any EPA Oversight Officials (to be designated by EPA at that time), the NMED Project Manager and any designated NMED Oversight Officials (to be designated by NMED at that time), a representative of the Supervising Contractor, the QA Official, a representative of the Remedial Action Contractor, a representative of the Settling Defendant's contractors who is well informed regarding the development of the Remedial Design, and a representative of each selected subcontractor. The purpose of the pre-construction conference shall also be to establish working relationships among all those involved in the Remedial Action, to establish lines of communication, and to discuss Remedial Action activities.

49. Construction Oversight Pursuant to Order Section XIX (Access to Site Not Owned By Respondents and Order Section XIX (Site Access and Data/Document Availability, during implementation of the Remedial Action, the Respondents shall provide the RPM, EPA-designated oversight officials, State Officials, and State-designated oversight officials with access to the Site and to all property utilized by Respondents or by Respondents' contractors or agents, in carrying out the Work. The Respondents shall provide an office for the RPM, the NMED project manager, and EPA-designated Oversight Officials at or near the Site. The office shall include, at a minimum, an air-conditioned, heated, well-lit, private office, two office desks with chairs, one four-drawer file cabinet, access to a telephone with a private line, access to the internet, a tele-facsimile, access to a photocopying machine, and restroom facilities. For field work undertaken away from the office, Respondents shall provide the RPM, the NMED project manager, and EPA-designated oversight officials with on-site restroom facilities and communications equipment, including a telephone and any communication equipment used by the Respondents or their contractors if necessary as determined by EPA. Respondents shall also provide personal protective equipment for the RPM, State Officials, and EPA-designated Oversight Officials, who have received the necessary training under 29 CFR § 1910.120, so that they might have access to all portions of the Site including contaminated portions.

Completion of Work to be Performed by Respondents

50. Construction of the remedy is complete once EPA determines that the physical components of the remedial action have been constructed. The remedy becomes Operational and Functional either one year after EPA determines that the construction of the remedy is complete, or when the remedy is determined concurrently by EPA and NMED to be functioning properly and is performing as designed, whichever is earlier. Once the remedy is Operational and Functional, Respondents shall perform Operation and Maintenance (O&M) of the remedy consistent with the EPA-approved O&M plan (which is part of the Remedial Action Work Plan).

Respondents shall demonstrate that Remedial Action Objectives and Remediation Goals are met

51. Once Respondents conclude that the Remedial Action Objectives and the Remediation Goals are met, Respondents shall submit written information supporting that conclusion for EPA review and approval pursuant to Order Section XIV (EPA Approval of Plans and Other Submissions), as part of the report described in paragraph 59) of the Order. Respondents must submit any and all information required by plans and procedures developed under SOW paragraphs 32 through 50, and Respondents must obtain the EPA approval described in SOW paragraph 54 to demonstrate that the Remedial Action Objectives and Remediation Goals are met.

Ground Water Remedial Action Objectives

52. The following are the remedial action objectives for ground water that were selected in the ROD (the remediation goals for ground water are part of the remedial action objectives):

- a. Prevent human exposure to contaminated ground water above the MCL (5µg/L) for PCE.
- b. Maintain capture of the PCE-contaminated ground water plume above the MCL (5 µg/L) for PCE.
- c. Restore ground water to its beneficial use as a drinking water supply with PCE concentrations no greater than the MCL (5 µg/L).

53. Respondents shall sample ground water at the contaminated subsurface contamination plume according to the EPA-approved Remedial Action Sampling and Analysis Plan, and submit a sampling analysis report , for EPA review and approval pursuant to Order Section XIV (EPA Approval of Plans and Other Submissions), to demonstrate that the remedial action objectives described in SOW paragraph 52 have been met.

Operational and Maintenance

54. Once EPA determines that all physical construction of the remedy is complete and pursuant to the provisions of SOW paragraphs 51 through 53, that the remedy is complete and that

the remedy is Operational and Functional, then Respondents shall perform Operation and Maintenance (O&M) of the remedy consistent with the EPA-approved O&M plan (which is part of the Remedial Action Work Plan). If EPA and NMED do not make a concurrent determination that the remedy is Operational and Functional, then the remedy becomes Operational and Functional one year after EPA determines that all physical construction of the remedy is complete and, at that time, Respondents shall start performing Operation and Maintenance (O&M) of the remedy consistent with the EPA-approved O&M plan (which is part of the Remedial Action Work Plan).

Certification of Completion

55. Upon the completion of the Operational and Functional phase at the Site, the Respondents shall prepare and submit, for EPA review and approval pursuant to Order Section XIV (EPA Approval of Plans and Other Submissions), a written Remedial Action Report which documents that all Work described in the Order, the SOW and EPA-approved submissions, has been completed. The report shall include a construction chronology, a list of any EPA-approved modifications to the Remedial Design that became part of the constructed remedy, pre-final inspection corrections, documentation substantiating that the remedy component is functioning properly and is performing as designed, and As-Built Drawings of the remedy component.

56. Respondents shall undertake the Work described in Order paragraph 60 to certify completion of all the Work.