GENERAL SITE INFORMATION, CHARACTERISTICS, AND STATUS

Project Name	***WILLOW RUN CREEK***	***ProjectID:*** 05-16
Last Updated:	04/23/99	

City:	Ypsilanti and van Buren Townships
County:	Wayne, Washtenaw
State:	MI
Country:	USA
Bodies of Water:	Willow Run Creek; Edison and Tyler Ponds (integral); Belleville Lake
US EPA Region:	V
Status (Active, Complete, or Monitoring Only):	Complete
Date On NPL:	N/A
ROD/ESD Date:	N/A
Operable Unit:	N/A
Areas of Concern (length or acres):	Edison and Tyler Ponds - 21 acres combined; Willow Run Sludge Lagoon.
Other Characteristics of Water Body:	Tyler Pond formed by impoundment of Willow Run Creek in 1940s; industrial area; Edison Pond, about 1.5 miles downstream, is situated in a steep wooded ravine and discharges into Belleville Lake. Adjacent to Edison Pond is a municipal park and residences. Willow Run Creek base flow to Belleville Lake is 25-30 cfs (with about 75% of the flow originating from a 15 mgd WWTP).
Contaminants of Concern:	PCBs (1242/1248/1254/1260)
Source of Contamination:	Willow Run Sludge Lagoon - Starting in 1942, for 2.5 years the lagoon received sludges from an acid-cyanide plating wastewater treatment plant and municipal sludges thereafter until 1964. Tyler Pond received numerous discharges including plating wastes, oil-water separator underflow, non-contact cooling water, and wastewater treatment plant effluent; Edison Pond received creek flow from Tyler Pond.
Contaminated Area Physical Characteristics:	Tyler Pond, shallow water depth (3-5 feet), 11 acres. Edison Pond, shallow water depth (1-3 feet), 10 acres. Willow Run Sludge Lagoon, 20,000 cy of sludge. Max. PCBs 290 ppm Aroclor 1242, 2500 ppm Aroclor 1248, and 1200 ppm Aroclor 1254 in Tyler Pond sediment; 440 ppm 1242, 29 ppm 1248, and 130 ppm 1254 in Edison Pond sediment. Also, elevated PAHs and heavy metals (lead, chromium, zinc, and cyanide). PCBs in the Willow Run Sludge Lagoon ranged from 2030-8075 ppm. Extensive clay unit underlies ponds.
Type of Regulatory Action:	Site proposed for the NPL, but not listed. EPA Region V Regional Decision Team approved the Willow Run Creek Superfund Accelerated Cleanup Model Site Strategy, and approved funding for an EE/CA. Agreement between EPA and Michigan DEQ allows for state supervision of an approved Remedial Action Plan under state law. EPA however, approved the new TSCA landfill. Final.
Overall Status Summary:	The selected remedy was in-situ solidification followed by removal of sludges, sediments, soils from the Willow Run (WR) Sludge Lagoon and Edison and Tyler Ponds, by dry excavation. Removed materials were solidified using lime/cement/cement kiln dust and disposed of in a new, dedicated TSCA landfill located on adjacent Wayne County property (considered part of the site). Pond sediments estimated at 310,000 cy. Removal work was slow to start in 1997 due to delay in completing the landfill and delays in placing sheetpile in Tyler Pond (intent was to dewater one-third, maintain flow through two-thirds, excavate the one-third, then vice versa). As of September 1998, remediation of the WR Sludge Lagoon and Edison Pond were complete; Tyler Pond was approximately 90% complete with work scheduled to be completed in October

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1998 with an estimated 20,000 cy of sediment still to be removed. A total of 450,000 cy of consolidated sediments were removed and landfilled at the site. Sediment removal was completed in late 1998 and the landfill capped. As of April 1999, the only remaining field work was the minor repair and reseeding of the landfill cap.

Remedial Action Planned:	☑
Risk Assessment:	☑
Remedial Action Implemented:	☑
Status of Dredging	☐
PRPs:	☑
Contacts:	☑
References:	☑
Modeling:	☐
Fishing Advisory:	☑

Key Conditions: dedicated landfill or CDF, solidification/stabilization

REMEDIAL ACTION PLANNED

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Target Sediment Cleanup Standards (TSCS):

In Willow Run Sludge Lagoon, removal of all sludges, and removal of soil to 21 ppm PCBs (MI Env. Response Act 451, Part 201 Generic Industrial Land Use). In Tyler and Edison Ponds, removal of all sediments, and removal of underlying soil to 1 ppm PCBs. If removal is not practical, cover underlying soils with 12 inches of sand and rip-rap. For soil above the waterline, removal to 2.3 ppm PCBs at Edison Pond, 21 ppm at Tyler Pond.

How TSCS Established:

Ecological ingestion modeling, then feasibility and compliance with MI Env. Response Act 307 (now Part 201).

Target Bank and Floodplain Cleanup Levels (if applicable):

Not clearly delineated

Other Target:

PAHs and heavy metals in sediments

Environmental Sample Data References:

- ***Sediment:***
- ***Water:***
- ***Fish:***

Estimated Target Volume:

331,000 cy

Planned Disposal Method:

Disposal of all removed materials into a dedicated TSCA landfill constructed at the Willow Run Creek site. Use of a dedicated TSCA landfill for these wastes was judged acceptable since

a) the Willow Run Sludge Lagoon sludges are considered municipal sludges under TSCA 761.60a (5);

b) the pond sediments are considered dredged materials under TSCA 761.60a(5);

c) a chemical waste landfill is considered protective under TSCA 761.75;

d) a landfill remedy may be conducted on-site pursuant to MI Act 307 (now Part 201). These findings, above, were used to ultimately supersede EPA's early opinion that the removed materials would require incineration since they were from "spill sites." (Source: Nov '94 RAP; Superfund Week 10/21/94).

Estimated Calendar Time to Implement Remedy:

According to the 1994 EE/CA, . . .

"Estimates for dredging and dewatering contaminated sediments from Tyler and Edison Ponds indicate that approximately 19 months will be needed to complete the required tasks. This schedule is based on the assumption that, when necessary, dredging activities will be curtailed such that the amount of dredged sediment stockpiled in dewatering and holding tanks does not become unmanageable. The limiting factor in any removal action at the Willow Run Creek site will be the treatment system feed capabilities and/or the scheduling availability of transportation and/or disposal facilities for off-site waste delivery. While a large portion of these treatment and/or disposal activities can be conducted concurrently with dredging and dewatering activities, a period of time at the completion of the project (i.e., beyond the 75 weeks) may be necessary for completion of final treatment and/or disposal activities. It is quite possible that the full-scale remediation of the Tyler and Edison Pond sediments proposed for this removal action may require 2 to 3 years, or more, to complete."

These estimates were originally based on removal of a total of 130,000 cy from the two ponds.

These estimates were substantially increased in the Nov. 1994 Remedial Action Plan (RAP), to 331,000 cy total, including 284,000 cy sediment and 47,000 cy related soils. Breakdown is 20,000 cy from Willow Run Sludge Lagoon, 144,000 cy from Tyler Pond, and 167,000 cy from Edison

	Pond. No updated construction schedule was provided.
Estimated Time to Implement Remedy:	Not available
Estimated Cost to Implement Remedy:	Not available
Stated Remedial Action Objectives (and Source):	Per the 1994 EE/CA (Reference A-143): "Section 104 (c) (1) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendment and Reauthorization Act (SARA), sets statutory limits for Fund-financed removal actions at $2 million and 12 months. Section 104 allows for an exemption from the statutory limits if continued response actions are otherwise appropriate and consistent with all remedial actions to be taken at the site. Removal actions at the Willow Run Creek site will prevent additional migration of contaminated sediments downstream into recreational usage areas (i.e., Belleville Lake). Conditions at the Willow Run Creek site meet the NCP Section 300.415 (b) (2) criteria for a removal action, as well as the CERCLA section 104 (c) consistency exemption from the $2 million and 12-month limitations." Per the 1994 RAP (Reference A-142): "The objectives of remedial action at the Willow Run Sludge Lagoon (WRSL) include the removal and disposal of sludges, soils underlying and adjacent to the lagoon, sediments in the outfall ditch, and soils associated with the outfall ditch which contain PCBs at concentrations above cleanup criteria to the on-Site TSCA/Act 64 compliant landfill. The WRSL and outfall ditch area will then be restored as a flow through ravine. The restoration of the WRSL will be performed in a manner which will support wetland mitigation activities." "The objectives of the remedial action at Edison Pond include the removal, dewatering and disposal of sediments, and underlying and bank soils containing PCBs at concentrations exceeding cleanup criteria to the on-Site TSCA/Act 64 compliant landfill. Edison Pond will be restored to a wetland and pond environment." "The objectives of the remedial action at Tyler Pond include the removal, dewatering and disposal of sediments and underlying soils containing PCBs at concentrations exceeding cleanup criteria to the TSCA/Act 64 compliant land fill. Surrounding soils associated with Tyler Pond will then be restored as a pond and wetland area." "The restoration of Edison Pond and Tyler Pond will be performed to restore or improve the watershed flow characteristics as well as to comply with wetland mitigation requirements."
Measures of Success to be Used:	Post-cleanup verification sampling.
Planned Monitoring and Restoration:	Construction area and perimeter air monitoring planned during construction. No long-term monitoring except at the TSCA landfill. The two ponds are to be restored to conditions approximating existing conditions (e.g., wetland pond)."
Agency Position on Sediment Removal (and Source):	The basis for remedial action at the WRC Site was determined in the RI/FS and Willow Run Creek EE/CA (through risk assessments and determinations made by U.S. EPA). A summary of relevant decisions made by MI DNR (now DEQ) and U.S. EPA follows: TSCA

- The WRSL sludges are considered municipal sludges under TSCA [761.60(a)(5)].
- Tyler Pond and Edison Pond sediments are considered dredged materials under TSCA.
- A chemical waste landfill (CWL) is considered protective (761.75).

MI Environmental Response Act 307 (now Part 201)

- A landfill remedy may be conducted on Site pursuant to Act 307.
- An on-site landfill remedy would have to meet the substantive requirements of Act 64 due to presence of F006 materials within the WRSL. A landfill design meeting Act 64 standards will meet or exceed the requirements for a CWL under TSCA.

Act 203

- Areas in and around the WRSL, Tyler Pond, and Edison Pond are considered wetlands.
- Wetlands eliminated by the remedy require replacement or mitigation (U.S. EPA requires mitigation at a 1.5:1 ratio).

Other Requirements for Remediation

- No backwater flooding.
- NPDES permit for treated water discharge to WRC (or permit from a POTW to release to the sanitary sewer system).
- Best available technology (BAT) utilization for water treatment.
- Washtenaw County Drain Commission permit for discharge of treated water into YDN8.
- Soil erosion permits, as required.
- Air emissions monitoring pursuant to Act 348 and associated guidance.
- Stormwater permit.
- Other pertinent guidance:
  - monitoring requirements pursuant to Act 307; and
  - verification of cleanup.

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RA Type: Ecological

RA Status: Complete

RA Objectives: A streamlined ecological assessment (EA) was performed as part of the EE/CA scope of work for the WRC site. The goal of the streamlined EA was to establish the environmental threats posed by the contaminated sediments in Tyler and Edison Ponds. The streamlined EA was conducted via the review of historical analytical data from sediment samples collected from both ponds; the review of existing reports and documentation concerning the potential ecological impacts of these PCB-contaminated sediments; and the collection, identification, and enumeration of macroinvertebrates from both ponds.

Company Performing RA: ecology and environment, inc.

RA Reference Report: Reference A-143. (A separate ecological risk assessment, not obtained, was prepared for the WR Sludge Lagoon).

RA Summary and Conclusions: The target level of 1 ppm PCBs was established based on ecological modeling, however this target level was not subsequently used to set cleanup criteria.

The EE/CA states that from the ingestion model results ... "it is reasonable to conclude that the PCB contaminants at the Willow Run Creek site are having an adverse health effect on a variety of animals, including raccoon, opossum, and mink. A sediment cleanup level of 1 ppm would be protective of these animals, which are known or are expected to utilize the Willow Run Creek site habitat. This proposed cleanup level would not provide all-encompassing protection for mink, due to their high susceptibility to PCBs; however, the presence of mink at the Willow Run Creek site has not been substantiated. A sediment cleanup level of 1 ppm would also be protective of human health in that the possibility of the migration of PCB-contaminated sediments further downstream into Belleville Lake would be greatly reduced."

"During the course of the sediment cleanup to a level of 1 ppm total PCBs, it also is reasonable to assume that the majority of the other contaminants of concern would be removed from the environment. This includes contamination in both Tyler and Edison Pond sediments, as well as surface waters."

"The removal action proposed is designed such that as little sedimentation as possible occurs. Because the amount of sediment disturbance would be minimized, very little suspension of contaminated sediments in the pond waters is expected."

REMEDIAL ACTION IMPLEMENTED

Project Name:	***WILLOW RUN CREEK***	***ProjectID:*** 05-16
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Physical Target:	PCBs. Willow Run Sludge Lagoon; Tyler Pond (11 acres); Edison Pond (10 acres)
Goals:	Remove sludges, underlying soils in Willow Run Sludge Lagoon to 21 ppm PCBs; remove sediments and underlying soils in ponds to 1 ppm PCBs
Primary Contractor:	IT Corporation
Other Contractors:	ecology and environment, Inc. and Conestoga-Rovers & Associates (consultants); Hardman Construction (sheeting contractor); ENRECO (solidification contractor)
Generic Remediation Method:	Dry excavation
Equipment:	Sheetpile to isolate sections of pond areas; excavator mounted on a pontoon/tracked "swamp buggy;" earth moving equipment, situated on "shore;" on-site mixing plant for stabilization reagent; equipment to mix reagent in-situ; temporary wastewater treatment tanks.
Material Handling:	In-situ dewatering and solidification (using lime, cement and cement kiln dust) of sediments, then transported to dedicated landfill. Water from Tyler Pond treated at temporary WWT facility. Water from Edison Pond pumped down to one foot depth with no treatment, then final foot of water treated at nearby temporary WWT facility.
Volume Removed:	450,000 cy of solidified sediments (disposed volume). Original estimated volume to be removed was 331,000 cy; the increase in disposed volume is attributed to deeper sediments requiring removal and a larger volume of bulking material required to meet compressive strength requirements prior to landfill disposal.
Calendar Time:	May 1996 (sheetpile installation started) to year end 1998 (landfill capping completed).
Time To Implement:	Two years and eight months to implement removal.
Total Cost:	Bid cost reportedly $28 million (including TSCA landfill construction). Removal cost reportedly $70 million.
Dredging Cost:	N/A
Disposal of Sediment:	Disposal, after in-situ solidification, into a project-specific 10-acre TSCA landfill on Wayne County property (donated to the project by Wayne County as PRP compensation) within site limits (across from airport).
Volume of Water:	Not available.
Method of Water Treatment:	Temporary WWT facilities to support work at Tyler and Edison Ponds. Waste water from the dedicated TSCA landfill was treated at a local POTW.
Water Discharge Limit:	Water was discharged without treatment if turbidity was < 50% of baseline; water with turbidity > 50% baseline was sent through the WWT facility prior to discharge.
Air Monitoring During Remediation:	Construction area, perimeter, and landfill area were monitored. Some exceedances of EPA-established limits for PCBs at the landfill area occurred during hot, humid weather conditions. There was an attempt to use a foam (surface-based emulsion) cap to control airborne releases of PCBs and odors at landfill.
Water Monitoring During Remediation:	

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Outcome:

Project completed approximately one year later than anticipated and at an estimated 2.5 times the original cost estimate.

Verification samples were taken from each cell to determine if target levels were achieved before moving on to the next cell. The target level for sediments was 1 ppm; for bank soils it was 2.3 ppm (Edison Pond) or higher. Removal efforts were repeated as necessary until the target levels were met.

Restoration and Post-Monitoring:

Little restoration work was required following completion of the work; natural processes are expected to restore the area.

Some post-monitoring of fish may be performed, however nothing formal has been planned by the State as of April 1999.

Site-Specific Difficulties:

(1) Landfill completion delayed the start of sediment removal work.

(2) Several obstructions in Tyler Pond delayed the installation of sheetpile. (Sheetpile is designed for 25-year flood.) In one instance, an old water line crossing Tyler Pond was identified. Sheeting contractor wasn't allowed to vibrate sheeting within 1000 feet proximity, due to concern that lead joints would fail. Resolved by re-routing the water line.

(3) In the "one-third sector" of Tyler Pond, sub-cells were created by running sheetpile perpendicular to shore. Couldn't effectively remove all water from sub-cells, a situation partially caused by different bottom elevations for adjacent cells and separation of sheet pile caused by obstructions.

(4) Sediments from Tyler Pond, apparently silt-like, were difficult to dewater effectively. Although solidified with cement sufficiently to pass the Paint Filter Test, they didn't consolidate properly in the landfill (moisture content still upwards of 50%). Presently, sediment is being solidified to 10 psi UCS on-site using cement kiln dust (CKD). Sediment consolidation much improved using CKD and problem has been nearly eliminated. A sand drainage layer and under-drain leachate collection system was added to the landfill to accelerate consolidation.

(5) Excessive odors at the landfill caused PR problems at the adjacent airport. Odor apparently originated from the "cement" solidification agent. Tried to abate using both a foam surfactant and a "geo-mulch." The geo-mulch was reportedly moderately successful. Other mitigation efforts included: reducing the exposed work area; allowing in-situ solidified materials to stay in place longer, resulting in dryer materials at the landfill; and limiting disposal to favorable weather conditions.

(6) PCB-in-air levels from time-to-time (summer 1997) exceeded all EPA and State-established air action levels (State-established levels were exceeded on a near continuous basis throughout the project duration). Exceedances also occurred at the Willow Run Sludge Lagoon. Exceedances traced to apparent increased volatilization of PCBs from wet sediments being off-loaded and placed, as well as in-place - - even though these sediments had been stabilized with "cement." Mitigation efforts included reducing exposed areas, limiting disposal to periods with favorable weather conditions, and application of the aforementioned foam and mulch.

7) The State originally required stabilization agents to be delivered in slurry form to limit particulate air emissions. Slurry method would not achieve adequate strength due to water and oil content of sediments. Changed to a dry reagent mixing and delivery system at the ponds, acceptable to the State. Fugitive emissions of CKD were a problem during the mixing process (CKD was being

applied over excavated sediment and mixed with backhoes); changed to conditioning CKD by misting with small amounts of water prior to mixing with a backhoe. This approach eliminated most fugitive emissions problems.

Monitoring Data References:

- ***Sediment***
- ***Water:***
- ***Fish:***

POTENTIALLY RESPONSIBLE PARTIES

Project Name ***WILLOW RUN CREEK*** ***ProjectID:*** 05-16

PRP Name: **PRP INFORMATION NOT RELEASED** ***PRPID:***

Street Address:

City:

State:

KEY CONTACTS

Project Name ***WILLOW RUN CREEK*** ***ProjectID:*** 05-16

Last Name: **KEY CONTACT INFORMATION NOT RELEASED** ***Contact ID:***

First Name:

Title:

Company:

Address:

City:

State:

Postal Code:

Work Phone # : ***Other Phone #:***

Fax # :

Email Address:

Project Name ***WILLOW RUN CREEK*** ***ProjectID:*** 05-16

Reference Type: A ***ReferenceID:*** 142

Title: ***Remedial Action Plan (RAP); Willow Run Creek Site; Wayne/Washtenaw Counties, Michigan***

Location: AEM

Category: Site Update

Prepared by/Author: Conestoga-Rovers & Associates

Preparer/Author Address:

Prepared For: EPA and MI DNR

Date Published: November 1994

Key Words and Phrases:

Reference Type: A ***ReferenceID:*** 143

Title: ***Engineering Evaluation and Cost Analysis for Willow Run EE/CA Ypsilanti, Michigan***

Location: AEM

Category: Site Update

Prepared by/Author: Michelle L. Jaster

Preparer/Author Address: ecology and environment, inc.
111 West Jackson Blvd.,
Chicago, IL 60604

Prepared For: EPA and MI DNR

Date Published: September 30, 1994

Key Words and Phrases:

Project Name ***WILLOW RUN CREEK*** ***ProjectID:*** 05-16

Reference Type: B ***ReferenceID:*** 765

Title: ***Realizing Remediation I - Great Lakes Contaminated Sediments Willow Run Creek (see Reference A-905)***

Location: AEM

Category: Dredging: Remedial (Contaminated Sediments)

Prepared by/Author: US EPA Great Lakes National Program Office (GLNPO)

Preparer/Author Address: 77 West Jackson Boulevard (G-17J)
Chicago, IL 60604

Prepared For: General Public

Date Published: August 1, 2002

Key Words and Phrases:

Reference Type: C ***ReferenceID:*** 105

Title: ***Bids near for Willow Run PCB fix***

Location: AEM

Category: Site Update

Prepared by/Author:

Preparer/Author Address:

Prepared For: Superfund Week

Date Published: January 27, 1995

Key Words and Phrases:

Reference Type: C ***ReferenceID:*** 106

Title: ***Willow Run PCBs cleanup decision is near***

Location: AEM

Category: Site Update

Prepared by/Author:

Preparer/Author Address:

Prepared For: Superfund Week

Date Published: October 14, 1994

Key Words and Phrases:

Project Name ***WILLOW RUN CREEK*** ***ProjectID:*** 05-16

ReferenceID: 240

Reference Type:	C
Title:	***Willow Run contamination evaluation begins***
Location:	AEM
Category:	Site Update
Prepared by/Author:	
Preparer/Author Address:	
Prepared For:	Superfund Week
Date Published:	January 14, 1994
Key Words and Phrases:	

ReferenceID: 243

Reference Type:	C
Title:	***TSCA allows landfilling of Willow Run PCBs***
Location:	AEM
Category:	Site Update
Prepared by/Author:	
Preparer/Author Address:	
Prepared For:	Superfund Week
Date Published:	October 21, 1994
Key Words and Phrases:	

ReferenceID: 244

Reference Type:	C
Title:	***Willow Run PCBs to be contained on-site***
Location:	AEM
Category:	Site Update
Prepared by/Author:	
Preparer/Author Address:	
Prepared For:	Superfund Week
Date Published:	January 6, 1995
Key Words and Phrases:	

Project Name ***WILLOW RUN CREEK*** ***ProjectID:*** 05-16

Reference Type: D ***ReferenceID:*** 75

Title: ***EPA Asks Willow Run Creek Landfill to Address PCB Air Emissions***

Location: AEM

Category: Site Update

Prepared by/Author: US EPA Region V

Preparer/Author Address: Chicago, IL

Prepared For: General Public

Date Published: July 15, 1997

Key Words and Phrases:

Reference Type: E ***ReferenceID:*** 28

Title: ***Dredging Remedy at Willow Run Creek Site, Michigan***

Location: AEM

Category: Site Update

Prepared by/Author: Edward Peterson, Superfund Program Manager

Preparer/Author Address: GM
Detroit, MI 48202

Prepared For: Sediment Management Seminar (New Orleans)

Date Published: February 9 - 10, 1998

Key Words and Phrases:

Reference Type: E ***ReferenceID:*** 140

Title: ***Sediment Management Seminar February 9-10, 1998 Proceedings (Reference E-137)***

Location: AEM

Category: Dredging: Remedial (Contaminated Sediments)

Prepared by/Author: Blasland, Bouck & Lee, Inc.

Preparer/Author Address: 6723 Towpath Road
P.O. Box 66
Syracuse, NY 13214

Prepared For: Attendees

Date Published: February 9-10, 1998

Key Words and Phrases:

Project Name ***WILLOW RUN CREEK*** ***ProjectID:*** 05-16

Reference Type: H ***ReferenceID:*** 3

Title: ***Site Features Map of Willow Run Creek***

Location: AEM

Category: Site Update

Prepared by/Author: ecology and environment, inc.

Preparer/Author Address:

Prepared For:

Date Published: May 1993

Key Words and Phrases:

Reference Type: J ***ReferenceID:*** 41

Title: ***Project: Willow Run Creek Site***

Location: AEM

Category: Contractor and Vendor Information

Prepared by/Author: Conestoga-Rovers & Associates

Preparer/Author Address:

Prepared For: General Public

Date Published: 1999 circa

Key Words and Phrases:

Reference Type: M ***ReferenceID:*** 31

Title: ***Identification and Analysis of Effectiveness, Implementability, and Cost of Removal Alternatives (Section 3.0 of EE/CA)***

Location: AEM

Category: Site Update

Prepared by/Author: ecology and environment, inc.

Preparer/Author Address:

Prepared For: EPA and MI DNR

Date Published: September 30, 1994

Key Words and Phrases:

Project Name ***WILLOW RUN CREEK*** ***ProjectID:*** 05-16

Reference Type: M ***ReferenceID:*** 258

Title: ***Environmental Dredging: An Evaluation of Its Effectiveness in Controlling Risks***

Location: AEM

Category: Contaminated Sediments: Overview of Issues

Prepared by/Author: Blasland, Bouck & Lee, Inc.

Preparer/Author Address: 6723 Towpath Road
P.O. Box 66
Syracuse, NY 13214

Prepared For: General Electric Company

Date Published: August 2000

Key Words and Phrases:

Reference Type: R ***ReferenceID:*** 2

Title: ***Letter to PRP re: Case Histories: Contaminated Sediment Sites (with response from GM)***

Location: AEM

Category: Site Update

Prepared by/Author: AEM, Inc. with response from GM

Preparer/Author Address: Malvern, PA 19355

Prepared For: General Motors Corporation, submitted to

Date Published: August 17, 1998

Key Words and Phrases:

Reference Type: R ***ReferenceID:*** 3

Title: ***Letter to PRP re: Case Histories: Contaminated Sediment Sites (with oral response from Ford Motor Company)***

Location: AEM

Category: Site Update

Prepared by/Author: AEM, Inc. with oral response from Ford Motor Company

Preparer/Author Address: Malvern, PA 19355

Prepared For: Ford Motor Company, submitted to

Date Published: August 17, 1998

Key Words and Phrases:

FISH ADVISORIES

Project Name ***WILLOW RUN CREEK*** ***ProjectID:*** 05-16

Advisory:	Belleville Lake	***AdvisoryID:***	1027
Extent:	Lake		
Pollutant:	PCBs (total)		
Species:	carp-common		
Population:	NCGP		
Population Definition:	No Consumption-General Population: Advise against consumption by the general population.		
Advisory Type:	Lake	***Advisory Number:***	4771
Status (Active or Rescinded):	Rescinded	***Date Rescinded:***	
Contact Name:	David R. Wade	***Contact Number:***	517-335-8834

Advisory:	Belleville Lake	***AdvisoryID:***	1028
Extent:	Lake		
Pollutant:	PCBs (total)		
Species:	carp-common		
Population:	RSP		
Population Definition:	Restricted Consumption-Subpopulation(s): Advises subpopulations potentially at greater risk, e.g., pregnant or nursing women, and/or small children, to restrict the size of the organism and/or frequency of meals consumed.		
Advisory Type:	Lake	***Advisory Number:***	4771
Status (Active or Rescinded):	Active	***Date Rescinded:***	
Contact Name:	David R. Wade	***Contact Number:***	517-335-8834

Advisory:	Belleville Lake	***AdvisoryID:***	1029
Extent:	Lake		
Pollutant:	PCBs (total)		
Species:	carp-common		
Population:	NCSP		
Population Definition:	No Consumption-Subpopulation(s): Advises against consumption for populations that are potentially at greater risk, e.g., pregnant or nursing women, and small children.		
Advisory Type:	Lake	***Advisory Number:***	4771
Status (Active or Rescinded):	Rescinded	***Date Rescinded:***	
Contact Name:	David R. Wade	***Contact Number:***	517-335-8834

Project Name ***WILLOW RUN CREEK*** ***ProjectID:*** 05-16

Advisory:	Belleville Lake	***AdvisoryID:***	1030
Extent:	Lake		
Pollutant:	PCBs (total)		
Species:	walleye		
Population:	RSP		
Population Definition:	Restricted Consumption-Subpopulation(s): Advises subpopulations potentially at greater risk, e.g., pregnant or nursing women, and/or small children, to restrict the size of the organism and/or frequency of meals consumed.		
Advisory Type:	Lake	***Advisory Number:***	4771
Status (Active or Rescinded):	Active	***Date Rescinded:***	
Contact Name:	David R. Wade	***Contact Number:***	517-335-8834

Advisory:	Belleville Lake	***AdvisoryID:***	1031
Extent:	Lake		
Pollutant:	PCBs (total)		
Species:	shad-gizzard		
Population:	RSP		
Population Definition:	Restricted Consumption-Subpopulation(s): Advises subpopulations potentially at greater risk, e.g., pregnant or nursing women, and/or small children, to restrict the size of the organism and/or frequency of meals consumed.		
Advisory Type:	Lake	***Advisory Number:***	4771
Status (Active or Rescinded):	Active	***Date Rescinded:***	
Contact Name:	David R. Wade	***Contact Number:***	517-335-8834

Advisory:	Belleville Lake	***AdvisoryID:***	1032
Extent:	Lake		
Pollutant:	PCBs (total)		
Species:	sucker-white		
Population:	RSP		
Population Definition:	Restricted Consumption-Subpopulation(s): Advises subpopulations potentially at greater risk, e.g., pregnant or nursing women, and/or small children, to restrict the size of the organism and/or frequency of meals consumed.		
Advisory Type:	Lake	***Advisory Number:***	4771
Status (Active or Rescinded):	Active	***Date Rescinded:***	
Contact Name:	David R. Wade	***Contact Number:***	517-335-8834

Project Name ***WILLOW RUN CREEK*** ***ProjectID:*** 05-16

Advisory:	Belleville Lake	***AdvisoryID:***	1033
Extent:	Lake		
Pollutant:	PCBs (total)		
Species:	walleye		
Population:	RGP		
Population Definition:	Restricted Consumption-General Population: Advises the general population to restrict the size of the organisms and/or the frequency of meals consumed.		
Advisory Type:	Lake	***Advisory Number:***	4771
Status (Active or Rescinded):	Active	***Date Rescinded:***	
Contact Name:	David R. Wade	***Contact Number:***	517-335-8834