CDM

environmental engineers, scientists, planners, & management consultants

CAMP DRESSER & McKEE INC.

5215 North Ironwood Road, Suite 109
Milwaukee, Wisconsin 53217
414 964-6166

RECEIVED
OCT 27 1988
BUREAU OF SOLID - HAZARDOUS WASTE MANAGEMENT

REM II MEMORANDUM

TO: B. Kush
M. Guerriero
M. Yang
G. Edelstein
M. Geisfeldt

FROM: D. Buss

RE: Schamlz Dump Site - Project History

DATE: October 25, 1988

DOCUMENT NO: 156-C01-I0-GMGQ

Attached is the Project History Summary for the Schmalz Dump Site (R.A. Operable Unit).

DFB:jf

cc: S. Paquette
J. Yoshitani
S. Killip

bcc: Reyburn-LMD

7777/31/56

PROJECT HISTORY SUMMARY

THE SCHMALZ DUMP SITE (R.A. OPERABLE UNIT)

Q.A. REM II

DOCUMENT NO: 156-COI-IO-GMGQ

PROJECT HISTORY SUMMARY - SCHMALZ DUMP SITE

Remediation at the Schmalz Dump Site began on November 16, 1987. The purpose of the project was to remove all PCB contaminated debris and underlying sediment with its disposal at a U.S. EPA approved PCB landfill in a manner posing the least danger to man and the environment. Initial site activities included mobilization of necessary equipment and personnel to perform site remediation followed by site preparation.

Site preparation included clearing of trees and shrubs for access roads and work areas. Grading was also necessary to provide level working areas for equipment and personnel. With the completion of site preparation, site construction was initiated. Primary construction tasks included:

- Road construction;
- Construction of containment berms on the west and south ends of the pond;
- Installation of solids dewatering pad and adjacent loading pad;
- Erecting the perimeter fence;
- Establishing water, electrical and telephone service;
- Installation of on-site weigh scales;
- Placement of office and decontamination trailers.

Due to the on-coming cold weather and the inability of the water treatment system and the hydraulic dredge to perform in such conditions, the project was performed in two phases. Completion of Phase I allowed the removal of the PCB contaminated demolition material and its ultimate disposal. Removal and shipping of the material began on December 6, 1987 and continued until the 10th of December. With the removal of the contaminated demolition debris and demobilization of site equipment complete, the first of these two phases of the project was complete.

Phase II began with initiating construction of the water treatment facility on May 29, 1988. While this plant was under construction, mechanical dredging of the pond sediment began on June 1st. This operation required the use of a crane with a clamshell bucket removing the pond sediment and stockpiling it on the dewatering pad after being dewatered and mixed with a desiccant when necessary. The sediment was shipped to an appropriate PCB landfill. Mechanical dredging and the disposal of waste generated by this operation ended on June 23rd. During the second phase operations, a severe drought had struck the entire Midwest area locally causing a precipitous decline in surface water. By the end of mechanical dredging, only six inches of water remained in diminished areas of the Schmalz pond.

The next operation of the project anticipated the use of a hydraulic dredge removing the residual sediment remaining from mechanical dredging. However, the hydraulic dredge, which was mounted on a raft, required at least one foot of water in the pond to remain afloat. Therefore, the hydraulic dredging operation was replaced with a modified mechanical dredging method. Modified mechanical dredging utilized a low impact or low ground pressure bulldozer to place the sediment in small mounds in the pond area. The crane with a clamshell bucket then removed the material and stockpiled it onto the dewatering pad. This operation commenced on the 23rd of June and ended on June 27th.

The water treatment system was used for completely dewatering the pond and hydraulically removing the sediment laden water in areas of the pond. This system used chemical conditioning, clarification, filtration, and carbon adsorption to treat the water. The treatment system worked as designed and all water returned to the pond met contractually specified limits for parameters.

Completing final sediment removal with modified mechanical dredging, confirmatory sampling of the pond sediment and remaining surface water was performed on July 19th by CDM. Initial confirmatory testing results of

laboratory analysis indicated PCB concentrations greater than the contract specifications of one part per million in four of the eleven sediment samples. However, these values were very close to the clean-up criteria and ranged from 1.65 ppm to 2.40 ppm.

This contaminated material was associated with the clay/silt particulates that settled out in areas of standing water. The pond was completely dewatered, and the water-silt mixture in these areas was hydraulically removed and treated in the water treatment system. All water returned to the pond was well below contractually specified clean-up limits. Thus, compliance with the clean-up standards of the contract specifications were met on August 18th, 1988. PCB concentrations at all confirmatory testing locations were less than one part per million.

Having met these standards, the final site closure could begin. Primary closure activities performed included:

- Decontamination of all subcontract equipment and removal from site;
- Collection and disposal of all contaminated subcontractor generated material and refuse;
- Disconnection of all utilities;
- Final site grading, topsoil application and seeding;
- Removal of all support area facilities;
- Removal of temporary perimeter sheeting and plywood walls, disposal of the liners.

An exception to the site closure was the handling of the concrete water treatment and solids dewatering/loading pad. Originally, these pads were to be broken up and disposed of at a PCB landfill. Per approval from the WDNR and the U.S. EPA, the Pads were left in place after being decontaminated, wipe tested for PCBs and shown not to be contaminated with PCB's.

Being found free of PCB's, the pads were covered with gravel and the sump was filled with concrete. The purpose of this action was, respectively, to prevent the pads from posing as an "attractive nuisance" to residents in the area and not retain rain water. Meeting the contract requirements for cleanliness and final closure, the on-site project work came to an end on September 2, 1988.

CAMP DRESSER & McKEE INC.

REM II MEMORANDUM

TO: B. Kush
M. Guerriero
M. Yang
G. Edelstein
M. Giesfeldt

bcc: Reyburn-LMD

FROM: Dan Buss

DATE: October 25, 1988

PROJECT: REM II - EPA CONTRACT NO. 68-01-6939

DOCUMENT NO.: 156-CM1-IO-CMFV-1

Subject: Confirmatory Sampling of the Schmalz Site and Final Closure

On July 21, 1988, eleven confirmatory sediment samples and five water samples were collected at the Schmalz site. Confirmatory testing was performed under the USEPA Contract Laboratory Program. While the pond water samples were shown to have no PCBs, four sediment sample locations were shown to have PCB concentrations higher than the contract cleanup standard of one part per million (ppm). PCB concentrations ranged from 1.65 to 2.40 ppm in these four samples. Three of the sample locations were at the west-central area of the pond with the fourth location being at the northwest area of the pond.

Upon further sediment removal, all four locations were resampled on August 11, 1988. The sample locations near the west-central area of the pond were below PCB cleanup levels while the sample collected on the pond's northwest area was again found to be slightly in excess of the contract standard with a PCB concentration of 1.72 ppm. More pond sediment at this aforementioned location was removed and another sediment sample obtained on August 16, 1988. Subsequent analysis showed no detectable levels of PCBs.

Site maps displaying sample dates, locations, and PCB concentrations, as well as a sample summary, are attached demonstrating the sites compliance to contract cleanup standards.

As a result of confirmatory samples complying with cleanup standards and the satisfactory completion of final site closure, remedial activites at Schmalz came to a conclusion on September 2, 1988.

7777/31/58

REM II MEMORANDUM
TO: Distribution
FROM: Dan Buss
SUBJ: Comfirmatory Sampling of the Schmalz Site and Final Closure
Date: October 25, 1988

Closure operations included:

- Removal and decontamination of metal retaining wall;
- Final site grading and application of topsoil on the pond's bank areas followed by sowing of grass seed to insure bank stability;
- Decontamination and removal of all equipment and apparatus;
- Disposal of all contaminated residual material generated by subcontractors to a USEPA approved landfill; and
- Disconnection of all utilities to the site.

Originally, the concrete water treatment and dewatering pad were to be removed and disposed of at an approved landfill. Per approval from USEPA and WDNR, the concrete pads were scrubbed and decontaminated to be left onsite. "Wipe tests" for PCBs were performed on the pads, equipment and apparatus to confirm decontamination. For safety reasons, and prevention of rainwater accumulation, the sump was filled with concrete and the curbs knocked out. To prevent the possibility of the pads becoming an "attractive nuisance" to neighboring children and, thus, a hazard, gravel was placed atop the pads.

All closure procedures were performed in compliance with contract specifications to insure site safety following the projects completion.

DFB:jf

SUMMARY OF CONFIRMITORY SEDIMENT SAMPLING AT THE
SCHMALZ DUMP SITE, 7/19/88 TO 8/16/88

SAMPLING DATE	NUMBER OF SAMPLES	SAMPLE NUMBER	TOTAL PCBs IN PARTS PER MILLION	COMMENTS
7/19/88	11 WITH ONE DUPLICATE	SD06	2.11 *	
		SD06 d	2.40 *	DUPLICATE OF SD06
		SD07	1.67 *	
		SD08	1.65 *	
		SD09	ND	
		SD10	0.84	
		SD11	0.21	
		SD12	0.78	
		SD13	2.40 *	
		SD14	0.26	
		SD15	ND	
		SD16	0.26	
8/11/88[1]	4 WITH ONE DUPLICATE	SD01	0.04	
		SD02	1.72 *	
		SD02 d	1.42 *	DUPLICATE OF SD02
		SD03	0.03	
		SD04	0.03	
8/16/88[2]	1 WITH ONE DUPLICATE	SD01	ND	
		SD01 d	ND	DUPLICATE OF SD01

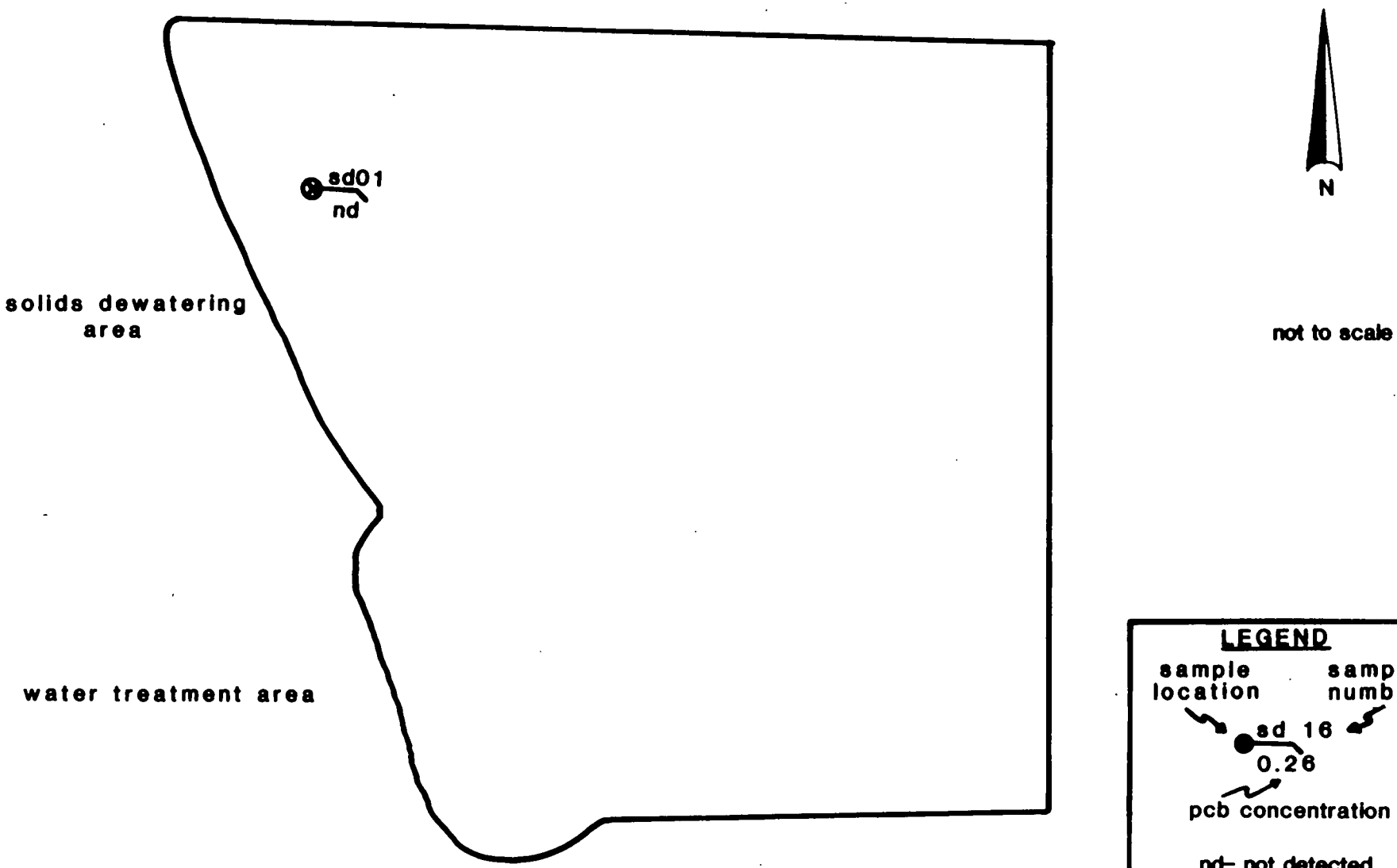
* INDICATES VALUES IN EXCESS OF CLEAN-UP STANDARDS (> 1.0 PPM)

1 SD01-SD04 SAMPLED NEAR SD06, SD13, SD07, SD08 RESPECTIVELY (SAMPLE POINTS FROM 7/19/88 SAMPLING EVENT IN EXCESS OF 1.0 PPM)

2 SD01 AND SD01d SAMPLED NEAR SD02 (SAMPLE POINT FROM 8/11/88 SAMPLING EVENT IN EXCESS OF 1.0 PPM)

ND MEANS BELOW ANALYTICAL LEVEL OF DETECTION

SCHMALZ DUMP SITE. REM II



PCB CONCENTRATIONS FROM CONFIRMITORY SEDIMENT SAMPLING- 8/16/88

all concentrations are in ppm or mg/kg

CAMP DRESSER & McKEE INC.

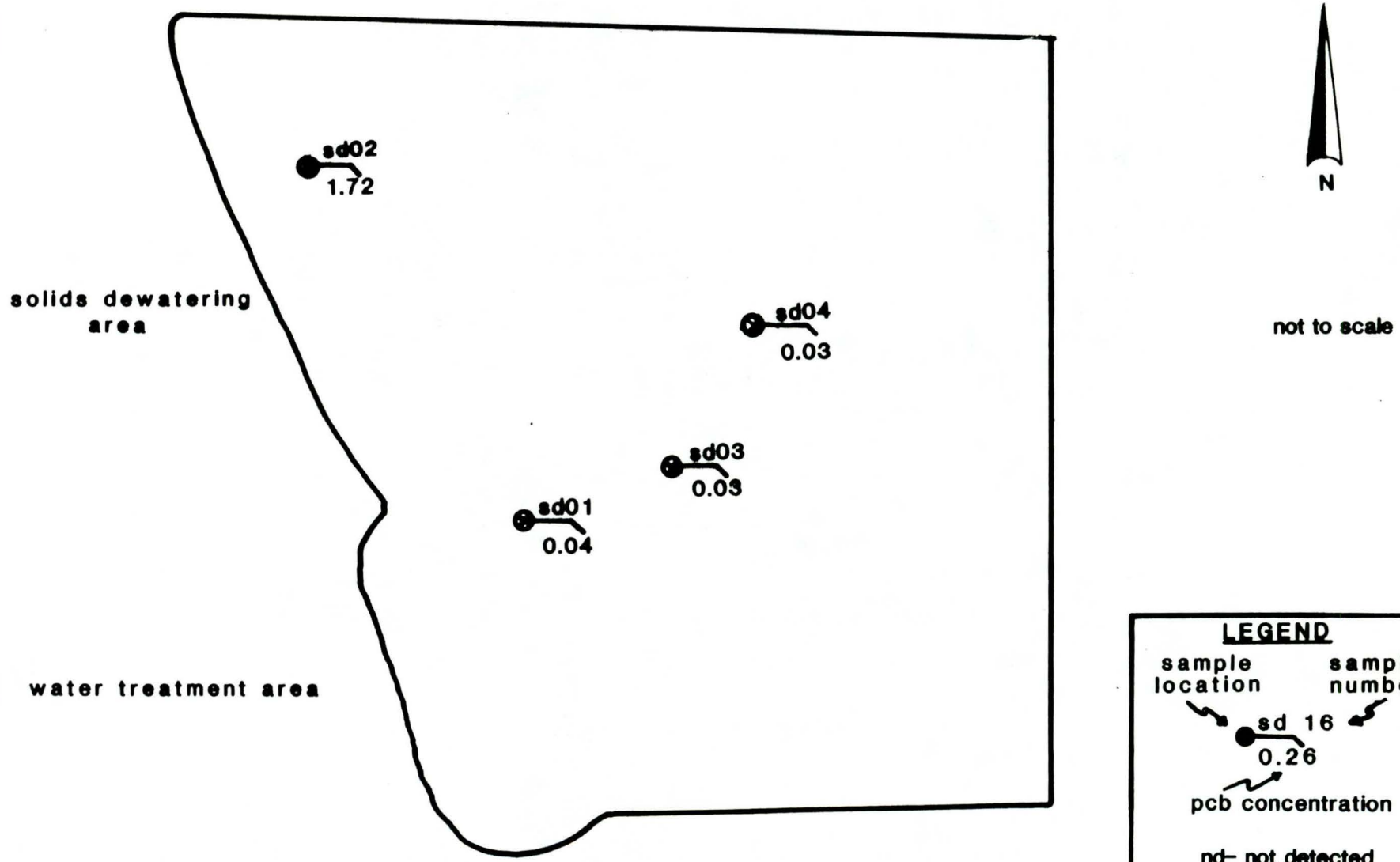
200 West Adams
Suite 1600
Chicago, Ill. 60606

CDM
environmental engineers, scientists, planners, & management consultants

FIG. NO.

504176

SCHMALZ DUMP SITE. REM II



PCB CONCENTRATIONS FROM CONFIRMITORY SEDIMENT SAMPLING- 8/11/88

all concentrations are in ppm or mg/kg

CAMP DRESSER & McKEE INC.

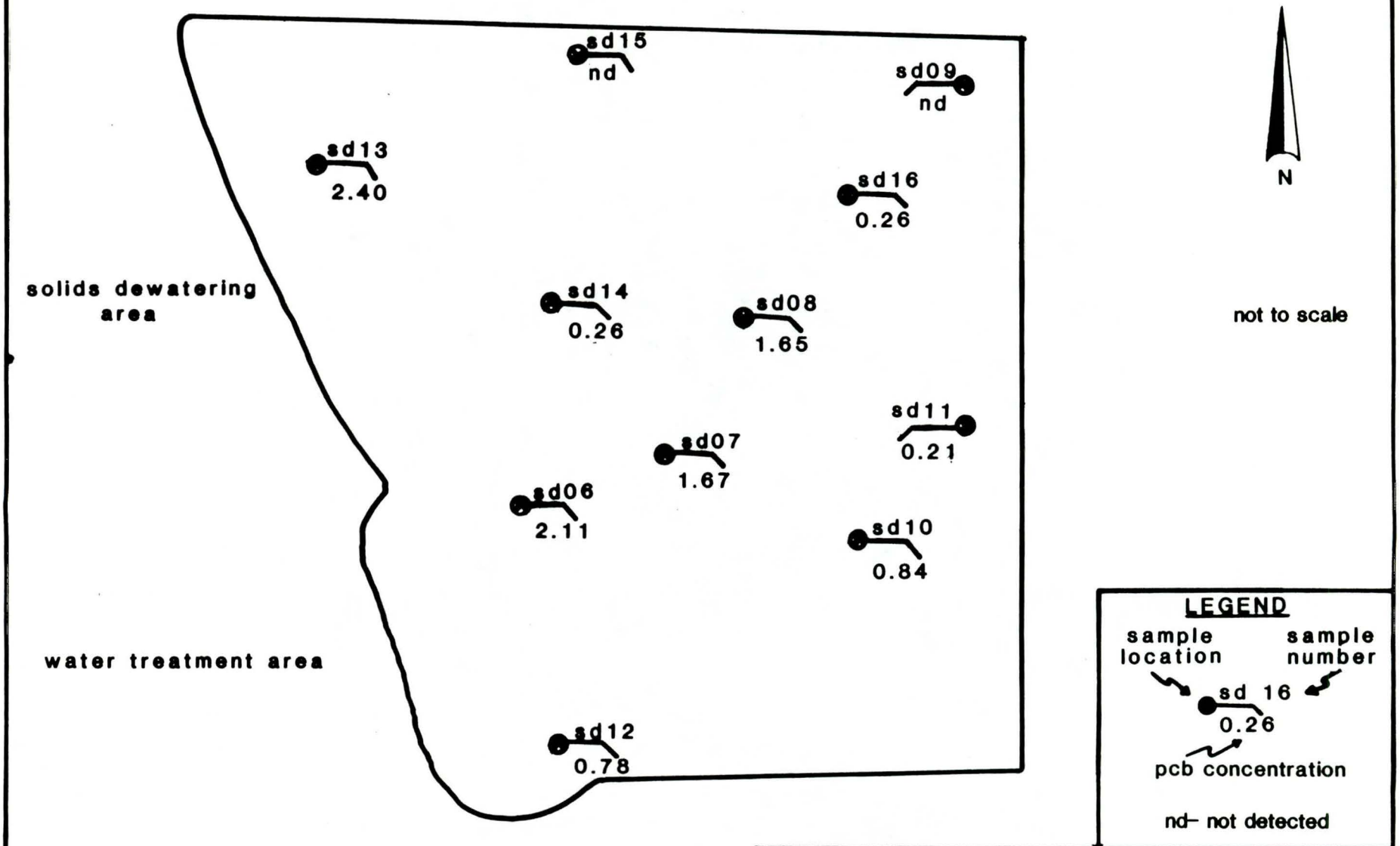
200 West Adams
Suite 1600
Chicago, Ill. 60606

CDM
environmental engineers, scientists, planners, & management consultants

FIG. NO.

504176

SCHMALZ DUMP SITE. REM II



PCB CONCENTRATIONS FROM CONFIRMITORY SEDIMENT SAMPLING- 7/19/88

all concentrations are in ppm or mg/kg

CAMP DRESSER & McKEE INC.

200 West Adams
Suite 1600
Chicago, Ill. 60606

CDM
environmental engineers, scientists, planners, & management consultants

FIG. NO.

504176