



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
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EPA CONCLUSIONS REGARDING CITIZEN CONCERNS ON THE DMDF

Over the past months, members of the Great Lakes Bay community have approached EPA with a number of concerns about the U.S. Army Corps of Engineers Saginaw River dredging project and its dredged materials disposal facility (DMDF). Many of the issues are outside EPA's jurisdiction, but the agency worked with the Corps of Engineers to respond to community concerns.

Impact of dredging on drinking water supplies

Some area residents feared that contaminants suspended during dredging would move into Saginaw Bay and affect the municipal drinking water intakes there. EPA and the Corps have concluded that this would not occur. To help allay concerns, EPA sampled drinking water being drawn from Saginaw Bay when there was no dredging activity to establish background conditions. Samples were collected of both the water entering the municipal water treatment systems and of the treated water sent to the local communities. EPA analyzed the samples for a wide range of chemicals including dioxins, furans, volatile organics, semi-volatile organics, PCBs, pesticides and metals and found no contamination. The results from this background testing are available on EPA's Web site. EPA is planning another round of sampling in spring 2010 when the Corps is expected to resume dredging.

Impact of the DMDF

Public concerns about the DMDF focused on several potential problems: odors, effects on wildlife, standing water allowing mosquitoes to breed; and residential well contamination. EPA asked the Corps of Engineers to address these issues. After a series of meetings, the Corps developed a fact sheet that EPA believes is responsive to the concerns that were raised. Below are summaries of Corps answers to some of the questions addressed. The entire fact sheet is attached and is online at http://bit.ly/usace_dmdf.

- **Will the DMDF affect nearby residential wells?** No. The DMDF is constructed over natural clay soils and is surrounded by clay dikes that prevent contaminants from leaving the site. The Corps has installed a network of monitoring wells around the DMDF and will take immediate action if ground water is affected. EPA has also reviewed available information from wells in the general area of the residential wells and consulted with the Saginaw County Public Health Department. Based on this, EPA has determined that nearby residential wells are not used for drinking because the water quality in the area is brackish, of poor quality.

- **What will be the effect of the DMDF on wildlife?** The Corps is taking a number of steps to minimize the exposure of wildlife to dredged materials. For example, the Corps plans to dredge the most contaminated material first and dispose of it in the bottom of the DMDF. Then, it will be buried under less contaminated material.
- **Why is the area surrounding the DMDF sometimes flooded?** The area surrounding the DMDF is intentionally flooded periodically to provide a place for wildlife to live and reproduce. It is owned by Saginaw County and is being managed as a wetland mitigation project in cooperation with the State of Michigan.
- **Will there be odor problems related to the DMDF?** Odor is not generally an issue at DMDFs. However, the Corps will be monitoring for this and will take steps to correct any problems.

The Corps of Engineers fact sheet provides contact information for additional information regarding the DMDF. For questions about EPA's Superfund cleanup of the Tittabawassee River, Saginaw River & Bay, please contact EPA community involvement coordinator Don de Blasio (312-886-4360 or deblasio.don@epa.gov). There is also extensive information on EPA's Web site at epa.gov/region5/sites/dowchemical.

Upper Saginaw River DMDF Fact Sheet



The Corps of Engineers (USACE) constructed a Dredged Material Disposal Facility (DMDF) for placement of sediments from maintenance dredging of the Upper Saginaw River Federal Navigation Channel. The facility is located on 281 acres of farmland located within portions of Saginaw and Bay Counties, Michigan and is designed to hold 3.1 million cubic yards of material to be dredged over a minimum 20-year period. The facility site is underlain by clay and has clay perimeter dikes constructed to a height of approximately 11 feet. The proposed DMDF includes a weir to release effluent to the Saginaw River after meeting State of Michigan 401 water quality standards. Sediments to be placed in the DMDF contain low levels of contamination. The local sponsor for this project is Saginaw County. After the site is full it will be turned over to the county who will then be responsible for maintenance and monitoring.

FREQUENTLY ASKED QUESTIONS:

Will the DMDF affect nearby residential wells?

The DMDF will not affect nearby residential wells because the DMDF, constructed on a site with natural clay soils with dikes constructed of clay with a six foot deep compacted clay “key”, provides a barrier to keep contaminants from leaving the site. In order to verify that contaminants are not leaving the site, the Corps has installed 28 ground water monitoring wells around the DMDF, including in the residential area between the facility and the Saginaw River. These monitoring wells will be sampled to see if the DMDF is affecting ground water quality at the site. The Corps will take immediate action if it is determined ground water is being affected by the placement facility. Ground water monitoring will continue for several dredge cycles, and then the frequency will be re-evaluated in consultation with Michigan Department of Environmental Quality.

What will be the effect of the DMDF on wildlife?

Wildlife exposure will be limited at the site through several controls. Dredging will most likely take place in the summer and fall so the material in the site will be allowed to settle during the winter months. Ice conditions will limit exposure during the settling process. In the spring, the water in the site will be evaluated to determine if it meets water quality standards and released when it does. Through many years of experience, USACE has found that dredged material is very high in nutrient rich soil and seeds, which causes vegetation to grow quickly. After the first year, plant growth on exposed sediment will take place and further limit wildlife exposure to the site by covering and stabilizing the sediment.

USACE plans to dredge the most contaminated material first and dispose of it in the lower sections of the DMDF. Then less contaminated material will be dredged and placed on top of the more contaminated material. This way, the most contaminated sediment will be buried beneath less contaminated material. When practical, wildlife exposure will also be limited by using only one cell for sediment placement during dredging operations. Wildlife exposure to the sediment in the DMDF will not be significantly different from the exposure it is currently experiencing in the uncontrolled river sediment and the surrounding habitat.

Why is the area surrounding the DMDF sometimes flooded?

The area surrounding the DMDF is owned by Saginaw County and is being managed by the county as a wetland mitigation project in cooperation with the State of Michigan. The area is flooded periodically to provide a place for wildlife to live and reproduce. Saginaw County is responsive to concerns about long periods of standing water and is willing to adjust water levels as needed. For additional information concerning this issue please reach the County at the contact information listed below.

Will there be odor problems related to the DMDF?

Odor has generally not been an issue at USACE dredged material disposal facilities. The USACE will monitor the DMDF for odors and in the event an inspection finds a problem corrective measures would be taken. If residents detect a smell, it should be reported to the USACE's Chief of operations, at the contact information listed below, who is responsible for ensuring proper actions are taken to stop the problem. The first cycle of placement has occurred and no odor has been detected.

Who should I contact if I have concerns, questions or complaints about the DMDF?

USACE: **Wayne Schloop**, Chief, Operations and Maintenance Division
313-226-5013
wayne.schloop@usace.army.mil

MDEQ: **Brenda Brouillet**, MDEQ Saginaw Bay District Office multimedia coordinator
989-686-8025
BROUILLB@michigan.gov

Saginaw County: **Jim Koski**, Public Works Commissioner
989-790-5258
jkoski@saginawcounty.com