Health Department revises Public Health Advisory at Bay Harbor

Restricted access area reduced along Lake Michigan shore

(July 1, 2008) Public health officials issued a revised Public Health Advisory for Bay Harbor today, allowing access to two sections of shoreline that had been previously restricted because water along portions of the five-mile Bay Harbor shoreline was contaminated by highly caustic leachate. At the same time, officials caution that contact with contaminated water in the areas which remain restricted can cause severe burns to humans and animals.

The local health department and the Michigan Department of Community Health are partnering with other regulatory agencies to assure that human exposure to harmful contaminants is restricted by issuing Public Health Advisories and controlling access to sites of concern. The other agencies involved include U.S Environmental Protection Agency (EPA), Michigan Department of Environmental Quality, and Little Traverse Bay Band of Odawa Indians.

Access restrictions at Seep 1, a release area west of Bay Harbor Lake, has been reduced from 1,800 feet of restricted shoreline to 930 feet, according to Scott Kendzierski, Director of Environmental Health Services for the Health Department of Northwest Michigan. “We revised the Bay Harbor Public Health Advisory when spring monitoring data collected by CMS Energy and EPA confirmed that pH values continue to be less than 9.0 standard units, which is considered safe by the Michigan Department of Community Health and which meets Michigan’s surface water standard,” he said. Additionally, EPA has authorized the removal of access control fencing and signage along the previously impacted shoreline.

CMS Energy is responsible for environmental clean-up caused by cement kiln dust (CKD) piles at the former Penn-Dixie cement plant site. When water runs through CKD piles, it creates a highly caustic liquid known as “leachate.”

“It is encouraging that the interim control methods are having a positive impact on the amount of leachate collected and improved water quality along the shoreline,” said Kendzierski. CMS has installed elaborate collection systems along release areas, which are continually monitored and undergo ongoing modifications to enhance their ability to collect leachate before it can vent to Lake Michigan.
Near other seeps, leachate continues to discharge into Little Traverse Bay, posing a health threat. Public Health Advisories were issued for these areas based on the acute risk of exposure to high pH and its ability to damage body tissues, Kendzierski said. Exposure to leachate at pH values of nine to 11 can result in irritation to eyes, skin, and mucus membranes. Irreversible damage can be caused by exposure to leachate at pH values above 11.

Elevated pH values along Bay Harbor shorelines have been shown to extend out up to 90 feet out into Little Traverse Bay in some areas, but generally are diluted below 9.0 closer to shore. Despite improvements, some areas continue to show leachate pH levels ranging between 9.0 and 13.0.

Five distinct locations continue to discharge leachate and are restricted under on-going Public Health Advisories. East Park Seep, owned by Resort Township and located east of Bay Harbor, has been under a significant construction project to divert water and encapsulate CKD material left on site. Village Harbor Lake Seep, which lies adjacent to East Park, was discovered to have high pH leachate in a 400-foot trough at the bottom of the channel and discrete areas of high pH along the southwestern corner. Seep 1, a long stretch of shoreline west of Bay Harbor Lake, is now restricted to a reduced 930-foot section between Bay Harbor Lake and Circle Drive. Pine Court Seep is an area just north of private homes on Pine Court. West CKD Seep exists northwest of the clubhouse at the Bay Harbor golf course.

“These areas, though showing improvement, still exhibit pH levels that are considered by the Michigan Department of Community Health to be a health threat. People are warned to avoid contact with these waters and are advised to restrict swimming, diving, and other recreational activities to waters outside the advisory areas,” said Linda Dykema, PhD, Toxicology & Response Section Manager from the Michigan Department of Community Health.

“We are monitoring CMS and EPA testing results for each of the seeps very closely,” Kendzierski said. This is the second time since 2004 that the Health Department has lifted portions of ongoing Public Health Advisories. In 2006 the Health Department removed restriction for some 2,800 of shoreline.

“As we confirm the effectiveness of the collection systems and see continued improvement with respect to pH and human exposure issues, Public Health Advisories will be modified or removed accordingly. Our top priority is the health and safety of residents and visitors. We’ll continue to issue Health Advisories and communicate why they are in effect until the public health issues have been resolved at Bay Harbor,” he said.

The Health Department of Northwest Michigan is mandated by the Michigan Public Health Code to promote wellness, prevent disease, provide quality healthcare, address health problems of vulnerable populations, and protect the environment for the residents and visitors of Antrim, Charlevoix, Emmet, and Otsego counties. For more information about Bay Harbor Public Health Advisories, visit www.nwhealth.org.