EPA Proposes PCB Cleanup Plan for Contaminated Soil

Ten-Mile Drain Superfund Site

St. Clair Shores, Michigan April 2018

You are invited

EPA invites you to discuss the proposed cleanup plan for the Ten-Mile Drain site.

The Agency will hold an open house and public meeting on May 10 to present details of the plan. The open house will be held at St. Clair Shores Public Library, 22500 Eleven Mile Rd. from 3 to 5:30 p.m. with the public meeting to follow at City Council Chambers, 27600 Jefferson Ave. at 6:30 p.m.

Read the proposed plan

The detailed proposed plan is available for review in the information repository and on the web www.epa.gov/superfund/ten-mile-drain.

Public comment period

There are several ways your voice can be heard during the public comment period that runs from **April 23 to May 23, 2018**.

- Fill out and return the enclosed comment form by the deadline.
- E-mail comments to EPA Community Involvement Coordinator **Heriberto León** at leon.heriberto@epa.gov.
- Attend the public meeting on May 10, 2018 and submit a written or oral statement.

See back page for contact information on EPA team members.

The U.S. Environmental Protection Agency is proposing to clean up PCB-contaminated soil at residential and commercial properties in the Ten-Mile Drain Superfund site in St. Clair Shores, Mich. This fact sheet is a summary of the proposed cleanup plan. It outlines proposed cleanup alternatives for two areas of the site and EPA's recommended cleanup plan. The proposed cleanup plan resulted from a study of the nature and extent of contamination at the site and an evaluation of the different cleanup options available.

This proposed cleanup action involves selected properties in Investigation Area 1 around Lakeland and Bon Brae streets and Harper Avenue and Investigation Area 2 centered on the Lange and Revere Street canals *(see map, Page 3)*. Based on data collected to-date, the near-surface soil cleanup addresses 25 known residential properties, part of a commercial property and three utility corridors as well as up to 100 properties that need to be tested in Investigation Areas 1 and 2. The recommended cleanup plan includes:

- Excavating near-surface soil with PCB concentrations exceeding selected cleanup levels.
- Off-site disposal of PCB-contaminated soil at an appropriate landfill.

EPA will not select a final cleanup plan until after it reviews comments received from the public at a hearing and during a public comment period *(see left-hand box for ways you can participate in the decision-making process)*. The Agency is issuing the proposed cleanup plan as part of its public participation responsibilities under the federal Superfund law[1]. EPA may modify the proposed cleanup plan or select another option based on new information or public comments so your opinion is important.

Site background

The site is northeast of Detroit on the western shores of Lake St. Clair in Macomb County, Mich. The site covers several city blocks where PCBs have been found inside the Ten-Mile Drain system as well as near-surface soil and sediment (mud) in the Lange and Revere Street canals connected to Lake St. Clair. The site was placed on the National Priorities List in 2010 making it eligible for cleanup funds under EPA's Superfund program.

Investigators believe PCB-contaminated oil originated from a historical release at the commercial property located at the corner of Lakeland Street and Harper Avenue in Investigation Area 1. It appears the PCB-tainted oil was dumped there or used for dust control on a former dirt parking lot. There is not an ongoing release of PCBs from the commercial property to the Ten-Mile Drain system.

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[1]*Section 117(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, known as the Superfund law) requires public notice about this proposed cleanup plan through a meeting, comment period and newspaper announcement. This fact sheet summarizes information contained in the feasibility study and other documents that can be reviewed at the St. Clair Shores Public Library and EPA Region 5 offices in Chicago.*

The PCB-contaminated oil was likely tracked onto adjacent properties by vehicles and people and flowed into the Ten-Mile Drain system where the pollution stuck to canal sediment. Floating PCB-contaminated sediment may also have been pumped out to water lawns, further spreading pollutants. See Page 7 for illustrations showing the probable origin and path of the PCB contamination.

Human health risks

A study of potential risk to public health and the environment was conducted for near-surface soil at the Ten-Mile Drain site. Human health risk-based cleanup goals were identified for PCBs in residential, commercial and utility corridor soil.

Residential soil: EPA set a preliminary cleanup goal of allowing no more than 1 part per million (ppm) of PCBs in soil.

Commercial soil: EPA set a preliminary cleanup goal of no more than 10 ppm of PCBs in soil.

Right-of-way/Utility Corridor soil: EPA set a preliminary cleanup goal of no more than 21 ppm of PCBs in soil.

These proposed cleanup goals will protect people and the environment. The cleanup goals are not final until EPA selects a final cleanup plan.

As mentioned above, for this proposed plan, the properties with PCBs above the proposed cleanup goal are located within Investigation Areas 1 and 2. The 25 residential properties, the commercial section and the three utility corridors all reported soil samples results above the proposed cleanup goals. Around 100 properties still need to be tested.

PCBs, or polychlorinated biphenyls, are a group of fabricated chemicals originally used in industrial processes and products such as coolants and lubricants. Production was banned in the U.S. in 1977, but PCB mixtures remain in old electrical equipment and other items. Eating PCB-contaminated food or coming in contact with PCB-tainted soil or water can pose potential health risks. EPA considers PCBs to be a possible cancer-causing chemical compound.

Proposed cleanup alternatives

To meet the preliminary cleanup goals established for near-surface soil in the investigation areas, EPA studied several action alternatives such as a protective cap, thermal treatment, and excavation. EPA determined that excavation was the only viable alternative. EPA then developed two alternatives and evaluated each option in detail against the selection criteria established by federal law *(see box, Page 3)*.

Alternative 1 – No-Further Action. EPA is required to include a "no-action" alternative as a basis for comparison with other cleanup options. Under this alternative, EPA would take no additional action to prevent exposure to contaminated near-surface soil, and the PCB-impacted soil would remain in place at the site. Site reviews would be done every five years. **Cost: $95,000**

Alternative 2 – Excavation and Off-Site Disposal of Contaminated Near-Surface Soil *(EPA's recommended cleanup option)*. This is the alternative that EPA recommends going through the approval process, including public comments. This option consists of excavating near-surface soil with total PCB concentrations exceeding selected cleanup levels to a specified maximum depth (depending on property type), followed by off-site disposal at an appropriate landfill**. Cost: $7.8 million**

EPA proposes Alternative 2 because it best meets the evaluation criteria among the alternatives and protects human health and the environment. This alternative also meets federal and state requirements and will be effective in the long-term. Table 1 *(see Page 4)* provides a comparison of the alternatives.

Past cleanup actions

Several investigations and cleanup actions have taken place since PCBs were first discovered at the site in 2001. Sediment samples collected in July 2001, prior to dredging activities, identified PCB contamination in the Lange and Revere Street canals. As a result, EPA conducted a removal action at the site, which was completed in July 2004. During the removal action, high concentrations of PCB-contaminated sediment were removed from inside the Ten-Mile Drain system and from a portion of the Lange and Revere Street canals. EPA also sampled 15 residential properties along the Lange and Revere Street canals to assess whether using water from the canals for irrigation of lawns or gardens may have caused yards to be contaminated with PCBs.

In May 2005, EPA and Michigan Department of Environmental Quality took additional soil samples in the area to better define the extent of PCB contamination. PCBs were found in the sand and gravel backfill surrounding the Ten-Mile Drain system pipe and appeared centered in the area near the intersection of Harper Avenue and Bon Brae Street. Based on these findings, EPA conducted another removal action in 2006.

The city of St. Clair Shores in 2009 discovered oil inside the Ten-Mile Drain system located at the Bon Brae Street and Harper Avenue intersection. EPA and the city identified the need to eliminate the potential for PCBs to move down the storm sewer and threaten the Lange and Revere Street canals.

(text continued on Page 4)

The latest proposed EPA cleanup project for near-surface soil in the Ten-Mile Drain site involves properties and utility corridors in Investigation Areas 1 and 2. Under the proposed cleanup plan, EPA will remove soil contaminated with elevated levels of PCBs.

Explanation of evaluation criteria

EPA compares each cleanup option or alternative with these nine criteria established by federal law.

1. **Overall protection of human health and the environment.** Examines whether an option protects both human health and the environment. This standard can be met by reducing or removing pollution or by reducing exposure to it.

2. **Compliance with applicable or relevant and appropriate requirements (ARARs).** Ensures options comply with federal and state laws.

3. **Long-term effectiveness and permanence.** Evaluates how well an option will work over the long term, including how safely remaining contamination can be managed.

4. **Reduction of toxicity, mobility or volume through treatment.** Determines how well the option reduces the toxicity, movement and amount of pollution through the use of treatment technologies.

5. **Short-term effectiveness.** Compares how quickly an option can help the situation and how much risk exists while the option is under construction.

6. **Implementability.** Evaluates how feasible the option is and whether materials and services are available in the area.

7. **Cost.** Includes not only buildings, equipment, materials and labor but also the cost of maintaining the option for the life of the cleanup.

8. **State acceptance.** Determines whether the state environmental agency – in this case, the MDEQ – accepts the option. The EPA evaluates this criterion after receiving public comments.

9. **Community acceptance.** Considers the opinions of the public about the proposed cleanup plan. The EPA evaluates this criterion after a public hearing and comment period.

Table 1
Comparing Cleanup Alternatives with the Nine Superfund Evaluation Criteria

Evaluation Criteria	Alternative 1 No Action	Alternative 2***** Excavation and Off-Site Disposal of Contaminated Near-Surface Soil
Overall Protection of Human Health and the Environment	□	■
Compliance with ARARs	□	■
Long-Term Effectiveness and Permanence	□	■
Reduction of Toxicity, Mobility, or Volume Through Treatment	□	□
Short-Term Effectiveness	■	■
Implementability	□	■
Cost	$95,000	$7.8 million
State Acceptance	MDEQ has indicated its support for Alternative 2	
Community Acceptance	Will be evaluated after public comment period	
■ – Meets Criteria ◪ – Partially Meets Criteria □ – Does Not Meet Criteria		

*****EPA's Recommended Alternative

(text continued from Page 2)
EPA then organized another cleanup action to remove PCB-contaminated oil and sediment. EPA also conducted an emergency cleanup in 2011.

In an effort to stop or slow PCBs flowing into Lake St. Clair, EPA placed 17 small dams called "weirs" in the drain system plus sediment traps and absorbent snares.

During additional investigation activities in 2013, EPA discovered elevated levels of PCB contamination in public rights-of-way (also known as parkways) and residential yards near the corner of Harper Avenue and Lakeland Street. In 2014, EPA conducted a removal action at 10 properties to prevent human exposure to elevated levels of PCBs in near-surface soil.

In 2015-16, EPA removed and replaced two large manhole vaults and a section of pipe beneath Harper Avenue when these structures were found with elevated PCB levels.

Next steps

Before making a final decision on this cleanup plan for Investigation Areas 1 and 2, EPA will review comments received during the public comment period. The Agency may modify the proposed plan or select another option based on new information.

EPA encourages you to review and comment on the proposed cleanup plan. This fact sheet is a summary of the more detailed documents available on the Ten-Mile Drain website or the official repository at the St. Clair Shores Public Library *(see back page).*

EPA will respond to the comments in a document called a "responsiveness summary." This will be part of another document called the "record of decision" or ROD. The ROD will describe the final cleanup plan for Investigation Areas 1 and 2. EPA will announce the selected cleanup plan in the local newspaper, place a copy in the information repository and post it on the web.

See illustrations of the Ten-Mile Drain site on Page 7.

Use This Space to Write Your Comments

EPA is interested in your comments on the proposed cleanup plan for Investigation Areas 1 and 2 of the Ten-Mile Drain site. You may use the space below to write your comments and submit them at the May 10, 2018 public meeting, or detach, fold, stamp and mail. Comments must be postmarked by May 23, 2018. If you have any questions, please contact EPA Community Involvement Coordinator Heriberto León directly at 312-886-6163, or toll free at 800-621-8431, weekdays 9:30 a.m. – 5:30 p.m. Comments may also be sent to Mr. León via fax to 312-697-2754 or via email to leon.heriberto@epa.gov.

Name _____

Affiliation _____

Address _____

City _____ State _____ ZIP _____

Ten-Mile Drain Comment Sheet

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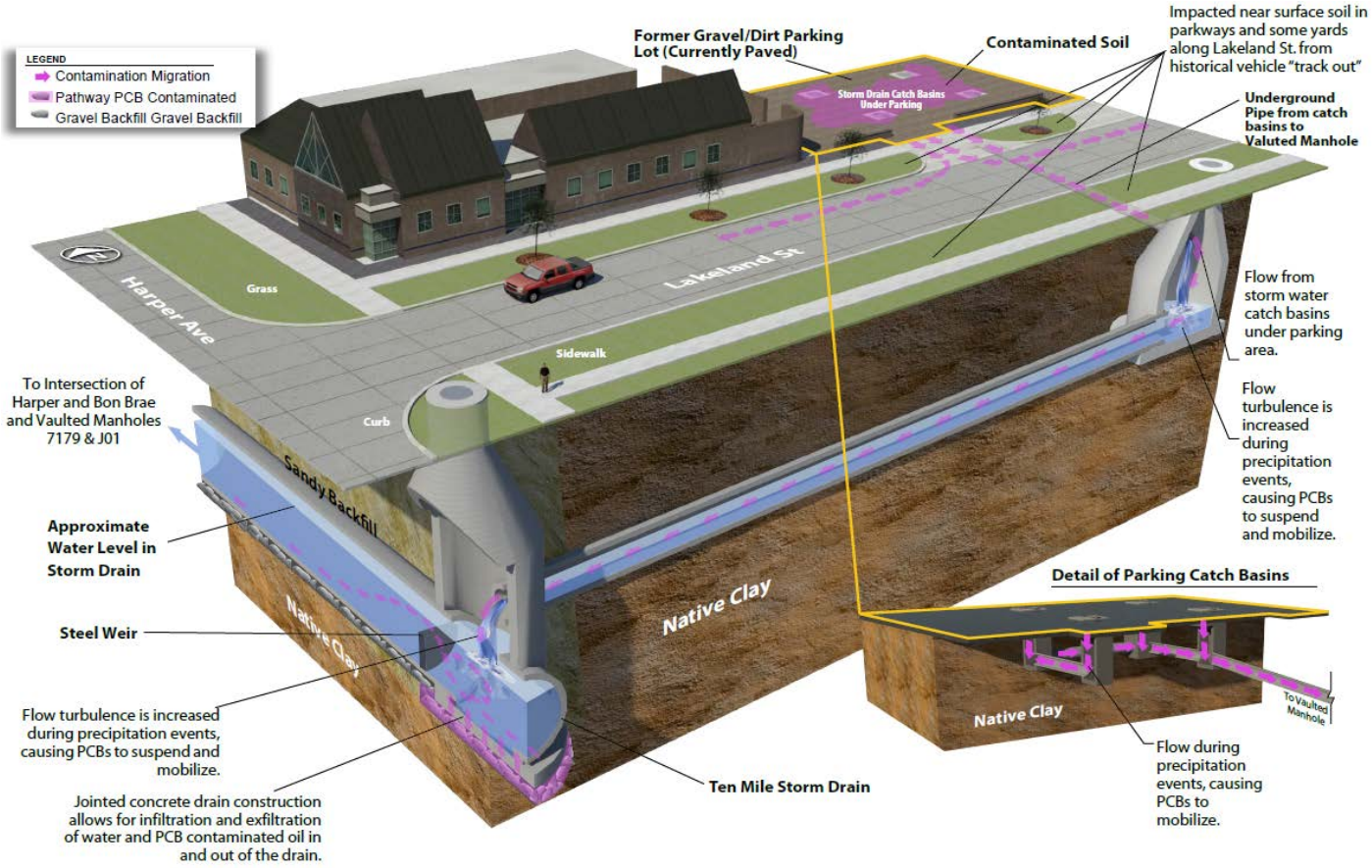
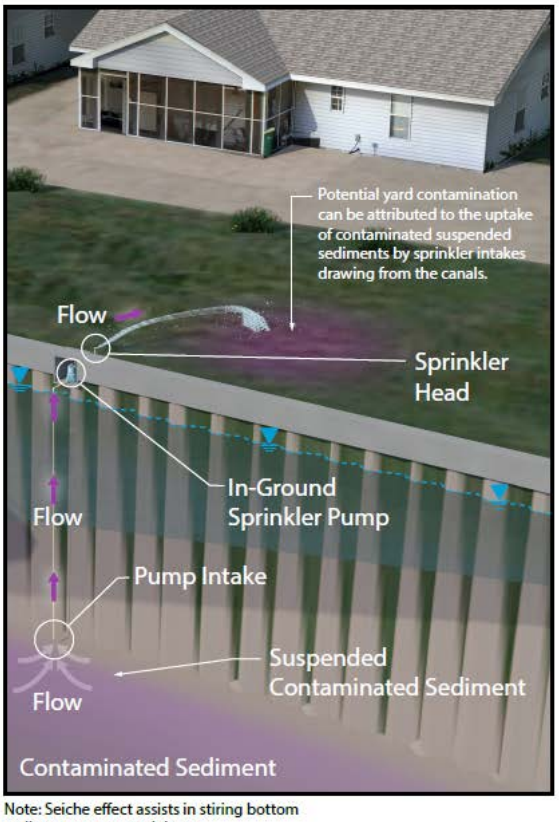
fold

Place
First
Class
Postage
Here

Heriberto León
Community Involvement Coordinator
U.S. Environmental Protection Agency
EPA Region 5
77 W. Jackson Blvd., SI-6J
Chicago, IL 60604-3590



These illustrations show the various routes the PCB contamination took to infiltrate the Ten-Mile Drain Superfund site. Investigators believe it all started many years ago when PCB-contaminated oil was dumped or used for dust control on a formerly unpaved parking lot seen in the top right-hand corner of the first illustration.



Potential yard contaminated by pumping PCB-contaminated sediment onto lawns.

EPA Proposes Cleanup Plan, Seeks Public Comments

Thursday, May 10

Open House
St. Clair Shores Public Library
22500 Eleven Mile Rd.
3 to 5:30 p.m.

Public Meeting
City Council Chambers
27600 Jefferson Ave.
6:30 p.m.

If you will need special accommodations at the meeting, contact:

Heriberto León
Community Involvement Coordinator
312-886-6163
leon.heriberto@epa.gov

For more information

You can read the proposed plan and other documents related to the Ten-Mile Drain site at www.epa.gov/superfund/ten-mile-drain or at the information repository:

St. Clair Shores Public Library
22500 Eleven Mile Road

If you have questions about the comment period or public meeting or want to learn more about the Ten-Mile Drain site, contact these team members:

(technical questions)
Colleen Moynihan
Remedial Project Manager
440-250-1702
moynihan.colleen@epa.gov

(general questions)
Heriberto León
Community Involvement Coordinator
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TEN-MILE DRAIN SITE: EPA Proposes Soil Cleanup Plan

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