

US EPA ARCHIVE DOCUMENT

ATTACHMENT 2

Scope of Work

Ansul Incorporated  
Marinette, Wisconsin

**I. Corrective Measures Implementation (CMI) Program Plan**

The Respondent shall prepare and submit a CMI Program Plan. This program plan will include the development and implementation of several plans, which shall be prepared concurrently. Since the Corrective Measures will be implemented over a period of years and various specialty contractors may be selected to implement specific work tasks of the Corrective Measures, the CMI Program Management Plan will be periodically updated or amended. The Respondent shall submit a final CMI Program Plan to U.S. EPA within 90 days of the effective date of the Order. The CMI Program Plan will include the following components:

I. Corrective Measures Implementation Program Plan
A. Program Management Plan
B. Program Management Team Organizational Chart
C. Project Schedule
D. Community Relations Plan

A. Program Management Plan

The Respondent shall prepare a Program Management Plan which will document the overall management strategy for performing the design, construction, operation, maintenance and monitoring of the Work to Be Performed required by Section VI ("Work to be Performed, or Work") of the Order.

B. Program Management Team Organizational Chart

The plan shall document the responsibility, qualifications and authority of all organizations and key personnel involved with the implementation of the Work.

C. Project Schedule

The Respondent shall develop a project schedule for construction and implementation of the Work which identifies timing for initiation and completion of all critical path tasks. Respondents shall specifically identify dates for completion of the Work consistent with the schedules contained in the Order. Respondent shall provide a copy to U.S. EPA of the project schedule as follows:

1. for the barrier wall and on-site remediation components of the Work within 90 days of the effective date of the Order;
2. for the on-site ground water management component no later than January 15, 2010;
3. for the river sediment at the time it submits the River Sediment Removal Workplan - May 1, 2010 and for the

monitored natural recovery component at the time it submits the MNR Workplan - November 1, 2012.

D. Community Relations Plan

The Respondent shall develop and distribute to the public Fact Sheets related to the barrier wall, river sediment dredging removal and monitored natural recovery components of the Work required by the Order. Respondent shall distribute the Fact Sheets to the public 10 days prior to initiation of on-site construction for these components of the Work. Respondent shall provide EPA with a copy 10 days before distribution to the public.

**II. DESIGN**

The Respondent shall prepare final construction plans and specifications to implement the Work. Based on the CMI Program Plan, three separate CMI Work Plans will be submitted.

II. Design: 1) Phase I - VBW (Completed); 2) Phase II Hydraulic Control & Soil Cap; and 3) Menominee River
A. Design Plans & Specifications
B. Subcontractor Bid Packages
C. Health & Safety Plan

A. Design Plans and Specifications

The Respondent shall develop clear and comprehensive design plans for the barrier wall, on-site soil capping, on-site ground water management, and river sediment removal components of the work. The Respondent shall submit to the EPA for review and approval the design plans for the sediment removal activities.

**Phase I CMI Work Plan:** On December 18, 2007, Tyco submitted the *Phase I Corrective Measures Implementation Work Plan* (Earth Tech, December 2007) to the U.S. EPA and WDNR. On January 18, 2008, the U.S. EPA and WDNR issued a letter entitled *Phase I Corrective Measures Implementation Work Plan - Tyco Safety Products -Ansul Stanton Street Facility* that provided written approval "with modifications" of the *Phase I Corrective Measures Implementation Work Plan* (Earth Tech, December 2007). The response to U.S. EPA/WDNR comments were submitted February 14, 2008, and errata pages to the *Phase I Corrective Measures Implementation Work Plan* were submitted February 22, 2008.

B. Subcontractor Bid Packages

The Respondent shall provide U.S. EPA with a copy of its Final Design Plan(s) and specifications 60 days prior to commencement of on-site construction activities related to the Work. The quality of the design documents shall be such that they will be ready, as is, for bid advertisement. The design documents shall also provide sufficient detail related to the construction and design of the Work. A Project Manual will be prepared and submitted to potential contractors that will include: 1) Request for Proposal; 2) Proposal Form; 3) Construction Subagreement; 4) Performance and Payment Bond Forms; 5) General and Supplementary Conditions; and 6) Project Specifications.

C. Health and Safety Plan

The Respondent shall develop a site-wide Health and Safety Plan to address the activities to be performed at the facility to implement the Work. Respondent shall provide U.S. EPA with a copy of its Health and Safety Plan simultaneous with submission of its CMI Program Plan - within 90 days of the effective date of the Order. Respondent will submit addendums to the Health and Safety Plan for individual components, as necessary. Respondent should submit the addendums 30 days prior to their being implemented.

**III. CONSTRUCTION QUALITY ASSURANCE PROGRAM**

The Respondent shall implement a construction quality assurance (CQA) program to ensure, with a reasonable degree of certainty, that the Work will meet or exceed all design criteria, plans and specifications. The Respondent shall construct and implement the Work consistent with its CQA plan. The Respondent shall provide U.S. EPA with a copy of its CQA Plan(s) simultaneous with the submission of a copy of the Final Design Plan(s) - 60 days before commencement of on-site construction. The CQA plan should include the following elements:

III. Construction Quality Assurance (CQA) Program
A. Responsibility & Authority
B. Construction Quality Assurance Personnel Qualifications
C. Inspection Activities
D. Documentation

A. Responsibility and Authority

The Respondent shall describe fully in the CQA Plan the responsibility and authority of all organizations (i.e., technical consultants, construction firms, etc.) and key personnel involved in the construction of the Work. The Respondent shall identify a CQA Officer and the necessary supporting inspection staff.

B. Construction Quality Assurance Personnel Qualifications

The Respondent shall set forth the qualifications of the CQA Officer and supporting inspection personnel shall be presented in the CQA Plan to demonstrate that they possess the training and experience necessary to fulfill their identified responsibilities.

C. Inspection Activities

The Respondent shall summarize in the CQA Plan the observations and tests that will be used to monitor the construction and/or installation of the components of the Work. The plan shall include the scope and frequency of each type of inspection. Inspections shall verify compliance with environmental requirements and include, but not be limited to air quality and emissions monitoring records, waste disposal

records (e.g., RCRA transportation manifests), etc. The inspection shall also ensure compliance with all health and safety procedures. In addition to the oversight inspections, the Respondents shall conduct the following activities:

1. Preconstruction inspection and meeting

The Respondents shall conduct a preconstruction inspection and meeting to:

- a. Review methods for documenting and reporting inspection data;
- b. Review methods for distributing and storing documents and reports;
- c. Review work area security and safety protocol;
- d. Discuss any appropriate modifications of the construction quality assurance plan to ensure that site-specific considerations are addressed;
- e. Conduct a site walk-around to verify that the design criteria, plans and specifications are understood and to review material and equipment storage locations. The preconstruction inspection and meeting shall be documented by a designated person and minutes shall be transmitted to all parties

2. Prefinal construction inspection

After 80% completion of the construction elements of each Final Design Plan (i.e., construction of barrier wall, on-site/off-site soil remediation, shallow groundwater augmentation system, river sediment removal, monitored natural recovery), Respondents shall conduct a pre-final inspection. Respondent shall notify U.S. EPA 30 days before it conducts a pre-final inspection. The pre-final inspection shall consist of a walk-through inspection of the entire project site. The inspection is to determine whether the Work elements are complete and consistent with the requirements of the Order. Any outstanding construction items discovered during the inspection shall be identified and noted. Additionally, where treatment is a part of the Work, treatment equipment shall be operationally tested by Respondent. The Respondent shall certify that the equipment has performed to meet the purpose and intent of the specifications. Retesting will be completed where deficiencies are revealed. The Respondent shall outline in the pre-final inspection report the outstanding construction items, actions required to resolve items, completion date for these items and date for final inspection.

3. Final construction inspection

The Respondent shall conduct a final construction inspection after it

completes any outstanding construction items from the pre-final construction inspection. The Respondent shall notify U.S. EPA 30 days before it conducts the final construction inspection. The final inspection shall consist of a walk-through inspection of the project site. The pre-final inspection report will be used as a checklist with the final inspection focusing on the outstanding construction items identified in the pre-final inspection report. Confirmation shall be made that outstanding items have been resolved.

**D. Documentation**

The Respondent shall describe in detail in the CQA plan the reporting requirements for CQA activities. As appropriate to the Work the reporting requirements may include such items as daily summary reports, inspection data sheets, problem identification and Work, design acceptance reports and final documentation. Provisions for the final storage of all records shall be presented in the CQA plan.

**IV. CONFIRMATION SAMPLING AND LONG-TERM MONITORING PLANS**

The Respondent shall develop confirmatory sampling plans for the on-site soil, on-site ground water management, and River Sediment removal.

IV. Confirmation Sampling And Long-Term Monitoring Plans
A. Barrier Wall Groundwater Monitoring Plan
B. Operations & Maintenance Plans

**A. Barrier Wall Groundwater Monitoring Plan**

The Respondent will develop monitoring plans for the long-term monitoring required for the natural recovery and barrier wall monitoring components. The confirmation sampling plans will identify the sampling activities, sample size, sample locations, frequency of testing, criteria for acceptance and rejection and plans for correcting problems required for the Work. Both monitoring and confirmation plans will incorporate U.S. EPA's QAPP instructions, (April, 1998, [www.epa.gov/reg5rcra/ca/modqapp](http://www.epa.gov/reg5rcra/ca/modqapp)).

Respondent shall submit the sampling plans for the on-site soil and ground water management and River Sediment removal for U.S. EPA for review and approval at least 90 days before commencement of the Work specified in the corresponding Final Design Document. Respondent shall submit the monitoring plans for the monitored natural recovery and barrier wall monitoring 90 days before completion of construction of these components. Respondent shall implement the approved sampling plans.

**B. Operation and Maintenance Plans**

The Respondent shall prepare Operation and Maintenance Plans (O & M Plans) for the following Corrective Measures components:

1. vertical barrier wall,

2. on-site soil cap,
3. on-site ground water management, and
4. river sediment removal.

Respondent will submit drafts of the O & M Plans for the barrier wall and on-site ground water management components by May 1, 2010 (180 days prior to completion of installation of the barrier wall). Respondent will submit the draft O & M Plan for the on-site soil remediation component by February 15, 2010 (45 days of completion of the capping activities). Respondent shall submit the draft O & M Plan for the river sediment removal component simultaneously with the river sediment removal Final Design document - which is 90 days prior to commencement of the Work specified in the river sediment removal Final Design Plan. These draft O & M Plans are subject to U.S. EPA review and approval.

The O & M Plans will cover both implementation and long-term maintenance of the Work. Respondent shall revise the draft O & M Plan(s) in accordance with U.S. EPA's comments. Respondent shall submit the final O & M Plan(s) within 30 days of receipt of U.S. EPA's comments. The approved O & M Plan(s) become an enforceable part of the Order. The final O & M Plan(s) shall include the following elements:

1. Description of normal operation and maintenance (O&M):
  - a. Description of tasks for operation;
  - b. Description of tasks for maintenance;
  - c. Description of prescribed treatment or operation conditions;
  - d. Schedule showing frequency of each O&M task.
2. Description of potential operating problems:
  - a. Description and analysis of potential operation problems;
  - b. Sources of information regarding problems;
  - c. Common and/or anticipated remedies.
3. Description of routine monitoring and laboratory testing:
  - a. Description of monitoring tasks;
  - b. Description of required laboratory tasks and their interpretation;
  - c. Required data collection, Quality Assurance Project Plan (QAPP);
  - d. Schedule of monitoring frequency;
  - e. Description of triggering mechanisms for action from monitoring results.
4. Description of alternate O&M:
  - a. Should system fail, alternate procedures to prevent pollutants or contaminants which may endanger public health and the environment or exceed cleanup standards;
  - b. Analysis of vulnerability and additional resource requirements should a failure occur.
5. Corrective Steps:
  - a. Description of corrective steps to be implemented in the event that cleanup or performance standards are not met;

- b. Schedule for implementing these corrective steps.
6. Safety Plan:
  - a. Description of precautions, of necessary equipment, etc., for site personnel;
  - b. Safety tasks required in the event of systems failure.
7. Description of equipment:
  - a. Equipment identification;
  - b. Installation of monitoring components;
  - c. Maintenance of site equipment;
  - d. Replacement schedule for equipment and installed components.
8. Records and reporting mechanisms required:
  - a. Daily operating logs;
  - b. Laboratory records;
  - c. Records for operating costs;
  - d. Mechanism for reporting emergencies;
  - e. Personnel and maintenance records;
  - f. Monthly/annual reports to State agencies.

**V: Other Reports and Submissions**

The Respondent shall submit to U.S. EPA for review and approval a comprehensive draft project completion report referred to as a *Draft Corrective Measures Implementation Report* within 90 days of completion of all Work - 2/1/2024. The report shall document that the project is consistent with the design specifications and the Order, and that the corrective measures are performing adequately. The Report shall include, but not be limited to the following elements:

- a. Synopsis of the corrective measures and certification of the design and construction;
- b. Explanation of any modifications to the plans and why these were necessary for the project;
- c. Listing of the criteria, established before the remedial action was initiated, for judging the functioning of the remedial action and also providing explanation of any modification to these criteria;
- d. Results of facility monitoring, indicating that the remedial action will meet or exceed the performance criteria;
- e. Explanation of the operation and maintenance (including monitoring) to be undertaken at the facility;
- f. Data demonstrating that the Cleanup Standards have been achieved.

The Respondents shall finalize the Corrective Measure Implementation Report incorporating comments received on the draft submission within 90



days of receipt of U.S. EPA's comments.

Additional Studies

The U.S. EPA may require additional studies to supplement the available technical data. The Respondents shall furnish all equipment and personnel necessary to complete any additional work needed. Final reports shall be prepared presenting all data obtained during the additional studies, summary of the results and conclusions.