



MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
HERCULES INCORPORATED SITE
HATTIESBURG, FORREST COUNTY, MISSISSIPPI

August 2012

CONTACT INFORMATION

For more information on investigation efforts, or should you have any questions or concerns, please feel free to phone, write, or email one of the following:

Melissa Collier, Community Engagement
MDEQ
Office of Community Engagement
(601) 961-5025
Melissa_Collier@deq.state.ms.us

Rick Sumrall, Environmental Engineer
MDEQ
Groundwater Remediation and Assessment Division
(601) 961-5731
Rick_Sumrall@deq.state.ms.us

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COMMUNITY UPDATE

Hercules Impoundment Basin Dewatering

In a continuing effort to manage the Hercules Incorporated site, MDEQ is overseeing the dewatering of the Impoundment Basin. The Hercules Impoundment Basin (IB) was used as part of the wastewater treatment system at the Hercules site. The IB contains about 4,700 cubic yards of sludge which will be mechanically dewatered.

This project is separate from the site investigations being required by the Environmental Protection Agency (EPA).

The Mississippi Department of Environmental Quality (MDEQ) required Hercules, Inc. to conduct a treatability study and an odor study to assist with determining methods for handling and removing the sludge in the IB. Sludges within the IB contain chemicals such as benzene and hydrogen sulfide. Benzene has exceeded the regulatory threshold for waste in some locations. The present results indicate the sludge can be divided into two parts liquids and solids. The liquid portion must meet regulatory permit limits before discharging from the site. The solids must be sampled and disposed in a permitted landfill.

Under MDEQ guidance, Hercules is being required to remove the liquid and solids from the impoundment basin. Odor monitoring will be conducted for the duration of sludge handling and dewatering activities. The odor monitoring plan has been developed based on the findings of the Impoundment Basin Odor Characterization Results Report submitted to MDEQ on March 2, 2012. The results of the odor characterization study indicated that there is a reasonable off-site odor potential for the proposed IB decommissioning activities. Based on the odor characterization, nearly all the odor is a result of hydrogen sulfide (H₂S). MDEQ has required Hercules to prepare and submit a Health and Safety Plan (HASP) and Odor Mitigation Plan. In an effort to minimize odors, all sludge dewatering work that potentially could lead to odors will be performed inside an enclosed building 500 feet inside the facilities fence line. Additionally, CC Eliminator, a special biodegradable anti-odor harmless compound that removes H₂S from the ambient air, will be employed by misting devices.

Of paramount importance is to protect the public from potentially harmful chemicals. In accordance with the State of Mississippi's regulations, the public should be protected from unreasonable odors in ambient air. Monitoring for benzene, odors, and hydrogen sulfide will be conducted when the sludge is being removed from the IB and dewatered. Monitors will be used both in the work area and areas downwind to protect the public from exposure. Hydrogen Sulfide will be monitored immediately downwind of the dewatering area on a continuous basis and will be programmed to record a measurement at a frequency of every 10 minutes. Because truck traffic will be required during the removal of the dewatered sludge

One stationary and continuous monitoring location will be installed immediately downwind of the dewatering building/area. To supplement this, a weather station including an anemometer will be installed to track the direction and speed of the wind. Extra caution will be employed when the wind is in the direction of the neighbors.

MDEQ is requiring the subcontractor to prove the effectiveness of the Odor Mitigation Plan on site **prior** to full-scale implementation of sludge removal and dewatering.



NEXT STEPS:

2012- Demonstration of odor mitigation method prior to full scale implementation by Hercules

2012- Upon satisfactory demonstration, notice of intent to begin removal activities will be given by MDEQ

2012- Sludge is removed and disposed in a permitted landfill in a permitted landfill

2012- Collect confirmatory samples from the impoundment basin sidewalls and bottom

2012- If samples meet regulatory criteria, the impoundment basin will be filled with clean soil

**MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF COMMUNITY ENGAGEMENT
P.O. BOX 2261
Jackson, MS 39225
ATTN: Melissa Collier**