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### Position Statement on Piney Point Submitted by the Manatee Democratic Environmental Caucus

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#### **Background:**

Piney Point is a small mountain of waste phosphogypsum called a "gypstack," with earthwork lakes on top for retaining, settling, and recycling the acidic process fluids used in fertilizer manufacturing. The current spill is just the latest in a string of disasters and near disasters associated with Florida's phosphate fertilizer industry. The barely controlled discharge of more than 200 million gallons has, by some estimates, inserted 150 metric tons of nitrogen, the biolimiting nutrient responsible for algal blooms, red tide and resultant fish kills, into the Tampa Bay ecosystem.

The cell (lake) that was pumped into Tampa Bay was the "good" cell—it had been nearly empty until FDEP acquired the Piney Point property in 2001 and subsequent operations by HRK, the owner, had refilled the cell with material somewhat more benign than typical process fluids found in the cells atop other gypstacks, where fertilizer plants are still humming away. Time will tell how bad this spill may have been, as the Tampa Bay ecosystem assimilates the nutrients, fueling explosive blooms of potentially harmful algae that consume oxygen and result in fish kills, as well as destruction of benthic and other biologic estuarine communities. Not only should nutrients be sampled and analyzed, but their ratios should be reported to assist with adequate review of data. If algal assays are not being performed on the discharge, why not? It's important to be able to predict the full extent of potential impacts that may occur in the way of algal blooms, fish kills, etc. Qualified biologists, water quality scientists and others <u>must</u> be included in all discussions and decisions relating to the Piney Point site to ensure multidisciplinary issues are adequately addressed, especially the potential impacts on the State's waters.

The other two cells atop Piney Point are still filled with lethal process fluids. Remarkably, after 15 years of rainfall and motley attempts by FDEP to accelerate evaporation, the fluids remain as hazardous as they were the day they were pumped into the cells, even though the fertilizer plant was dismantled and scrapped for over a decade. Over the years, the FDEP has been presented with any number of researched and modeled opportunities to alleviate this situation, including recycling metered and blended nutrient-rich waters to irrigate *Paspalum*, a grass also known as bahia grass, that would be made available to FDOT and others for roadside stabilization. Unfortunately, it often takes a crisis to bring needed results or to revisit viable alternative solutions.

There are 23 other gypstacks, most of them larger than Piney Point. They are scattered throughout the "Bone Valley," so named because of thick deposits of fossilized, phosphate-rich marine life. Hillsborough, Polk and Hardee counties have been and are being extensively mined more than 50 percent of the counties' land area), and Manatee has been moderately mined (less than 10 percent). Several other stacks have experienced catastrophes, especially the two stacks at New Wales, which have breached and developed two sinkholes since 1994. The latest, in 2016, also made international news, but since the spill went straight underground into the Floridan Aquifer—a major drinking water source—the news died down soon after the sinkhole was filled and closed. Out of sight, out of mind.

Mosaic is back to pumping process fluids into the south stack at New Wales and asking FDEP for a permit to expand the footprint of that stack by more than 100 acres. All permit applications must be made available for review and comment, along with all correspondence and requests for additional information, in accordance with Chapter 120, FS. Too often the permitting process escapes needed peer review and it is incumbent upon the concerned public to keep a finger on the pulse through their presence as potential intervenors.

#### **Democratic Environmental Caucus Positions and Action Items:**

- 1. We oppose deep-well injection of hazardous waste from phosphogypsum stack-top cells without advanced wastewater treatment (AWT) to remove heavy metals, make pH adjustments, remove radionuclides and mitigate for nutrient pollution. A thorough review of all deep-well injection failures in Florida and elsewhere is recommended in an attempt to fully evaluate the risks associated with this procedure. Perhaps some of the earlier studies and modeling efforts for recycling of wastewater should be revisited before pursuing this out-of-site, out-of-mind option. Background information on the Piney Point site dates back to its management under Royster Phosphates, with permitting and WQBEL's that may also provide useful data.
- 2. We urge the FDEP to require the phosphate industry, bankrupt or not, to begin AWT on stack fluids immediately. We do not accept procrastination and postponement as viable preventive measures. An RFP may be advertised for viable alternative treatment options, including recycling as irrigation water, for example. The FDEP has historically sole-sourced work to select contractors when alternative inputs may be more cost effective and technically preferable.
- 3. The flanks of gypstacks are comprised of fine radioactive dust, which can travel airborne over long distances and become lodged in the lungs of people and animals. All gypstacks must be adequately covered and sealed in stages—first, immediate coverage with liner material, and eventually with 6' of reinforced concrete or an impervious material that would mitigate for fugitive dust emissions.

- 4. We oppose radioactive roads without adequate measures that inhibit escape of radioactivity. The phosphate industry's recent lobbying fell on receptive ears in the previous administration, and we believe that any movement to use radioactive phosphogypsum for roadbeds or any other application must be halted, unless it can be demonstrated that the material is fully and permanently encapsulated.
- 5. Any further production of phosphogypsum must be halted immediately, at least until long-term solutions are found that will permanently protect our health and our environment. This would require legislative action, with repeal of current rules and regulations.
- 6. We appeal to the Biden Administration and to the U.S. Congress to repeal the Bevill Amendment, which established so-called "special wastes" under subtitle C of the Resource Conservation and Recovery Act (RCRA). Enacted at the behest of fossil fuel and mining interests, Bevill waves a magic wand over materials like phosphogypsum, which is by any definition hazardous, and in some cases overtly toxic, and declares them harmless. All relevant physical (e.g., pH, conductivity), chemical and biological (e.g., bioassay, diversity) tests included as FAC standards must be included to ensure both short- and long-term maintenance of water quality.
- 7. We oppose permitting and activating the Desoto mine and Desoto West, also known as the Keyes Tract. We must be present when Mosaic returns to Desoto County with its full mining plans and rezoning requests, to lend support to the Board of County Commissioners in making the difficult decisions to deny all rezoning and permits, knowing that Mosaic will return again and again, and will sue this tiny, impoverished county. We must also be present in the Commission chambers of Manatee County when the Keyes Tract applications are submitted and decided. Manatee will be a much heavier lift because it has already permitted mines and is subject to the anti-home-rule Bert Harris Act. The public must be notified of all permitting activities as a formal intervenor pursuant to Chapter 120, FS. It is the only way to be formally (legally) engaged.
- 8. FDEP is far too soft on the phosphate industry, and many of the disasters that have occurred—and will continue to occur—can be laid at FDEP's feet. By the terms of the National Environmental Policy Act (NEPA) and the Clean Water Act, states may enact environmental quality standards that are *more* stringent than federal standards. We must lean hard on FDEP to adopt water quality standards that are more stringent than they are today. Importantly, they must include rigorous and meaningful monitoring requirements with contingencies for compliance with all permitted activities.

- 9. FDEP allows the phosphate industry to dilute the toxic constituents of its waste stream until they meet the state's water quality standards—requiring tens of millions of gallons per day at no cost—and then permits release into surface waters, many of which, such as the Alafia and Peace Rivers, are also drinking water sources. To ensure adequate compliance with standards and criteria, additional bioassay and other applicable parameter testing of effluent is required, as has been done historically. There are standards on the books that must be included, such as the biodiversity index, in monitoring programs to ensure compliance with meeting reasonable assurance criteria.
- 10. We urge the state to require the phosphate industry to use AWT reclaimed water for its industrial or reuse purposes, where permittable, and to preserve aquifer waters for human consumption. Potable water supplies in Southwest Florida are being stressed due to explosive development and inadequate concurrency reviews by planners regarding a finite source of potable water.
- 11. We believe that the phosphate industry and FDEP are sufficiently compromised that the water quality monitoring done in and around phosphate sites, whether extraordinary or routine, be performed by independent third parties, whether academic or NGO, funded by federal dollars and individual donations. In any event, independent sampling and analyses should be allowed, split samples should be taken and sent to separate laboratories for analyses, round robin protocol should be required for these analyses and a detailed quality assurance plan (QAP) must be made available for review and comment *before* permits are issued.

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