Letter Health Consultation

DSC MCLOUTH STEEL GIBRALTAR PLANT
GIBRALTAR, WAYNE COUNTY, MICHIGAN

Prepared by Michigan Department of Health and Human Services

JANUARY 15, 2016

Prepared under a Cooperative Agreement with the U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES Agency for Toxic Substances and Disease Registry Division of Community Health Investigations Atlanta, Georgia 30333

Health Consultation: A Note of Explanation

An ATSDR health consultation is a verbal or written response from ATSDR to a specific request for information about health risks related to a specific site, a chemical release, or the presence of hazardous material. In order to prevent or mitigate exposures, a consultation may lead to specific actions, such as restricting use of or replacing water supplies; intensifying environmental sampling; restricting site access; or removing the contaminated material.

In addition, consultations may recommend additional public health actions, such as conducting health surveillance activities to evaluate exposure or trends in adverse health outcomes; conducting biological indicators of exposure studies to assess exposure; and providing health education for health care providers and community members. This concludes the health consultation process for this site, unless additional information is obtained by ATSDR which, in the Agency's opinion, indicates a need to revise or append the conclusions previously issued.

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LETTER HEALTH CONSULTATION

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STATE OF MICHIGAN DEPARTMENT OF HEALTH AND HUMAN SERVICES LANSING

NICK LYON DIRECTOR

January 15, 2016

RICK SNYDER

GOVERNOR

Demaree Collier USEPA REGION 5 77 West Jackson Boulevard Mail Code: SR-6J Chicago, IL 60604-3507

Cindy S Fairbanks MDEQ RRD Superfund Constitution Hall 5th Floor South PO Box 30426 Lansing, Michigan 48909

Dear Ms. Collier and Ms. Fairbanks:

The Michigan Department of Health and Human Services (MDHHS) is funded by the Agency of Toxic Substances and Disease Registry (ATSDR) to assess sites of chemical contamination in Michigan, including sites added to the National Priorities List (NPL). ATSDR is required to evaluate all NPL sites, and this letter is part of that requirement. The DSC McLouth Steel Gibraltar Plant site was added to the NPL in late March 2015. The U.S. Environmental Protection Agency plans on conducting a Remedial Investigation/Feasibility Study (RI/FS), and this letter recommends some sampling activities to include during that study.

Although trespassers are not expected to be on-site because of the fencing, chemicals may have migrated off-site. People using the Frank and Poet Drain for fishing and other recreational activities could encounter site-related chemicals in the sediment, fish, or water. Along with on-site sampling and investigation, MDHHS recommends sampling off-site, both upgradient and downgradient, in and along the Frank and Poet Drain, as part of the RI/FS to determine if people may be exposed to site-related chemicals.

Background

The DSC McLouth Steel Gibraltar Plant site was added to the NPL on March 26, 2015. It is approximately located at 28000 West Jefferson Avenue in Gibraltar, Wayne County, Michigan and includes a leachate treatment lagoon system and three landfills (Countywide Landfill [CWLF], Landfill A or 1A, and Landfill B or 1B). The site is bordered by the West Jefferson Avenue to the east, Vreeland Road to the north, a railroad track to the west, and Gibraltar Road

to the south. The Frank and Poet Drain bisects the site and continues south. The Detroit River International Wildlife Refuge is to the east of Jefferson Avenue and to the south of Gibraltar Road. The southern portion of the refuge includes part of the Humbug Marsh. The Detroit River runs along a portion of the Detroit River International Wildlife Refuge. Brownstone Creek also runs along the southern side of CWLF. The Frank and Poet Drain is a connecting waterway to both Brownstone Creek and the Detroit River. See Figure 1.

The site includes approximately 350 acres. The former McLouth Steel Building, located next to the northeast corner of the site, was historically used primarily as a steel finishing operation. Landfills A and B mostly contain steel production waste, and the CWLF contains both steel production waste and demolition debris. Leachate from Landfills A and B were treated on-site through a lagoon system and discharge to the Frank and Poet Drain. However, seepage from Landfill B has flowed into a ditch and entered the Frank and Poet Drain in the past. ¹

The CWLF was not closed or capped appropriately and subsequently has released leachate into Brownstone Creek then Frank and Poet Drain.² The CWLF leachate contains a variety of chemicals, including mercury, 1,1 dichloroethane, 2-methylnaphthalene, carbon disulfide, naphthalene, 2,4-dimethylphenol, 2-methylphenol, 3,4-methylphenol, phenol, arsenic, nickel, lead, vanadium, antimony, selenium, strontium, copper, acenaphthene, fluorene, diethyl phthalate, phenanthrene, anthracene, 1,2,4- trimethylbenzene, cadmium, acenaphthylene, fluoranthene, pyrene, and bis(2ethylhexyl)phthalate.¹

The leachate treatment lagoons near Landfills A and B include four water retention basins and two ponds. One of the ponds is the Tandem Mill Pond, which was used to separate oil from process water. Lubricating, hydraulic, rolling, and slushing oils were used. Water from the Tandem Mill Pond was then pumped to the other treatment lagoons. The treatment system has not been maintained for optimal performance and discharges have released a variety of chemicals.² Elevated pH, ranging from 8.24 to 12.71, was identified in five leachate samples, with three having levels higher than 11.5.³

Discussion

The U.S. EPA plans to conduct a RI/FS for the site. The planning stages for the RI/FS will be occurring this fall. Characterization of site-related contaminants will be conducted at that time.

Currently, the site is fenced, and there is no evidence of trespassers. However, people could access the site by walking in from the Brownstone Creek or Frank and Poet Drain. The drain, creek, and river have fishing and other recreational uses.² The Frank and Poet Drain flows through a residential neighborhood to the Detroit River. Off-site areas of the creeks have not been assessed. These off-site areas may have contamination from multiple previous instances of seepage from Landfill B and the CWLF.

¹ U.S. Environmental Protection Agency Hazard Ranking System (HRS) Documentation Record DSC McLouth Steel Gibraltar Plant. Date prepared: September 2014, Date modified: March 2015.

² Michigan Department of Environmental Quality CERCLA Re-Assessment Report for McLouth Steel Corp Gibraltar Plt. U.S. EPA ID no.: MID005320254, Assistance #: V-00E00778, July 23, 2013.

³ U.S. Environmental Protection Agency TCLP Analytical Detections for McLouth Samples electronic data, report date April 23, 2015.

Conclusions

MDHHS concludes that there are no data to evaluate potential off-site exposure to site-related chemicals. Off-site data needs include collection of sediment and fish from the Brownstone Creek and Frank and Poet Drain.

Recommendations

MDHHS recommends that the EPA and MDEQ include off-site sampling in the RI/FS. Specifically, data on chemicals present in water, sediment, and fish from Brownstone Creek and Frank and Poet Drain are needed to evaluate potential human exposure during recreational activities.

MDHHS recommends that the site security, fencing, and any "No Trespassing" signage be maintained to prevent trespassing.

Public Health Action Plan

MDHHS will remain available to evaluate sampling plans, in particular ones for fish sampling, to ensure that the species collected and the analytes meet the data quality objectives of the Michigan Fish Consumption Advisory Program administered by MDHHS.

MDHHS will remain available to evaluate data generated from the RI/FS and other work.

MDHHS will evaluate the data in a Public Health Assessment or Health Consultation, as appropriate.

Please contact me (grayj@michigan.gov or 517-373-7672) if you have any questions.

Sincerely,

Jennifer Gray, Ph.D.

CC: Kory Groetsch, MS, Manager, Toxicology and Response Section, Michigan Department of Health and Human Services

Steven Check, United States Army Core of Engineers William Frederick, United States Army Core of Engineers David Kline, Michigan Department of Environmental Quality Robert Franks, Michigan Department of Environmental Quality Eric Alexander, Michigan Department of Environmental Quality Beth Place, Michigan Department of Environmental Quality

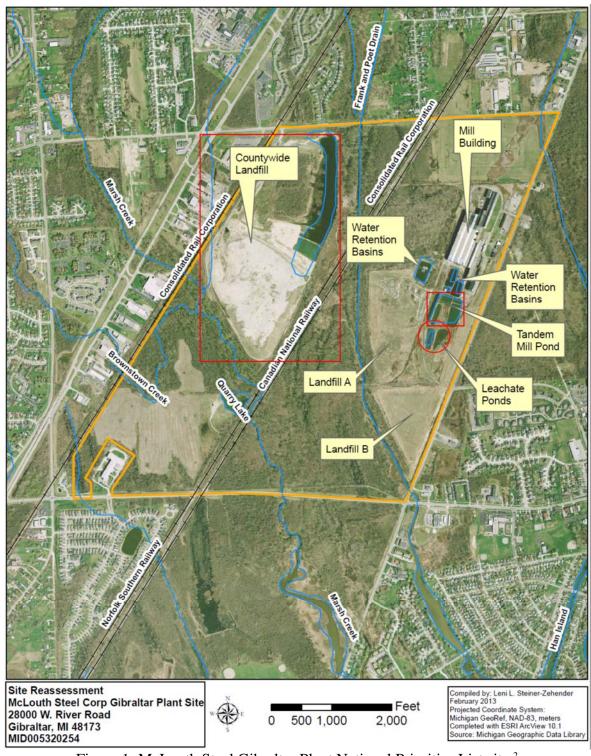


Figure 1: McLouth Steel Gibraltar Plant National Priorities List site.²

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Completing the survey should take less than 5 minutes of your time. If possible, please provide your responses within the next two weeks. All information that you provide will remain confidential.

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