

PREASSESSMENT SCREEN AND DETERMINATION

Grand Calumet River, and Indiana Harbor Canal Lake County, Indiana

by

U.S. Fish and Wildlife Service Indiana Department of Environmental Management Indiana Department of Natural Resources

Action: Preassessment Screen for the Grand Calumet River and Indiana Harbor Canal (GCR/IHC), Lake County, Indiana by the United States Department of the Interior (Department), the Indiana Department of Environmental Management (IDEM), and the Indiana Department of Natural Resources (IDNR).

Authority: The U.S. Fish and Wildlife Service (Service) is acting on behalf of the Secretary of the Department as a trustee for natural resources. The Secretary is delegated natural resource trusteeship pursuant to Executive Order 12580, January 23, 1987 and the National Contingency Plan (NCP), at 40 CFR Part 300.600, to conduct Natural Resource Damage Assessment (NRDA) procedures, pursuant to the natural resource damage assessment regulations at 43 CFR Part 11. IDNR and IDEM are natural resource trustees for the State of Indiana pursuant to Section 107(f)(2)(B) of CERCLA with trusteeship delegated to the Deputy Director (IDNR) and the Assistant Commissioner of the Office of Environmental Response (IDEM) by the Governor's Office in 1987. The authority for trustees to assess damages to natural resources is pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, 42 U.S.C. 9601 *et seq.*, the Oil Pollution Act of 1990, 33 U.S.C. 2701 *et seq.*, and the Federal Water Pollution Control Act (FWPCA), as amended, 33 USC 1251 *et seq.*

Preassessment Screen

Requirement: Federal Regulations at 43 CFR Part 11.23(a) require the trustees to complete a preassessment screen and make a determination as to whether a NRDA shall be conducted. This document fulfills that requirement and follows the structure of Federal Regulations at 43 CFR Part 11.

General Criteria

1. Discharge or release

The trustees reviewed relevant information which indicates that oil and hazardous substances have been emitted, emptied, discharged, allowed to escape, disposed, or otherwise released into the GCR/IHC. Numerous oil spills and releases of hazardous substances have occurred resulting in detrimental impacts to water quality, aquatic and wildlife habitat, and use

impairment. Sediments in the GCR/IHC are severely contaminated. and are a continuous source of pollution to the water column.

2. Affected natural resources

Natural resources for which the Department may assert trusteeship under CERCLA have been or are likely to have been adversely affected by the discharge or release, include but are not limited to:

endangered species, migratory birds, anadromous fish, and their supporting habitats, and Federal lands. Authority for the management or control of these resources is pursuant to the Endangered Species Act (ESA), as amended, 16 U.S.C. 1531 *et seq.*, the Migratory Bird Treaty Act (MBTA), as amended, 16 U.S.C. 703 *et seq.*, the Anadromous Fish Conservation Act (AFCA), as amended, 16 U.S.C. 757, and the Great Lakes Fish and Wildlife Restoration Act (GLFWRA), as amended, 16 U.S.C. 941.

Natural resources for which Indiana may assert trusteeship under CERCLA have been or are likely to have been adversely affected by the discharge or release, include but are not limited to:

microorganisms, invertebrates, fish, amphibians, reptiles, birds, mammals, endangered species, aquatic and terrestrial plants, air, surface waters, groundwater, sediments and State lands. Authority for the management or control of these resources is pursuant to the Indiana Environmental Management Act, IC 13-1-3-8, IC 13-7-4-1, (effective July 1, 1996 IC 13-18-4-5, IQ 13-30-2-1), and the Indiana Fish and Wildlife Act, IC 14-11 *et seq.*, and IC 14-22 *et seq.*

Natural resources under the jurisdiction of federal and state trustees affected or potentially affected include, but are not limited to, the following without regard to the specific natural resource trustee:

all fish species in the GCR/IHC and Lake Michigan including but not limited to: coho salmon (*Oncorhynchus kisutch*), chinook salmon (*O. tshawytscha*), pink salmon (*O. gorbuscha*), rainbow trout (*Salmo gairdneri*), rainbow smelt (*Osmerus mordax*), lake trout (*Salvelinus namaycush*), yellow perch (*Perca flavescens*), brown trout (*Salmo trutta*), carp (*Cyprinus carpio*), and catfish (*Ictalurus sp.*); peregrine falcon (*Falco peregrinus*), wood duck (*Aix sponsa*), mallard (*Anas platyrhynchos*), double-crested cormorant (*Phalacrocorax auritus*), black-crowned night-heron (*ATycticorax nycticorax*), great blue heron (*Ardea herodias*), green-backed heron (*Butorides striatus*), tree swallow (*Ta-chycineta bicolor*), barn swallow (*Hirundo rustica*), common merganser (*Mergus merganser*), herring gull (*Larus argentatus*), red-winged blackbird (*Agelaius phoeniceus*),

great egret (*Casmerodius albus*), birds, including waterfowl, shorebirds, raptors, and others; lands owned and/or managed by the State of Indiana, including wetlands, shorelines, soil, geologic resources, and other features

of those lands; air, groundwater, surface water and sediments.

3. Quantity and concentration of discharged oil or hazardous substance

Alternatives being considered by the U.S. Army Corps of Engineers (COE) for the IHC Federal navigation dredging project include removing 1,422,000 to 4,675,000 yd³ of sediment from the IHC; the upper estimate includes almost 200,000 yd³ of seriously contaminated sediments.

Current U.S. Environmental Protection Agency (EPA) actions seek to remove 687,000 yd³ of sediment in the East Branch GCR. It is estimated that 1,100,000 to 1,300,000 yd³ of "visibly contaminated sediments" are in the portion of the GCR/IHC bounded on the west by Indianapolis Boulevard, the north by Columbus Drive, and GCR's headwaters (FBA 1993). More than 710,000 yd³ were dredged from the eastern 5 miles of the East Branch GCR (the most highly contaminated area of the GCR) between 1965 to 1972 (FBA 1993) (the height of industrial uses of PCBs), potentially moving hazardous substances to other undetermined locations.

4. Availability of data for a reasonable cost damage assessment

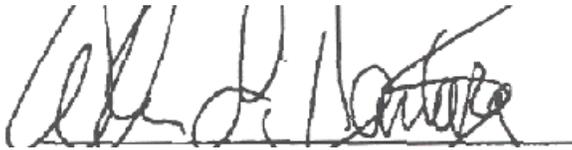
There are data available documenting the severity of contamination and extent of degradation of environmental quality in the GCR/IHC. Supporting documentation includes NPDES permits, Monthly Operating Reports, discharge monitoring reports, industrial pretreatment monitoring reports, notices of violations, RCRA enforcement and compliance documents, and documents generated by various CERCLA activities. In addition, the EPA has documented pollution problems and sources in this area, and EPA has conducted chronic toxicity tests at several outfalls to the GCR/IHC, which document adverse impacts to aquatic life. The EPA Assessment and Remediation of Contaminated Sediments (ARCS) Program has conducted various studies on the sediments of the GCR/IHC. This has resulted in documentation of the extent of sediment contamination and toxicity.

5. Response Actions

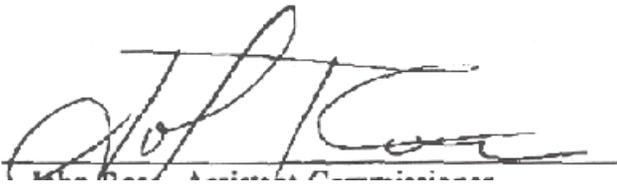
Indiana Harbor Canal is classified as a Federal navigation channel, and is under the jurisdiction of the COE. The channel is scheduled for maintenance dredging and a draft environmental impact statement (EIS) has been prepared for this project. If maintenance dredging occurs, it will remove some of the contaminated sediments. However, this activity will not sufficiently restore or provide compensation of lost or injured natural resources.

PREASSESSMENT SCREEN DETERMINATION

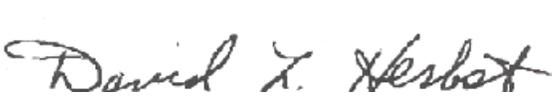
As a result of past and continuing releases of hazardous substances into the GCR/IHC, and **unpermitted** discharges of pollutants, numerous natural resources under the trusteeship of state and federal agencies under CERCLA have been and will continue to be injured. **Therefore**, the Trustees have determined to conduct a natural resource damage **assessment** this site in accordance with Federal Regulations at 43 CFR Part 11, **Subparts C and E**.

Date: 6/17/96 
William Hartwig, Regional Director, Region 3
U.S. Fish and Wildlife Service

Date: 6-28-96 
Kathy Prosser, Commissioner
Indiana Department of Environmental Management

Date: 6-28-96 
John Rose, Commissioner
Indiana Department of Environmental Management


Patrick Ralston, Director
Indiana Department of Natural Resources

Date: 6/24/96 
David Herbst, Deputy Director
Indiana Department of Natural Resources

References

Floyd, Browne, and Associates. 1993. Sediment characterization study, U.S. Steel, Gary, Indiana: Volume 1a, Text and Tables.