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EPA Region 5 Records Ctr.
330325

PRC

September 12, 1994

RECEIVED
SEP 12 1994
SITE ASSESSMENT SECTION

Ms. Jeanne Griffin
U.S. Environmental Protection Agency
Region 5
77 W. Jackson Boulevard
Chicago, IL 60604

Subject: **Columbus Scrap Corporation**
Columbus, Ohio
OHD 131 884 348
Contract No. 68-W8-0084, Work Assignment No. 29-5JZZ

Dear Ms. Griffin:

PRC Environmental Management, Inc. (PRC), has prepared the site evaluation report (SER) for the above-referenced site (Enclosure 1). PRC reviewed available information and prepared a preliminary Hazard Ranking System (HRS) score for the Columbus Scrap Corporation (CSC) site. Based on PRC's findings, the preliminary HRS score for the site is less than 28.50. Therefore, PRC recommends that the site receive a no further action (NFA) designation.

Photographs taken during the off-site reconnaissance are included in the appendix of the SER. The U.S. Environmental Protection Agency recommendation form is included in Enclosure 2. The CSC site preliminary HRS score is documented in a transmittal memorandum and draft preliminary scoresheets in Enclosure 3.

Chris Scott 9/12/94

If you have any questions, please call me at (703) 556-2585.

For Reference I have attached what documents are need to say we have a completed PA/SI/ESI
Integrated Assessment
Since this was a no further action the top as will be omitted. However the SSI form is still required.

Sincerely,

Kevin Schnoes

for Julie Kaiser
Project Manager

Enclosures (3)

cc: Thomas Short, EPA Project Officer (letter only)
Bridgette Manzke, EPA Contracting Officer (letter only)
Majid Chaudry, PRC Program Manager (letter only)
Jack Brunner, PRC (letter only)

Jeanne Griffin

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PRC

SCREENING SITE INSPECTION
SITE EVALUATION REPORT

COLUMBUS SCRAP CORPORATION
580 FURNACE STREET
COLUMBUS, OHIO

EPA ID NO.: OHD 131 884 348

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY
Site Assessment Section
77 West Jackson Boulevard
Chicago, IL 60604

Date Prepared	:	September 12, 1994
Contract No.	:	68-W8-0084
U.S. EPA Region	:	5
U.S. EPA Work Assignment No.	:	29-5JZZ
PRC Project No.	:	030-002980
Prepared by	:	PRC Environmental Management, Inc. (Kevin Schnoes)
PRC Project Manager	:	Julie Kaiser
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U.S. EPA Work Assignment Manager	:	Jeanne Griffin
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A SITE RECONNAISSANCE PHOTOGRAPHS

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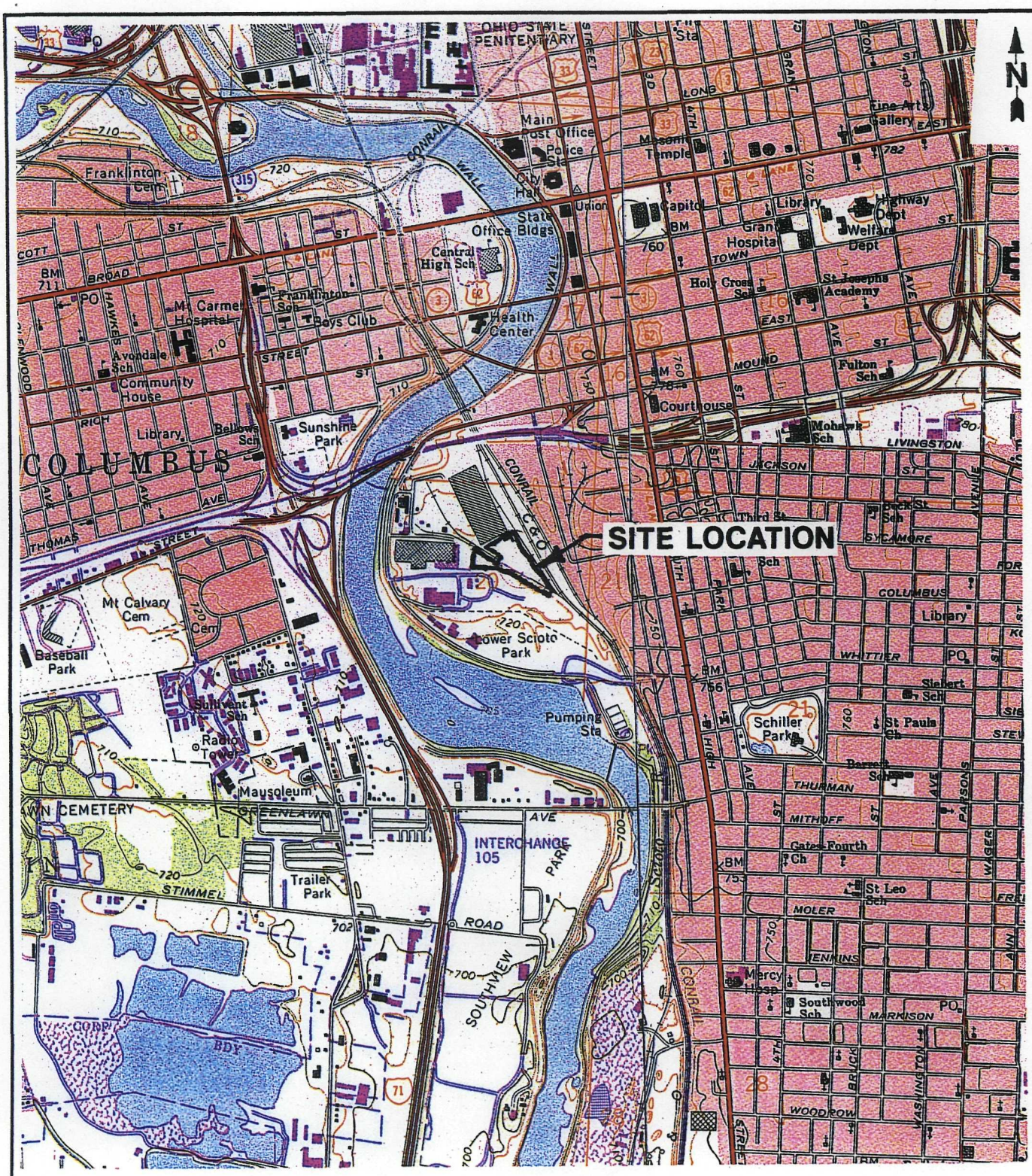
1.0 INTRODUCTION

Under Contract No. 68-W8-0084, Work Assignment No. 29-5JZZ, PRC Environmental Management, Inc. (PRC), has evaluated the Columbus Scrap Corporation (CSC) site in Columbus, Franklin County, Ohio, as a potential candidate for the National Priorities List (NPL) and has prepared this draft site evaluation report. Using the Hazard Ranking System (HRS), PRC evaluated the site to determine whether, or to what extent, it poses a threat to human health and the environment. This report presents the results of PRC's evaluation and summarizes the site conditions and targets pertinent to the migration and exposure pathways associated with the CSC site. Information was obtained from the U.S. Environmental Protection Agency (EPA) preliminary assessment (PA) and files, and Ohio Environmental Protection Agency (OEPA) files.

This report has six sections, including this introductory section. Section 2.0 describes the site. Section 3.0 discusses site operations and site history. Section 4.0 provides information about previous investigations conducted at the site. Section 5.0 provides information about the four migration and exposure pathways (groundwater migration, surface water migration, soil exposure, and air migration) that can be scored. Section 6.0 summarizes conditions at the site.

2.0 SITE DESCRIPTION

The CSC site is an inactive site located at 580 Furnace Street, Columbus, Franklin County, Ohio. The site location is shown in Figure 1. The site occupies about 6.2 acres in an industrial area of downtown Columbus. The site property is leased from CSX Transportation (CSX). Buildings on site consist of an office and storage buildings, a shearer building, a baler building, and a locker building. Piles of scrap metal of varying size and content cover most of the property. The area covered by the scrap metal piles is coincident with the area of observed soil contamination noted in Figure 2. Northwest-southeast orientated railroad tracks are located on site near the center of the site property. A large, elongated pile of polychlorinated biphenyl (PCB) contaminated soil is also located near the west boundary of the property. A large, elongated pile of wood chips is located adjacent to and south of the PCB-contaminated soil pile. Two large, elongated white piles are located along the west boundary of the property. The white piles reportedly were placed there by CSX. The composition of



SCALE 1:24000

1 1/2 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

SCALE: 1" = 2,000'

QUADRANGLE LOCATION

COLUMBUS SCRAP CORPORATION
COLUMBUS, OHIO

FIGURE 1
SITE LOCATION

PRC ENVIRONMENTAL MANAGEMENT, INC.

SOURCE: MODIFIED FROM USGS,
SOUTHWEST COLUMBUS, OHIO, QUADRANGLE, 1982
SOUTHEAST COLUMBUS, OHIO, QUADRANGLE, 1985

the white piles is unknown; however, it may consist of lime scale from railroad sources (EPA 1992). Access to the site is limited by a chain-link fence that surrounds the facility. The layout of the site is shown in Figure 2.

The CSC site is bordered to the north and west by warehouses, to the southwest by a concrete company, to the south by the City of Columbus Impound Lot and Recreation Department buildings, and to the east and northeast by railroad tracks (OEPA 1992). The predominant land use within 1 mile of the site is industrial and commercial.

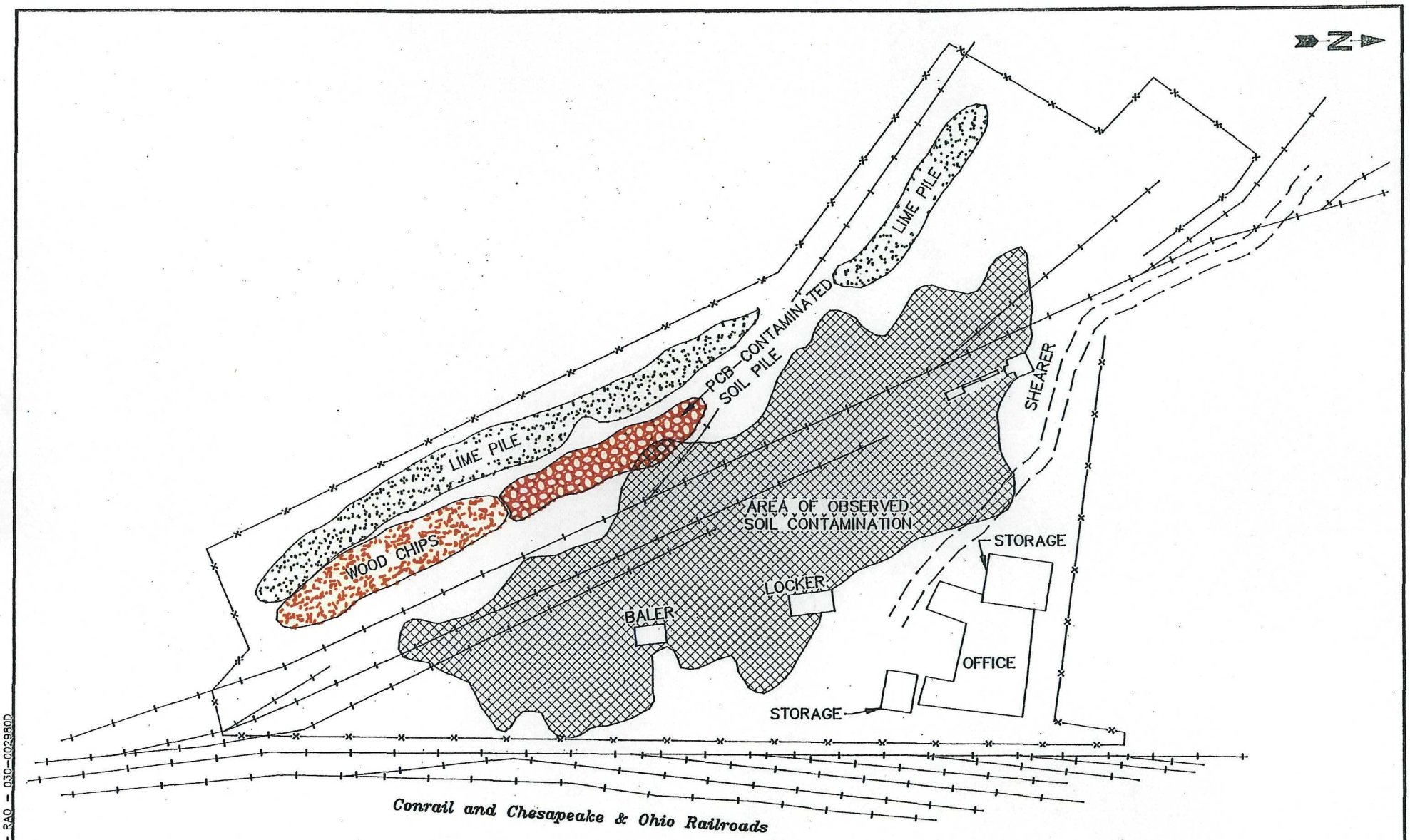
The CSC site is located inside a curve of the Scioto River. A strip of city park land west and south of the site follows the river curve. Whittier Road also follows the inside curve of the river. Whittier Road is elevated about 20 feet above the CSC property and prevents runoff from CSC from entering the river. Ponded water was noted on site during the site reconnaissance conducted on April 28, 1994. The Scioto River is about 1,300 feet from the site (USGS 1982) and had an annual mean flow rate of 2,085 cubic feet per second in 1993 (USGS 1993).

PRC conducted a site reconnaissance inspection of the CSC site on April 28, 1994 and found conditions generally consistent with those noted during previous investigations. Photographs taken during the inspection are included in Appendix A.

3.0 SITE OPERATIONS AND HISTORY

Prior to 1951, the CSC site was used by CSX for railroad operations. From 1951 to 1981, Handler Compressed Steel used the site as a scrap yard. From 1981 to 1985, the Summer Company also used the site as a scrap yard. In 1985, CSC purchased the Summer Company, and since then, has operated a commercial scrap yard at the site. The land, however, is still leased from CSX (OEPA 1992).

Current operations at the site include segregating scrap metals, shearing the scrap into pieces, and baling the metal for sale and shipment to off-site steel mills and smelters. The metals are separated into ferrous and nonferrous (copper, brass, aluminum, and stainless steel) categories.



LEGEND

- FENCE LINE
- RAILROAD TRACKS
- DIRT/GRAVEL ROAD

100' 0 100' 200'

SCALE: 1" = 200'

SOURCE: MODIFIED FROM KEMRON 1992

COLUMBUS SCRAP CORPORATION
COLUMBUS, OHIO

FIGURE 2

SITE FEATURES

PRC ENVIRONMENTAL MANAGEMENT, INC.

COSCRAP1.DWG - 09/07/94 - RAO - 030-002960D

PCB-capacitors and PCB-contaminated soils were identified on site in 1989 (OEPA 1990). The capacitors and about 40 cubic yards (yd^3) of soil were subsequently removed and disposed of off site in June 1989 (Kemron 1991; OEPA 1990). Soil sampling results from 1989 and 1990 indicated that about 5 of the 6.2 acres at the site had surface soil with PCB concentrations of greater than 25 milligrams per kilogram (mg/kg) (OEPA 1992). On April 10, 1991, CSC and CSX signed an administrative order by consent (AOC) to sample the entire 6.2 acres and dispose of any contaminated soils (EPA 1991). In 1992, about 16,000 yd^3 of PCB-contaminated soil was excavated and staged on site (EPA 1992). Soil sampling results indicated that about 2,678 yd^3 of soil with PCB concentrations of greater than 25 mg/kg still exist at the site (Kemron 1992). There apparently has been no further excavation of contaminated soils at the site. Kemron Environmental Services (Kemron) conducted a bioremediation experiment in 1993 to treat PCB-contaminated soils on site; however, CSC was ordered on July 26, 1994 by EPA to remove the PCB-contaminated soil pile (PRC 1994a).

4.0 PREVIOUS INVESTIGATIONS

On May 25, 1989, OEPA conducted an inspection at the CSC site to determine if CSC was in compliance with PCB disposal and marking regulations. During the inspection, inspectors noticed eight large capacitors and visible soil contamination. A soil sample collected by OEPA contained 1,000 parts per million (ppm) of PCBs (EPA 1991).

On February 23, 1990, OEPA and Chemical Waste Management, Inc. (CWM), CSC's contractor at the time, obtained on-site soil samples based on grid sampling of the capacitor areas. Composite soil samples collected by OEPA contained 8,700 ppm of PCBs (EPA 1991).

On July 27, 1990, the EPA Technical Assistance Team (TAT) conducted a site assessment at the CSC site. TAT collected soil samples from two of five PCB capacitor locations where the first partial cleanup resulting in the removal of 40 yd^3 of contaminated soil occurred. TAT also collected soil samples from four random locations outside of the capacitor areas. Soil samples from the capacitor areas contained up to 108 ppm of PCBs, and soil samples from the random locations contained up to 279 ppm of PCBs (EPA 1991).

The CSC site is located on the nearly level flood plain of the Scioto River (USGS 1982; Federal Emergency Management Agency [FEMA] 1983). The site is underlain by Wisconsinan-aged sand and gravel deposits that are about 60 feet thick in the area near the CSC site (ODNR 1958; USGS 1982). These sand and gravel deposits are confined to a buried bedrock valley that follows the trend of the Scioto River (ODNR 1958). The Devonian-aged Columbus and Delaware Formations underlie the sand and gravel deposits beneath the site. These formations consist of limestone and are about 200 feet thick in the area near the CSC site (ODNR 1981). The depth to bedrock beneath the site is about 60 feet below ground surface (bgs). East and west of the site, the depth to bedrock is shallower due to the presence of the buried bedrock valley (ODNR 1958). Bedrock in the area dips to the east (ODNR 1981). The nearest known drinking water well is about 1.8 miles southwest of the CSC site. This and other nearby drinking water wells draw water from limestone. The depth to limestone in the drinking water wells varies from 11 to 20 feet bgs. The depth to bedrock in these drinking water wells is shallow because they are located near the west flank of the buried bedrock valley (ODNR 1958, 1994). The static water level in these drinking water wells is up to 20 feet bgs (ODNR 1994; OEPA 1992).

No releases from the site to groundwater have been documented. PCB-contaminated soils are the main source of contamination at the site. PCBs are not very mobile or soluble (EPA 1994).

5.2 SURFACE WATER MIGRATION PATHWAY

The surface water migration pathway does not contribute significantly to the HRS score. Surface water reportedly does not drain off site because the CSC site is located in a low area. There are no known storm water drains located on site (EPA 1992). Ponded water was noted on site during the site reconnaissance conducted on April 28, 1994. Also, Whittier Road, which follows the inside curve of the Scioto River, is raised about 20 feet above the level of the CSC property. This elevation prevents drainage from the site to the river. However, based on water levels from the nearest water wells with wells logs and on surface water levels taken from topographic maps, groundwater beneath the site discharges to the Scioto River (ODNR 1994; USGS 1982).

Surface water from the Scioto River is not used as a drinking water source within 15 miles downstream of the CSC site. The Scioto River is used as a fishery (PRC 1994b). A variety of fish

reconnaissance conducted on April 28, 1994, a tarpaulin covered most of the PCB-contaminated soil pile; however, areas where the tarpaulin had opened to expose to PCB-contaminated soil were noted. PCB-contaminated soil particulates at the site may migrate by wind. However, releases attributable to the site have not been documented. Buildings at the site that are regularly occupied by workers are located within 100 feet of contaminated soils. About 239,843 people live within 4 miles of the site (Frost 1994).

6.0 SUMMARY

The main risk at the CSC site results from contamination through the air migration pathway. Contaminated soils at the site are uncovered in areas and exposed to the atmosphere. PCB-contaminated soil particulates at the site may migrate by wind. Buildings at the site that are regularly occupied by workers are within 100 feet of areas of contaminated soils. Risk also exists through the soil exposure pathway. Contaminated soils at the site are not covered; therefore, a risk of direct exposure to contaminated soils exists. Access to the site is restricted by a chain-link fence that surrounds the site.

A slight risk of exposure from the surface water migration pathway exists in the Scioto River. Surface water runoff does not occur from the site because it is located in a low area, and a raised road (Whittier Road) prevents runoff to the Scioto River. However, groundwater in the area probably discharges to the Scioto River, which is used as a fishery. If groundwater beneath the site is contaminated with PCBs, it could discharge to the Scioto River and contaminate the fishery. Exposure through the groundwater migration pathway does not pose a significant risk. The majority of the population within 4 miles of the site receives its water supply from the City of Columbus municipal water supply.

EPA. 1994. *Superfund Chemical Data Matrix*, Hazardous Substance Reference Table. Assigned Hazard Ranking system Factor Values. June 24.

U.S. Department of the Interior (DOI). 1993. 7.5-Minute Series National Wetlands Inventory Map o Southwest Columbus, Ohio, Quadrangle.

U.S. Geological Survey (USGS). 1982. 7.5-Minute Series Topographic Map of Southwest Columbus, Ohio, Quadrangle. Photorevised.

USGS. 1985. 7.5-Minute Series Topographic Map of Southeast Columbus, Ohio, Quadrangle. Photorevised.

USGS. 1993. Water Resources Data in Ohio for Water Year 1993. Volume 1 - Ohio River Basin Excluding Project Data.

APPENDIX A

SITE RECONNAISSANCE PHOTOGRAPHS

(Eight pages)

Photograph No. 1 Location: South end of scrap yard
Orientation: Northwest Date: 04/28/94
Description: The photograph shows an area near the south end of the scrap yard where contaminated soil was excavated. Scrap metal was observed in the area where the soil was reportedly excavated. The limits of the soil excavation area could not be determined due to the presence of the scrap metal.

Photograph No. 2 Location: South end of scrap yard
Orientation: West Date: 04/28/94
Description: The photograph shows a closeup of the soil excavation area in the south end of the scrap yard. The area currently contains various types of scrap metal. No visible signs of contamination were observed.

Photograph No. 3 Location: South end of scrap yard
Orientation: West Date: 04/28/94
Description: The photograph shows a closeup of the soil excavation area in the south end of the scrap yard. The depth of soil excavation can be determined from the soil profile beneath the railroad tracks. The depth of excavation in this area was about 48 inches. The excavation contained steel girders. No visual evidence of contamination was observed.

Photograph No. 4 Location: South end of site
Orientation: Southeast Date: 04/28/94
Description: The photograph shows the wood chip stockpile area. The wood chips were used in the bioremediation study conducted at the site to treat contaminated soil. The wood chip stockpile is in contact with the contaminated soil pile (plastic tarpaulin in bottom right corner of photograph).

Photograph No. 5 Location: West side of site
Orientation: Northwest Date: 04/28/94
Description: The photograph shows the contaminated soil pile that was treated in the bioremediation study. The contaminated soil was excavated from other on-site areas and placed here. The pile is covered with a tarpaulin; however, the soil pile appeared to be in contact with the ground surface.

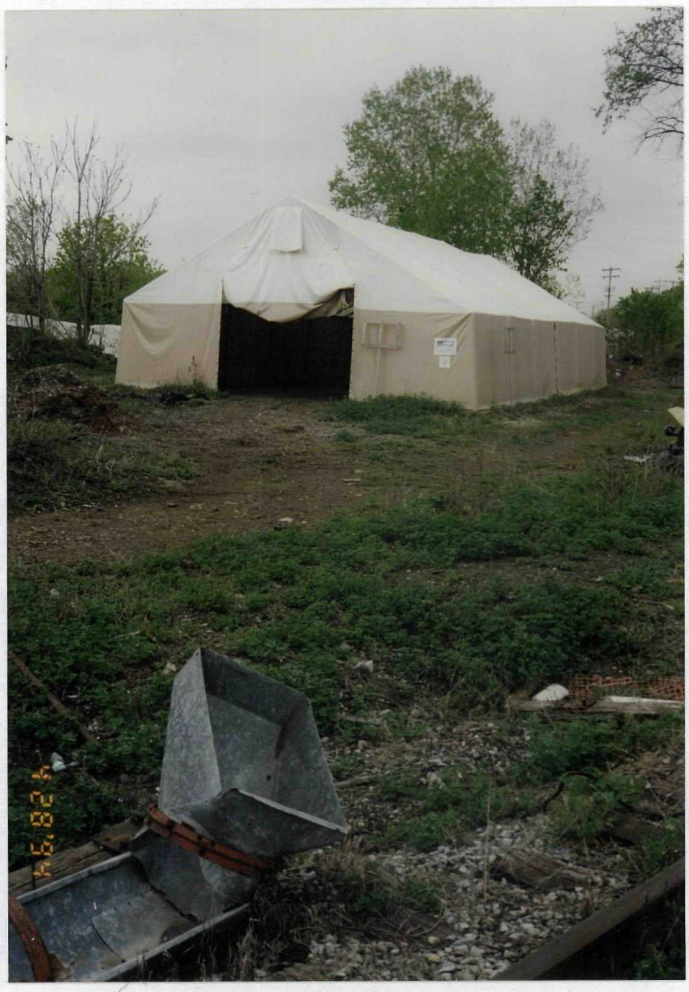
Photograph No. 6 Location: South end of site
Orientation: Northeast Date: 04/28/94
Description: The photograph shows a soil excavation area next to the on-site railroad tracks. Reportedly, a locomotive broke down in this area and leaked hydraulic oil. No visual evidence of contamination was observed; however, the extent of the excavation could not be determined due to the presence of scrap metal.

Photograph No. 7 Location: West side of site
Orientation: Northwest Date: 04/28/94
Description: The photograph shows an area of the contaminated soil pile where the tarpaulin has opened to expose the contaminated soil.

Photograph No. 8 Location: Central area of site
Orientation: North Date: 04/28/94
Description: The photograph shows an area of excavation near the railroad tracks. The excavation measures about 100 feet by 20 feet and is about 4 feet deep. The excavation has filled in with water. No evidence of contamination and no sheen on the surface of the water were observed.

Photograph No. 9 Location: Central area of site
Orientation: Southeast Date: 04/28/94
Description: The photograph shows a southeast view of the excavation shown in Photograph No. 8. Wetland-type vegetation appears to be growing in this portion of the excavation; however, this vegetation was limited in extent. The contaminated soil pile is visible in the upper right corner of the photograph.

Photograph No. 10 Location: West side of site
Orientation: Southeast Date: 04/28/94
Description: The photograph shows an area of the contaminated soil pile not covered with the tarpaulin. The white piles located along the western site boundary are also shown.



Photograph No. 11 Location: Central area of site
Orientation: West Date: 04/28/94
Description: The photograph shows an area of soil excavation in the foreground. The excavation area has some vegetation growing in it. The tent in the background is where soil plots used in the treatability study were located.

Photograph No. 12 Location: Northwest area of site
Orientation: Southeast Date: 04/28/94
Description: The photograph shows an area of soil excavation in the northwest corner of the site property. The excavation reportedly is about 2 feet deep. The excavation has been partially filled in with gravel to construct a roadway. The extent of the excavation could not be determined due to the presence of scrap metal.

Photograph No. 13 Location: Northwest area of site
Orientation: South Date: 04/28/94
Description: The photograph also shows the area of excavation shown in Photograph No. 12. The roadway that was constructed by partially filling in the excavation with gravel is also shown.

Photograph No. 14 Location: Northwest area of site

Orientation: West Date: 04/28/94

Description: The photograph shows a soil excavation area in the northwest area of the site property. Reportedly, a roll-off box containing contaminated soil was stored here. The roll-off box was supposedly filled with rainwater and leaked. The excavation reportedly is about 2 feet deep.