



EPA Says Previous Cleanup Actions Remain Effective

Waste Management of Michigan – Holland Lagoons Site

Holland, Michigan

June 2011

We want to hear from you

EPA invites your comments on the Agency's proposal to take no additional cleanup action at the Holland Lagoons. Your input is important because it helps EPA determine the best course of action. Here are ways your voice can be heard during the public comment period that runs from July 7, 2011 to midnight August 5, 2011:

- Fill out and mail the enclosed comment form by the deadline.
- Email comments to EPA Project Manager Denise Boone at boone.denise@epa.gov or fax Denise at 312-692-2912.
- Comment via the Internet at <http://epa.gov/region5/http://www.epa.gov/region5/cleanup/wmholland/pubcomment.html>
- If there is sufficient interest, EPA will host a public hearing on this proposed plan where you can submit oral and written comments. Contact Dave Novak at 312-886-7478 or 800-621-8431 ext 6-7478, 9:30 a.m. – 5:30 p.m., weekdays, by July 15, 2011 to request a hearing.

For technical questions about the Holland Lagoons cleanup, contact:

Denise Boone
EPA Remedial Project Manager
312-886-6217
boone.denise@epa.gov

Cindy Fairbanks
MDEQ
517-335-4111
fairbanksc@michigan.gov

The U.S. Environmental Protection Agency is proposing no further cleanup actions be taken at the Waste Management of Michigan – Holland Lagoons Superfund site in Ottawa County, Michigan. EPA believes that previous efforts to remove contaminated soil from the property are protecting human health and the environment. EPA concluded all sources of contamination originating at the site have been eliminated.

Underground water supplies (called “ground water” in environmental terms) at the property also were contaminated by a class of chemicals called volatile organic compounds or VOCs. The plume, or mass of contaminated ground water, of VOCs originated from the nearby Southwest Ottawa County Landfill (SWOCLF). SWOCLF and Holland Lagoons are two separate cleanup sites, but they are closely linked because landfill pollution is affecting the lagoons property.

Human exposure to pollutants from the SWOCLF was eliminated when the county passed an area-wide ordinance restricting the use of private drinking water wells and hooked up affected residents to municipal water service.

A legal restriction, called a covenant, barring the use of ground water, was placed on the Holland Lagoons property in 1997. The Michigan Department of Environmental Quality (MDEQ) has approved Waste Management of Michigan's (WMMI) rescinding of that covenant as part of this proposed cleanup plan because Ottawa County established an area-wide ground water use restriction as part of its cleanup of SWOCLF.

This fact sheet is a summary of official documents from the site including the “remedial investigation/remedial action plan and closure report” done for the Holland Lagoons site. The remedial investigation studies the nature and extent of the contamination at a site while the action plan outlines the cleanup steps to be taken.

EPA in consultation with the MDEQ will select a final cleanup plan after the agencies review statements received from the public during a public comment period. (*see left-hand box for ways you can participate in the decision-making process*).

EPA is issuing this proposed cleanup plan as part of its public participation responsibilities under federal 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.

¹ Section 117(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA known as the Superfund law) requires public participation in cleanup decisions. This fact sheet summarizes information available for public review at the Herrick District Library, and EPA's Chicago offices.

Background and history

The 80-acre Waste Management of Michigan – Holland Lagoons site is located at 2700 N. 168th Ave. between Riley and James streets near Holland, Michigan. The property is about a half-mile from Lake Michigan in Ottawa County. The area around the site is mixed residential, recreational and agricultural. The property is adjacent to the SWOCLF to the northeast. The site consists of the former lagoon area and the office/maintenance garage building.

The Holland Lagoons site was operated by Jacobusse's Refuse Service Co. from about 1945 until 1972 and by various successor companies including WMMI until 1980. The site accepted solid and liquid waste for disposal.

The location was placed on the National Priorities List in 1986. The NPL is a roster of the nation's hazardous waste sites eligible for cleanup under EPA's Superfund program.

Enforcement activities

Holland Lagoons is a state-lead enforcement site. The "Final Feasibility Study and Remedial Action Plan Closure Report for the Waste Management Holland Superfund Site" developed by WMMI and approved by MDEQ called for "No Further Action" to be executed at the site and for the placement of a restrictive covenant due mainly to the ground water contaminant plume coming from the SWOCLF. The "Final Feasibility Study and Remedial Action Plan Closure Report for the Waste Management Holland Superfund Site" was approved by MDEQ in October 2008. A declaration of restrictive covenant was filed with Ottawa County in 1997 before the determination that the plume was originating at the SWOCLF site.

Contamination

Liquid industrial waste was placed into waste disposal ponds or lagoons from 1967 to 1978 at the Holland Lagoon site. The lagoons were abandoned in 1978 and the sludges were excavated, mixed with lime to stabilize them and hauled to the SWOCLF for disposal.

WMMI later excavated discolored soil from a short connecting road to the landfill because it was suspected this material contained sludges that spilled from the waste-carrying trucks. The state in 1980 also located and removed intact drums containing technical grade chloral hydrate. In 1985, WMMI removed four underground storage tanks from the truck maintenance area. The remedial investigation was conducted by WMMI from 1994 to 1996. While that study was ongoing, WMMI

performed short-term cleanup work at the site by excavating the discolored soil on the landfill road and to remove general surface debris from the Holland Lagoons property.

WMMI also excavated the former municipal trash landfill area and disposed of the material off-site. All subsequent soil samples showed metal levels at or below the Michigan health standards. Benzene was also found in several on-site monitoring wells at excessive levels that would not meet residential standards.

In 2007, the soil and ground water was sampled below the building and no environmental issues were found.

The contaminated plume

There is a volatile organic compound contaminant plume beneath the Holland Lagoons site. However, the source of the plume is the SWOCLF, which is uphill and next door to the lagoons site. As part of a March 2005 legal agreement between the state and Ottawa County over the SWOCLF, the county passed an area-wide ground water use restriction in March 2009. MDEQ approved this in 2009 as part of the cleanup plan for the landfill site. This ground water restriction includes the Holland Lagoons site.

The following contaminants have been found at the SWOCLF: benzene, ethyl benzene, xylene, chlorobenzene, 1,1-dichloroethane, 1,2-dichloroethane, methylene chloride, diisopropyl ether, tetrahydrofuran and total iron. From 2005 to 2009, all area residents were connected to a municipal water supply and their wells were abandoned. The legal order also required Ottawa County to perform the following cleanup actions at the SWOCLF site:

- Construct a new landfill cap
- Install and operate a new extraction well system around the landfill
- Prevent discharges of ground water containing hazardous substances exceeding health standards to Lake Michigan.
- Apply reliable land and resource use restrictions (institutional controls) to restrict construction and use of wells within the ground water plume
- Properly abandon all existing residential wells once residents have been hooked into the municipal water supply
- Operate the downhill extraction system until it was demonstrated that pollution standards have been met.

Currently, the county has constructed the new landfill cap and completed the hook-up of residents to the municipal

water supply. The county continues to operate the extraction system and conduct annual ground water monitoring that also includes the Holland Lagoons site. The county also has installed and began operation of a new extraction well system.

Risks to people and the environment

Possible exposure to contaminated ground water has been eliminated because of the connections to municipal water. That means cancer risks from coming in contact with ground water are very low. Pollutant levels in the soil on the Holland Lagoons property also do not rise to the level of concern.

Explanation of evaluation criteria

EPA compares each cleanup option or alternative with these 9 criteria established by 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, state and local laws.
- 3. Short-term effectiveness** compares how quickly an option can help the situation and how much risk exists while the option is under construction.
- 4. Reduction of toxicity, mobility or volume through treatment** determines how well the option reduces the toxicity, movement and amount of pollution.
- 5. Long-term effectiveness and permanence** evaluates how well an option will work over the long-term, including how safely remaining contamination can be managed.
- 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 MDEQ) accepts the option. EPA evaluates this criterion after receiving public comments.
- 9. Community acceptance** considers the opinions of nearby residents and other stakeholders about the proposed cleanup plan. EPA evaluates this standard after the comment period.

Cleanup options

EPA considered two alternatives for managing and cleaning up contaminated soil and ground water on and near the Waste Management of Michigan – Holland Lagoons site. The Agency evaluated each option against nine criteria required by law (*see explanation of criteria in box left column*).

Alternative 1 – No Further Action (*this is EPA’s preferred alternative*): Includes rescinding the 1997 restrictive covenants: **Cost – \$0**

Alternative 2 – No Action with institutional controls: Includes placing a restrictive covenant prohibiting the installation of drinking water wells: **Cost – \$5,000**

No further action justification

After examining all the information presented above, EPA concluded the cleanup steps performed in the last decade under the supervision of Michigan authorities were sufficient to protect people and the environment from exposure to pollution.

Neither alternative will result in adverse environmental effects at the site because the options do not propose to conduct cleanup work. Additional institutional controls to prohibit the installation of wells are not necessary because of Ottawa County’s ground water use restriction already in place.

The recommended cleanup option is Alternative 1 – No Further Action. There is no remaining contamination associated with the Holland Lagoons site. Therefore, there is no need for any further cleanup or monitoring.

The SWOCLF plume underneath the Holland Lagoons site will have to be watched over the long term, but that is the responsibility of Ottawa County. Ownership of the remaining water wells on the lagoons property has been transferred to Ottawa County to use in the SWOCLF plume monitoring.

Next steps

EPA encourages the public to comment on this proposal for the Waste Management of Michigan – Holland Lagoons site. The comment period runs through midnight July 29, 2011. After reviewing all the comments, EPA will decide whether the no further action alternative is appropriate and will release a document called a “record of decision” or ROD. Announcement of the ROD will be

made in a local newspaper. The ROD will be available for public review in the administrative record for the site kept at the Herrick Library and the EPA Chicago offices (*see below*).

EPA will also answer all comments in a “responsiveness summary” attached to the ROD.

State acceptance

MDEQ had previously approved the “Final Feasibility Study and Remedial Action Plan Closure Report for the Waste Management Holland Superfund Site” that called for no further action with a restrictive covenant. MDEQ has approved rescinding the restrictive covenant because

of Ottawa County’s area-wide ground water use restrictions. Because of these previous actions, the state is likely to approve EPA’s preferred cleanup alternative of no further action, although a final decision will not be made until after public comments are reviewed.

Community participation

MDEQ noted there has been little community interest in the SWOCLF site in the past and does not expect a lot of attention in the Holland Lagoons area. The 30-day public comment period ends **August 5, 2011**, and a public meeting is not planned at this time; however, one will be scheduled if the public expresses adequate interest.

More information

Official documents about this site can be viewed at the Herrick District Library, 300 S. River Ave., Reference Section, Holland and EPA Chicago offices: EPA, Records Section, 7th Floor, 77 W. Jackson, Blvd., Chicago, IL

Website: <http://epa.gov/region5/cleanup/wmholland/>

Waste Management of Michigan – Holland Lagoons Site

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Denise Boone
EPA Remedial Project Manager
Superfund Division (SR-6J)
EPA Region 5
77 W. Jackson Blvd.
Chicago, IL 60604-3590