

POLLUTION

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Protection Agency · P.O. Box 19276, Springfield, IL 62794-9276

FACT SHEET

CARPENTERSVILLE WASTE SITE REMEDIAL INVESTIGATION REPORT

NOVEMBER, 1987

This fact sheet contains a brief summary of an extensive two-year investigation of environmental contamination at the Carpentersville Waste Site, located on the east bank of the Fox River in Carpentersville, Illinois. The full, two-volume report of this State-funded investigation is available to the public at several repositories listed at the end of this document.

BACKGROUND

The Carpentersville Waste Site consists of over 62 acres of land, portions of which were extensively mined for sand and gravel in the early 1900's. It was the site of intermittent random dumping and served as the municipal dump during the 1940's and 1950's. Since the late 1950's, the site has housed several chemical manufacturing plants under changing ownership, as well as a ready-mix concrete plant still in operation. Two paint-resin manufacturing plants, operated by Cargill, Inc., and the McWhorter Division of Valspar Corporation, presently operate on the site along with the Tri-County Ready-Mix Company. The site boundary also includes a Kane County Forest Preserve nature trail and several private residences and small businesses on the bluff on the east and south sides of the site.

The site has been the source of numerous citizen complaints over industrial spills and accidents, chemical odors, and chemical releases into the Fox River. In a 1979 preliminary investigation, the Illinois Environmental Protection Agency (IEPA) discovered numerous seeps of possibly contaminated groundwater entering the Fox River from the site. Chemical analysis showed these "leachate seeps" to be contaminated by ethylbenzene and other chemicals. The suspected cause of this chemical contamination was past disposal of chemicals in the old dump, making the site eligible to be considered as a U.S.EPA "Superfund" site. In the end, the site was proposed for investigation under the newly created "Clean Illinois" program, and it was added to the State Remedial Action Priority List on July 24, 1985. The IEPA made a formal decision to proceed with an investigation using Clean Illinois funds on January 22, 1986, and John Mathes and Associates, Inc. was chosen to carry out the study.

THE FIELD INVESTIGATION

Field investigations at the site took place from May through November of 1986, and nearly a year was required for analyzing and interpreting the voluminous data. Site investigation activities included electromagnetic surveying to identify subsurface irregularities, and sampling of water and sediment from leachate seeps, air, soil, groundwater and surface water from both the site and the Fox River. In all, twelve (12) leachate seeps were identified and sampled on at least two occasions, and ten (10) surface water samples were taken from the Fox River. Three storm drains, two industrial outfalls, and the stormwater retention pond at McWhorter/Valspar were each sampled twice. Soil samples were taken from each of twenty (20) soil boring locations and twenty (20) groundwater monitoring well installations. Groundwater samples were taken twice for each of the twenty (20) IEPA monitoring wells and from the six (6) monitoring wells installed by the Cargill Company on its property. The Carpentersville public water supply well (#3) near the site was also sampled twice as part of this study.

RESULTS OF THE INVESTIGATION

Samples were analyzed for a wide spectrum of potential inorganic and organic contaminants. A variety of contaminants were discovered in groundwater, the McWhorter/Valspar pond, soil and sediment samples, and leachate entering the Fox River. Some of the chemicals found in groundwater at the site were xylenes, toluene, ethylbenzene, and PCB's. Chemicals found in the leachate entering the river included benzene, xylenes, 1,2-dichloropropane, and dimethylphenol. Samples from one industrial outfall at McWhorter/Valspar contained significant levels of ethylbenzene and xylenes.

No contamination was detected in samples taken from the Fox River above the dam. This fact suggests that mixing of the contaminated leachate with uncontaminated river water reduces contaminant levels below the limits of detection. Thus the Carpentersville Waste Site does not appear to pose an immediate threat to the City of Elgin water supply, which is drawn from the river downstream.

Downstream from the waste site just below the dam, a different group of chemicals was found in the groundwater, leachate seeps, and the sluiceway east of the river. These include tetrachloroethene, trichloroethene, and two forms of dichloroethene. This particular mix of chemicals was not found on the Carpentersville Waste Site. In addition, the groundwater movement in the area downstream of the dam structure suggests that the source of these chemicals is to the east of the dam rather than in the waste site.

Contrary to early expectations regarding the source of contamination at the site, this investigation found no evidence of widespread, large-scale, uncontrolled hazardous waste disposal at the site. However, the McWhorter/Valspar pond and the soil, sediment, groundwater, and leachate seeps near the pond and between the pond and the river were found to be "severely contaminated." Lower levels of contamination were found elsewhere on the site. (See Attached Map)

THE SOURCE OF THE CONTAMINATION

This environmental investigation has led the IEPA and its contractor to conclude that the probable source of most of the contamination found on-site is past industrial activity, particularly at the two paint resin plants, Cargill and McWhorter/Valspar, and their predecessor companies on the site. This conclusion is based on both historical information and the patterns of environmental contamination found by the study. The possibility that other industrial operations on the site may also have been contributors to the contamination has not been ruled out. The study concludes that much or perhaps all of the contamination occurred before there were any regulations governing the handling and disposal of hazardous materials. It appears that the area of the McWhorter/Valspar plant now known as a stormwater retention pond may have been used in the past by one or both of the facilities for waste disposal. In addition, the natural drainage from the plants is toward this area, so spills and contaminants would have tended to collect there.

NEXT STEPS IN THE PROCESS

The next step in the Carpentersville Waste Site investigation is an Endangerment Assessment, which will evaluate the possible public health and environmental threats posed by the site. This analysis is presently ongoing. At the same time, the IEPA is beginning a Feasibility Study to evaluate a variety of possible remedial actions. This study is expected to be completed within the first quarter of 1988. When this study is complete and has been made public, the IEPA will hold a formal public hearing in Carpentersville to accept comments on proposed remedial actions. Due out after
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Copies of the complete Remedial Investigation report from this site are available to the public along with other relevant information at the locations and hours listed below. A public meeting will be held to answer questions regarding this investigation on Wednesday, December 9 at 7 P.M. in the auditorium of the Carpentersville Middle School, 100 Cleveland Avenue, in Carpentersville.

SITE INFORMATION REPOSITORY LOCATIONS AND HOURS:

Dundee Township Library
555 Barrington Avenue
East Dundee, Illinois

Telephone: 428-3661
Hours: Mon-Thurs 9 A.M. - 9 P.M.
Fri & Sat 9 A.M. - 5:30 P.M.

Village Clerk's Office
Carpentersville Village Hall
1200 L.W. Besinger Drive
Carpentersville, Illinois

Telephone: 426-3439
Hours: Mon, Tue, Wed, & Fri 9 A.M. - 5 P.M.
Thurs 9 A.M. - 8 P.M.

IEPA CONTACTS FOR FURTHER INFORMATION:

PLEASE FEEL FREE TO CALL OR WRITE:

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