

DIKE 14 ENVIRONMENTAL STUDY

Phase I Property Assessment

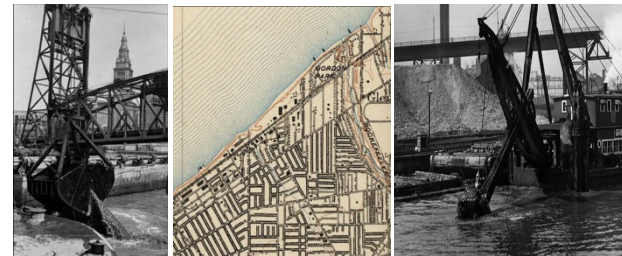


What is a Phase I Property Assessment

The Cuyahoga Soil and Water Conservation District contracted Partners Environmental Consulting, Inc. to conduct a Phase I Property Assessment in accordance with Ohio Voluntary Action Program (VAP) guidelines. The results and findings are presented in a report titled, Ohio Voluntary Action Program, Phase I Property Assessment, Dike 14 Confined Waste Disposal Facility, Cleveland, Cuyahoga County, Ohio 44103 and dated March 8, 2007. A Phase I Property Assessment is completed to determine if hazardous substances or petroleum have been released at a property and consists of the following tasks:

- Inspect the property to observe and document existing conditions;
- Interview people knowledgeable about current and past operations;
- Review Federal, State, and Local environmental databases; and
- Research public records to determine the historical and current uses of a property and surrounding area.

The research conducted as part of the Phase I Property Assessment revealed an interesting environmental history.



A 1903 topographic map showing the original lakeshore in the vicinity of Dike 14. Photographs show historic dredging operations in the Cuyahoga River



Dike 14 An Interesting Story

This 88-acre property is located along Cleveland's eastern shoreline. Bordered on the north, east and west by Lake Erie and to the south by Gordon Park and Lakefront State Park.

Where Brook Meets Lake

Dike 14 now exists where before there was just Lake Erie and the lakeshore. It was here that Doan Brook entered the Lake. During the last century, it wasn't uncommon for wastes to be disposed of along and in Lake Erie. The Phase I Assessment showed an 8-acre area, now a part of the Dike, had been a solid waste landfill operated by the City of Cleveland. The landfill was known as the "Cleveland Lakefront Dump" which operated from about 1930 to 1970. There is a report of an underground fire at the landfill during the early 1970s.

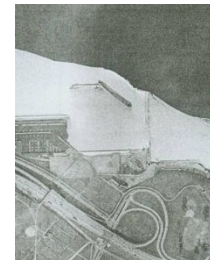
Sunken Ships

In 1962, two (2) ships, the James J. Hill and the William Edenborn of the U.S. Steel Fleet were sunk here to create a reef. These ships were coal-powered boats built in 1900 and were 500 feet long. These ships can be seen on the 1967 and 1974 aerial photographs. The landfill operations continued around and over the boats between at least 1962 through 1976.

Dredge Sediments

In the mid-1970s, the US Army Corps of Engineers proposed to construct Dike 14 for placement of dredged sediments from the shipping channel in the Cuyahoga River and in Cleveland Harbor. Between 1976 and 1979, construction of Dike 14 began with the placement of the break walls and the construction of the culvert for Doan Brook which was extended out into Lake Erie. Filling the Dike began in 1979. In 1993, the elevation of Dike 14 was raised by seven (7) feet to extend the life of the facility another 5 years. In March 1999, the US Army Corps of Engineers made the final fill. Dike 14 reached capacity and the site was closed. Dike 14 presently holds approximately 5.66 million cubic yards of consolidated dredge material.

The Development of Dike 14



1967



1974

1967: Two ships sunk at the Dike can be seen in the ice.
1974: Landfilling was occurring on the west side of the ships.



1986



1988

1986: The dike surrounding the property had been constructed and sediment filling had begun.
1988: Filling continued at the dike until 1999.



The Present

A metal chain-link fence runs along Dike 14's southern border with the main entrance located at the southwest corner gate. A break wall, consisting of large boulders and sheet piling, surrounds Dike 14 on its north, east and west sides. Through natural processes, vegetation began to grow. Insects, migratory birds, and mammals then came to this undeveloped area. Tall grasses, weeds, shrubs, and trees of varying sizes now cover a majority of the Dike. A six-foot wide mowed path runs north from the entrance to the northwest portion of the property. Other mowed paths extend east and west from the main path. Doan Brook, a historic stream that once ran open through Cleveland, now runs below the surface of the Dike through a culvert and meets Lake Erie along the north end.

A Path Forward

Dike 14 was transferred to the Cleveland-Cuyahoga County Port Authority in 2000. The land under Dike 14 is known as submerged land. The submerged land is held in the public's trust by the State of Ohio. In 2001, the break walls were reinforced and raised in an effort to stabilize the outer walls. Since 2001, a public effort has been made to convert Dike 14 to a nature preserve. In December of 2005, a Dike 14 Public Natural Area Master Plan was produced and as a result, the USEPA Brownfield Grant application was submitted by the Cuyahoga Soil and Water Conservation District (SWCD) to make this project possible.

*Funding for this project was provided by the USEPA and in part by the Cuyahoga County Board of Commissioners
through the Cuyahoga Soil and Water Conservation District.*

For more information please contact the Cuyahoga Soil and Water Conservation District or visit their web page at www.cuyahogaswcd.org

