

REGION V

Work Plan Memorandum for
Sheboygan River and Harbor
Sheboygan, Wisconsin

Document Number 174-WP1-WM-ASVD-1

February 20, 1985



*environmental engineers, scientists,
planners, & management consultants*

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February 20, 1985

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Work Assignment No.: 73-5H00.0

EPA Contract No.: 68-01-6939

Subject: Work Plan Memorandum for Sheboygan River and Harbor,
Sheboygan, Wisconsin

Document No.: 174-WP1-EP-ASVC-1

Dear Mr. Bartelt and Ms. Calabrese:

Camp Dresser & McKee is pleased to submit this Work Plan Memorandum for Sheboygan River and Harbor located in Sheboygan County, Wisconsin.

The Work Plan for the Sheboygan River and Harbor will follow closely the Scope of Work (SOW) provided by USEPA under Work Assignment Number 73-5H00.0. In addition it will address the activities which the Great Lakes National Program Management Office would like to see expanded beyond the usual requirements of Superfund. Additions or deletions to this SOW will be discussed with Ms. Calabrese and rationale for a modification to the SOW included in the Work Plan.

Please note that the costs presented in this memorandum represent direct and indirect costs, without base fee or award fee. The detailed costs and fees will be presented in the Work Plan and will be supported by optional forms 60 for each REM II Team firm's participation in the Work Assignment.

It has been determined that no conflict of interest exists for the Regional and Site Managers for this work assignment. Signed conflict of interest statements are included as Attachments F-1, and F-2.

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 FOR
 SHEBOYGAN RIVER AND HARBOR
 REMEDIAL INVESTIGATION/FEASIBILITY STUDY
 SHEBOYGAN, WISCONSIN

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1.0 INTRODUCTION

This Work Plan Memorandum describes the initial tasks to be performed at the Sheboygan River and Harbor Site in accordance with USEPA's Work Assignment Number 73-5H00.0.

The Sheboygan Harbor Site, located in Sheboygan, Wisconsin is presented in Figure 1. Figure 2, 3 and 4 present the general locations of previous sampling stations for PCBs by the U.S. Army Corps of Engineers and depth of channel and river reaches below low water datum.

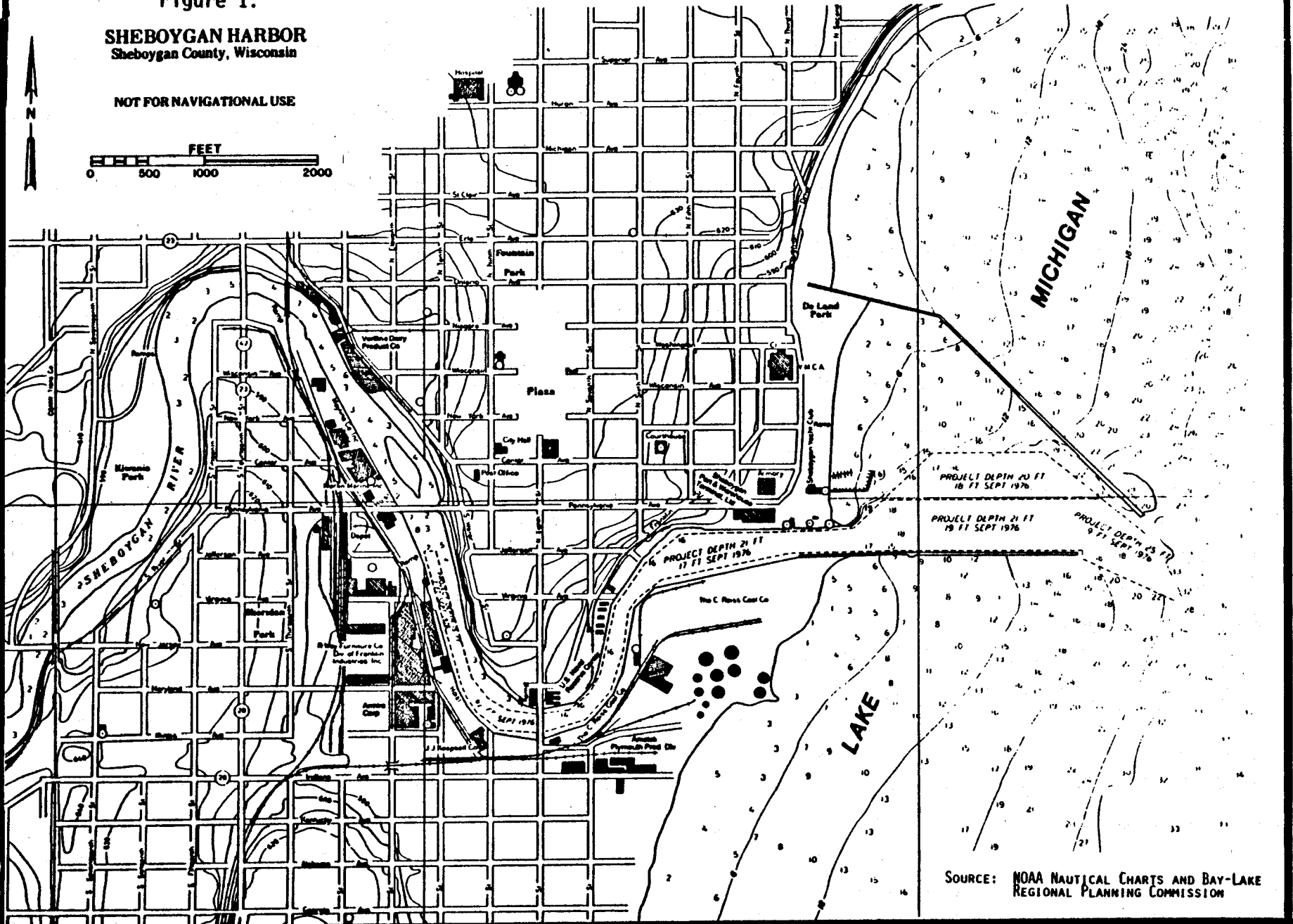
The City of Sheboygan is located on the western shore of Lake Michigan approximately 50 miles north of Milwaukee. Sheboygan is the county seat and an economic growth center with a population of 48,085. The Sheboygan River drains west to east into Lake Michigan and roughly bisects the city. It has a mean annual discharge of 247 cfs and had been classified as a high quality waterway for fishing throughout the harbor area. The WDNR has named the lower Sheboygan River as an area of concern regarding human consumption of game fish with high tissue PCB levels.

Sheboygan Harbor has been classified as a diversified cargo port by the Department of Transportation. This means that the port can handle more than one or two types of freight but the origins and destinations of the cargo are limited to the vicinity of the port. The harbor is approximately 96 acres in size and is formed by two breakwalls located immediately south of the river mouth and about 2000 feet north of the river mouth. The Army Corps had dredged the Sheboygan River upstream for a distance of about one mile forming the inner harbor area. Land uses adjacent to the harbor consist mainly of small boat facilities, parks/recreation areas and industrial/transportation uses. The city's central business district and older industrial area are located in the vicinity of the harbor.

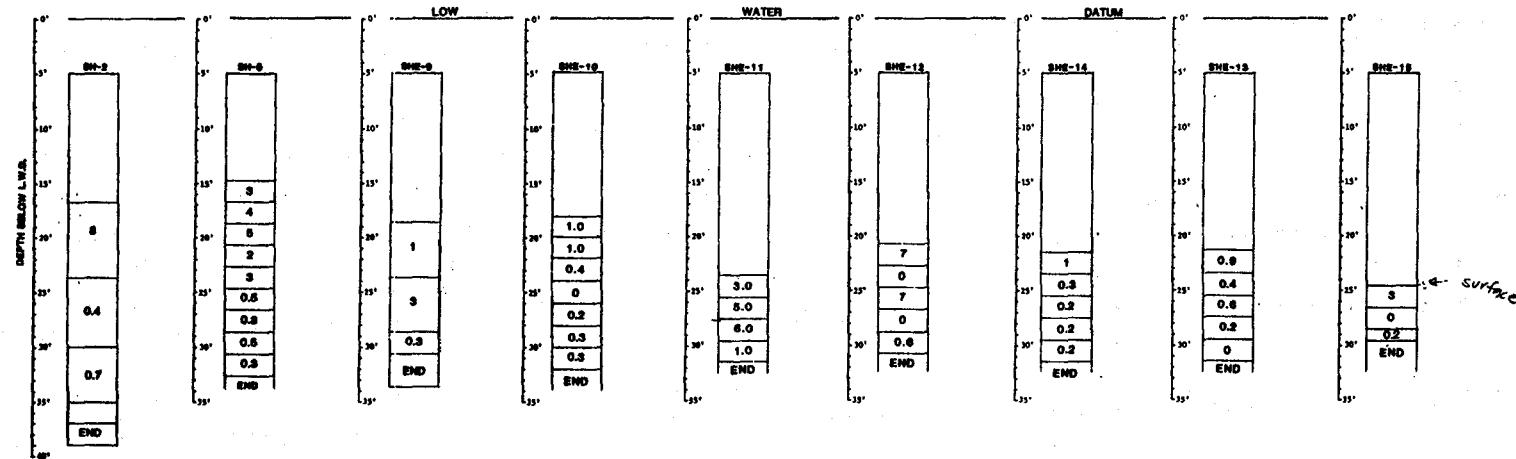
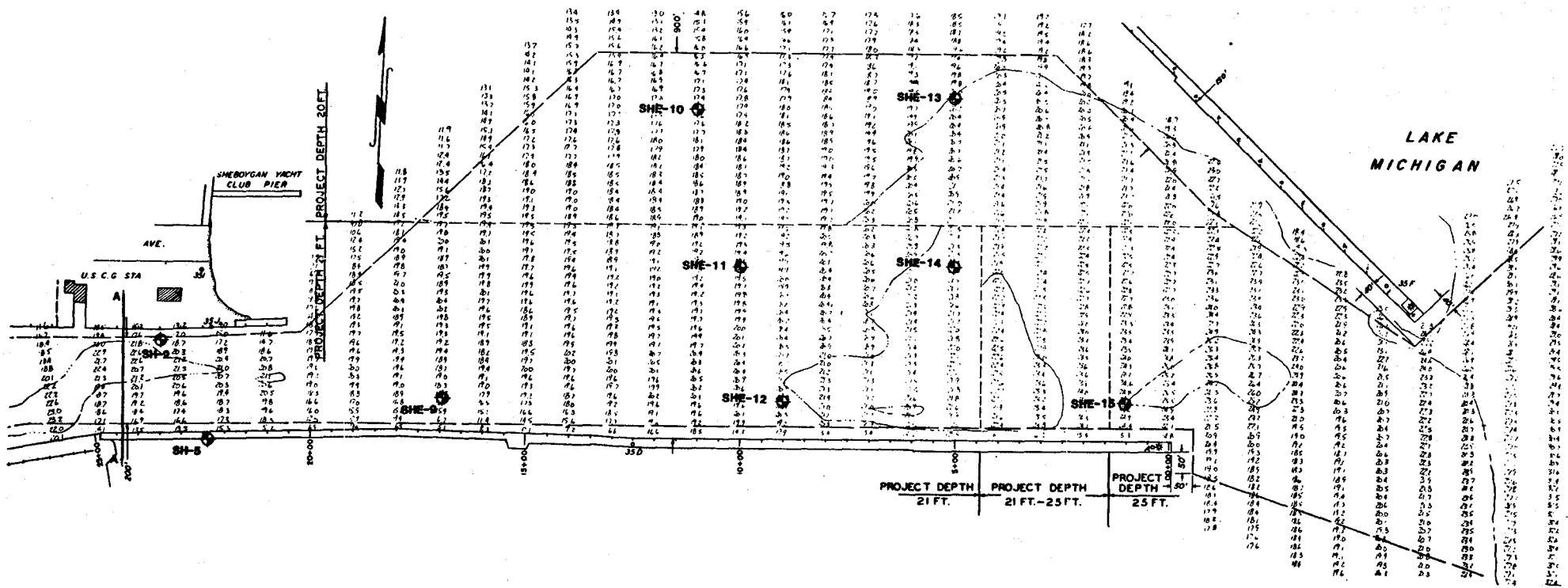
Figure 1.

SHEBOYGAN HARBOR
Sheboygan County, Wisconsin

NOT FOR NAVIGATIONAL USE



SOURCE: NOAA NAUTICAL CHARTS AND BAY-LAKE REGIONAL PLANNING COMMISSION



NOTE:
 1. BORING INFORMATION DATES:
 SHE - BORINGS 1982
 SH - BORINGS 1982
 OTHER BORINGS 1979
 2. BORING LOG UNITS ARE PARTS PER MILLION.

U.S. ARMY ENGINEER DISTRICT, DETROIT
 CORPS OF ENGINEERS
 DETROIT, MICHIGAN

**SHEBOYGAN HARBOR,
 WISCONSIN**

PCB PROFILE

20 MARCH 1984

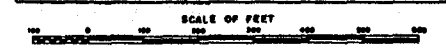


Figure 2.

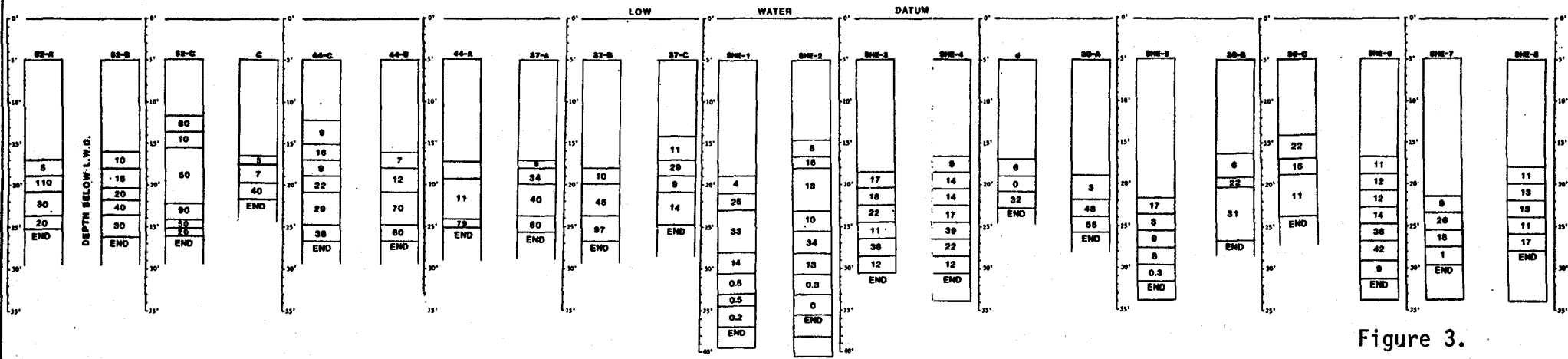
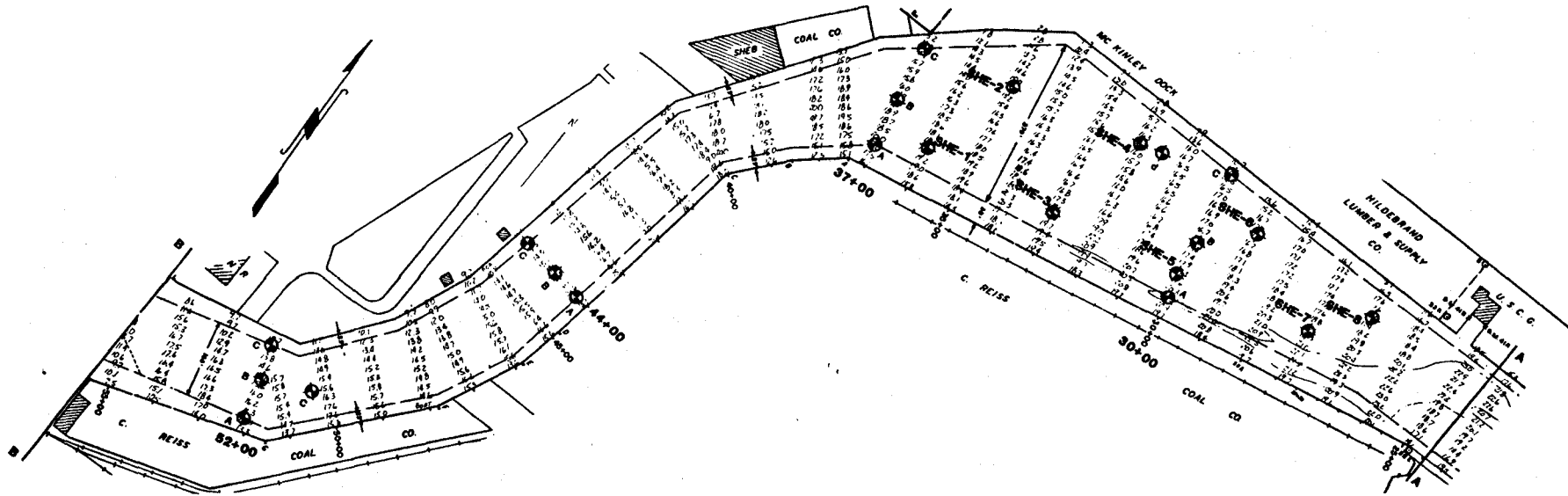
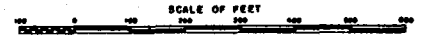


Figure 3.

U.S. ARMY ENGINEER DISTRICT, DETROIT
 CORPS OF ENGINEERS
 DETROIT, MICHIGAN
**SHEBOYGAN HARBOR,
 WISCONSIN**
PCB PROFILE
 20 MARCH 1984

NOTE:
 1. BORING INFORMATION DATES:
 SHE - BORINGS 1982
 SH - BORINGS 1982
 OTHER BORINGS 1979
 2. BORING LOG UNITS ARE, PARTS PER MILLION.



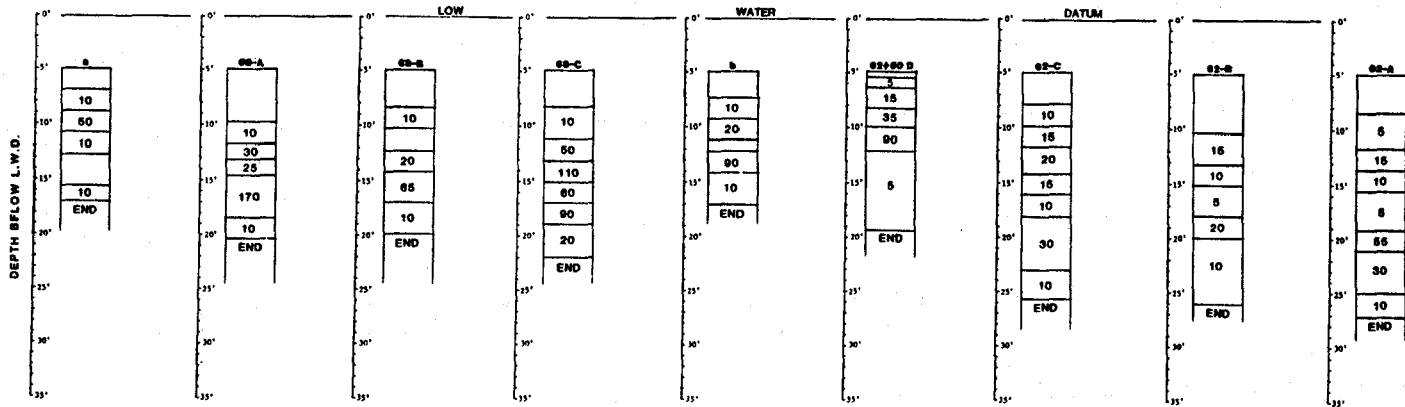
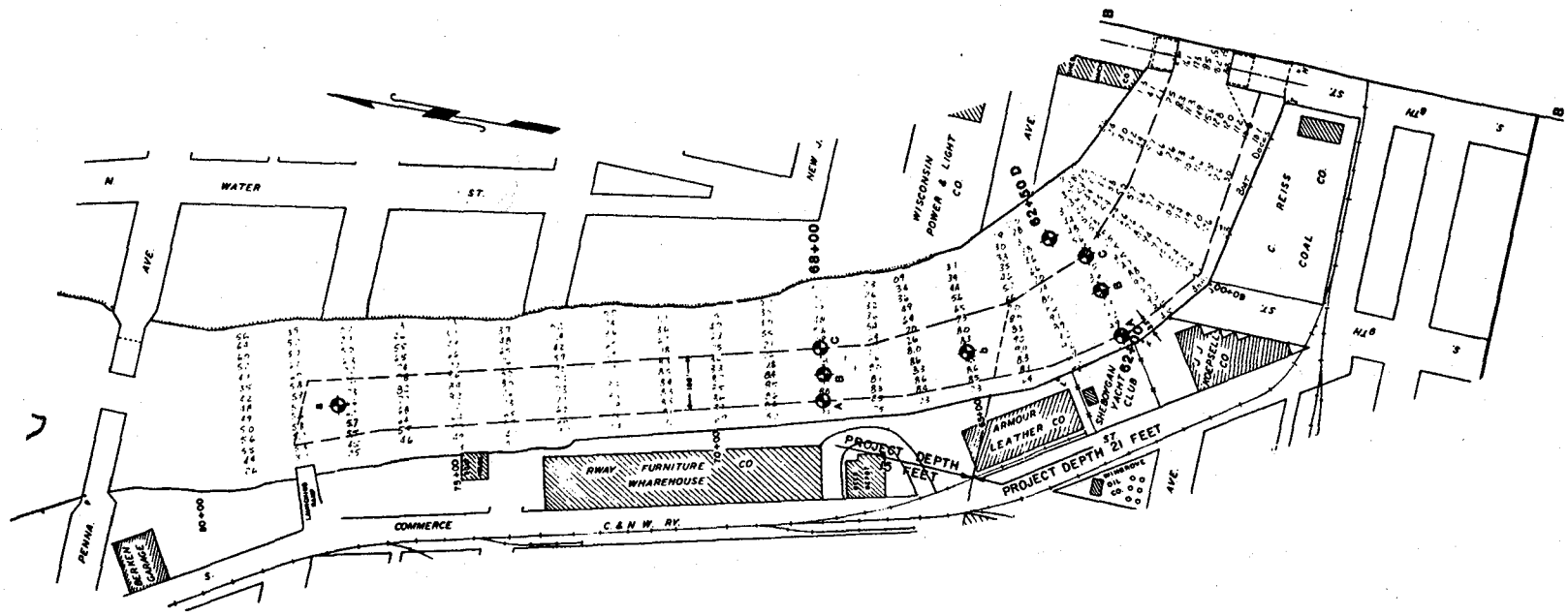


Figure 4.

NOTE:
 1. BORING INFORMATION DATES:
 SHE - BORINGS 1982
 SH - BORINGS 1982
 OTHER BORINGS 1976
 2. BORING LOG UNITS ARE, PARTS PER MILLION.

U.S. ARMY ENGINEER DISTRICT, DETROIT
 CORPS OF ENGINEERS
 DETROIT, MICHIGAN
**SHEBOYGAN HARBOR,
 WISCONSIN**
PCB PROFILE
 20 MARCH 1984

SCALE OF FEET
 0 100 200 300 400 500

Sheboygan Harbor was dredged to project navigation depths by the Army Corps of Engineers in the mid 1950's. Harbor sediments were removed annually and disposed of in the offshore waters of Lake Michigan until 1973. No harbor dredging of polluted solids has occurred since 1973, and presently there is controversy over the environmental acceptability of placing PCB contaminated sediments in a new, proposed CDF. Sediments are estimated to be accumulating in the harbor at an annual rate of 30,000 cubic yards. In 1981, approximately 20,000 cubic yards of unpolluted sediments were removed by the Army Corps from a shoaling area at the mouth of the harbor and placed on the C. Reiss Coal Company dock to dry until trucked to the city's industrial park for use as fill.

A recent investigation of 98 sediment profile samples collected from Sheboygan Harbor during December 2-6, 1982 show inner harbor surficial sediments to be contaminated with Polychlorinated Biphenyls (PCBs). The possibility that these contaminated sediments may be classified as hazardous has contributed to the impasse on acceptable dredging and disposal methods. The projected annual increase in commercial shipping from 15 to 90 ships (1983 vs 1984) due to a five-year coal transshipment agreement between Wisconsin Electric Power Company and C. Reiss Coal Company is expected to add pressure for a resolution to the dredging impasse. Sheboygan harbor and navigation channels are presently two to three feet below the project navigation depth requirement of 21 feet.

Remedial Investigations and Feasibility Studies are aimed at remedial actions that offer permanent remedies which prevent or control the release of hazardous wastes into the environment. The objectives for Sheboygan River and Harbor are to:

Determine the nature and extent of contamination of Sheboygan Harbor, primarily ship turning basin and lower reaches of the Sheboygan River.

Assess the extent of offsite migration of contaminants and their impact on potential receptors.

Determine whether the site poses an imminent hazard to public health, welfare, or the environment.

Determine the safest, most cost-effective remedial actions.

Prepare a conceptual design of the remedial action selected.

2.0 SCOPE OF INITIAL SERVICES

Task 1. Prepare Work Plan Memorandum

Objective: Prepare a Work Plan Memorandum describing the initial tasks to be performed regarding Work Plan Development for the Remedial Investigation/Feasibility Study (RI/FS) for the Sheboygan River and Harbor site. Identify the level of effort, associated costs and schedule of these tasks specified in the Work Plan.

Data Sources: As listed in Task 2

Deliverables: Work Plan Memorandum

Task 2.0 Description of Current Situation

Subtask 2.1 - Obtain and Evaluate Existing Information

Objective: Develop a database of existing available information for use in preparing the Work Plan for conducting the Remedial Investigation (RI) and preparing the Feasibility Study (FS).

Data Sources: Sources of information presently available:

- o Sources of information from USEPA files are presented in Attachment G of this Work Plan Memorandum.
- o EPA Work Assignment for Sheboygan River Harbor site. WA. No. 73-5H00.0.
- o Other sources of information to be investigated are:

- o Wisconsin Department of Natural Resources files
- o City of Sheboygan records
- o EPA section 104 questionnaires to potentially responsible parties
- o Report prepared by Camp Dresser & McKee Inc. and IEP Inc. An Evaluation of Beach Nourishment Alternatives for Unpolluted Sediments Dredged from Sheboygan Harbor. Report prepared by D. Buss, Program Manager, for the City of Sheboygan and the Office of Coastal Zone Management, State of Wisconsin. July 1984.
- o Other sources as appropriate

- Assumptions:
1. Identified data sources will provide access to and furnish required data for evaluation in a timely manner.
 2. Site data is valid with respect to QA/QC protocols.

Deliverables: Evaluation of available and existing information to establish a baseline data file of site conditions to be summarized in the Initial Site Evaluation Report. Also a chronological history of operations and response actions conducted at the site and a listing of all materials known to have been deposited or stored at the site will be prepared. The results of the data sources evaluation will serve as input into subsequent tasks and shall consist of:

- o General description of known or on-site and off-site contamination

- o Site characterization based on available geological, hydrogeological, surface water, soil and air quality information
- o Identification of technical and nontechnical data gaps

Subtask 2.2 - Prepare Compiled Site Map(s) and Confirm EPA Graphics Standards

- Objective:
1. Prepare site map(s) showing existing site information. These maps will be used for field verification of existing information and site conditions. The site maps will also be used to establish the preliminary site boundary conditions for development of the Work Plan.
 2. Obtain graphics standards from EPA for incorporation into the final site maps and other graphics to be included in the RI/FS.

- Data Sources:
- o Existing site maps.
 - o Quadrangle maps of the site
 - o Plat and property maps of the site
 - o Existing information developed in subtask 2.1
 - o Available historic and current aerial photographs

- Assumptions:
1. Site survey information e.g., location of structures, land features, property lines are valid.
 2. Locations of sampling and coring stations are valid.

Deliverables: Compiled site map(s) as input into the Initial Site Evaluation Report and Work Plan.

Subtask 2.3 - Perform Initial Site Characterization

Objective: Conduct a site reconnaissance to confirm the existing site conditions as shown on the compiled site map(s), to provide the on-site information necessary to prepare the Health and Safety plan, identify sensitive receptors within the study area and to familiarize the site manager and team members with the existing site conditions.

Data Sources:

1. USGS Maps
2. Maps depicting property boundaries
3. Available local survey information
4. Information such as soil and hydrogeological data presented in subtask 2.1

Assumptions: Site access will be arranged by EPA in a timely manner. Compiled site maps will be used to confirm existing information and to be a base to develop detailed mapping to be accomplished in the Remedial Investigation.

Deliverables:

1. Revised compiled site map(s)
2. Data to be used in Initial Site Evaluation Report.

Subtask 2.4 - Prepare Initial Site Evaluation Report

A Memorandum report will be prepared by CDM summarizing the information gathered and evaluated under subtask 2.1 and 2.3. Also included in this interim report will be a synopsis of our observations during the initial site visit, and the level of protection required for working on the site.

Task 3.0 Prepare Project Plans

Objectives: To prepare those project plans necessary for the execution of the work and to ensure that the work is conducted in a consistent manner that satisfies the reviewing and using agencies' requirements prior to execution.

- Data Sources:**
1. Information collected from site files compiled in Task 2 and the initial site inspection.
 2. REM II Guidance Documents
 3. U.S. EPA Region V directives and procedures
 4. State and local directives and procedures
 5. U.S. EPA approved REM II Health and Safety Assurance Manual.
 6. Quality Assurance Program Plan for Performance of Remedial Response Activities at Uncontrolled Hazardous Waste Sites
 7. Available Community Relations Information prepared by others

- Assumptions:**
1. A Site Health and Safety Plan will have to be developed in its entirety. The plan will be prepared using input from Task 2.
 2. A Community Relations Plan will have to be prepared in its entirety.

3. The REM II approved programs plans will be used as guidance for developing the respective site specific project plans.
4. The format of the Quality Assurance Project Plan will be that of EPA Region V as specified in EPA Region V Guidance Memorandum from the Regional Project Office and clarified in meetings with the Regional V Quality Assurance Officer.
5. Laboratory Quality Control will be performed in accordance with the requirements of EPA's Contract Laboratory program.

Subtask 3.1 - Health and Safety Plan

A site-specific Health and Safety Plan will be prepared using input from Task 2.0. The plan will include:

- o Personnel protective equipment requirements keyed to site specific location and activities
- o Safety equipment inventory
- o Training requirements
- o Medical surveillance program
- o Personnel hygiene requirements
- o Contingency plan and emergency procedures
- o Site personnel/activity safety monitoring program
- o Decontamination procedures

The plan will be organized to apply to all Remedial Investigation (RI) field work and will be consistent with:

- o Section III (c) (6) of CERCLA
- o U.S. EPA Order 144.2 -- Health and Safety Requirements for Employees engaged in field activities

- o U.S. EPA Order 1440.3 -- Respiratory Protection
- o U.S. EPA Occupational Health and Safety Manual
- o U.S. EPA Interim Standard Operation Safety Procedures (September 1982)
- o Coast Guard, US Army Corps of Engineers, US Department of Transportation and other federal requirements for working on waters of the United States
- o Site Conditions

Subtask 3.2 - Quality Assurance Project Plan (QAPP)

A site-specific Quality Assurance Project Plan (QAPP) will be developed in accordance with U.S. EPA Region V Quality Assurance Project Plan Guidance. Preparation of this document will be tailored to the specific requirements for the project in the field and in the office. Analysis will be performed in accordance with the requirements of U.S. EPA's Contract Laboratory Program.

The site-specific Quality Assurance Project Plan shall include:

- o Project Description
- o Project Organization and Responsibility
- o Quality Assurance objectives for data (precision, accuracy, completeness, comparability, and intended use).
- o Sampling procedures, locations, parameters, and numbers of samples.
- o Sample custody procedures
- o Calibration procedures, references, and frequency
- o Internal quality control checks and frequency
- o Quality assurance performance audits, system audits, and frequency
- o Quality assurance reports

- o Preventive Maintenance procedures and schedule
- o Specific procedures to assess data precision, representativeness, comparability, accuracy and completeness of specific measurements parameters involved.
- o Corrective action
- o Quality assurance reports to management
- o Internal quality control checks and frequency

Subtask 3.2.1 - Quality Assurance Protocols

There are two QA/QC protocols that apply to the Sheboygan Harbor and River site: A Quality Control Plan that governs office work and deliverables, and a site specific Quality Assurance Plan that covers field and laboratory work. The types of reviews included in the QCP are shown in Table 1. As part of the Work Plan, a site-specific list of deliverables and reviews will be prepared. An example that applies to this memorandum is included as Attachment D. The field analyses and sample collection shall be done in accordance with accepted operating procedures and chain-of-custody procedures as provided by the U.S. EPA. The Quality Assurance review procedures regarding field and analytical work will be presented in the QAPP for the Sheboygan Harbor and River Site.

Subtask 3.2.2 - Site Management Plan

A plan detailing project operations at the site, including site access and security, contingency plans for other than site personnel, and the general coordination and operational planning of activities to be performed at the site will be developed.

Table 1

TYPES OF QUALITY CONTROL REVIEWS

QCP Activities Legend

- A. Single Person Review and Signoff
 - 1. Supervisor
 - a. Regional Manager
 - b. Health and Safety Manager
 - c. Technical Operations Manager
 - d. Finance and Administration Director
 - 2. Peer Review and Signoff*
 - 3. Technical Expert Review and Signoff*
(Identify individual, provide resume, and schedule time)
- B. Committee Review and Signoff
 - 1. Assembled Committee
 - 2. Blind Committee
(appropriate technical disciplines must be identified, resume provided, chairman identified, and time schedule)

* Signoff consists of approval signature block on the transmittal page of the deliverable signed and dated by the responsible party(ies) or committee chairman prior to electronic submittal to the NPMO for approval for release to the U.S. EPA region.

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Subtask 3.2.3 - Sampling and Analysis Plan

A site-specific sampling and analysis plan based on the findings of the initial investigations phase will be developed. The plan will include sampling and analytical requirements for the RI/FS as part of QAPP. This plan will be developed in accordance with the U.S. EPA approved Site Investigations Procedure Manual and the Draft Site Investigation Protocol for Uncontrolled Hazardous Waste Sites prepared by Camp Dresser & McKee, Inc., December 1984. The RI/FS program will include sampling of air, soil, surface water, sediment and groundwater. The Site Manager will request all primary data from the Central Regional Laboratory and will provide a separate and independent evaluation of this data. Procedures for this verification will be identified in the Sampling and Analysis Plan which will be part of the QAPP.

Subtask 3.2.4 - Data Management Plan

A Data Management Plan will be prepared for internal use to guide the efficient management of the large quantity of data which will result from this assignment. This plan will include:

- o Data recording/gathering format
- o Data file type and location
- o Data file control assignment (by individual) and sign-out procedure
- o Procedures/timing for return of information to file (e.g., no data left at work station overnight)
- o Backup file procedures, requirements, locations and updating periods.

Standardized REM II Team procedures will form the basis for Data Management Plan development and usage.

Subtask 3.3 - Community Relations Activities

The Community Relations Plan preparation tasks will be performed and administered by ICF. These activities will be described in a separate Work Plan submitted by ICF. The Community Relations Plan will be prepared in its entirety since it is our understanding that one does not presently exist. The Community Relations Plan will be prepared under a separate work assignment and, therefore will not be budgeted into the work plan.

Supportive activities associated with the Community Relations Plan that the REM II Team will perform are:

- o Participation in public meetings
- o Provide information for press releases, fact sheets, and technical summaries.
- o Prepare responsiveness summaries for records of decision.

A meeting will be held with USEPA Region V to discuss details of the Community Relations Plan prior to completing the Final Work Plan.

Task 4.0 Prepare Work Plan

Subtask 4.1 - Prepare Draft Work Plan

Objectives: Prepare a Draft Work Plan detailing the scope, budget and schedule necessary to conduct the Remedial Investigation/Feasibility Study (RI/FS) using the results and outputs of Tasks 2 and 3. The Work Plan will be developed following closely the Scope of Work for the Sheboygan River and Harbor site as provided by EPA under this Work Assignment. The Work Plan will be

developed to allow initiation of certain identified tasks based on limited EPA approval in order to expedite the execution of the RI/FS work. The Work Plan will also be developed, insofar as possible, to allow flexibility in the method of accomplishing the stated Work Plan objectives. These statements in the Work Plan will generally appear as IF statements.

- Data Sources:
1. Outputs and information from Tasks 2 and 3
 2. REM II Guidance Document
 3. Statement of Work for the Sheboygan River and Harbor Site, WA-73-5H00.

Deliverables: The draft Work Plan including scope, estimated budgets and schedules for the Remedial Investigation and Feasibility Study for the long-term remedial action addressing contamination on-site and off-site for river and harbor sediment, surface water, benthic macroinvertebrates, and fish.

Subtask 4.2 - Agency Review

- Objectives:
1. To interface closely with the EPA in discussing and reviewing the draft Work Plan prior to finalization.
 2. To obtain timely EPA input and finalization.

Data Sources: EPA Region V and other state and local reviewing entities.

Assumptions: EPA will interface directly with other state and local reviewing bodies.

Deliverables: None

Subtask 4.3 - Prepare Final Work Plan and Obtain EPA Approval

- Objectives:
1. To finalize the draft Work Plan with evaluation and incorporation appropriate comments, suggestions, and directives from EPA and other (state and local) reviewing bodies.
 2. To obtain EPA approval for the entire Work Plan.
 3. If EPA approval for the entire Work Plan cannot be provided in a timely manner, obtain limited approval for initiation of certain tasks which are not dependent upon a resolution of unresolved issue(s) such as QAPP approval.

Data Sources: The results of Subtasks 4.1 and 4.2.

Assumptions: Timely review and approval of Work Plan by EPA

Deliverables: Final Work Plan for conducting the RI/FS for the Sheboygan River and Harbor site.

Task 5.0 Technical and Financial Management

- Objectives:
1. Provide technical supervision for the project
 2. Prepare and submit monthly technical and financial progress reports
 3. Attend progress meetings

4. Conduct work effort quality control and Quality Assurance audits
5. Implement document control procedures and project schedule controls
6. Monitor schedule control project

Data Sources:

1. Work Plan Memorandum
2. Output from tasks 2 through 4
3. Management information system established for the REM II Contract (REMIS)

Assumptions

1. Format adopted for REM II financial and management reports are acceptable to EPA Region V.

Deliverables: Monthly Progress Reports will be prepared during the performance of the initial tasks in conformance with standard monthly report format.

3.0 BUDGET

The costs associated with the initial tasks are presented in Attachments A and B. Attachment A presents a summary of all costs associated with the initial tasks and Attachment B presents a detailed breakout of labor by category and task expenses and other direct costs (ODC's) by Task. These costs are in accordance with our understanding of the requirements of this project.

4.0 SCHEDULE

The schedule of Activities by task and subtask is presented in Attachment C. As shown, we estimate that the final Work Plan will be completed by June 4, 1985.

The Schedule of Deliverables is presented in Attachment D and shows distribution and approval dates. We have not included distribution to any identified potential responsible parties; we look to your guidance in these areas.

5.0 STAFF

1. Daniel F. Buss, P.E., will be the site manager for the Sheboygan River and Harbor site assignment. His resume is included as Attachment E. He will work under the direction of John W. Hawthorne, P.E., the Region V manager.
2. Camp Dresser & McKee, Inc. will provide direction and input on health and safety, quality assurance and on specific tasks as required.
3. ICF will prepare the Community Relations Plan and will provide direction and input into other Community Relations Activities as required.
4. Clement Associates will provide guidance on the exposure and risk assessment and on the endangerment assessment.

6.0 ATTACHMENTS

REM II PHASE

ATTACHMENT A

WA Code 113V
 WA Manager Name D. Buss
 SSAN 393-40-8298

Site Number 174
 Site Name Sheboygan River and Harbor
 Phase WP1

Start Date 2/4/85 (4)
 End Date 6/4/85 (5)
 (Completion of WDNR
 review and consideration
 of their comments for
 inclusion in Final Work
 Plan)

TASK	Professional		Support		Equipment	Travel	ODC's	Sub-Pool	Indirect	Total	
	Hours	\$	Hours	\$	\$	\$	\$	\$	\$	\$	
1.0 Work Plan Memo	24	1881	16	476	0	580	250	0	0	3187	
2.0 Eval. Info.	180	9658	40	1190	0	570	900	0	0	12,318	
3.0 Project Plans	137	7017	48	1428	0	850	625	0	0	9920	
4.0 Work Plan	124	9026	56	1667	300	1040	675	0	0	12,708	
5.0 Tech. Fin. Mgmt.	24	1635	8	238	0	630	125	0	0	2628	
TOTAL	489	29,217	168	4999	300	3670	2575	0	0	40,761	
IJS.PROJ	WA==>	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(2)

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REM II EXPENSES

ATTACHMENT B
(Continued)

Site Number: 174

Site Manager: D. Buss

Site Name: Sheboygan River and Harbor, WI

SSAN: 393-40-8298

Phase: WP1

Date: 2/10/85

WA Code: 113V

TASK	Equipment \$/day		Per Diem \$90/day		Transpor- tation	Sub- Pool	G & A* 0.0%	Total
	Days	\$	Days	\$	\$	\$	\$	\$
1.0 Work Plan Memo	0	0	2	180	400	0	0	580
2.0 Eval. Info.	0	0	3	270	150	0	0	420
3.0 Project Plans	0	0	5	450	400	0	0	850
4.0 Work Plan	2	300	6	540	500	0	0	1340
5.0 Tech. Fin. Mgmt.	0	0	2	180	450	0	0	630
TOTAL	2	300	18	1620	1900	0	0	3820

E:WA.EXP

* Subcontractor pool excluded from G&A computation

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ATTACHMENT B
(Continued)

Site Number: 174
Site Name: Sheboygan River and Harbor, WI
Phase: WP1
WA Code: 113V

Site Manager: D. Buss
SSAN: 393-40-8298
Date: 2/10/85

TASK	Xerox \$	Blue-prints \$	Mail/ Courier \$	Supplies \$	Tele- phone \$	Computer \$	\$	G & A \$	TOTAL \$
1.0 Work Plan Memo	50	100	25	25	50	0	0	0	250
2.0 Eval. Info.	200	500	50	50	100	0	0	0	900
3.0 Project Plans	100	250	100	50	100	25	0	0	625
4.0 Work Plan	150	250	100	50	100	25	0	0	675
5.0 Tech. & Fin. Mgmt.	25	0	25	25	25	25	0	0	125
TOTAL	525	1,100	300	200	375	75	0	0	2,575

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REM II
LABOR

Site Number: 174

Phase: WPI

ATTACHMENT B

Site Manager: D. Buss

Date: 2/10/85

Site Name: Sheboygan River & Harbor

WA Code: 73-5800.0

CSAN: 393-40-8298

TASK ELEMENT	Professional 4		Professional 3		Professional 2		Professional 1		Technical 2		Technical 1		TOTAL TECHNICAL LOE		Clerical 3		Clerical 2		Clerical 1		Total	
	78.38 \$/Hr.		47.72 \$/Hr.		36.63 \$/Hr.		27.42 \$/Hr.		35.11 \$/Hr.		20.50 \$/Hr.				29.79 \$/Hr.		22.15 \$/Hr.		16.21 \$/Hr.			
	Hours	\$	Hours	\$	Hours	\$	Hours	\$	Hours	\$	Hours	\$	Hours	\$	Hours	\$	Hours	\$	Hours	\$	Hours	\$
1.0 Work Plan Memo	24	1881	0	0	0	0	0	0	0	0	0	0	24	1881	16	476	0	0	0	0	40	2357
2.1 Existing Info.	16	1254	8	382	0	0	0	0	0	0	0	0	24	1636	16	465	0	0	0	0	40	2112
2.2 Compiled Site Maps	24	1881	16	764	16	586	0	0	40	1404	0	0	96	4635	8	238	0	0	0	0	104	4873
2.3 Site Characterizat.	16	1254	32	1527	0	0	0	0	0	0	0	0	48	2781	8	238	0	0	0	0	56	3019
Prepare Existing																						
2.4 Conditions Memo	4	313	0	0	8	293	0	0	0	0	0	0	12	606	8	238	0	0	0	0	20	844
3.1 Health&Safety Plan	13	1019	16	764	24	879	0	0	0	0	0	0	53	2662	24	714	0	0	0	0	77	3376
3.2 Quality Assur. Plan	20	1568	40	1908	24	879	0	0	0	0	0	0	84	4355	24	714	0	0	0	0	108	5069
4.1 Draft Work Plan	60	4703	0	0	0	0	0	0	16	561	0	0	76	5264	40	1191	0	0	0	0	116	6455
4.2 Agency Review	8	627	0	0	0	0	0	0	0	0	0	0	8	627	0	0	0	0	0	0	8	627
4.3 Final Work Plan	40	3135	0	0	0	0	0	0	0	0	0	0	40	3135	16	476	0	0	0	0	56	3611
5.0 Tech/Finan. Mgmt.	16	1254	8	381	0	0	0	0	0	0	0	0	24	1635	8	238	0	0	0	0	32	1873
TOTAL	241	18,889	120	5726	72	2637	0	0	56	1965	0	0	489	29,217	168	4999	0	0	0	0	657	34,216

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SCHEDULE OF ACTIVITIES

ATTACHMENT C

SHEBOYGAN RIVER AND HARBOR

	FEBRUARY				MARCH				APRIL					MAY				JUNE								
	/	5	12	19	26	5	12	19	26	/	2	9	16	23	30	7	14	21	28	/	4	11	18	25	/	
1.0 Work Plan Memorandum		█	█	█	█																					
2.0 Site Definition					█	█	█	█	█																	
2.1 Existing Information Evaluation				█	█																					
2.2 Compiled Site Map (s)				█	█	█	█	█	█	█																
2.3 Site Characterization				█	█																					
2.4 Prepare Initial Site Evaluation Report				█	█	█	█	█																		
3.0 Project Plans				█	█	█	█	█	█	█	█	█	█	█	█											
3.1 Health and Safety Plan				█	█	█	█	█	█	█	█	█	█	█												
3.2 Quality Assurance Project Plan (s)				█	█	█	█	█	█	█	█	█	█	█												
4.0 Work Plan				█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
4.1 Draft Work Plan				█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
4.2 Agency Review Meeting																										
4.3 Final Work Plan																										
Monthly Reports		●				●						●														
○ Meetings																										

EPA REVIEW
 ●●●●●●●●

WDNR REVIEW
 ●●●●●

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REVIEW AND DELIVERABLE SCHEDULE

ATTACHMENT D

SITE: 174 WA NO: 73-5H00.0 WA ISSUED: 2/4/85
 REGION: 5 REGIONAL MANAGER: J. Hawthorne SITE MANAGER: D. Buss

TASK	REM II APPROVAL				QUALITY CONTROL REVIEW		DELIVERABLE DUE TO EPA	EPA REVIEW COMPLETION DATES				OTHER AGENCY REVIEW COMPLETION DATES		
	RM	HSM	TOM	FAM	ACTIVITY	DATE	DATE	PO	CO	RPO	RSPO	WDNR		
1.0 Work Plan Memo	2/18	2/18	2/18	2/18	A.1.a,c&d	2/18	2/25	3/4	3/4	3/4	3/4	3/8		
2.0 Site Definition														
2.1 Eval. Exist. Info.	-	-	-	-	A.1.a	-	3/6	3/12	3/12	3/12	3/12	3/15		
2.2 Compiled Site Map(s)	3/25	3/25	3/25	3/25	A.1.a	3/25	4/1	4/8	4/8	4/8	4/8	4/12		
2.3 Site Characterization	-	-	-	-	A.1.a	-	-	-	-	-	-	-		
2.4 Initial Site Eval. Report	3/18	3/18	3/18	3/18	A.1.a	3/18	3/20	3/27	3/27	3/27	3/27	4/2		
3.0 Project Plans														
3.1 Health & Safety Plans	4/8	4/8	-	-	A.1.a&b	4/8	4/11	4/16	4/16	4/16	4/16	4/19		
3.2 Quality Assur. Proj. Plans	4/23	4/23	4/23	4/23	A.1.a&c	4/23	4/25	4/30	4/30	4/30	4/30	5/3		
3.3 Community Relations Plan	4/8	4/8	4/8	4/8	A.1.a	4/8	4/11	4/15	4/15	4/15	4/15	4/19		
4.0 Work Plan														
4.1 Draft Work Plan	4/18	4/18	4/18	4/18	B.1	4/18	4/25	5/10	5/10	5/10	5/10	5/15		
4.2 Agency Review Meeting	-	-	-	-	-	-	5/10	-	-	-	-	-		
4.3 Final Work Plan	5/12	5/12	5/12	5/12	A.1.a	5/12	5/17	5/25	5/25	5/25	5/25	6/4*		
Monthly Reports					A.1.a		Ongoing							
* NOTE: WDNR review should be completed by 5/30 and consideration of comments for inclusion in Final Work Plan by EPA and REM II Team by 6/4/85.														

ATTACHMENT E

DANIEL F. BUSS

Program Manager
Camp Dresser & McKee Inc.

QUALIFICATIONS AND EXPERIENCE

Mr. Buss has over 15 years experience in managing major multidisciplinary projects in the environmental field for industries, utilities municipalities and mining primarily in the Midwest. Major involvement at CDM has been in the evaluation of impacts of hazardous waste and contaminated materials on the environment and the proper management of these wastes. He has been responsible for preparing Spill Prevention Control Countermeasures Plans, conducting hazardous waste management audits, performing industrial waste treatability studies, managing contaminated dredge spoils feasibility studies, conducting waste characterization studies, managing geohydrology and geotechnical studies, obtaining air pollution emission permits and providing assistance and guidance to industry in securing necessary construction permits. He has conducted training programs to industry and the University of Wisconsin regarding hazardous waste management practices.

Mr. Buss has served as QA/QC manager for a \$3.7 million environmental assessment regarding the impacts of dredging on the striped bass population of the Hudson River; has served as Program Manager for multidisciplinary environmental studies on the Point Beach Nuclear Plant and Wisconsin Electric Power Company's Oak Creek and Lakeside Power Plants. He has conducted dredge disposal planning studies for the following harbors: Kenosha, Milwaukee, Sheboygan, Kewaunee, Sturgeon Bay, and Duluth Superior. Other dredging feasibility studies include Cross Lake, Shreveport, Louisiana, and the Finger Lakes in New York State and on Young's Bay near Astoria, Oregon.

While in the United States Army, he served as a coordinator of activities involving chemical, biological, and radiological contamination incidents. He has served in a quality Control/Quality Assurance Management and technical Review capacity on numerous multidisciplinary environmental projects. Mr. Buss has provided expert testimony on the impacts of dredging on associated environmental systems.

EDUCATION B.S. Biology, Geography (Environmental), Carroll, College, Wisconsin, 1965.
 M.S., Botany-Zoology (Environmental), University of Wisconsin-Milwaukee, 1973.
 M.S., Engineering (Environmental), University of Wisconsin-Milwaukee, 1978.
 Completing (1985) Professional Development Degree in Engineering - University of Wisconsin-Madison (emphasis safety management and environmental affairs)

2/85

ATTACHMENT E (Continued)

DANIEL F. BUSS
Page 2

PROFESSIONAL SOCIETIES American Industrial Hygiene Association
 American Institute of Chemical Engineers
 American Water Resources Association
 Sigma Xi
 Water Pollution Control Federation
 Engineers and Scientists of Milwaukee Inc.
 National Association of Environmental Professionals

EQUIPMENT DEVELOPMENT AND DESIGN

An all teflon bailer and an air driven pump for evacuating small-diameter groundwater wells (Publ. 1981, Vol. 19 issue Groundwater).

CERTIFICATION Certified Hazard Control Manager

REGISTRATION Professional Engineer, Wisconsin

PRESENTATION AND PUBLICATION

Several societies where papers have been published and presented are: Federal Water Pollution Control Federation, American Water Resources Association, American Nuclear Society, American Society of Testing materials, International Association for Great Lakes Research, Groundwater and Industrial Waste.

ATTACHMENT F-1

MEMORANDUM:

To: D.F. Doyle
Manager of Technical Operations
Camp Dresser & McKee, Inc.
One Center Plaza
Boston, MA 02108

From: John W. Hawthorne

Date: February 12, 1985

Project: EPA Contract No.: 68-01-6939/NPM/NPMO

Document No.:

Subject: Staff Conflict of Interest Declaration
Site: Sheboygan River and Harbor, Sheboygan, Wisconsin
Work Assignment No.: 73-5800.0

Action: Immediate Response

I have reviewed the above work assignment for the U.S. EPA Contract 68-01-6939, Remedial Response Activities at Uncontrolled Hazardous Waste Sites. Based upon this review and my understanding of the legal requirements of this work, I certify that I have no known conflict of interest associated with this assignment based upon the known potential responsible parties or my past work experience with this site, if any. Also, I understand my professional obligation to inform any staff working at my direction on this assignment of the conflict of interest requirements and ensure that such staff have no such conflicts of interest.

John W. Hawthorne, P.E.
Vice President
Region V Manager

cc: J.G. Curtis
Camp Dresser & McKee, Inc.
7630 Little River Turnpike
Suite 500
Annandale, VA 22003

ATTACHMENT F-2

MEMORANDUM:

To: D.F. Doyle
Manager of Technical Operations
Camp Dresser & McKee, Inc.
One Center Plaza
Boston, MA 02108

From: Daniel F. Buss

Date: February 10, 1985

Project: EPA Contract No.: 68-01-6939/NPM/NPMO

Document No.: 174-WP1-WM-ASVD-1

Subject: Staff Conflict of Interest Declaration
Site: Sheboygan River and Harbor, Sheboygan, Wisconsin
Work Assignment No.: 73-5H00.0

Action: Immediate Response

I have reviewed the above work assignment for the U.S. EPA Contract 68-01-6939, Remedial Response Activities at Uncontrolled Hazardous Waste Sites. Based upon this review and my understanding of the legal requirements of this work, I certify that I have no known conflict of interest associated with this assignment based upon the known potential responsible parties or my past work experience with this site, if any. Also, I understand my professional obligation to inform any staff working at my direction on this assignment of the conflict of interest requirements and ensure that such staff have no such conflicts of interest.



Daniel F. Buss, P.E.
REM II Site Manager

cc: J.G. Curtis
Camp Dresser & McKee, Inc.
7630 Little River Turnpike
Suite 500
Annandale, VA 22003

7777/4/6

ATTACHMENT G

SOURCES OF INFORMATION FOR SHEBOYGAN RIVER AND HARBOR
FROM USEPA FILES

1. U.S. Army Engineer District-Chicago, U.S. Army Corps of Engineers. Report of Findings, Sediment Samples, Sheboygan Harbor, Wisconsin. Mr. F.R. Brown, Engineer, Technical Director. June 28, 1979.
2. U.S. Department of the Interior. Green Bay Field Office, Green Bay, Wisconsin. Letter to Mr. Argiroff, from Janet Smith, Field Supervisor. Letter concerns a review and comments on the Draft Final Report entitled "Bioaccumulation of Polychlorinated Biphenyls (PCBs) from Sheboygan Harbor Sediment in Laboratory Exposures. Mr. Carl Argiroff, Chief, Planning Division, U.S. Army Corps of Engineers, Detroit District, Detroit, Michigan. December 3, 1984.
3. Wisconsin Department of Natural Resources (WDNR), PCB Content in Sheboygan River Sediment. Bode, J.B, N.T. O'Reily. April 16, 1979.
4. Department of the Army, Chicago District, Corp of Engineers. Sheboygan Harbor Wisconsin PCB Investigations and Results.
5. Department of the Army, District Engineer, U.S. Army Engineer District Chicago to George Sandburn from F.R. Brown. Copies of the report of findings on sediments samples as requested.
6. Memorandum from Department of Army Waterways Experimental Station, Corp of Engineers, P.O. Box 631, Vicksburg, MS.

ATTACHMENT G

(Continued)

7. U.S. Army Engineer District, Detroit, Michigan. U.S. Army Corps of Engineers, Environmental Assessment Maintenance Dredging of Uncontaminated Sediment at Sheboygan Harbor, Wisconsin. March 1981.
8. Department of Natural Resources, Madison, Wisconsin. Press release pertaining to human consumption of PCB-contaminated fish. August 21, 1984.
9. State of Wisconsin, Department of Natural Resources, Madison, Wisconsin. Press release stating that Furans similar to dioxins and PCB's have been detected in gamefish, roughfish and snapping turtles samples from state waters. January 10, 1984.
10. Wisconsin Department of Natural Resources, Madison, Wisconsin. Press release stating that Dioxin concentrations remain unacceptably high in carp from the Petenwell Flowage. January 4, 1984.
11. Department of Natural Resources, Southeast District, Milwaukee. PCB Content in Sheboygan River Sediments. Bode, J.B. and N.T. O'Reilly, 1978.
12. Edwin A. Marti. Polychlorinated Biphenyls in 16 Lake Michigan Tributaries. A thesis submitted in partial fulfillment for the requirements of Masters of Science, Water Chemistry, at the University of Wisconsin-Madison.
13. James L. Casterline, et a.l, Food and Drug Administration, Division of Chemical Technology, Washington. In: Toxicological Methods: Screening of Fish Extracts for Enzyme-Inducing Substances by an Aryl Hydrocarbon Hydroxylase Induction Bioassay Technique.

ATTACHMENT G

(Continued)

14. Patuxent Wildlife Research Center, Laurel, Maryland. PCDD and PCDF residues in birds. January 4, 1982.
15. Gary H. Heinz and Douglas M. Swineford. PCB Residues in Birds from the Sheboygan River, Wisconsin.
16. Patuxent Wildlife Research Center, Laurel, Maryland and Wisconsin Department of Natural Resources. Organial chlorine residues were measured in the carcasses, brains and stomach contents of four species of birds collected along the Sheboygan River, Wisconsin, during the years 1976 to 1980.
17. U.S. Department of the Interior, Fish and Wildlife Service, Green Bay office. University of Wisconsin-Green Bay, Green Bay, Wisconsin. Colonel Raymond T. Beurket, Jr., District Engineer, U.S. Army Corps of Engineers, Detroit District, Detroit, Michigan. October 21, 1983.
18. Chicago District Corps of Engineers. Limited dredge project, evaluating three potential disposal sites for dredge materials. June 1979.
19. Draft Feasibility Report, Environmental Impact Statement, Sheboygan Harbor Interim 3. Harbor between Kenosha and Kewaunee from Edith J. Tebo, Ph.D., Director, Great Lakes National Program Office to Colonel Howard N. Nicholas, Corp of Engineers, Chicago, Illinois.
20. Army Corps of Engineers, Chicago, Illinois. Report on confined disposal area for Sheboygan Harbor, Wisconsin. June 1976.

ATTACHMENT G

(Continued)

21. U.S. Army Corps of Engineers, North Central U.S. Army District, Detroit. Draft Final Report, Bioaccumulation of Polychlorinated Biphenyls (PCB's) from Sheboygan Harbor Sediments in Laboratory Exposures, by Victor M. McFarland, Joan U. Clarke, and Alfreda B. Gibson, Environmental Laboratory, Department of the Army Waterways Experimental Station, Corp of Engineers, P.O. Box 631, Vicksburg, MS. October 1984.
22. Federal Water Pollution Control Administration, Great Lakes Region-Lake Michigan Basin Office. Report on the degree of pollution of bottom sediments in Sheboygan Harbor. April 17, 1969.
23. Department of the Army, Chicago District, Corps of Engineers, Chicago, Illinois. Water Quality Monitoring Program Design Analysis for the Proposed Confined Disposal Facility at Sheboygan Harbor, Wisconsin. Lawrence F. Coffill, Chief, Engineering Division to Mr. M.W. Tellekson, Regional Administrator, USEPA, Chicago, Illinois.
24. U.S. Environmental Protection Agency, Region V, Great Lakes Surveillance Branch, Sheboygan Harbor, Wisconsin. Report on the degree of pollution of bottom sediments sampled October 2, 1984.
25. Evaluation of the Corps of Engineers maintenance dredging project and the disposal of PCB contaminated sediment from Sheboygan Harbor, Wisconsin. Letter from Barbara Taylor Backley, Acting Chief, Environmental Review Branch, to Tony Leffin, Indiana/Wisconsin Coordinator. January 6, 1982.