

In late August a sinkhole developed at Mosaic's New Wales phosphate facility pouring roughly 215m gallons of water, characterised as slightly radioactive, into the state's aquifer resulting in a remediation costing millions and causing a public relations black-eye for the producer.

Yet the more lasting consequences of the earth opening up at the plant's gypsum stacks and allowing chemical-containing wastewater from the manufacturing process to enter into the state's main sources of drinking water was the further igniting of the environmental push already underway against the phosphate mining and manufacturing industry in Florida.

At the heart of the current criticism is that Mosaic, which has been cast as the poster child for the ills of fertilizer production locally, is thought by some to have shown careless disregard to the risks to human health, safety and the environment.

Carrying that further is a sentiment by environmental groups that phosphate mining has left a terrible legacy as scarring of the natural landscape, manufacturing toxins and wastewater releases are damaging the surrounding ecosystem.

“Those who want to shut down the phosphate industry are doing a disservice to the local community by suggesting the drinking water supply is anything but safe,” said Mosaic. “We remain confident in our efforts to recover the impacted water and implement a remediation plan to fill the sinkhole.”

Fertilizer producer Mosaic -



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Mosaic has insisted it notified the requisite regulatory authorities when the sinkhole appeared but the public, echoed in lawsuit filed in September by nearby residents against the company, have taken issue that the producer had not informed the public until outed by the media.

At this time, Florida law does not require the environmental authorities to inform the public about a spill into the aquifer if it has not spread off-site.

Spanning between 40-150 feet in diameter and approximately 220 feet deep, the sinkhole was first discovered when Mosaic noticed their monitoring system indicated there was a decline in water levels from the retention pond where it has its phosphogypsum stack – gypstacks – which is where the waste byproduct from phosphate manufacturing is disposed.

With a slurry-like consistency the by-product is stacked in lined ponds and can be as high as 500 feet high and covers massive acreage across Florida, which supplies an estimated 70% of the phosphate rock utilised in fertilizers.

By some estimates there is the potential for about 40 years left of mining in Florida, and while there have been efforts to develop technology that would result in the elimination of gypstacks, most of that work is still in the testing phase and is thought to be a good distance from becoming commercially viable.

Mosaic points out that when it comes to its manufacturing residue it has followed the process as required by Florida regulations.

“Florida’s geology is something all businesses in the state need to deal with. Our industry is no different. But what is different is before we can construct a gypstack, our plans must undergo detailed review and approval by state and local authorities each and every time, and that process includes an evaluation of the proposed gypstack’s footprint,” said Mosaic.

“**It does not make sense that the public is not immediately notified when pollution incidents occur. I am demanding any business, county or city government responsible for a pollution incident to immediately tell the public. That is common sense and our residents deserve that.**”

Florida Governor Rick Scott –

In late October, the state signed an order requiring Mosaic to plug the sinkhole and make an effort to recover all the contaminated water. It was also told to monitor for any further impacts and if discovered, to immediately mitigate. It also stipulated the produce could face fines for violation of the order.

While a thorough and systematic testing of water resources with 1,397 well water tests as of 28 November have revealed no signs of contamination from Mosaic’s sinkhole, it has clearly raised public concerns and led to more questions of when there will be an accident that seriously harms the public.

At a news conference earlier in November activists were vocal in their appeal for more accountability from Mosaic and responsiveness from regulatory authorities, with a

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push for the US Army Corps of Engineers to undertake a study reviewing the impacts fertilizer manufacturing and the associated gypsum stacks have on the aquifer.

Environmental organisation The Sierra Club further said it is asking agencies to place a moratorium on issuing new mining permits until such study is completed, and highlighted that this is not the first sinkhole at the site and Mosaic has had two phosphoric acid spills at other Florida facilities since the sinkhole.

In 1994, a sinkhole opened under a stack at the same facility sight, but it was not owned at the time by Mosaic.

“Today fertilizer plants produce 30 million tons of phosphogypsum waste every year. There are 25 gypsum stacks in the state, each a disaster waiting to happen,” said Beverly Griffiths, Sierra Club of Florida chair of the phosphate committee.

Responding to the growing outcry, Mosaic said the water quality data still demonstrates no offsite impacts and that the suggestion that the industry should be shuttered was short sighted on the behalf of activists.

“Those who want to shut down the phosphate industry are doing a disservice to the local community by suggesting the drinking water supply is anything but safe,” said Mosaic. “We remain confident in our efforts to recover the impacted water and implement a remediation plan to fill the sinkhole.”

“Shutting down one of Florida’s most important industries would also put 4,000 of their neighbours out of work and jeopardize our work to help farmers throughout America grow the food we need.”

While it has received criticism for coming after the fact, Florida Governor Rick Scott did respond to the sinkhole outcry by ordering the state's environmental agency to enact an emergency rule requiring public notification by businesses and local government within 24 hours of a pollution incident.

This public notification is to occur whether contamination remained on-site or not and the governor is proposing a bill that would put the requirement into law and carry significant penalty for violations. That measure is expected to be considered in the upcoming legislative session.

"It does not make sense that the public is not immediately notified when pollution incidents occur," said Scott. "I am demanding any business, county or city government responsible for a pollution incident to immediately tell the public. That is common sense and our residents deserve that."

While the sinkhole did not stop production at New Wales, Mosaic has been diligently working to fix the sinkhole, whose repairs could have a price as high as \$60m, and will be sealing the hole with concrete-like grout and then pump the released water out of the aquifer.

As of late November the work pad has advanced atop of the gypstack enough to allow the operation of heavy equipment needed as four stations are being built on the work pad to install instruments that will monitor grouting activities.

The producer said more than 20 instruments will be placed surrounding the sinkhole at various depths to allow engineers to monitor and direct drilling and grouting activities.

During the installation, Mosaic will continue to expand the work pad and has stated the recovery well for the water extraction has continued to operate as intended.

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