

**APPENDIX A
STATEMENT OF WORK
FOR REMEDIAL INVESTIGATION AND FEASIBILITY STUDY
AND REMOVAL ACTIONS
AT THE TITTABAWASSEE RIVER DIOXIN SPILL SITE IN MICHIGAN**

I. PURPOSE

This Statement of Work (SOW) sets forth the requirements for conducting a Remedial Investigation and Feasibility Study (RI/FS) and Removal Actions at the Tittabawassee River Dioxin Spill Site (Site) located in, and down stream of, Midland, Michigan. The Site is located in and along the upper six miles of the Tittabawassee River and its floodplains, beginning at the upstream portion of Reach A, located upstream of Dow's Midland Plant property, and extending downstream to approximately Reach O, and areas where hazardous substances, pollutants, or contaminants have or may have come to be located from the Site including, but not limited to, the Saginaw River and its floodplains and portions of Saginaw Bay in Lake Huron.

The RI Report shall fully evaluate the nature and extent of hazardous substances, pollutants or contaminants at and/or from the Site. The RI Report shall also assess the risk which these hazardous substances, pollutants or contaminants present for human health and the environment. The RI Report shall provide sufficient data to develop and evaluate effective remedial alternatives. The FS Report shall evaluate alternatives for addressing the impact to human health and the environment from hazardous substances, pollutants or contaminants at the Site.

The Respondent shall prepare and complete the RI and FS Reports in compliance with the Administrative Order on Consent (AOC), this SOW, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 C.F.R. Part 300) as amended, and all requirements and guidance for RI/FS studies and reports, including but not limited to EPA Superfund *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA* (EPA/540/G-89/004, October 1988) (RI/FS Guidance), and any other guidance that the United States Environmental Protection Agency (EPA) uses in conducting or submitting deliverables for a RI/FS. Exhibit B sets forth a partial list of guidance used by EPA for a RI/FS.

The Removal Actions shall provide an appropriate extent of action to be taken in response to a given release, considering available information and current site conditions. The Removal Actions shall be taken to abate, prevent, minimize, stabilize, mitigate, or eliminate the release or threat of a release that may pose a threat to public health or the environment.

The Respondent shall furnish all personnel, materials, and services necessary for, or incidental to, performing the RI/FS and Removal Actions at the Site, except as otherwise specified herein.

II. DOCUMENT REVIEW

In accordance with the Schedule in Exhibit A to this SOW, the Respondent shall submit all documents or deliverables required as part of this SOW to the EPA, with a copy(ies) to the Michigan Department of Environmental Quality (MDEQ), for review and approval in accordance with Section X of the AOC.

To the extent approved by EPA, the parties will use a series of meetings and calls to support document development and review. After receipt of a draft document for review and approval in accordance with Section X of the AOC, EPA, at its sole discretion, may meet or confer with Respondent to give preliminary Agency feedback on the document.

III. SCOPE OF RI/FS

In accordance with the Schedule in Exhibit A to this SOW, the Respondent shall complete the following tasks as part of the RI/FS for the Site:

- Task 1: Project Scoping and RI/FS Planning Documents
- Task 2: Community Relations and Technical Assistance Plan
- Task 3: Site Characterization
- Task 4: Remedial Investigation Report (including human health and ecological risk assessment)
- Task 5: Treatability Studies (if needed)
- Task 6: Development and Screening of Alternatives (Technical Memoranda)
- Task 7: Detailed Analysis of Alternatives (FS Report)
- Task 8: Progress Reports

Details regarding the aforementioned eight tasks are specified below.

TASK 1: PROJECT SCOPING AND RI/FS PLANNING DOCUMENTS

1.1. Site Background

The Respondent shall gather and analyze the existing Site background information and shall conduct a Site visit to assist in planning the scope of the RI/FS.

1.1.1. Previous Work

For portions of the Site where environmental clean up work has previously been conducted either voluntarily or under a local, State or federal program, the Respondent shall assess the previous work with respect to the extent to which the risk to human health and the environment from hazardous substances, pollutants or contaminants has been reduced or eliminated (considering EPA's Superfund goals to protect public health, welfare or the environment) and the need for additional work (either additional response actions and/or further investigation) to further eliminate such risks. The Respondent shall summarize and document the previous clean up work

in the RI/FS Work Plan submitted pursuant to Task 1.2, and shall assess the adequacy of the previous work to meet the objectives of this AOC and SOW.

1.1.2. Collect and Analyze Existing Data

Before planning the RI/FS activities, the Respondent shall thoroughly compile and review all existing Site data. The Respondent shall summarize and document the existing data in the RI/FS Work Plan submitted pursuant to Task 1.2, and shall assess the adequacy of the previous work to meet the objectives of this AOC and SOW. Historical data shall be submitted electronically according to EPA Region 5 specifications. Existing Site data includes presently available data relating to the varieties and quantities of hazardous substances, pollutants and contaminants at the Site, past disposal practices, the results of previous sampling activities, and information about past response actions and residual contamination at the Site.

1.1.3. Conduct Site Visit

The Respondent shall visit the Site during the project scoping phase. The Respondent shall coordinate visits to the Site with EPA's project manager, and MDEQ shall be invited to attend.

1.1.4. Assess Source Control

The Respondent shall prepare a Source Control Technical Memorandum assessing past and current sources of contamination to the Site, and documenting the current degree of control on potential and actual sources. The Technical Memorandum shall include an assessment of the affect actual or ongoing sources could have on downstream sediments and/or floodplain areas.

1.2. RI/FS Work Plan

A RI/FS Work Plan shall be prepared to accomplish the following:

- A remedial investigation that fully determines the nature and extent of the release or threatened release of hazardous substances, pollutants, or contaminants at and from the Site. In performing this investigation, the Respondent shall gather sufficient data, samples, and other information to fully characterize the nature and extent of the contamination at the Site, to support the human health and ecological risk assessments, and to provide sufficient data for the identification and evaluation of remedial alternatives for each Site.
- A feasibility study that identifies and evaluates alternatives for remedial action to protect human health and the environment by preventing, eliminating, controlling or mitigating the release or threatened release of hazardous substances, pollutants, or contaminants at and from the Site.

The Respondent shall prepare the RI/FS Planning documents to be consistent with applicable portions of the "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA," October, 1988.

The RI/FS Work Plan shall include a detailed description of the tasks the Respondent shall perform, the information needed for each task, a detailed description of the information the Respondent shall produce during and at the conclusion of each task, and a description of the work products that the Respondent shall submit to EPA and MDEQ including: the deliverables set forth in this SOW; a schedule for each of the required activities; and a project management plan including a data management plan (e.g., requirements for project management systems and software, minimum data requirements, requirements for submittal of electronic data, data format and backup data management).

The RI/FS Work Plan shall include: data quality objectives (DQOs); number and types of sampling locations; analytical, physical and/or biological tests; a site-specific conceptual site model (CSM); preliminary objectives for the remedial action at the Site; a description of the Site management strategy; and data needs for fully characterizing the nature and extent of the contamination at the Site, evaluating risks and developing and evaluating remedial alternatives. The RI/FS Work Plan shall reflect coordination with treatability study requirements, if any. In addition, the RI/FS Work Plan shall include the following:

1.2.1. Site Background

The Site Background section shall include a brief summary of the Site location, description, physiography, hydrology, geology, demographics, ecological, cultural and natural resource features, Site history, description of previous investigations and responses conducted at the Site by local, state, federal, or private parties, and Site data evaluations and project planning completed during the scoping process.

The Site background section shall discuss areas of waste handling and disposal activities, the locations of existing groundwater monitoring wells, if any, and previous surface water, sediment, soil, groundwater, and air sampling locations. The Site Background section shall include a summary description of available data and identify areas where hazardous substances, pollutants or contaminants were detected and the detected levels. The Site Background section shall include tables and/or figures displaying the minimum and maximum levels of detected hazardous substances, pollutants or contaminants in Site areas and media.

1.2.2. Conceptual Site Model

The Respondent shall prepare a CSM that is applicable to the Site. The CSM shall show potential contaminant sources, fate and transport routes, and exposure pathways for the Site. New information will be used to refine the CSM, as it becomes available, and evaluation of the CSM will be done in an iterative fashion, starting with the RI planning documents and continuing through completion of the FS.

1.2.3. Data Gap Description/Data Acquisition

As part of the RI/FS Work Plan, the Respondent shall analyze the currently available data. The Respondent shall identify those areas of the Site and nearby areas that require additional data and evaluation in order to define the extent of hazardous substances, pollutants or contaminants. The RI/FS Work Plan shall include a description of the number, types, and locations of samples to be collected. As needed and deemed appropriate by EPA, the RI/FS Work Plan shall include an environmental program to accomplish the following:

- Site Reconnaissance. The Respondent shall conduct:
 - Site surveys including property, boundary, utility rights-of-way, and topographic information
 - Land survey
 - Topographic mapping
 - Field screening

- Geological Investigations (Soils and Sediments). The Respondent shall conduct geological investigations to determine the extent of hazardous substances, pollutants or contaminants (including waste materials) in surface soils, subsurface soils and sediments at the Site. As part of this geological investigation Respondent shall:
 - Collect surface soil samples
 - Collect subsurface soil samples
 - Perform soil boring and permeability sampling
 - Collect sediment samples
 - Survey soil gases
 - Test pit
 - Identify real-world horizontal, vertical, and elevation coordinates for all samples and Site features in accordance with EPA Region 5 electronic data requirements

- Air Investigations. The Respondent shall conduct air investigations to determine the extent of atmospheric hazardous substances, pollutants or contaminants at and from the Site, which shall include:
 - Collect air samples
 - Establish air monitoring stations

- Hydrogeological Investigations (Groundwater). The Respondent shall conduct hydrogeological investigations of groundwater to determine the horizontal and vertical distribution of hazardous substances, pollutants or contaminants in the groundwater and the extent, fate and transport of any groundwater plumes containing hazardous substances, pollutants or contaminants. The hydrogeological investigation shall include:

- Install well systems
 - Collect samples from upgradient, downgradient, private and municipal wells
 - Collect samples during drilling (e.g., HydroPunch or equivalent)
 - Perform hydraulic tests (such as pump tests, slug tests and grain size analyses)
 - Measure groundwater elevations and determine horizontal and vertical sample locations in accordance with EPA Region 5 electronic data requirements
 - Modeling
 - Determine the direction of regional and local groundwater flow
 - Identify the local uses of groundwater including the number, location, depth and use of nearby private and municipal wells
- **Hydrogeological Investigations (Surface Water).** The Respondent shall conduct hydrogeological investigations to determine the nature and extent of contamination of surface water from the Site. The hydrogeological investigation shall include:
 - Collect samples
 - Measure surface water elevation and depth
 - Evaluate flow and hydrodynamics
- **Geophysical Investigation.** The Respondent shall conduct geophysical investigations to delineate waste depths, thicknesses and volume; the elevations of the underlying natural soil layer and the extent of cover over fill areas including the following:
 - Magnetometer
 - Electromagnetic
 - Ground-penetrating Radar
 - Seismic refraction
 - Resistivity
 - Site meteorology
 - Cone penetrometer survey
 - Remote sensor survey
 - Radiological investigation
 - Test pits, trenches and soil borings
- **Ecological Investigation.** The Respondent shall conduct ecological investigations to assess the impact to aquatic and terrestrial ecosystems from the disposal, release and migration of hazardous substances, pollutants or contaminants at the Site including:
 - Wetland and habitat delineation
 - Wildlife observations
 - Community characterization
 - Endangered Species identification
 - Biota sampling and population studies

- Dispose of Investigation-Derived Waste. The Respondent shall characterize and dispose of investigation-derived wastes in accordance with local, state, and federal regulations as specified in the FSP (see the Fact Sheet, *Guide to Management of Investigation-Derived Wastes*, 9345.3-03FS (January 1992)).
- Evaluate and Document the Need for Treatability Studies. If the Respondent or EPA identify response actions that involve treatment, the Respondent shall include treatability studies as outlined in Task 5 of this SOW unless the Respondent satisfactorily demonstrates to EPA that such studies are not needed. When treatability studies are needed, the Respondent shall plan initial treatability testing activities (such as research and study design) to occur concurrently with Site characterization activities.

1.2.4. Field Sampling Plan

The Respondent shall prepare the Field Sampling Plan (FSP) portion of the RI Planning Documents to ensure that sample collection and analytical activities are conducted in accordance with technically acceptable protocols and that the data meet DQOs as established in the Quality Assurance Project Plan (QAPP) and FSP. All sampling and analyses performed shall conform to EPA direction, approval, and guidance regarding sampling, quality assurance/quality control (QA/QC), data validation, and chain of custody procedures. This document shall provide standard operating procedures (SOPs) for sampling activities.

The FSP will incorporate elements of dynamic field activities, to the extent appropriate, based on site-specific conditions and data needs. Dynamic field activities will be used to streamline Site activities with real-time data and real-time decisions in accordance with site specific QA/QC requirements. This approach, sometimes called the Triad approach, involves systematic planning, a dynamic work plan strategy, and real time field measurements. Dynamic field activities will be conducted consistent with OSWER No. 9200.1-40, *Using Dynamic Field Activities for On-Site Decision Making: A Guide for Project Managers*.

1.2.5. Quality Assurance Project Plan (QAPP)

The Respondent shall prepare a QAPP that covers sample analysis and data handling for samples collected during the RI, based on the AOC and guidance provided by EPA. The Respondent shall prepare the QAPP in accordance with "EPA Requirements of Quality Assurance Project Plans (QA/R-5)" (EPA/240/B-01/003, March 2001) and "EPA Guidance for Quality Assurance Project Plans (QA/G-5)" (EPA/600/R-02/009, December 2002). The QAPP may include Field-Based Analytical Methods, if appropriate and scientifically defensible.

The Respondent shall demonstrate, in advance to EPA's satisfaction, that each laboratory it may use is qualified to conduct the proposed work. This includes use of methods and analytical protocols for the chemicals of concern in the media sampled within detection and quantification limits consistent with both QA/QC procedures and DQOs approved in the QAPP. The laboratory must have and follow an approved QA program. If a laboratory not in the Contract

Laboratory Program is selected, methods consistent with CLP methods that would be used at the Site for the purposes proposed and QA/QC procedures approved by EPA shall be used. The Respondent shall only use laboratories which have a documented Quality Assurance Program which complies with ANSI/ASQC E-4 1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs," (American National Standard, January 5, 1995) and "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01-002, March 2001) or equivalent documentation as determined by EPA.

Upon request by EPA, the Respondent shall have its laboratory analyze samples submitted by EPA for quality assurance monitoring. The Respondent shall provide EPA with the QA/QC procedures followed by all sampling teams and laboratories performing data collection and/or analysis. The Respondent shall also ensure the provision of analytical tracking information consistent with OSWER Directive No. 9240.0-2B, *Extending the Tracking of Analytical Services to PRP-Lead Superfund Sites*.

The Respondent shall participate in a pre-QAPP meeting or conference call with EPA. The purpose of this meeting or conference call is to discuss QAPP requirements and obtain any clarification needed to prepare the QAPP.

1.2.6. Health and Safety Plan

The Respondent shall prepare a Health and Safety Plan (HSP). The HSP shall conform to the Respondent's health and safety program and comply with the Occupational Safety and Health Administration (OSHA) regulations and protocols outlined in 29 C.F.R. Part 1910. The HSP shall be prepared in accordance with EPA's Standard Operating Safety Guide (PUB 9285.1-03, PB 92-963414, June 1992). The HSP shall include the 11 elements described in the RI/FS Guidance such as a health and safety risk analysis, a description of monitoring and personal protective equipment, medical monitoring, and Site control. EPA does not "approve" the Respondent's HSP, but rather EPA reviews it to ensure that all the necessary elements are included, and that the plan provides for the protection of human health and the environment, and after that review provides comments as may be necessary and appropriate. The safety plan must, at a minimum, follow the EPA's guidance document *Standard Operating Safety Guides* (Publication 9285.1-03, PB92-963414, June 1992).

TASK 2: COMMUNITY INVOLVEMENT SUPPORT AND TECHNICAL ASSISTANCE PLANS

2.1. Community Involvement Support

EPA has the responsibility of developing and implementing community involvement activities for the Site. The critical community involvement planning steps performed by EPA include conducting community interviews and developing a Community Involvement Plan. Although implementing the Community Involvement Plan is the responsibility of EPA, the Respondent, if

directed by EPA, shall assist by providing information regarding the Site's history; participating in public meetings; assisting in preparing fact sheets for distribution to the general public; or conducting other activities approved by EPA. All Respondent-conducted community involvement activities shall be planned and developed in coordination with EPA.

2.2. Technical Assistance Plan (TAP)

In addition to any assistance with community involvement activities, if requested by EPA, the Respondent shall prepare a Technical Assistance Plan (TAP) that will provide and administer \$50,000 at the Site for a qualified community group to hire Technical Advisors, independent from the Respondent, to help interpret and comment on Site-related documents developed under this SOW and through EPA's issuance of the Record of Decision. After a request by EPA, the Respondent shall submit to EPA its TAP for the Site for Agency approval, in accordance with the Schedule in Exhibit A to this SOW.

As part of the TAP, the Respondent shall propose methods, including an application process, minimum eligibility requirements and selection criteria for awarding, and administering the funds above.

Any eligible group shall be: 1) a group of people who may be affected by a release or threatened release at the Site; 2) incorporated as a nonprofit organization for the purposes of the Site or otherwise established as a charitable organization that operates within the geographical range of the Site and is already incorporated as a nonprofit organization; and 3) able to demonstrate its capability to adequately and responsibly manage any funds awarded. Any group is ineligible if it is: 1) a potentially responsible party (PRP) at the Site or represents such a PRP or is a group whose ability to represent the interests of the affected individuals might be limited as a result of receiving money or services from a PRP; 2) affiliated with a national organization; 3) an academic institution; 4) a political subdivision; or 5) a group established or presently sustained by government entities, a PRP, or any ineligible entity. Selection criteria should be consistent with 40 C.F.R. §35.4155. Funds may be awarded to only one qualified group at a time.

Also as part of the TAP, the Respondent shall include a proposed plan for documenting the eligibility of the selected community group, and informing the group and EPA if it believes any individual member is ineligible (consistent with 40 C.F.R. §35.4030) to participate in the group. Respondent shall also include a plan for informing the selected group of the activities that can and cannot be undertaken with Respondent's funds. The lists of eligible and ineligible activities should be consistent with 40 C.F.R. §35.4070 and §35.4075, respectively. The TAP shall also include a proposal for offering and, if accepted, transferring up to \$5,000 to the selected group to cover its estimated need for funds for an initial start-up period.

Also as part of the TAP, Respondent shall include a plan for providing assistance to the selected community group in the solicitation for an independent Technical Advisor. As long as the group documents its selection and the advisor selected by the group satisfies the requirements specified in 40 C.F.R. §35.4190 and §35.4195, Respondent shall accept the group's choice. Finally,

Respondent shall include a proposed plan for negotiating a contract with the selected community organization and the independent Technical Advisor. The contract shall specify the duties of the Respondent, community group, and Technical Advisor, respectively, and establish a dispute resolution process. Respondent shall notify EPA of the provisions of the final contract.

The Respondent may hire a third party to coordinate and administer the TAP (hereinafter referred to as the TAP Coordinator). However, any such TAP Coordinator shall be approved by EPA. It is the Respondent's burden to demonstrate that the TAP Coordinator is qualified to perform this task. If the Respondent opts to hire a TAP Coordinator, then it shall submit in writing that person's name, title, and qualifications to EPA within 30 days after a request by EPA for submittal of a TAP for a Site. Additionally, as part of the TAP, Respondent shall designate an outreach coordinator who will be responsive to the public's inquiries and questions about the Site, including information about the application process and administration of the TAP. Respondent shall also propose a plan for arranging for and hosting meetings between its Outreach Coordinator, the community group, the Technical Advisor, and other interested individuals.

If the community group demonstrates, consistent with the criteria specified in 40 C.F.R. §35.4065, that it needs additional funds for TAP activity, then Respondent will provide the additional monies needed. Any unobligated funds shall revert to the Respondent upon EPA's issuance of the ROD based upon the RI/FS to be conducted pursuant to this SOW.

In accordance with the schedule in the EPA approved TAP, the Respondent shall select the TAP recipient; release \$5,000 in start-up funds; confirm the selection of the Technical Advisor, and finalize an appropriate contract with the selected community representative and the Technical Advisor. In addition, the Respondent shall provide EPA and MDEQ with quarterly progress reports concerning the implementation of the TAP.

TASK 3: SITE CHARACTERIZATION

3.1. Investigate and Define Site Physical and Biological Characteristics

The Respondent shall implement the RI/FS Work Plan and collect data on the physical and biological characteristics of the Site and its surrounding areas including, as needed, the physical physiography, geology, and hydrology, and specific physical characteristics. This information will be ascertained through a combination of existing data, and physical measurements, observations, and sampling efforts and will be utilized to define potential transport pathways and human ecological receptor populations. In defining the Site's physical characteristics the Respondent will also obtain sufficient engineering data for the projection of contaminant fate and transport, and development and screening of res alternatives, including information to assess treatment technologies.

The Respondent shall provide EPA with a paper copy and an electronic copy (according to EPA Region 5 format specification) of laboratory data within the monthly progress reports and in no

event later than 90 days after samples are shipped for analysis. In addition, the monthly progress reports will summarize field activities (including drilling locations, depths and field notes if requested by RPM), problems encountered, solutions to problems, and upcoming field activities.

Upon request by EPA, the Respondent shall allow EPA or its authorized representatives to take split and/or duplicate samples of any samples collected by the Respondent or their contractors or agents. The Respondent shall notify EPA not less than 15 business days in advance of any sample collection activity. EPA shall have the right to take any additional samples that it deems necessary.

3.2. Define Sources of Contamination

The Respondent shall locate each source of contamination. For each location, Respondent shall determine the areal extent and depth of contamination by sampling in accordance with the approved plans. Respondent shall determine the physical characteristics and chemical constituents and their concentrations for all known and discovered sources of contamination. The Respondent shall conduct sufficient sampling to define the boundaries of the contaminant sources to the level established in the QAPP and DQOs. Defining the source of contamination will include analyzing the potential for contaminant release (e.g., long term leaching from soil), contaminant mobility and persistence, and characteristics important for evaluating remedial actions, including information to assess treatment technologies.

3.3. Describe the Nature and Extent/Fate and Transport of Contamination

The Respondent shall gather information to describe the nature and extent of contamination as a step during the field investigation. To describe the nature and extent of contamination, the Respondent will utilize the information on Site physical and biological characteristics and sources of contamination to give a preliminary estimate of the contaminants that may have migrated. The Respondent will then implement an iterative monitoring program and any study program identified in the work plan or sampling plan such that by using analytical techniques sufficient to detect and quantify the concentration of contaminants, the migration of contaminants through the various media at the Site can be determined. In addition, the Respondent shall gather data for calculations of contaminant fate and transport. This process is continued until the area and depth of contamination are characterized as established in the QAPP and DQOs.

3.3.1. Evaluate Site Characteristics

The Respondent shall analyze and evaluate the data to describe: (1) Site physical and biological characteristics; (2) contaminant source characteristics; (3) nature and extent of contamination; and (4) contaminant fate and transport. Results of the Site physical characteristics, source characteristics, and extent of contamination analyses are utilized in the analysis of contaminant fate and transport. The Respondent shall evaluate the actual and potential magnitude of releases from the sources, and horizontal and vertical spread of contamination as well as mobility and

persistence of contaminants. Where modeling is appropriate, such models shall be identified to EPA in a technical memorandum prior to their use. Upon request, all model data and programming, including any proprietary programs, shall be made available to EPA together with a sensitivity analysis. The RI data shall be presented electronically according to EPA Region 5 format requirements. Analysis of data collected for Site characterization will meet the DQOs developed in the QAPP and stated in the FSP (or revised during the RI).

3.3.2. Baseline Human Health Risk Assessment

As an attachment to the RI Report, the Respondent shall submit a Baseline Human Health Risk Assessment Report to EPA, with a copy to the MDEQ, for review and approval pursuant to Section X of the AOC. The Respondent shall conduct the baseline risk assessment to determine whether Site contaminants pose a current or potential risk to human health and the environment in the absence of any remedial action. The Baseline Risk Assessment will include contaminant identification, exposure assessment, toxicity assessment, and human health and ecological risk characterization.

Respondent shall conduct a baseline human health risk assessment that focuses on actual and potential risks to persons coming into contact with on-site hazardous substances, pollutants or contaminants as well as risks to the nearby residential, recreational and industrial worker populations from exposure to hazardous substances, pollutants or contaminants in groundwater, soils, sediments, surface water, air, and ingestion of contaminated organisms in nearby, impacted ecosystems. The human health risk assessment shall define central tendency and reasonable maximum estimates of exposure for current land use conditions and reasonable future land use conditions. The human health risk assessment shall use data from the Site and nearby areas to identify the contaminants of concern (COCs), provide an estimate of how and to what extent human receptors might be exposed to these COCs, and provide an assessment of the health effects associated with these COCs. The human health risk assessment shall project the potential risk of health problems occurring if no cleanup action is taken at the Site and/or nearby areas, and establish target action levels for COCs (carcinogenic and non-carcinogenic).

Respondent shall conduct the human health risk assessment in accordance with EPA guidance including, at a minimum: "Risk Assessment Guidance for Superfund (RAGS), Volume I - Human Health Evaluation Manual (Part A)," Interim Final (EPA-540-1-89-002)," OSWER Directive 9285.7-01A; December 1, 1989; and "Risk Assessment Guidance for Superfund (RAGS), Volume I - Human Health Evaluation Manual (Part D, Standardized Planning, Reporting, and Review of Superfund Risk Assessments)," Interim, (EPA 540-R-97-033), OSWER 9285.7-01D, January, 1998 or subsequently issued guidance.

As appropriate, Respondent shall also conduct the human health risk assessment in accordance with the following additional guidance found in the following OSWER directives:

- 1) "Clarification to the 1994 Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities," OSWER Directive 9200.4-27; August, 1998,
- 2) "Implementation of the Risk Assessment Guidance for Superfund (RAGS) Volume I - Human Health Evaluation Manual, (Part D, Standardized Planning, Reporting, and Review of Superfund Risk Assessments) (Interim)," OSWER Directive 9285.7-01D-1; December 17, 1997,
- 3) "Soil Screening Guidance: Technical Background Document," OSWER Directive 9355.4-17A; May 1, 1996 and "Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites, OSWER Directive 9355.4; March 24, 2001,
- 4) "Soil Screening Guidance: User's Guide," Publication 9355.4-23; April, 1996,
- 5) "Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities," OSWER Directive 9355.4-12; July 14, 1994,
- 6) "Guidance Manual for the Integrated Exposure Uptake Biokinetic (IEUBK) Model for Lead in Children," Publication 9285.7-15-1; February, 1994, and associated, clarifying Short Sheets on IEUBK Model inputs, including but not limited to OSWER 9285.7-32 through 34, as listed on the OSWER lead internet site at www.epa.gov/superfund/programs/lead/prods.htm,
- 7) "Integrated Exposure Uptake Biokinetic (IEUBK) Model for Lead in Children," Version 0.99D, NTIS PB94-501517, 1994 or "Integrated Exposure Uptake Biokinetic (IEUBK) Model for Lead in Children," Windows© version, 2001,
- 8) "Risk Assessment Guidance for Superfund: Volume I - Human Health Evaluation Manual: (Part B, Development of Risk-based Preliminary Remediation Goals)," Interim, OSWER Directive 9285.7-01B; December, 1991,
- 9) "Human Health Evaluation Manual, Supplemental Guidance: Standard Default Exposure Factors," OSWER Directive 9285.6-03; March 25, 1991, and
- 10) "Exposure Factors Handbook," Volumes I, II, and III; August 1997 (EPA/600/P-95/002Fa, b, c).

Respondent shall also comply with the guidance on assessing human health risk associated with adult exposures to lead in soil as found in the following document: "Recommendations of the Technical Review Workgroup for Lead for an Interim Approach to Assessing Risks Associated with Adult Exposures to Lead in Soil," December, 1996. This document may be downloaded from the Internet at the following address: www.epa.gov/superfund/programs/lead/prods.htm.

With regard to dose-response in human health assessment, EPA does not develop or evaluate probabilistic approaches for dose-response in human health assessment and, further, discourages undertaking such activities on a site-by-site basis. Such activities require contaminant specific national consensus development and national policy development. (Risk Assessment Guidance for Superfund; Process For Conducting Probabilistic Risk Assessment; December 31, 2001).

Additional applicable or relevant guidance may be used for the human health risk assessment only if approved by EPA.

Respondents shall prepare the Human Health Risk Assessment Report according to the guidelines outlined below:

- Hazard Identification (sources). The Respondent shall review available information on the hazardous substances present at the Site and identify the major contaminants of concern.
- Dose-Response Assessment. The Respondent shall select contaminants of concern based on their intrinsic toxicological properties.
- Conceptual Exposure/Pathway Analysis. The Respondent shall identify and analyze critical exposure pathways (e.g., drinking water). The proximity of contaminants to exposure pathways and their potential to migrate into critical exposure pathways shall be assessed.
- Characterization of Site and Potential Receptors. The Respondent shall identify and characterize human populations in the exposure pathways.
- Exposure Assessment. The exposure assessment will identify the magnitude of actual or potential human exposures, the frequency and duration of these exposures, and the routes by which receptors are exposed. The exposure assessment shall include an evaluation of the likelihood of such exposures occurring and shall provide the basis for the development of acceptable exposure levels. In developing the exposure assessment, the Respondent shall develop reasonable maximum estimates of exposure for both current land use conditions and potential land use conditions at the Site.
- Risk Characterization. During risk characterization, Respondent shall compare chemical-specific toxicity information, combined with quantitative and qualitative information from the exposure assessment, to measured levels of contaminant exposure levels and the levels predicted through environmental fate and transport modeling. These comparisons shall determine whether concentrations of contaminants at or near the Site are affecting or could potentially affect human health.

- Identification of Limitations/Uncertainties. The Respondent shall identify critical assumptions (e.g., background concentrations and conditions) and uncertainties in the report.
- CSM. Based on contaminant identification, exposure assessment, toxicity assessment, and risk characterization, the Respondent shall reevaluate the preliminary CSM.

3.3.3. Baseline Ecological Risk Assessment

As an attachment to the RI Report, the Respondent shall submit a Baseline Ecological Risk Assessment Report to EPA, with a copy to the MDEQ, for review and approval pursuant to Section X of the AOC. In the Ecological Risk Assessment Report, the Respondent shall evaluate and assess the risk to the environment posed by Site contaminants. Respondent shall prepare the Ecological Risk Assessment Report in accordance with EPA guidance including, at a minimum: "Ecological Risk Assessment Guidance for Superfund, Process for Designing and Conducting Ecological Risk Assessments, (EPA-540-R-97-006, June 1997), OSWER Directive 9285.7-25 and as appropriate, shall follow the guidelines outlined below:

- Hazard Identification (sources). The Respondent shall review available information on the hazardous substances present at the Site and identify the major contaminants of concern.
- Dose-Response Assessment. The Respondent must select contaminants of concern based on their intrinsic toxicological properties.
- Conceptual Exposure/Pathway Analysis. Critical exposure pathways (e.g., surface water) shall be identified and analyzed. The proximity of contaminants to exposure pathways and their potential to migrate into critical exposure pathways shall be assessed.
- Characterization of Site and Potential Receptors. The Respondent shall identify and characterize environmental exposure pathways.
- Selection of Chemicals, Indicator Species, and End Points. In preparing the assessment, the Respondent will select representative chemicals, indicator species (species that are especially sensitive to environmental contaminants), and end points on which to concentrate.
- Exposure Assessment. In the exposure assessment, Respondent must identify the magnitude of actual or environmental exposures, the frequency and duration of these exposures, and the routes by which receptors are exposed. The exposure assessment shall include an evaluation of the likelihood of such exposures occurring and shall provide the basis for the development of acceptable exposure levels. In developing the exposure assessment, the Respondent shall develop reasonable maximum estimates of exposure for both current land use conditions and potential land use conditions at the Site.

- Toxicity Assessment/Ecological Effects Assessment. The toxicity and ecological effects assessment will address the types of adverse environmental effects associated with chemical exposures, the relationships between magnitude of exposures and adverse effects, and the related uncertainties for contaminant toxicity (e.g., weight of evidence for a chemical's carcinogenicity).
- Risk Characterization. During risk characterization, Respondent shall compare chemical-specific toxicity information, combined with quantitative and qualitative information from the exposure assessment, to measured levels of contaminant exposure levels and the levels predicted through environmental fate and transport modeling. These comparisons shall determine whether concentrations of contaminants at or near the Site are affecting or could potentially affect the environment.
- Identification of Limitations/Uncertainties. The Respondent shall identify critical assumptions (e.g., background concentrations and conditions) and uncertainties in the report.
- CSM. Based on information developed for the Baseline Ecological Risk Assessment, the Respondent shall reevaluate the preliminary CSM.

3.4. Current and Future Land Uses and Reuse Assessment

As an Attachment to the RI Report, Respondent shall submit to EPA, with a copy to MDEQ, for review and approval pursuant to Section X of the AOC, a Memorandum that evaluates the current and reasonably anticipated future land uses at the Site. The Memorandum shall identify: 1) past uses at the Site including title and lien information; 2) current uses of the Site and neighboring areas; 3) the owner's plans for the Site following cleanup and any prospective purchasers; 4) applicable zoning laws and ordinance; 5) current zoning; 6) applicable local area land use plans, master plans and how they affect the Site; 7) existing local restrictions on property; 8) property boundaries; 9) groundwater use determinations, wellhead protection areas, recharge areas and other areas identified in the state's Comprehensive Ground Water Protection Program; 10) floodplains, wetland, or endangered or threatened species; and 11) utility rights of way.

If EPA, in its sole discretion, determines that a Reuse Assessment is necessary, Respondent will perform the Reuse Assessment in accordance with EPA guidance, including, but not limited to: "Reuse Assessments: A Tool To Implement The Superfund Land Use Directive, OSWER 9355.7-06P, June 4, 2001 upon request of EPA. The Reuse Assessment should provide sufficient information to develop realistic assumptions of the reasonably anticipated future uses for the Site.

TASK 4: REMEDIAL INVESTIGATION (RI) REPORT

In accordance with the schedule in the EPA approved final RI/FS Planning Documents, the Respondent shall submit to EPA, with a copy to the MDEQ, for review and approval pursuant to Section X of the AOC, an RI Report addressing all of the Site and nearby areas. The RI Report shall be consistent with the AOC and this SOW. The RI Report shall accurately establish the site characteristics such as media contaminated, extent of contamination, and the physical boundaries of the contamination. Pursuant to this objective, the Respondent shall obtain only the essential amount of detailed data necessary to determine the key contaminants' movement and extent of contamination. The key contaminants must be selected based on persistence and mobility in the environment and the degree of hazard. The key contaminants identified in the RI shall be evaluated for receptor exposure and an estimate of the key contaminants level reaching human or environmental receptors must be made. The Respondent shall use existing standards and guidelines such as drinking-water standards, water-quality criteria, and other criteria accepted by the EPA as appropriate for the situation may be used to evaluate effects on human receptors who may be exposed to the key contaminant(s) above appropriate standards or guidelines. Respondent shall complete the RI Report in accordance with the following requirements:

The Respondent shall submit an RI Report that includes site-specific findings, and which includes the following:

- Executive Summary
- Site Background. The Respondent shall assemble and review available facts about the regional conditions and conditions specific to the Site under investigation.
- Investigation (as applicable)
 - Site Reconnaissance
 - Field Investigation & Technical Approach
 - Chemical Analysis & Analytical Methods
 - Field Methodologies
 - Biological
 - Surface Water
 - Sediment
 - Soil Boring
 - Soil Sampling
 - Monitoring Well Installation
 - Groundwater Sampling
 - Hydrogeological Assessment
 - Air Sampling
 - Waste Investigation
 - Geophysical Investigation
- Site Characteristics (as applicable)

- Geology
- Hydrogeology
- Meteorology
- Demographics and Land Use
- Ecological Assessment
- Hydrodynamics

- Nature and Extent of Contamination
 - Contaminant Sources
 - Contaminant Distribution and Trends

- Fate and Transport
 - Contaminant Characteristics
 - Transport Processes
 - Contaminant Migration Trends

- Human Health Risk Assessment
 - Hazard Identification (sources)
 - Dose-Response Assessment
 - Prepare Conceptual Exposure/Pathway Analysis
 - Characterization of Site and Potential Receptors
 - Exposure Assessment
 - Risk Characterization
 - Identification of Limitations/Uncertainties
 - Site Conceptual Model

- Ecological Risk Assessment
 - Hazard Identification (sources)
 - Dose-Response Assessment
 - Prepare Conceptual Exposure/Pathway Analysis
 - Characterization of Site and Potential Receptors
 - Selection of Chemicals, Indicator Species, and End Points
 - Exposure Assessment
 - Toxicity Assessment/Ecological Effects Assessment
 - Risk Characterization
 - Identification of Limitations/Uncertainties
 - Site Conceptual Model

- Summary and Conclusions

TASK 5: TREATABILITY STUDIES

If EPA determines that treatability testing is necessary, the Respondent shall conduct treatability studies as described in this Task 5 of this SOW. In addition, if applicable, the Respondent shall

use the testing results and operating conditions in the detailed design of the selected remedial technology. The Respondent shall perform the following activities.

5.1. Determine Candidate Technologies and the Need for Testing

The Respondent shall submit to EPA, with a copy to MDEQ, for review and approval pursuant to Section X of the AOC, a Candidate Technologies and Testing Needs Technical Memorandum that identifies candidate technologies for a treatability studies program. The list of candidate technologies shall cover the range of technologies required for alternatives analysis. The Respondent shall determine and refine the specific data requirements for the testing program during Site characterization.

5.1.1. Conduct Literature Survey and Determine the Need for Treatability Testing

Within the Candidate Technologies and Testing Needs Technical Memorandum, the Respondent shall conduct a literature survey to gather information on the performance, relative costs, applicability, removal efficiencies, operation and maintenance (O&M) requirements, and implementability of candidate technologies. Respondent shall conduct treatability studies except where Respondent can demonstrate to EPA's satisfaction that they are not needed.

5.2. Treatability Testing and Deliverables

5.2.1. Treatability Study Work Plan and Sampling and Analysis Plan (SAP)

If EPA determines that treatability testing is necessary, EPA will decide on the type of treatability testing to use (e.g., bench versus pilot). At the request of EPA, and in accordance with the schedule in Exhibit A to this SOW, the Respondent shall submit a Treatability Study Work Plan and a SAP, or amendments to the RI/FS Work Plan to EPA with a copy(ies) to the MDEQ for review and approval pursuant to Section X of the AOC, that describes the Site background, the remedial technology(ies) to be tested, test objectives, experimental procedures, treatability conditions to be tested, measurements of performance, analytical methods, data management and analysis, health and safety, residual waste management, and a schedule. The Respondent shall document the DQOs for treatability testing as well. If pilot scale treatability testing is to be performed, the Treatability Study Work Plan shall describe pilot plant installation and start-up, pilot plant operation and maintenance procedures, operating conditions to be tested, a sampling plan to determine pilot plant performance, and a detailed health and safety plan. If testing is to be performed off-Site, the plans shall address all permitting requirements.

5.2.2. Treatability Study Health and Safety Plan

If the HSP required by Task 1.2.6 is not adequate for defining the activities to be performed during the treatability tests, the Respondent shall submit a separate or amended HSP. Task 1.2.6 of this SOW provides additional information on the requirements of the HSP. EPA and MDEQ review, but do not "approve" the Treatability Study Health and Safety Plan.

5.2.3. Treatability Study Evaluation Report

Following the completion of the treatability testing, the Respondent shall analyze and interpret the testing results in a technical report to EPA and MDEQ. Respondent shall submit the treatability study report according to the schedule in the Treatability Study Work Plan. As approved by EPA, this report may be a part of the RI Report or submitted as a separate deliverable. The Treatability Study Evaluation Report shall evaluate each technology's effectiveness, implementability and cost, and actual results as compared with predicted results. The report shall also evaluate full scale application of the technology, including a sensitivity analysis identifying the key parameters affecting full-scale operation.

TASK 6: DEVELOPMENT AND SCREENING OF ALTERNATIVES

The Respondent shall develop and screen an appropriate range of site-specific remedial alternatives that will be evaluated in the FS. The range of alternatives shall include, as appropriate, options in which treatment is used to reduce the toxicity, mobility, or volume of wastes, but which vary in the types of treatment, the amount treated, and the manner in which long-term residuals or untreated wastes are managed; options involving containment with little or no treatment; options involving both treatment and containment; and a no-action alternative. The Respondent shall perform the following activities as a function of the development and screening of remedial alternatives.

The Respondent shall prepare and submit to EPA and MDEQ a technical memorandum for this task. An Alternatives Screening Technical Memorandum shall be submitted in accordance with the Schedule in Exhibit A to this SOW. Comments on the Alternatives Screening Technical Memorandum shall be addressed in the draft FS, after EPA authorizes the Respondent to proceed with preparation of the FS pursuant to Task 7.

6.1. Alternatives Screening Technical Memorandum

The Alternatives Screening Technical Memorandum shall summarize the work performed and the results of each of the above tasks, and shall include an alternatives array summary. If required by EPA, the Respondent shall modify the alternatives array to assure that the array identifies a complete and appropriate range of viable alternatives to be considered in the detailed analysis. The Alternatives Screening Technical Memorandum shall document the methods, the rationale and the results of the alternatives screening process, and shall include:

6.1.1. Remedial Action Objectives

The Respondent shall develop site-specific Remedial Action Objectives (RAOs). Based on the baseline human health and ecological risk assessments, the Respondent shall document the site-specific RAOs which shall specify the contaminants and media of concern, potential exposure pathways and receptors, and contaminant level or range of levels (at particular locations for each

exposure route) that are protective of human health and the environment. RAOs shall be developed by considering the factors set forth in 40 C.F.R. § 300.430(e)(2)(i).

6.1.2. Identify Areas or Volumes of Media

In the Alternatives Screening Technical Memorandum, the Respondent shall identify areas or volumes of media to which response actions may apply, taking into account requirements for protectiveness as identified in the remedial action objectives. The Respondent shall also take into account the chemical and physical characterization of the Site.

6.1.3. Identify, Screen, and Document Remedial Technologies

In the Alternatives Screening Technical Memorandum, the Respondent shall identify and evaluate applicable technologies and eliminate those that cannot be implemented at the Site. The Respondent shall evaluate process options on the basis of effectiveness, implementability, and cost factors to select and retain one or, if necessary, more representative processes for each technology type. The Respondent shall summarize and include the technology types and process options in the Alternatives Screening Technical Memorandum. Whenever practicable, the alternatives shall also consider the CERCLA preference for treatment over conventional containment or land disposal approaches.

6.1.4. Assemble and Document Alternatives

The Respondent shall assemble the selected representative technologies into alternatives for each affected medium or operable unit. Together, all of the alternatives shall represent a range of treatment and containment combinations that shall address either the Site or the operable unit as a whole. The Respondent shall prepare a summary of the assembled alternatives and their related ARARs. If necessary, the Respondent shall conduct the screening of alternatives to assure that only the alternatives with the more favorable composite evaluation of all factors are retained for further analysis. As appropriate, the screening shall preserve the range of treatment and containment alternatives that was initially developed. The Respondent shall specify the reasons for eliminating alternatives during the preliminary screening process.

TASK 7: DETAILED ANALYSIS of ALTERNATIVES (FS REPORT)

The Respondent shall conduct a detailed analysis of remedial alternatives to provide EPA with the information needed to select a Site remedy.

7.1. Detailed Analysis of Alternatives

The Respondent shall conduct a detailed analysis of the remedial alternatives for the Site. The detailed analysis shall include an analysis of each remedial option against each of the nine evaluation criteria set forth in 40 C.F.R. § 300.430(e)(9)(iii) and a comparative analysis of all options using the same nine criteria as a basis for comparison.

7.1.1. Apply Nine Criteria and Document Analysis

The Respondent shall apply the nine evaluation criteria to the assembled remedial alternatives to ensure that the selected remedial alternative will protect human health and the environment and meet remedial action objectives; will comply with or include a waiver of ARARs; will be cost-effective; will utilize permanent solutions and alternative treatment technologies, or resource recovery technologies, to the maximum extent practicable; and will address the statutory preference for treatment as a principal element. The evaluation criteria include: (1) overall protection of human health and the environment and how the alternative meets each of the remedial action objectives; (2) compliance with ARARs; (3) long-term effectiveness and permanence; (4) reduction of toxicity, mobility, or volume through treatment; (5) short-term effectiveness; (6) implementability; (7) cost; (8) state (or support agency) acceptance; and (9) community acceptance. (Note: criteria 8 and 9 are considered after the RI/FS report has been released to the general public.) For each alternative the Respondent shall provide: (1) a description of the alternative that outlines the waste management strategy involved and identifies the key ARARs associated with each alternative, and (2) a discussion of the individual criterion assessment. If the Respondent does not have direct input on criteria (8) state (or support agency) acceptance and (9) community acceptance, EPA will address these criteria.

7.1.2. Compare Alternatives Against Each Other and Document the Comparison of Alternatives

The Respondent shall perform a detailed comparative analysis between the remedial alternatives. That is, the Respondent shall compare each alternative against the other alternatives using the nine evaluation criteria as a basis of comparison. EPA will identify and select the preferred alternative.

7.1.3. Alternatives Analysis for Institutional Controls

For any Alternative that relies on Institutional Controls, Respondent shall include an evaluation of the following: 1) *Overall Protection of Human Health and the Environment* including what specific institutional control components will ensure that the alternative will remain protective and how these specific controls will meet remedial action objectives; 2) *Compliance with ARARs*; 3) *Long Term Effectiveness* including the adequacy and reliability of institutional controls and how long the institutional control must remain in place; 4) *Short Term Effectiveness* including the amount of time it will take to impose the Institutional Control; 5) *Implementability* including research and documentation that the proper entities (e.g., potentially responsible parties, state, local government entities, local landowners conservation organizations) are willing to enter into any necessary agreement or restrictive covenant with the proper entities and/or that laws governing the restriction exist or allow implementation of the institutional control; 6) *Cost* including the cost to implement, maintain, monitor and enforce the institutional control; and 7) *State and Community Acceptance* of the Institutional Control.

7.2. Feasibility Study Report

In accordance with the Schedule in Exhibit A to this SOW, the Respondent shall prepare and submit a draft FS Report to EPA and MDEQ for review and approval pursuant to Section X of the AOC. The FS report shall summarize the development and screening of the remedial alternatives and present the detailed analysis of remedial alternatives. In addition, the FS Report shall also include the information EPA will need to prepare relevant sections of the Record of Decision (ROD) for the Site [see Chapters 6 and 9 of EPA's *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents* (EPA 540-R-98-031, July 1999) for the information that is needed].

TASK 8: PROGRESS REPORTS

8.1. Monthly Progress Reports

The Respondent shall submit monthly written progress reports to EPA and MDEQ concerning actions undertaken pursuant to the AOC and this SOW, in accordance with the Schedule in Exhibit A to this SOW, unless otherwise directed in writing by the RPM. These reports shall include, but not be limited to, a description of all significant developments during the preceding period, including the specific work that was performed and any problems that were encountered; a paper and electronic copies (formatted according to EPA specifications) and summary of the analytical data that was received during the reporting period; and the developments anticipated during the next reporting period, including a schedule of work to be performed, anticipated problems, and actual or planned resolutions of past or anticipated problems. The monthly progress reports will summarize the field activities conducted each month including, but not limited to drilling and sample locations, depths and descriptions; boring logs; sample collection logs; field notes; problems encountered; solutions to problems; a description of any modifications to the procedures outlined in the Work Plans, with justifications for the modifications; a summary of all data received during the reporting period and the analytical results; and upcoming field activities. In addition, the Respondent shall provide all laboratory data to the RPM, or the entity designated by the RPM, within the monthly progress reports and in no event later than 90 days after samples are shipped for analysis.

8.2. Annual Progress Reports

In accordance with the Schedule in Exhibit A to this SOW, the Respondent shall submit Annual Progress Reports to EPA and MDEQ. These reports shall summarize overall progress in completing the Work required by this AOC and SOW. The Annual Progress Reports are intended to be a concise summary of the progress of the Work at the Site. These reports will continue until termination of the AOC, unless otherwise directed in writing by EPA.

IV. SCOPE OF REMOVAL ACTIONS

In accordance with the Schedule in Exhibit A to this SOW, the Respondent shall complete the following tasks as part of each Removal Action for the Site:

- Task 9: Project Scoping and Removal Planning Documents
- Task 10: Removal Action Work Plan Implementation
- Task 11: Post-Removal Site Control
- Task 12: Removal Action Community Relations
- Task 13: Removal Action Reporting

Details regarding the aforementioned five tasks are specified below.

TASK 9: PROJECT SCOPING AND REMOVAL PLANNING DOCUMENTS

9.1. Removal Action Work Plans

A Removal Action Work Plan shall be prepared to accomplish the following:

- Removals shall provide an appropriate extent of action to be taken in response to a given release, considering available information and current site conditions. The Removals shall be taken to abate, prevent, minimize, stabilize, mitigate, or eliminate the release or threat of a release that may pose a threat to public health or the environment.
- Removal Action Work Plans will be developed to implement Removal work selected by EPA in Action Memoranda, and are expected to contribute to overall risk reduction at the Site and to be consistent with the anticipated final site remedy.

The Respondent shall prepare the Removal Planning documents to be consistent with applicable EPA guidance. Each Removal Action Work Plan shall include project objectives, a detailed description of the tasks the Respondent shall perform, procedures to accomplish them, sequencing of the work, quality assurance/quality control systems, project documentation, a project schedule, and a project management plan including a data management plan.

9.1.1. Project Background and Objectives

The Project Background section of each Removal Action Work Plan shall include a brief summary of the project location, current conditions (including a summary of existing data), project description, and objectives. The project objectives shall be consistent with all objectives in the relevant EPA decision document.

9.1.2. Project Management and Documentation

Each Removal Action Work Plan shall include sufficient details as to how the Work will be managed and documented. The Removal Action Work Plan shall specify the project team and its organization. If necessary, the Removal Action Work Plan shall include a Field Sampling Plan describing the sampling and data collection methods. The Field Sampling Plan shall take into consideration the sampling needed to determine disposal requirements for any waste material generated during implementation of the Work, construction sampling, and post-construction sampling to delineate contamination remaining within the area of the Work after the completion of the Work. Samples shall be collected in accordance with the sampling plans contained in the Removal Action Work Plan. A record of sample locations and results must be maintained and submitted to EPA.

9.1.3. Tasks and Procedures

Each Removal Action Work Plan shall include detailed descriptions and/or plans of specific work tasks, procedures and practices necessary to implement the work. The Removal Action Work Plan shall include information on sequencing of tasks, staging, construction approach, materials, methods, and all relevant information on how the work will be performed.

9.1.4. Schedule

Each Removal Action Work Plan shall provide a description of, and an expeditious schedule for, the actions required by the Work.

9.1.5. Quality Assurance/Quality Control

If the QAPP developed under Task 1.2.5 is not adequate for the DQOs and data needs of the Removal, Respondent shall submit to U.S. EPA for approval, either an amended QAPP or a separate Removal Action QAPP meeting the standards and requirements outlined in Task 1.2.5, above.

9.1.6. Health and Safety

If the HSP developed under Task 1.2.6 is not adequately protective for the Removal, Respondent shall submit to U.S. EPA for approval, either an amended HSP or a separate Removal Action HSP meeting the standards and requirements outlined in Task 1.2.6, above. EPA and MDEQ review, but do not "approve" the Removal Action HSP.

9.1.6. Disposal of Material

Each Removal Action Work Plan shall include provisions for disposal of all waste materials generated during the Removal. Waste materials must be properly characterized for disposal as authorized by this Settlement Agreement or as otherwise allowed under applicable law.

Characteristic waste and contaminants may be present at the Site and sampling shall be conducted, as necessary, to characterize waste materials. Depending on the waste stream and manner of disposal, testing may include analysis for dioxin and/or listed hazardous wastes, leach testing using the Toxic Characteristic Leaching Procedure (“TCLP”) to determine if the excavated bottom deposits and sediments are characteristic of hazardous waste as provided at 40 C.F.R. Part 261, Subpart C, and other tests, as appropriate. Based upon the results, treatment may be required prior to disposal and disposal options will be based upon the analytical results. Any waste material removed from the Site and transported off-Site for disposal must be disposed of in compliance with the EPA Off Site Disposal Rule (Section 300.440 of the NCP and 58 Fed. Reg. 49200).

TASK 10: REMOVAL ACTION WORK PLAN IMPLEMENTATION

Respondent shall perform, at a minimum, all actions necessary to implement the approved Removal Action Work Plan in accordance with the schedule approved by EPA. Once approved, or approved with modifications, the Removal Action Work Plan, the Removal schedule, and any subsequent modifications shall be incorporated into and become fully enforceable under this Settlement Agreement. The actions to be implemented generally include, but are not limited to, the following:

10.1. Commencement of Work

Except as provided by this Settlement Agreement or as directed by EPA’s in writing, Respondent shall not commence any Removal work or commence implementation of the Removal Action Work Plan developed hereunder until receiving written EPA approval of the Removal Action Work Plan.

10.2. Removal Action Work Plan Implementation

Upon approval, Respondent shall implement the Removal Action Work Plan in accordance with the approved Removal schedule.

10.3. Completion of Work

Upon completion of the work specified in the Removal Action Work Plan, the Respondent shall submit a Removal Action Final Report documenting all work performed. The final report shall provide construction details (e.g., as-built drawings, final specifications, etc.), document Site conditions remaining upon completion of the work, and document any changes from the approved Removal Action Work Plan.

10.4. Removal Action QA Monitoring

Upon request by EPA, Respondent shall have its laboratory analyze samples submitted by EPA for Removal Action QA monitoring. Respondent shall provide to EPA the QA/QC procedures followed by all sampling teams and laboratories performing data collection and/or analysis.

Upon request by EPA, Respondent shall allow EPA or their authorized representatives to take split and/or duplicate samples of any samples collected by Respondent or its contractors or agents while performing the Removal. Respondent shall notify EPA not less than 3 business days in advance of any sample collection activity, unless shorter notice is agreed to by EPA. EPA shall have the right to take any additional samples that EPA deems necessary. Upon request, EPA shall allow Respondent or its contractors to take split or duplicate samples of any samples taken as part of their oversight of Respondent's implementation of the Removal.

TASK 11: POST-REMOVAL SITE CONTROL

In accordance with the Removal Action Work Plan schedule, or as otherwise directed by EPA, Respondent shall submit a proposal for post-removal site control consistent with Section 300.415(l) of the NCP and OSWER Directive No. 9360.2-02. Upon approval EPA, after a reasonable opportunity for review and comment by MDEQ, of the proposal for post-removal site control, Respondent shall implement such controls and shall provide U.S. EPA and MDEQ with annual documentation of all post-removal site control arrangements.

TASK 12: REMOVAL COMMUNITY RELATIONS

EPA has the responsibility of developing and implementing community involvement activities for Removals at the Site. The Respondent, if directed by EPA, shall assist by providing information regarding the background and history for the Removal Action; participating in public meetings; assisting in preparing fact sheets for distribution to the general public; or conducting other activities approved by EPA. All Respondent-conducted community involvement activities shall be planned and developed in coordination with EPA.

TASK 13: REMOVAL ACTION REPORTING

Respondent shall submit a monthly written progress report to EPA and MDEQ concerning Removals undertaken pursuant to this Settlement Agreement, in accordance with the Schedule in Exhibit A to this SOW, unless otherwise directed in writing by EPA. These reports shall describe all significant developments during the preceding month, including the Work performed and any problems encountered, validated final analytical data received during the reporting period and developments anticipated during the next reporting period, including a schedule of Work to be performed, anticipated problems and planned resolutions of past or anticipated problems. If EPA approves, the monthly Removal Reports may be combined with the monthly RI/FS reports required by Task 8.1 of this SOW.

EXHIBIT A
SCHEDULE FOR MAJOR DELIVERABLES

The following schedule shall apply to the RI, FS and Removal Action Documents. The schedule may be modified when: 1) a different schedule is approved by EPA in a Work Plan, Treatability Testing Work Plan, or other EPA approved document; or 2) the Respondent submits in writing a request for a specific extension or schedule modification, including justification and good cause for the extension or modification, and EPA approves any such request.

DELIVERABLE	DUE DATE
TASK 1.1.4 – Source Control Technical Memorandum	Due 30 days after the effective date of the AOC. Final due 30 days after EPA direction to modify pursuant to Section X of the AOC.
TASK 1.2 – RI/FS Work Plan	Due 45 days after the effective date of the AOC. Final due 30 days after EPA direction to modify pursuant to Section X of the AOC.
TASK 2 - Technical Assistance Plan (TAP)	Due 45 days after a request from EPA. Final due 30 days after EPA direction to modify pursuant to Section X of the AOC.
TASK 2 - Quarterly Progress Reports on Implementation of the TAP	Due 10 days after the end of each calendar year quarter; first report due in the first full calendar year quarter after a request for a TAP from EPA.
TASK 3 - Site Characterization Technical Communications	To be included in the monthly Progress Reports.
TASK 4 - RI Report	Due one year following EPA approval of the RI/FS Work Plan, or on a schedule approved in the final RI/FS Work Plan. Final due 30 days after receipt of EPA's direction to modify pursuant to Section X of the AOC.
TASK 5.1 - Candidate Technologies and Testing Needs Technical Memorandum	With the draft RI/FS Work Plan (Task 1.2).
TASK 5.2.1 - Treatability Testing Work Plan and SAP or Amendments to the Original RI/FS Work Plan.	Due 30 days after a request from EPA. Final due 30 days after receipt of EPA's direction to modify pursuant to Section X of the AOC.
TASK 5.2.2 - Treatability Testing Health and Safety Plan or Amendment to the Original Health and Safety Plan	Due 30 days after a request from EPA. Final due 30 days after receipt of EPA's direction to modify pursuant to Section X of the AOC.

DELIVERABLE	DUE DATE
TASK 5.2.3 - Treatability Study Evaluation Report	Due with the RI Report (Task 4), or on a schedule approved by EPA in the Treatability Testing Work Plan. Final due 30 days after receipt of EPA's direction to modify pursuant to Section X of the AOC.
TASK 6.1 – Site-Specific Alternatives Screening Technical Memorandum	Due 30 days after submittal of the draft RI Report.
TASK 7 - FS Report	Due 30 days after receipt of EPA's comments and authorization to proceed on the Site-Specific Alternatives Screening Technical Memorandum, but no later than two years after the effective date of the AOC. Final due 30 days after receipt of EPA's direction to modify pursuant to Section X of the AOC.
TASK 8.1 - Monthly Progress Reports	On the 10 th day of each month or the first business day after the 10 th of the month commencing 30 days after the effective date of the AOC.
TASK 8.2 – Annual Progress Reports	Due one year after the effective date of the AOC and every year thereafter.
TASK 9.1 –Removal Action Work Plan	Due 30 days after EPA's signature of an Action Memorandum.
Task 10.3 –Removal Action Final Report	Due one year following EPA approval of the Removal Action Work Plan, or on a schedule approved in the final Removal Action Work Plan. Final due 30 days after receipt of EPA's direction to modify pursuant to Section X of the AOC.
Task 13 –Removal Reporting	On the 10 th day of each month or the first business day after the 10 th of the month commencing 30 days after EPA's signature of an Action Memorandum.
Miscellaneous Documents	In accordance with the submittal date provided by RPM.

EXHIBIT B PARTIAL LIST OF GUIDANCE

The following list, although not comprehensive, comprises many of the regulations and guidance documents that apply to the RI/FS process. The majority of these guidance documents, and additional applicable guidance documents, may be downloaded from the following websites:

<http://www.epa.gov/superfund/pubs.htm> (General Superfund)
<http://clu.in.org> (Site Characterization, Monitoring and Remediation)
<http://www.epa.gov/ORD/NRMRL/Pubs> (Site Characterization and Monitoring)
http://www.epa.gov/quality/qa_docs.html#guidance (Quality Assurance)
<http://www.epa.gov/superfund/programs/dfa/index.htm> (Dynamic Field Activities)
<http://www.epa.gov/superfund/programs/risk/toolthh.htm> (Risk Assessment - Human)
<http://www.epa.gov/superfund/programs/risk/tooleco.htm> (Ecological Risk Assessment)
<http://www.epa.gov/superfund/programs/lead> (Risk Assessment - Lead)
<http://cfpub.epa.gov/ncea> (Risk Assessment - Exposure Factors/Other)
<http://www.epa.gov/nepis/srch.htm> (General Publications Clearinghouse)
<http://www.epa.gov/clariton/clhtml/pubtitle.html>
<http://www.epa.gov/superfund/programs/lead/products.htm>(General Publications Clearinghouse)

1. The (revised) National Contingency Plan;
2. *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA*, U.S. EPA, Office of Emergency and Remedial Response, OSWER Directive No. 9355.3-01, EPA/540/G-89/004, October 1988.
3. *Conducting Remedial Investigations/Feasibility Studies for CERCLA Municipal Landfill Sites*, U.S. EPA, Office of Emergency and Remedial Response, EPA/540/P-91/001, February 1991.
4. *Implementing Presumptive Remedies*, U.S. EPA, Office of Emergency and Remedial Response, EPA-540-R-97-029, October 1997.
5. *Presumptive Remedy for CERCLA Municipal Landfill Sites*, U.S. EPA, OSWER Directive No. 9355.0-49FS, EPA-540-F-93-035, September 1993.
6. *Presumptive Remedies: CERCLA Landfill Caps RI/FS Data Collection Guide*, U.S. EPA, OSWER 9355.3-18FS, EPA/540/F-95/009, August 1995.
7. *Presumptive Response Strategy and Ex-Situ Treatment Technologies for Contaminated Ground Water at CERCLA Sites*, OSWER 9283.1-12, EPA-540-R-96-023, October 1996.

8. *Field Analytical and Site Characterization Technologies Summary of Applications*, U.S. EPA, EPA-542-F-97-024, November 1997.
9. *CLU-IN Hazardous Waste Clean-Up Information World Wide Web Site*, U.S. EPA, EPA-542-F-99-002, February 1999.
10. *Field Sampling and Analysis Technology Matrix and Reference Guide*, U.S. EPA, EPA-542-F-98-013, July 1998.
11. *Subsurface Characterization and Monitoring Techniques: A Desk Reference Guide, Volumes 1 and 2*, U.S. EPA, EPA/625/R-93/003, May 1993.
12. *Use of Airborne, Surface, and Borehole Geophysical Techniques at Contaminated Sites: A Reference Guide*, U.S. EPA, EPA/625/R-92/007(a,b), September 1993.
13. *Innovations in Site Characterization: Geophysical Investigation at Hazardous Waste Sites*, U.S. EPA, EPA-542-R-00-003, August 2000.
14. *Innovative Remediation and Site Characterization Technology Resources*, U.S. EPA, OSWER, EPA-542-F-01-026b, January 2001.
15. *Handbook of Suggested Practices for the Design and Installation of Ground-Water Monitoring Wells*, U.S. EPA, EPA/600/4-89/034, 1991.
16. *Ground-Water Sampling Guidelines for Superfund and RCRA Project Managers*, U.S. EPA, EPA-542-S-02-001, May 2002.
17. *Ground Water Issue: Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures*, U.S. EPA, EPA/540/S-95/504, April 1996.
18. *Superfund Ground Water Issue: Ground Water Sampling for Metals Analysis*, U.S. EPA, EPA/540/4-89/001, March 1989.
19. *Resources for Strategic Site Investigation and Monitoring*, U.S. EPA, OSWER, EPA-542-F-010030b, September 2001.
20. *Region 5 Framework for Monitored Natural Attenuation Decisions for Groundwater*, U.S. EPA Region 5, September 2000.
21. *Ground Water Issue: Suggested Operating Procedures for Aquifer Pumping Tests*, U.S. EPA, OSWER, EPA/540/S-93/503, February 1993.
22. *Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Ground Water*, U.S. EPA, EPA/600/R-98/128, September 1998.

23. *Use of Monitored Natural Attenuation at Superfund, RCRA Corrective Action and Underground Storage Tank Sites*, U.S. EPA, OSWER Directive 9200.4-17P, April 21, 1999.
24. *Ground Water Issue: Fundamentals of Ground-Water Modeling*, U.S. EPA, OSWER, EPA/540/S-92/005, April 1992.
25. *Assessment Framework for Ground-Water Model Applications*, U.S. EPA, OSWER Directive #9029.00, EPA-500-B-94-003, July 1994.
26. *Ground-Water Modeling Compendium - Second Edition: Model Fact Sheets, Descriptions, Applications and Cost Guidelines*, U.S. EPA, EPA-500-B-94-004, July 1994.
27. *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents*, U.S. EPA, Office of Solid Waste and Emergency Response, OSWER Directive No. 9200.1-23P, EPA 540-R-98-031, July 1999.
28. *Region 5 Instructions on the Preparation of A Superfund Division Quality Assurance Project Plan Based on EPA QA/R-5, Revision 0*, U.S. EPA Region 5, June 2000.
29. *Guidance for the Data Quality Objectives Process (QA-G-4)*, U.S. EPA, EPA/600/R-96/055, August 2000.
30. *Guidance for the Data Quality Objectives Process for Hazardous Waste Sites (QA/G-4HW)*, U.S. EPA, EPA/600/R-00/007, January 2000.
31. *Guidance for the Preparation of Standard Operating Procedures (QA-G-6)*, U.S. EPA, EPA/240/B-01/004, March 2001.
32. *EPA Requirements for Quality Management Plans (QA/R-2)*, U.S. EPA, EPA/240/B-01/002, March 2001.
33. *EPA Requirements for QA Project Plans (QA/R-5)*, U.S. EPA, EPA/240/B-01/003, March 2001.
34. *Guidance for Quality Assurance Project Plans (QA/G-5)*, U.S. EPA, EPA/600/R-98/018, February 1998.
35. *Users Guide to the EPA Contract Laboratory Program*, U.S. EPA, Sample Management Office, OSWER Directive No. 9240.0-01D, January 1991.
36. *Technical Guidance Document: Quality Assurance and Quality Control for Waste Containment Facilities*, U.S. EPA, EPA/600/R-93/182, 1993.

37. *Risk Assessment Guidance for Superfund - Volume I Human Health Evaluation Manual (Part A)*, U.S. EPA, EPA/540/1-89/002, December 1989.
38. *Risk Assessment Guidance for Superfund - Volume I Human Health Evaluation Manual (Part B, Development of Risk-Based Preliminary Remediation Goals)*, U.S. EPA, EPA/540/R-92/003, OSWER Publication 9285.7-01B, December 1991.
39. *Risk Assessment Guidance for Superfund - Volume I Human Health Evaluation Manual (Part C - Risk Evaluation of Remedial Alternatives)*, U.S. EPA, Office of Emergency and Remedial Response, Publication 9285.7-01C, October, 1991.
40. *Risk Assessment Guidance for Superfund - Volume I Human Health Evaluation Manual (Part D - Standardized Planning, Reporting, and Review of Superfund Risk Assessments)*, U.S. EPA, Office of Emergency and Remedial Response, Publication 9285.7-47, December 2001.
41. *Risk Assessment Guidance for Superfund: Volume III - Part A, Process for Conducting Probabilistic Risk Assessment*, U.S. EPA, OSWER Publication 9285.7-45, EPA-540-R-02-002, December 2001.
42. *Policy for Use of Probabilistic in Risk Assessment at the U.S. Environmental Protection Agency*, U.S. EPA, Office of Research and Development, 1997.
43. *Human Health Evaluation Manual, Supplemental Guidance: Standard Default Exposure Factors*, U.S. EPA, OSWER Directive 9285.6-03, March 25, 1991.
44. *Exposure Factors Handbook*, Volumes I, II, and III, U.S. EPA, EPA/600/P-95/002Fa,b,c, August 1997.
45. *Supplemental Guidance to RAGS: Calculating the Concentration Term*, U.S. EPA, OSWER Publication 9285.7-08I, May 1992.
46. *Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities*, U.S. EPA, OSWER Directive 9355.4-12, EPA/540/F-94/043, July 14, 1994.
47. *Clarification to the 1994 Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities*, U.S. EPA, OSWER Directive 9200.4-27, EPA/540/F-98/030, August 1998.
48. *Guidance Manual for the Integrated Exposure Uptake Biokinetic (IEUBK) Model for Lead in Children*, U.S. EPA, OSWER Publication 9285.7-15-1, February 1994; and associated, clarifying Short Sheets on IEUBK Model inputs, including but not limited to OSWER

9285.7-32 through 34, as listed on the OSWER lead internet site at www.epa.gov/superfund/programs/lead/prods.htm,

49. *Integrated Exposure Uptake Biokinetic (IEUBK) Model for Lead in Children*, Version 0.99D, NTIS PB94-501517, 1994 or *Integrated Exposure Uptake Biokinetic (IEUBK) Model for Lead in Children*, Windows© version, 2001,
50. *Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions*, U.S. EPA, OSWER Directive 9355.0-30, April 22, 1991.
51. *Performance of Risk Assessments in Remedial Investigation /Feasibility Studies (RI/FSs) Conducted by Potentially Responsible Parties (PRPs)*, OSWER Directive No. 9835.15, August 28, 1990.
52. *Supplemental Guidance on Performing Risk Assessments in Remedial Investigation Feasibility Studies (RI/FSs) Conducted by Potentially Responsible Parties (PRPs)*, OSWER Directive No. 9835.15(a), July 2, 1991.
53. *Role of Background in the CERCLA Cleanup Program*, U.S. EPA, OSWER 9285.6-07P, April 26, 2002.
54. *Soil Screening Guidance: User's Guide*, U.S. EPA, OSWER Publication 9355.4-23, July 1996.
55. *Soil Screening Guidance: Technical Background Document*, U.S. EPA, EPA/540/R95/128, May 1996.
56. *Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites (Peer Review Draft)*, U.S. EPA, OSWER Publication 9355.4-24, March 2001.
57. *Ecological Risk Assessment Guidance for Superfund: Process for Designing & Conducting Ecological Risk Assessments*, U.S. EPA, OSWER Directive 9285.7-25, EPA-540-R-97-006, February 1997.
58. *Guidelines for Ecological Risk Assessment*, U.S. EPA, EPA/630/R-95/002F, April 1998.
59. *The Role of Screening-Level Risk Assessments and Refining Contaminants of Concern in Baseline Ecological Risk Assessments*, U.S. EPA, OSWER Publication 9345.0-14, EPA/540/F-01/014, June 2001.
60. *Ecotox Thresholds*, U.S. EPA, OSWER Publication 9345.0-12FSI, EPA/540/F-95/038, January 1996.
61. *Issuance of Final Guidance: Ecological Risk Assessment and Risk Management Principles for Superfund Sites*, U.S. EPA, OSWER Directive 9285.7-28P, October 7, 1999.

62. *Guidance for Data Usability in Risk Assessment (Quick Reference Fact Sheet)*, OSWER 9285.7-05FS, September, 1990.
63. *Guidance for Data Usability in Risk Assessment (Part A)*, U.S. EPA, Office of Emergency and Remedial Response, Publication 9285.7-09A, April 1992.
64. *Guide for Conducting Treatability Studies Under CERCLA*, U.S. EPA, EPA/540/R-92/071a, October 1992.
65. *CERCLA Compliance with Other Laws Manual, Two Volumes*, U.S. EPA, Office of Emergency and Remedial Response, OSWER Directive No. 9234.1-01 and -02, EPA/540/G-89/009, August 1988.
66. *Guidance on Remedial Actions for Contaminated Ground Water at Superfund Sites*, U.S. EPA, Office of Emergency and Remedial Response, (Interim Final), OSWER Directive No. 9283.1-2, EPA/540/G-88/003, December 1988.
67. *Considerations in Ground-Water Remediation at Superfund Sites and RCRA Facilities - Update*, U.S. EPA, OSWER Directive 9283.1-06, May 27, 1992.
68. *Methods for Monitoring Pump-and-Treat Performance*, U.S. EPA, EPA/600/R-94/123, June 1994.
69. *Pump-and-Treat Ground-Water Remediation A Guide for Decision Makers and Practitioners*, U.S. EPA, EPA/625/R-95/005, July 1996.
70. *Ground-Water Treatment Technology Resource Guide*, U.S. EPA, OSWER, EPA-542-B-94/009, September 1994.
71. *Land Use in the CERCLA Remedy Selection Process*, U.S. EPA, OSWER Directive No. 9355.7-04, May 25, 1995.
72. *Reuse Assessments: A Tool To Implement The Superfund Land Use Directive*, U.S. EPA, OSWER 9355.7-06P, June 4, 2001.
73. *Reuse of CERCLA Landfill and Containment Sites*, U.S. EPA, OSWER 9375.3-05P, EPA-540-F-99-015, September 1999.
74. *Reusing Superfund Sites: Commercial Use Where Waste is Left on Site*, U.S. EPA, OSWER 9230.0-100, February 2002.
75. *Covers for Uncontrolled Hazardous Waste Sites*, U.S. EPA, EPA/540/2-85/002, 1985.

76. *Technical Guidance Document: Final Covers on Hazardous Waste Landfills and Surface Impoundments*, U.S. EPA, OSWER, EPA/530-SW-89-047, July 1989.
77. *Engineering Bulletin: Landfill Covers*, U.S. EPA, EPA/540/S-93/500, 1993.
78. *Principles for Managing Contaminated Sediment Risks at Hazardous Waste Sites*, U.S. EPA OSWER Directive 9285.6-08, February 12, 2002.
79. *Institutional Controls: A Site Manager's Guide to Identifying, Evaluating and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups*, U.S. EPA, OSWER 9355.0-74FS-P, EPA/540-F-00-005, September 29, 2000.
80. *Health and Safety Requirements of Employees Employed in Field Activities*, U.S. EPA, Office of Emergency and Remedial Response, EPA Order No. 1440.2, July 12, 1981.
81. *OSHA Regulations in 29 CFR 1910.120*, Federal Register 45654, December 19, 1986.
82. *Standard Operating Safety Guides*, PB92-963414, June 1992.
83. *Community involvement in Superfund: A Handbook*, U.S. EPA, Office of Emergency and Remedial Response, OSWER Directive No. 9230.0#3B June 1988; and OSWER Directive No. 9230.0-3C, January 1992.