

DEQ on alert in St. James: Wall holding back acidic water inside Mosaic waste pile might collapse

[BY DAVID J. MITCHELL | \[dmitchell@theadvocate.com\]\(mailto:dmitchell@theadvocate.com\)](#) Jan 26, 2019 - 4:45 pm

Environmental regulators are engaged in emergency mode in monitoring the stability of a large waste pile at a Mosaic Fertilizer plant in St. James Parish that is threatening to collapse along its northern face, state officials said Friday.

Looming more than 187 feet in the air, the towering porcelain white pile of waste called phosphogypsum north of Convent supports and encases giant ponds of acidic process water from the company's Uncle Sam fertilizer complex on the Mississippi River, state permit documents show.

In a Jan. 10 letter to state regulators, Mosaic issued a "Condition Critical Notice" advising that the north slope of one of the stacks is moving and that the company was taking immediate action.

Mosaic officials said in a statement late Friday that they have been pumping process water from the pond by the stack, which holds an estimated 500 million gallons of the acidic water. By pumping that water to other ponds on site, Mosaic officials hope to remove pressure and halt the movement in the shifting phosphogypsum slope.

Mosaic officials said they will be able to continue to operate the Mississippi River plant while the company pumps the water and explores a longer-term fix.

Greg Langley, spokesman for the state Department of Environmental Quality, said agency officials don't believe there is an imminent danger of a sudden

gypsum slope collapse but nevertheless considers the situation to be a serious one.

"There is a possibility that one of the slopes could give way," Langley said.

A sudden, catastrophic failure could release the acidic water into the surrounding Uncle Sam site and possibly into surrounding lands and waterways. Langley acknowledged that such a major failure, if it did happen, could send the process water spilling into Blind River and the fresh water swamps surrounding it.

The ponds inside the gypsum stacks aren't easily visible from the ground spread across acres of ground, Mosaic aerial maps and documents show. Mosaic maps show the pond in the stack that's in danger of collapsing is among the largest and sits atop the highest portion of the company gypsum stack in St. James.

Mosaic officials said a 3,000-foot-long stretch of the slope along the north face of that stack is shifting laterally about a half inch per day near La. 3125. The slow daily shifts have resulted in a few feet of movement already, state and company officials said.

The moving gypsum wall doesn't have any leaks, state regulators said, and company officials said no environmental impacts have occurred at this point.

St. James Parish President Timmy Roussel said Saturday that he and other parish officials have been informed that the company would begin staging equipment and dirt around the pile. Roussel said company officials want to be in position to halt the flow of process water in surrounding canals should it escape the pond.

Callie Neslund, a spokeswoman for Mosaic, said the process water has an acidic level that's about the equivalent of that found in lemon juice.

Regulatory filings also show the water contains strong concentrations of

phosphorous and fluoride.

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The process that is used to make phosphate fertilizer results in the acidic wastewater and lots of phosphogypsum, an unwanted byproduct with trace radioactivity.

In recent years, Mosaic has run into problems with the operations of its phosphogypsum piles in Florida and Louisiana and the acidic process water.

Since late 2015, Mosaic has been operating under a federal consent decree over its mishandling of both materials. The order applied to its operations in Florida and Louisiana, including the Uncle Sam plant, which has been undergoing upgrades and an expansion of its stacks due to that order.

In 2016, a huge sinkhole opened up under a phosphogypsum pile at Mosaic's New Wales plant in Mulberry, Florida, [swallowing](#) 215 million gallons of contaminated process water that had seeped down into the stack and underlying earth. The company spent \$84 million and two years to fill the hole with grout but drew fire because it didn't notify the public for 19 days about the possibility of aquifer contamination, the [Tampa Bay Times](#) reported.

Then, in December, the company told Florida regulators a 6-inch-wide, 100-foot-long crack had opened up in Mosaic's gypsum pile in Bartow. Company officials told the Tampa Bay Times then that the crack posed no threat to the environment, was on the surface of the pile only and was due to expected settling.

Company officials have been seeking approval from DEQ in Louisiana to expand the capacity of other ponds at the Uncle Sam waste pile and shift around water storage because extremely heavy rain in recent months has

been using up capacity.

But, in a statement, Mosaic called the slope's still not fully explained movement a "geological event."

Neslund, the Mosaic spokeswoman, said the slope's shifting is related to apparent movement of the underlying soil supporting the pile, not heavy rain.

She said the pile is a highly engineered and regulated structure. The company is installing sensors to measure and understand the shifting, she said, and has brought in geotechnical experts to figure out how to stop the movement.

DEQ and Mosaic notified surrounding landowners of the issues relating to the waste pile Friday.

Parish officials, the Governor's Office of Homeland Security and Emergency Preparedness and the U.S. Environmental Protection Agency have also been notified, DEQ and company officials said.

Neslund said the handful of homeowners near the plant are southwest of the gypsum pile, essentially on the opposite side of the stack from where the slope is moving.

Many EPA workers had been furloughed during the government shutdown, which ended Friday. Langley said EPA officials were expected at Mosaic early next week once they return to work.

Fertilizer companies like Mosaic mine phosphate rock and send it to processing plants where sulfuric acid is used to extract phosphorous for fertilizer used on corn, wheat and other crops.

Phosphogypsum, which is a solid waste, is difficult to reuse under current federal rules due to its radioactivity and can present a risk to ground and surface water if the material is not properly contained.