

NATIONAL PRIORITIES LIST (NPL)

NPL Site

January 2018

MISSISSIPPI PHOSPHATES CORPORATION | Pascagoula, Mississippi
*Jackson County*** Site Location:**

The Mississippi Phosphates Corporation (MPC) site is located on the east side of Bayou Casotte in Bayou Casotte Industrial Park at 601 Industrial Road (Highway 611), in Pascagoula, Mississippi. The site occupies about 1,080 acres.

 Site History:

MPC is an inactive chemical and fertilizer production facility. From the late 1950s through 2014, MPC (known as Mississippi Chemical Corporation prior to late 2004) produced phosphate fertilizer. Plant processes involved combining phosphate rock, sulfur, ammonia and water. The facility operated two sulfuric acid plants, a phosphoric acid plant, a phosphate rock grinding plant and a process wastewater treatment plant. Phosphate fertilizer production generates phosphogypsum (calcium sulfate dehydrate, or “gypsum”), which is disposed of in piles known as “gypstacks.” Rainfall on the gypstacks, together with general plant operations, produced a large volume of highly-acidic wastewater requiring treatment. Plant operations also resulted in releases of contamination to soil and ground water and releases of large volumes of acidic wastewater into Bayou Casotte. MPC filed for bankruptcy in October 2014, and plant operations ceased at that time.

 Site Contamination/Contaminants:

Gypstack waste contains elevated levels of arsenic, cadmium, chromium, lead and zinc. Ground water beneath the plant is contaminated with arsenic, cadmium, lead, selenium and thallium at levels above EPA’s Safe Drinking Water Act Maximum Contaminant Levels (MCLs). Surface soil contains arsenic above screening values for site workers and elevated levels of cadmium, chromium, lead, nickel, vanadium, radium-226, radium-228 and associated decay products. Sediment is contaminated with arsenic, chromium and lead above screening values for the saltwater environment.

 Potential Impacts on Surrounding Community/Environment:

Contaminated acid-wastewater poses a threat to Bayou Casotte, which is used by the public for fishing and recreation. Contaminated ground water at the site may pose risks to Pascagoula residents (population approximately 22,000). Multiple city-owned ground water wells are located within 4 miles of the site.

 Response Activities (to date):

Wastewater is being actively managed to prevent releases to the bayou. A trust established by the Bankruptcy Settlement Agreement was used to pay for treatment and other environmental maintenance tasks until funds were depleted on February 10, 2017. The Mississippi Department of Environmental Quality (MDEQ) oversaw the work performed by the trust. On February 11, 2017, the EPA took over the management and funding of wastewater treatment operations. Approximately 2,000,000 gallons of wastewater are treated per day, at a cost of approximately \$750,000 per month.

 Need for NPL Listing:

The state of Mississippi referred the site to the EPA because of the need for assistance to address the potential threats to human health and the environment. Other federal and state cleanup programs were evaluated, but are not viable at this time. The EPA received a letter of support for placing this site on the NPL from the state.

[The description of the site (release) is based on information available at the time the site was evaluated with the HRS. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices]

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. [ATSDR ToxFAQs](https://www.atsdr.cdc.gov/toxfaqs/index.asp) can be found on the Internet at <https://www.atsdr.cdc.gov/toxfaqs/index.asp> or by telephone at 1-800-CDC-INFO or 1-800-232-4636.