US EPA RECORDS CENTER REGION 5
479979

STATEMENT OF WORK FOR THE REMEDIAL DESIGN AND REMEDIAL ACTION AT HIMCO DUMP SUPERFUND SITE ELKHART COUNTY, INDIANA

I. PURPOSE

The purpose of this Statement of Work (SOW) is to set forth requirements for implementation of the remedial action set forth in the Amended Record of Decision (ROD-A), which was signed by the Regional Administrator of U.S. EPA Region V on September 15, 2004, for the Himco Dump Superfund Site (Site). The Settling Defendants will follow the Consent Decree (CD), ROD-A, SOW, approved Remedial Design Work Plan, approved Remedial Action Work Plan, U.S. EPA Superfund Remedial Design and Remedial Action Guidance, and any additional guidance provided by U.S. EPA in submitting deliverables for designing and implementing the remedial action at the Himco Dump Superfund Site.

II. DESCRIPTION OF THE REMEDIAL ACTION/PERFORMANCE STANDARDS

Settling Defendants will design and implement the Remedial Action to meet the performance standards/remedial action objectives (RAOs) and specifications set forth in the ROD-A and this SOW. Performance standards/RAOs will include cleanup standards, standards of control, quality criteria and other substantive requirements, criteria or limitations including all Applicable or Relevant and Appropriate Requirements (ARARs) set forth in the ROD, SOW and/or Consent Decree.

1. Site Security

The Settling Defendants will install and maintain a fence at the Site to prevent access and vandalism to the Site, until the site is redeveloped. Fencing of the Site will consist of a chain link fence around the perimeter which is a minimum six-feet high with a minimum three-strand barbed wire. The fence will include a gate(s) in which the number and the exact location will be determined in the RD Work Plan as approved by U.S. EPA, in consultation with the Indiana Department of Environmental Management ("IDEM").

2. Institutional Controls/Deed Restrictions

Within 15 days after the entry of this Consent Decree, Settling Defendants will execute and record with Elkhart County Deeds Office, Institutional Controls (ICs) outlined in the ROD-A.

3. Access

Settling Respondents will secure for the United States and the State of Indiana, and their representatives including U.S. EPA, IDEM and their contractors, access to those portions of the Site and all adjacent areas controlled by or available to Settling Respondents where work is to be performed pursuant to the Consent Decree and SOW. The Settling Respondents will use their best efforts to acquire deeds, easements or access agreements to perform work pursuant to the Consent Decree and SOW on land not presently owned by the Settling Respondents including but not limited to, land necessary to: (a) conduct a pre-design investigation to characterize on-site soils (depth, nutrients, vegetation, grain size , etc); (b) remove and dispose of on-site surface debris; (c) cover areas of exposed waste and in-fill surface voids with clean soil and suitable vegetation; grade the soil cover for proper drainage and erosion protection. It is anticipated that an 18-inch soil depth or more will be necessary to maintain vegetation and prevent exposure to on-site soils; (d) install and maintain the fence at the Site; (e) mitigate inadvertent exposure to waste materials in the future by recording or filing a deed notice regarding the landfill's site history and constituents; (f) conduct a groundwater investigation and groundwater monitoring program; (g) remediate the parcels in the construction debris area (CDA) either by excavation or a soil cover. If excavation is used, backfill with clean fill, and dispose the excavated material as approved by U.S. EPA, in consultation with IDEM during the remedial design, i.e. disposal on the landfill, on commercial parcel F, or disposal at a hazardous waste facility ; and (e) install, operate and maintain the landfill gas collection system with treatment, as appropriate.

4. Construction, Installation, and Operation of the Remedial Action

A. Landfill Cover

The Settling Defendants will: 1) contour and grade the existing cover; 2) conduct a pre-design investigation to characterize on-site soils; 3) remove and dispose of on-site debris; 4) cover areas with exposed waste and in-fill any surface voids and depressions with clean soil and suitable vegetation, it is anticipated that an 18-inch soil depth or more will be necessary to maintain vegetation and prevent exposure to on-site soils; 4) grade the soil cover for proper drainage and erosion protection; 5) final grading of the total cover to no less than a two percent slope, after an accounting for the anticipated settlement; 6) mitigate inadvertent exposure to waste materials in the future by recording/filling of a deed notice for the landfill regarding the site's history and constituents; limit the land reuse to industrial, recreational or commercial with institution controls (ICs) in the form of a deed restriction or other appropriate ICs to prohibit both future groundwater use, and future drilling or digging into the landfill cover; 7) construct the cover to avoid or minimize adverse effects on the wetland; 8) conduct Operation and Maintenance (O&M) of all components of the remedy, which includes the vegetative cover, groundwater monitoring, and the landfill vapor collection system as part of the long term requirements to be established in the O&M Plan.

B. Landfill Gas Management

Settling Respondents will design, construct and maintain a landfill gas collection and treatment system capable of collecting and treating all gases generated by the landfill. The landfill gas collection and treatment system shall, at a minimum, comply with all standards and requirements listed below and, shall include as necessary, a vapor phase carbon collection and treatment system and an enclosed ground flare system. The performance standards/RAOs, and ARARs for the collection system are:

- To prevent inhalation of indoor air which contains carcinogens that present a total excess cancer risk above EPA's acceptable risk range of 1×10^{-4} to 1×10^{-6} for all site-related contaminants released from the subsurface vapor migration pathway.

- To prevent inhalation of indoor air which contains non carcinogens that present a total non carcinogenic Hazardous Index (HI) greater than one for all site-related contaminants released from the subsurface vapor migration pathway.

- To prevent the future migration of hydrogen sulfide gas and methane gas beyond the landfill.

- To establish a landfill gas monitoring program that will ensure compliance with all of the RAOs listed above for air, including the state of Indiana Applicable or Relevant and Appropriate Requirement (ARARs) for air as follows: Ambient Air Quality Standards: 326 IAC 1-3; Volatile Organic Compound Emission Standards: 326 IAC 2-1.1-3(e)(1)(D), 326 IAC 2-5.1-2(a)(1)(C), 326 IAC 2-5.1-3(a)(1)(D), 326 IAC 2-5.1-3(a)(1)(E); and Indiana Fugitive Dust Control 326-IAC 6-4.

- Quarterly monitoring of the vapor migration to assure that the performance standards of the gas system are functioning properly for the duration of one year; semiannually for the next four years; and then re-evaluated to determine the monitoring schedule for the next 25 years.

- Residential Area East, and Southeast, and of the Landfill

  - At a minimum, connect select residents living on the east and southeast side of Himco Dump to the local municipal water supply (21 select and 18 buffer zone residents, for a total of 39 residents). See Table 14 of the ROD-A for a list of the addresses to be connected to the municipal water supply;

  - Abandon all residential private water wells according to the requirements listed in 312 IAC 13-10-2, once the municipal water supply has been established. Institutional Controls in the form of deed restriction or other appropriate ICs will be applied to each property to prohibit future ground

water use; and

- Install new monitoring wells in the buffer zone, based on the groundwater investigation study performed during the pre-design studies to monitor the spatial area where the residents are still using private wells. The new monitoring wells will be installed to capture all portions of the aquifer (shallow, intermediate and deep).

5. Installation and Operation of Monitoring Program for Remedial Action

Settling Defendants will implement monitoring program(s) to evaluate and ensure that the construction and implementation of the Remedial Action comply with approved plans and design documents, ARARs and performance standards/RAOs. Settling Defendant will submit monitoring programs as part of the Remedial Design Work Plan, which will address the specific components of the remedial action listed below. Each sample will be analyzed for a list of parameters approved by EPA, in consultation with IDEM during the design.

A. Groundwater Monitoring

- Upon the lodging of the Consent Decree, Settling Defendant will complete a pre-design groundwater investigation study for the south, east and southeast sides of the landfill to determine the contaminant concentration, rate and extent of all detected contaminants. The investigation will include the vertical characterization of the contaminants to optimize the placement of the additional long-term monitoring wells in the residential buffer zone area, and the landfill perimeter;

- Settling Defendant will establish a long-term groundwater monitoring program to monitor the future groundwater conditions from the site monitoring wells approved during the remedial design by EPA, in consultation with IDEM. The purpose is to determine if the groundwater performance standards/RAOs are not being exceeded which would trigger the need for connection to the municipal water supply beyond the buffer zone;

- If at any time the groundwater monitoring program indicates the possibility that contamination from the landfill is migrating beyond the presently known location, the potential need for additional alternative water supplies will be evaluated and an appropriate response action will be implemented;

- Monitor all groundwater wells associated with Himco Dump for a minimum of 10 years; quarterly monitoring for the first two years. Based on the results, groundwater-monitoring frequency may be decreased to semiannually for the next three years. Samples collected from all of the groundwater monitoring wells will be analyzed for the following water quality parameters: 1) target

compound list for volatile organic compounds; 2) semi-volatile organic compounds; 3) PCB/Pesticides; 4) inorganic target analyte list; 5) water-quality parameters (including groundwater indicators); and 6) the human effective compounds. At the end of the two year groundwater monitoring period the results will be evaluated by EPA, in consultation with IDEM to determine the on-going sampling frequency.

- At each five year review, or earlier if necessary, EPA in consultation with IDEM, will evaluate the following criteria to determine the need for more or less remedial measures;

  - Groundwater results collected during the previous monitoring period years to determine trends in contaminant concentrations, if any;

  - Effectiveness of the source control measures to prevent contaminant migration beyond the downgradient boundary;

  - Potential for the contaminants in the groundwater to meet or exceed performance standards/RAOs trigger levels;

  - Addition measures may be necessary if an evaluation of the above criteria indicates that concentrations in the groundwater have not decreased and source control measures do not meet the performance standards/RAOs; and

  - If additional information indicates that the groundwater monitoring program is inadequate, U.S. EPA may require additional groundwater monitoring wells and laboratory analysis of additional parameters.

- Implement institutional controls in the form of deed restrictions, or other appropriate institutional controls to limit future groundwater use, prohibit the installation of new private groundwater wells in the landfill vicinity.

6. <u>Remedation of Waste/Soils</u>

I. CDA Surface

A. Remove all construction debris

B. Remove all rubble

II. CDA Soil – The following two alternatives are protective and meet the RAOs for these materials.

A. Excavate residential parcels in two feet intervals, up to six feet. Check sample results at each two feet interval.

a) Disposal of excavated materials.

2. Landfill
3. Commercial Parcel F –
   a) Fence as a part of the landfill
   b) Establish ICs in parallel with the landfill.
4. Hazardous waste facility

b) Backfill with clean soil
c) Vegetate

B. Cover CDA material with soil.

a) Minimum of 18 inches of clean soil
b) Vegetate
c) Grade to allow for proper drainage
d) Fence area as a part of the landfill
e) Establish ICs in parallel with landfill

III. Commercial Parcel F

A. If the excavated residential soils are not consolidated to parcel F, then an institutional control in the form of a deed restriction, or other appropriate ICs will be applied to the parcel to be zoned as commercial/industrial only, since the 695 mg/kg of lead detected in the soil is an acceptable level for an industrial setting.

IV. Private residential wells near CDA

A. Abandon private residential wells per 312 IAC 13-10-2, residences that were provided municipal water supply in 1991.

B. Establish institutional controls in the form of a deed restriction, or other appropriate ICs applied to each property to prohibit future installation of private wells for groundwater use.

The performance standards/RAOs for the CDA are as follows:

- To prevent exposure to soil which contains carcinogens that present a total excess cancer risk above EPA's acceptable risk range of 1×10^{-4} to 1×10^{-6} for all contaminants through all exposure pathways (i.e., ingestion, inhalation of soil-derived substances, and dermal contact);

- To prevent exposure to soil which contains non carcinogens that present a total non carcinogenic HI greater than one for all contaminants through all exposure pathways (i.e., ingestion, inhalation of soil-derived substances, and dermal contact); and

- To prevent direct contact with the CDA contents that presents a physical hazard.

7. Air

At all times during the performance of the Remedial Action, Settling Defendants will ensure that air emissions do not exceed a cumulative cancer risk of 1×10^{-6} at the nearest downwind residence, using risk calculation methods set forth in Risk Assessment Guidance for Superfund. In addition, the air emissions will not exceed any ARARs. If air emissions exceed these levels, Settling Defendants will take corrective measures as developed in the Contingency Plan/Design Plans.

8. Points of Compliance

In order to monitor and evaluate the remedial actions throughout the Site, during the pre-design studies, certain locations at which there are groundwater monitoring wells will be selected as points of compliance. The wells are grouped into wells for detection monitoring and wells for compliance monitoring, as defined below and within the Attachments. If any of the wells are destroyed or in any way becomes unusable, the Settling Defendants will repair or replace each well. Additional wells may be included during the development of the RD/RA Work Plan and the Operation and Maintenance (O&M) Plan. The location of any additional wells installed pursuant to the Consent Decree or this SOW will be approved by EPA, in consultation with IDEM.

III. SCOPE OF REMEDIAL DESIGN AND REMEDIAL ACTION

The Remedial Design/Remedial Action will consist of six tasks. All plans are subject to EPA's approval, in consultation with IDEM.

Task 1: RD Work Plan

Task 2: Remedial Design Phases

A. Preliminary Design
B. Intermediate Design

C. Prefinal Design/ Final Design

Task 3: Remedial Action Work Plan

Task 4: Remedial Action/Construction

A. Preconstruction Meeting
B. Prefinal Inspection
C. Final Inspection
D. Reports

1. Final Construction Report
2. Completion of Remedial Action Report
3. Completion of Work Report

Task 5: Operation and Maintenance

Task 6: Performance Monitoring

Task 1: Remedial Design Work Plan

The Settling Defendants will submit a Work Plan which will document the overall management strategy for performing the design, construction, operation, maintenance and monitoring of Remedial Actions for EPA's review and approval. The plan will document the responsibility and authority of all organizations and key personnel involved with the implementation and will include a description of qualifications of key personnel directing the Remedial Design, including contractor personnel. The Work Plan will also contain a schedule of Remedial Design activities. The Settling Defendants will submit a Remedial Design Work Plan in accordance with § XII and paragraph 11 of the Consent Decree and Section V of this SOW.

This remedial design will require pre-design studies to provide information necessary to fully implement the remedial design and remedial action. This RD Work Plan will include, at a minimum, a pre-design QAPP, Health and Safety Plan, Field Sampling Plan and schedule to determine monitoring well locations for the landfill perimeter, and the residential monitoring well placement.

The Settling Defendants will implement the pre-design work in accordance with the final RD Work Plan. The results of the pre-design studies will be included with the 30% design.

Task 2: Remedial Design Phases

Settling Defendants will prepare construction plans and specifications to implement the Remedial Actions at the Site as described in the ROD and this SOW. Plans and specifications will be submitted in accordance with the schedule set forth in Section V below. Subject to

approval by U.S. EPA, Settling Defendants may submit more than one set of design submittals reflecting different components of the Remedial Action. All plans and specifications will be developed in accordance with U.S. EPA's Superfund Remedial Design and Remedial Action Guidance (OSWER Directive No. 9355.0-4A) and will demonstrate that the Remedial Action will meet all objectives of the ROD , the CD and this SOW, including all Performance Standards/RAOs. Settling Defendants will meet regularly with EPA to discuss design issues.

A. Preliminary Design

Settling Defendants will submit the Preliminary Design when the design effort is approximately 30 % complete. The Preliminary Design submittal will include or discuss, at a minimum, the following:

- Preliminary plans, drawings, and sketches, including design calculations;
- Results of treatability studies and additional field sampling;
- Design assumptions and parameters, including design restrictions, process performance criteria, appropriate unit processes for the treatment train, and expected removal or treatment efficiencies for both the process and waste (concentration and volume);
- Proposed cleanup verification methods, including compliance with Applicable or Relevant and Appropriate Requirements (ARARs);
- Outline of required specifications;
- Proposed siting/locations of processes/construction activity;
- Expected long-term monitoring and operation requirements;
- Real estate, easement, and permit requirements;
- Preliminary construction schedule, including contracting strategy.

B. Intermediate Design

Settling Defendants will submit the Intermediate Design when the design effort is approximately 60 % complete. The Intermediate Design will fully address all comments made to the preceding design submittal. The Intermediate Design submittal will include those elements listed for the Preliminary Design, as well as, the following:

- Draft Performance Standard Verification Plan;
- Draft Construction Quality Assurance Plan;

- Draft QAPP, Draft Health and Safety Plan, Draft Field Sampling Plan, and Draft Contingency Plan

C. Prefinal and Final Designs

Settling Defendants will submit the Prefinal Design when the design effort is 95% complete and will submit the Final Design when the design effort is 100% complete. The Prefinal Design will fully address all comments made to the preceding design submittal. The Final Design will fully address all comments made to the Prefinal Design and will include reproducible drawings and specifications suitable for bid advertisement. The Prefinal Design will serve as the Final Design if EPA has no further comments and issues the notice to proceed.

The Prefinal and Final Design submittals will include those elements listed for the Preliminary Design, as well as, the following:

- Final Performance Standard Verification Plan;
- Final Construction Quality Assurance Plan;
- Final QAPP, Final H & S Plan, Final FSP, and a Final Contingency Plan.;
- Draft Operation and Maintenance Plan;
- Capital and Operation and Maintenance Cost Estimate. This cost estimate will refine the FS cost estimate to reflect the detail presented in the Final Design;
- Final Project Schedule for the construction and implementation of the Remedial Action which identifies timing for initiation and completion of all critical path tasks. The final project schedule submitted as part of the Final Design will include specific dates for completion of the project and major milestones.

Task 3: Remedial Action Work Plan

The Settling Defendants will submit a Remedial Action Work Plan which includes a detailed description of the remediation and construction activities. The RA Work Plan will include a project schedule for each major activity and submission of deliverables generated during the Remedial Action. The Settling Defendants will submit a Remedial Action Work Plan in accordance with § XII and paragraph 12 of the Consent Decree and Section V of this SOW.

Task 4: Remedial Action Construction

The Settling Defendants will implement the Remedial Action as detailed in the approved Final Design. The following activities will be completed in constructing the Remedial Action.

A. Preconstruction inspection and meeting:

The Settling Defendants will participate with the U.S. EPA and the State in a preconstruction inspection and meeting to:

a. Review methods for documenting and reporting inspection data;

2. 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; and,

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 will be documented by a designated person and minutes will be transmitted to all parties.

B. Prefinal inspection:

Within 15 days after Settling Defendants make preliminary determination that construction is complete, the Settling Defendants will notify the U.S. EPA and the State for the purposes of conducting a prefinal inspection. The prefinal inspection will consist of a walk-through inspection of the entire Facility with EPA and IDEM. The inspection is to determine whether the project is complete and consistent with the contract documents and the Remedial Action. Any outstanding construction items discovered during the inspection will be identified and noted. Additionally, treatment equipment will be operationally tested by the Settling Defendants. The Settling Defendants will certify that the equipment has performed to meet the purpose and intent of the specifications. Retesting will be completed where deficiencies are revealed. The prefinal inspection report will outline the outstanding construction items, actions required to resolve items, completion date for these items, and a proposed date for final inspection.

C. Final inspection:

Within 15 days after completion of any work identified in the Prefinal Inspection report, the Settling Defendants will notify the U.S. EPA and the State for the purposes of conducting a final inspection. The final inspection will consist of a walk-through inspection of the Facility by U.S. EPA and the Settling Defendants. The Prefinal Inspection report will be used as a checklist with the final inspection focusing on the outstanding construction items identified in the prefinal inspection. Confirmation will be made that outstanding items have been resolved.

D. Reports

1. Final Construction Report

Within 30 days of a successful final inspection, Settling Defendants will submit a Construction Completion Report. In the report, a registered professional engineer and the Settling Defendants' Project Coordinator will state that the Remedial Action has been constructed in accordance with the design and specifications. The written report will include as-built drawings signed and stamped by a professional engineer. The report will contain the following statement, signed by a responsible corporate official of a Settling Defendant or the Settling Defendants' Project Coordinator:

> "To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

2. Completion of Remedial Action Report

Within 30 days of a successful final inspection, Settling Defendants will submit a Completion of Remedial Action Report. In the report, a registered professional engineer and the Settling Defendants' Project Coordinator will state the Remedial Action has been completed in full satisfaction of the requirements of this Consent Decree. The written report will include as-built drawings signed and stamped by a professional engineer. The report will contain the following statement, signed by a responsible corporate official of a Settling Defendant or the Settling Defendants' Project Coordinator:

> "To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

<u>Task 5: Operation and Maintenance</u>

The Settling Defendants will prepare an Operation and Maintenance (O&M) Plan to cover both implementation and long term maintenance of the Remedial Actions. An initial Draft O&M Plan will be submitted as a final Design Document submission. The final O&M Plan will be submitted to EPA prior to the pre-final construction inspection, in accordance with the approved construction schedule. The plan will be composed of the following elements:

1. Description of normal operation and maintenance ;

    a. Description of tasks for operation;
    b. Description of tasks for maintenance;

c. Description of prescribed treatment or operation conditions; and
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; and
c. Common and/or anticipated remedies.

3. Description of routine monitoring and laboratory testing;

a. Description of monitoring tasks;
b. Description of required data collection, laboratory tests and their interpretation;
c. Required quality assurance, and quality control ;
d. Schedule of monitoring frequency and procedures for a petition to U.S. EPA to reduce the frequency of or discontinue monitoring; and
e. Description of verification sampling procedures if Cleanup or Performance Standards are exceeded in routine monitoring.

4. Description of alternate O&M;

a. Should systems fail, alternate procedures to prevent release or threatened releases of hazardous substances, pollutants or contaminants which may endanger public health and the environment or exceed performance standards; and

b. Analysis of vulnerability and additional resource requirement should a failure occur.

5. Corrective Action;

a. Description of corrective action to be implemented in the event that cleanup or performance standards are exceeded; and
b. Schedule for implementing these corrective actions.

6. Safety plan;

a. Description of precautions, of necessary equipment, etc., for Site personnel; and
b. Safety tasks required in event of systems failure.

7. Description of equipment; and

a. Equipment identification;
b. Installation of monitoring components;
c. Maintenance of Site equipment; and
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; and
f. Monthly/annual reports to State agencies.

Task 6: Performance Monitoring

Performance monitoring will be conducted to ensure that all Performance Standards are met.

A. Performance Standard Verification Plan

The purpose of the Performance Standard Verification Plan is to provide a mechanism to ensure that both short-term and long-term Performance Standards for the Remedial Action are met. The Draft Performance Standards Verification Plan will be submitted with the Intermediate Design. Once approved, the Performance Standards Verification Plan will be implemented on the approved schedule. The Performance Standards Verification Plan will include:

1. Quality Assurance Project Plan
2. Health and Safety Plan
3. Field Sampling Plan

IV CONTENT OF SUPPORTING PLANS

The documents listed in this section -- the Quality Assurance Project Plan, the Field Sampling Plan, the Health and Safety Plan, the Contingency Plan and the Construction Quality Assurance Plan -- are documents which must be prepared and submitted as outlined in Section III of this SOW. The following section describes the required contents of each of these supporting plans.

A. Quality Assurance Project Plan

The Settling Defendants will develop a Site specific Quality Assurance Project Plan (QAPP), covering sample analysis and data handling for samples collected in all phases of future Site work, based upon the Consent Decree and guidance provided by U.S. EPA. The QAPP will be consistent with the requirements of the EPA Contract Lab Program (CLP) for laboratories

proposed outside the CLP. The QAPP will at a minimum include:

Project Description
* Facility Location History
* Past Data Collection Activity
* Project Scope
* Sample Network Design
* Parameters to be Tested and Frequency
* Project Schedule

Project Organization and Responsibility

Quality Assurance Objective for Measurement Data
* Level of Quality Control Effort
* Accuracy, Precision and Sensitivity of Analysis
* Completeness, Representativeness and Comparability

Sampling Procedures

Sample Custody
* Field Specific Custody Procedures
* Laboratory Chain of Custody Procedures

Calibration Procedures and Frequency
* Field Instruments/Equipment
* Laboratory Instruments

Analytical Procedures
* Non-Contract Laboratory Program Analytical Methods
* Field Screening and Analytical Protocol
* Laboratory Procedures

Internal Quality Control Checks
* Field Measurements
* Laboratory Analysis

Data Reduction, Validation, and Reporting
* Data Reduction
* Data Validation
* Data Reporting

Performance and System Audits
* Internal Audits of Field Activity

* Internal Laboratory Audit
* External Field Audit
* External Laboratory Audit

Preventive Maintenance
* Routine Preventative Maintenance Procedures and Schedules
* Field Instruments/Equipment
* Laboratory Instruments

Specific Routine Procedures to Assess Data Precision, Accuracy, and Completeness
* Field Measurement Data
* Laboratory Data

Corrective Action
* Sample Collection/Field Measurement
* Laboratory Analysis

Quality Assurance Reports to Management

The Settling Defendants will attend a pre- QAPP meeting with EPA. The Settling Defendants will submit a draft QAPP to for review and approval.

B. Health and Safety Plan

The Settling Defendants will develop a health and safety plan which is designed to protect on-site personnel and area residents from physical, chemical and all other hazards posed by this remedial action. The safety plan will develop the performance levels and criteria necessary to address the following areas.

Facility Description
Names of Key Personnel and Health and Safety Personnel
Safety and Health Risk Analysis for Each Site Task and Operation
Site Control
Employee Training
Medical surveillance
Personal protective equipment
Personal and environmental air monitoring
Confined Space Entry Procedures
Spill Containment Program
Decontamination Program
Emergency Response Plan
Logs, reports and record keeping

The safety plan will follow EPA guidance and all OSHA requirements as outlined in 29 CFR 1910 and 1926.

C. Contingency Plan

Settling Defendants will submit a Contingency Plan describing procedures to be used in the event of an accident or emergency at the site. The draft Contingency Plan will be submitted with the prefinal design and the draft final Contingency Plan will be submitted with the final design. The final Contingency Plan will be submitted prior to the start of construction, in accordance with the approved construction schedule. The Contingency Plan will include, at a minimum, the following:

1. Name of the person or entity responsible for responding in the event of an emergency incident.

2. Plan and date(s) for meeting(s) with the local community, including local, State and Federal agencies involved in the cleanup, as well as local emergency squads and hospitals.

3. First aid medical information.

4. Air Monitoring Plan (if applicable).

5. Spill Prevention, Control, and Countermeasures (SPCC) Plan (if applicable), as specified in 40 CFR Part 109 describing measures to prevent and contingency plans for potential spills and discharges from materials handling and transportation.

D. Field Sampling Plan

The Settling Defendants will develop a field sampling plan (as described in " Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA," October 1988). The Field Sampling Plan should supplement the QAPP and address all sample collection activities.

F. Construction Quality Assurance Plan

Settling Defendants will submit a Construction Quality Assurance Plan (CQAP) which describes the Site specific components of the quality assurance program which will ensure that the completed project meets or exceeds all design criteria, plans, and specifications. The draft CQAP will be submitted with the prefinal design and the draft final CQAP will be submitted with the final design. The final CQAP will be submitted prior to the start of construction in accordance with the approved construction schedule. The CQAP will contain, at a minimum, the following elements:

1. Responsibilities and authorities of all organizations and key personnel involved in the design and construction of the Remedial Action.

2. Qualifications of the Quality Assurance Official to demonstrate he possesses the training and experience necessary to fulfill his identified responsibilities.

3. Protocols for sampling and testing used to monitor construction.

4. Identification of proposed quality assurance sampling activities including the sample size, locations, frequency of testing, acceptance and rejection data sheets, problem identification and corrective measures reports, evaluation reports, acceptance reports, and final documentation. A description of the provisions for final storage of all records consistent with the requirements of the Consent Decree will be included.

5. Reporting requirements for CQA activities will be described in detail in the CQA plan. This will include such items as daily summary reports, inspection data sheets, problem identification and corrective measures reports, design acceptance reports, and final documentation. Provisions for the final storage of all records will be presented in the CQA plan.

V. SUMMARY OF MAJOR DELIVERABLES/SCHEDULE

A summary of the project schedule and reporting requirements contained in this SOW is presented below:

Submission	Due Date
1. RD Work Plan	Sixty (60) days after Notice of Authorization to proceed with RD
2. Preliminary Design (30%)	Thirty (30) days after EPA's approval of Final RD Work Plan
3. Intermediate Design (60%) (if required)	Thirty (30) days after receipt of EPA's comments on the Preliminary Design
4. Prefinal Design (95%)	Thirty (30) days after receipt of EPA's comments on the Intermediate Design
5. Final Design (100%)	Thirty (30) days after receipt of EPA's comments on the Prefinal Design
6. RA Work Plan	Thirty (30) days after receipt of EPA's Notice of Authorization to Proceed with RA
7. Award RA Contract(s)	Thirty (30) days after receipt of EPA's Notice of Authorization to Proceed with RA
8. Pre-Construction Inspection and Meeting	(15) days after Award of RA Contract(s)
9. Initiate Construction of RA	15 days after Pre-Construction Inspection and meeting
10. Completion of Construction	15 after receipt of EPA's authorization to proceed with RA or as approved by EPA in RA construction schedule
11. Prefinal Inspection	No later than 15 days after completion of construction

12.	Prefinal Inspection Report	15 days after completion of Prefinal inspection
13.	Final Inspection	15 days after completion of work identified in Prefinal inspection report
14.	Final O&M Plan	No later than Prefinal Inspection
15.	Construction Completion Report	30 days after final inspection
16.	Completion of Remedial Action Report	30 days after final inspection Completion of Work Report See Consent Decree and Task 4.D.3 of this SOW

RECEIVED JUL 02 1976

June 30, 1976

David D. Lamm, Acting Chief
Solid Waste Management Section
Division of Sanitary Engineering
Indiana State Board of Health
1330 West Michigan Street
Indianapolis, Indiana 46206

Dear Mr. Lamm:

SUBJECT: Pharmaceutical Waste Disposal - Elkhart County

Further to your June 11, 1976 letter, I am attaching a listing of the chemicals and quantities that we dispose of via Himco Waste Away Service. These figures are average daily figures based on a 10-day test period.

Thank you for allowing us the time extension. Should you have any questions, please call.

Very truly yours,

WHITEHALL LABORATORIES INC.

Paul F. Brandt

Paul F. Brandt
Assistant Vice President

sam

Att.

bcc: Mr. C. Himes, Himco - Elkhart

000955

RECEIVED JUL 0 2 1976

Whitehall Laboratories
Elkhart, Indiana

Aspirin	504.55 lbs.	Phenylephrine HCl	.315 lbs.
Caffeine	151.99 lbs.	Phenindamine Tartrate	.64 lbs.
Calcium Carbonate	17.67 lbs.	FMA-11	40.51 lbs.
Magnesium Hydroxide	16.59 lbs.	Theophylline Hydrous	1.59 lbs.
Ephedrine Hydrochloride	.30 lbs.	Methapyrilene Hydrochloride	.23 lbs.
Phenobarbital	.09 lbs.	Sodium Bicarbonate	4.14 lbs.
Magnesium Carbonate	3.06 lbs.	Starch	196.90 lbs.
Sterotex	1.79 lbs.	Di-Pac	1.41 lbs.
Calcium Stearate	.02 lbs.	Sodium Saccharin	.01 lbs.
Lactose	1.29 lbs.	Peppermint Oil	.04 lbs.
Acetominophen	15.65 lbs.	Pamabron	.054 lbs.
Sodium Lauryl Sulfate	.07 lbs.	Dried Aluminum Hydroxide Gel	.12 lbs.
Sodium Carboxymethcellulose	.39 lbs.	Propyl Parabin	.032 lbs.
Triethanolamine	.34 lbs.	Stearic Acid	3.84 lbs.
Cetyl Alcohol	2.02 lbs.	Methyl Nicotinate	.26 lbs.
Oleoresin Capsicum	.04 lbs.	Histamine Dihydrochloride	.03 lbs.
Methyl Parabin	.01 lbs.	Oil of Lavender	.26 lbs.
Live Yeast Cell Derivative	.59 lbs.	Shark Liver Oil	.296 lbs.
Phenylmercuric Nitrate	.003 lbs.	Scopolamine Hydrobromide	.001 lbs.
Salicylic Acid	1.45 lbs.	Methol Levo	.569 lbs.
Acetic Acid	1.13 lbs.	Camphor	.268 lbs.
Castor Oil	.23 lbs.	Acetone	1.68 lbs.
Ether	4.87 lbs.	Netrocellulose Blend	.571 lbs.
alk	2.83 lbs.	Thioglycolic Acid	2.54 lbs.
Calcium Hydroxide	1.42 lbs.	Sodium Silicate	1.024 lbs.
Sodium Hydroxide	1.23 lbs.	Perfume Oils	.672 lbs.
Lemon Fragrance	.01 lbs.	Iron Oxide	.004 lbs.
methon	.01 lbs.	Mineral Oil	1.479 lbs.
Promulgen	.92 lbs.	Sorbital	.799 lbs.
Paraffin	.27 lbs.		

Chloroform	.10 gal.	Methyl Salicylate	.07 gal.
Alcohol SD-23A	.19 gal	Coal Tar	.22 gal.
Parachlorometaxylenol	.01 gal.	Mayrofix	1.30 gal.
Methocel	.03 gal	Supermide	.10 gal.
Iodine	.001 gal.	Glycerine	.50 gal.
Alcohol 38A	.37 gal.	Benzocaine	.03 gal.

6/30/76

HIMCO Customer Settling Parties

Albert H. Bostain
Andrew H. Perellis
Ann E. Viner
Anne Liu
April Milburn-Knizer
Brad Gilbert
Bruce White
Carl Tiedemann
Charles Denton
Christopher Dunsky
Christopher L. Kennedy
Dan Formsma
David Goltz
Dean Leazenby
Edward Freel
Edward Walerko
Elizabeth Bottorff Ahlemann
Frank Deveau
Gary Gengel
Greg Kelley
Heidi H. Bumpers
James V. Woodsmall
Jeff Wells
Jerome I. Maynard
Jim Leda
John Crosbie
John Dudek
John Kalich
Benjamin Stonelake
Karin Stamy
Kevin Higdon
Leslie Moreau
Lindsay Wolter
Lindsey Howard
Michael B. Ortega
Michael Feeley
Norman B. Berger
Philip L. Comella
Randy Johnson
Robert Hendricks
Ronald Schott
Stephen Studer
Theodore J. Esborn
Thomas C. Phillips
Thomas McLaughlin
Tim Coquillard
Tom Burgunder
W.C. Blanton