

Kalamazoo River Oil Spill

Summary Report

July 29, 2010

Submitted By:

Chief Jeff Hadley

Kalamazoo Department of Public Safety

City of Kalamazoo Emergency Management Liaison

Executive Summary

On Monday, July 26, 2010, a 30-inch pipeline belonging to Enbridge Energy Partners LP burst in Marshall, Michigan, releasing hundreds of thousands of gallons of crude oil into Talmadge Creek, a waterway that feeds the Kalamazoo River. The spill has affected up to 25 miles of the Kalamazoo River. The spill site, located between Marshall and Battle Creek, includes marshlands, residential areas, farmland and businesses.

The Kalamazoo County Office of Emergency Management activated a response and is in the process of evaluating particular aspects and dynamics of the spill. The Kalamazoo County Board of Commissioners has declared a state of emergency and is coordinating with the United States Environmental Protection Agency (EPA). The City of Kalamazoo Departments of Public Safety and Public Services has been involved in the process and has offered resources as needed to the County of Kalamazoo. At this time we do not believe that the oil spill has moved any further than the Morrow Dam where booms are in place to catch any contaminants before they travel further down stream.

The City of Kalamazoo has identified three key priorities relative to the spill:

- The health and safety of our residents
- The protection of city assets and water systems
- The protection of the natural environment within the City of Kalamazoo

As such, we will proceed forward in an observant and reasonable manner in an effort to focus on the listed priorities and offer any assistance to other key partners. The following will provide a brief summary of actions taken by the Kalamazoo Department of Public Safety and the City of Kalamazoo Public Services Department.

Kalamazoo Department of Public Safety

On Tuesday, July 27, 2010, Public Safety was asked to attend a Emergency Management meeting in reference to the oil spill at 1030 hrs. Sgt. Habel was assigned to attend. Public Safety was given no directives and no assets were requested.

On Tuesday, July 27, 2010, PSO Kotecki who is also a Public Safety Haz-Mat Team Leader, prepared and checked Haz Mat equipment in the event Public Safety was asked to assist in the mitigation of the spill.

On Wednesday, July 28, 2010 at 1400 hrs Assistant Chief Brian Uridge contacted Under Sherriff Paul Matyas and offered Public Safety assistance. US Matyas stated that no help was needed at this time.

On Wednesday, July 28, 2010, at 2130 hrs Lieutenant Mike McCaw was assigned to attend an Emergency Management meeting in reference to the oil spill. Public Safety was given no directives and no assets were requested.

On Thursday, July 29, 2010, at 0900 Assistant Chief Brian Uridge attended the EPA Unified Command meeting in Marshall, Michigan. The meeting lasted approximately one hour. The following is a brief summary of pertinent information:

- 1) Due to elevated levels of certain chemicals in the air, they are looking at an evacuation due to long term exposures. There is a voluntary evacuation order in place now. Approximately 20 homes in this zone. No evacuation zone in Kalamazoo County at this point.
- 2) Next possible area for evacuation is Squaw Creek which includes 60 homes. No time frame on this.
- 3) There are concerns that clean up activities actually cause increased air problems.
- 4) We are told the leak has been stopped. However, the actual leak site is located on unstable ground.
- 5) Booms and boom skimmers are being added today along with pads.
- 6) Plans are in place for catch sites in Allegan and Plainwell.

- 7) Due to water level they are making plans for the environmental damage to various flood plains.
- 8) No one will say for sure if there is oil sheen beyond Morrow dam. No one can explain the discrepancy. Various officials have reported different sightings in the area.
- 9) KCSD will have a representative in the Marshall EOC.

On Thursday, July 29, 2010, at 1300 hrs, Assistant Chief Brian Uridge accompanied Sherriff Fuller in a helicopter and toured the Kalamazoo River from Mayor's Riverfront Park to Battle Creek. They observed multiple booms in the water at various points in the river. From the air, they observed no obvious signs the oil had passed the Morrow Dam.

An Operations Plan has been prepared in the event we have oil pass the Morrow Dam and are requested to activate Public Safety Haz Mat assets or other city resources.

Kalamazoo Department of Public Services

Public Services Response - July 29, 2010:

The oil spill to the Kalamazoo River has created potential impacts to human health, elements of the City's infrastructure and the environment. City infrastructure most impacted by the spill includes one of our base load stations, Water Pumping Station #39 (WPS #39) that is located approximately 200 feet from Morrow Lake between the lake and I-94. Anticipating that there would be a potential for pollutants from the oil spill to impact surface water quality in the lake, the Public Services Department proactively decided to take WPS #39 offline as of 11:00 p.m., Tuesday, July 27, 2010. **Neither the water quality nor quantity to our water system has been adversely impacted.** The quantity of drinking water normally pumped from WPS #39 is being supplemented by other well fields in our system.

The well located at WPS #39 is unique in that it is a horizontal collector well that was put into operation in 1986 and is comprised of a 9-foot ID by 12-foot OD steel-reinforced concrete caisson approximately 58.5 feet in overall length from the top slab to the top of the bottom plug. Three, 8-inch diameter laterals are projected horizontally from the caisson, ranging in length from 108 to 144 feet.

The well, therefore, is much shallower than the other drinking water production wells in our system. Furthermore, as the pump station normally operates, it

draws groundwater from the direction of the lake. So any contamination that might be present in the lake could potentially be drawn to the well.

The action taken has eliminated any possibility that contaminants from the oil spill could impact drinking water quality provided to the customers on the Kalamazoo Area Water System. As an added precaution, Public Services personnel will conduct additional sampling of the distribution system to provide assurance that water quality is maintained.

The Wastewater Treatment facility, located on the Kalamazoo River just north of Paterson at Harrison Street, has also taken some precautions as well. Plant personnel have discontinued using plant final effluent or non-potable water in the treatment process. The plant has the capability to use City water for this purpose and has already made the change.

From a utilities standpoint, the oil spill has caused us to make some modifications to our normal operating procedures. Fortunately, the redundancy and flexibility designed into the City's water and wastewater systems has allowed us to make these changes without sacrificing our level of services and our ability to supply clean, safe drinking water to all of its customers.

Public Services Response - July 30, 2010:

About 10:00am, Public Services staff reported that they canoed the Kalamazoo River starting at Merrill Park located in Comstock Township (located on River Street at Comstock Avenue) to the Wastewater Treatment facility and **observed no obvious signs of oil in that portion of the Kalamazoo River.**

Health and Safety Concerns

If the spill moves further down stream the possibility exists of exposure either through the strong smell associated with the oil or contact with the skin. The following was an advisory that the Kalamazoo County Health Department put on their website:

“Most individuals who come into contact with oil spills will have no health problems. Only individuals who have prolonged, direct contact with oil or strong oil vapors are at risk for illness. Cleanup crews not using proper protective equipment would be an example of a hazardous exposure.

For individuals who have been close to the oil spill, some may experience reactions. The primary reaction is a psychological aversion to the odor of chemicals released from the oil into the air. In addition the sight of large amounts of oil in the Kalamazoo River is itself very distressing. For a small number of individuals, fumes from the oil may cause headaches and

dizziness or breathing problems. Those at high risk for symptoms would be individuals who have prolonged exposure to high concentrations of fumes and those individuals with existing respiratory or nervous system illnesses.

Advisories are posted on contaminated sections of the Kalamazoo River. Follow the no contact advisories to avoid health risks.

Individuals who feel they may have health problems related to the oil spill should contact their regular health care provider for evaluation and management.”

At this time we unaware of any reported exposures or health concerns related to the spill.

Conclusion:

At this time we believe we have taken all reasonable steps and precautions relative to the Kalamazoo River Oil Spill. We will continue to monitor and communicate as pertinent information becomes available and other measures need to be taken. We are well positioned to respond to any threat against public health, our water systems and environment.