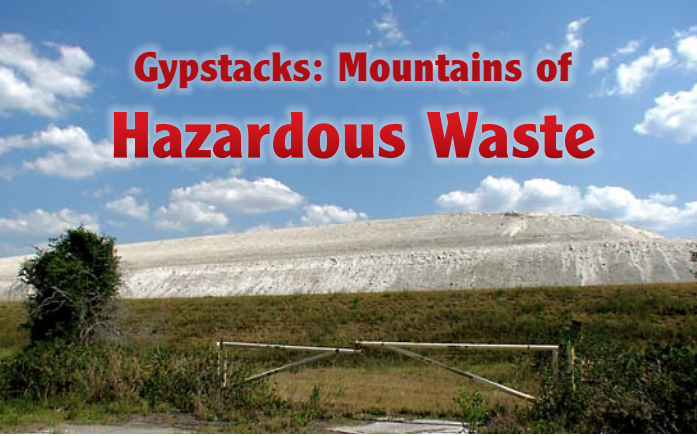


Gypstacks: Mountains of Hazardous Waste



Gypstack, Fort Meade, FL, by Harvey Henkelman.

PHOSPHOGYPSUM is the hazardous waste byproduct created when phosphate ore is processed into fertilizer. It is stored in mountain-like structures called gypstacks that can reach 200 feet or more. These radioactive stacks, which re-circulate acidic process water, will be here *forever*. Florida will have to deal with them long after the mining companies are gone. There are already 25 gypstacks in Florida. They can sometimes overflow and spill their toxic waste after strong storms or prolonged rain events. The State of Florida spent over \$200 million to clean up an abandoned gypstack at Piney Point in north Manatee County. An estimated 30 million tons of waste phosphogypsum will continue to be produced every year.



State law says that the public is entitled to reasonable assurances that our environment, water supplies, and economy will not be negatively affected by phosphate mining. The current rules do not provide that assurance.

What can citizens do?

- ◆ Share this information with your friends, neighbors and community leaders.
- ◆ When new mine permits are being considered in your community, attend public meetings and speak out. Write a letter to the editor of your local paper.
- ◆ Tell USEPA you support its activities, including aerial surveys for radioactivity and a strong federal standard for water quality nutrient control. Email: Pritchett.DavidA@epamail.epa.gov
- ◆ Learn more at www.thephosphaterisk.com
- ◆ Watch the movie “The Phosphate Dilemma” at www.protectpeaceriver.org
- ◆ Provide comments to the Army Corps of Engineers as they prepare an Area-wide Environmental Impact Statement (AEIS) which will consider the cumulative impacts of mining, as well as more protective alternatives. Specific mine projects being considered are CF Industries’ South Pasture Extension, Mosaic Fertilizer, LLC’s DeSoto Mine, Ona Mine and Wingate East Mine. For the status of the AEIS and how to participate in the process, go to: www.phosphateaeis.org



For more information,

contact a conservation organization that is working to protect the Peace and Myakka River Watersheds.

Sierra Club Florida

<http://florida.sierraclub.org>

ManaSota-88

www.manasota88.org

People for Protecting Peace River (3PR)

www.protectpeaceriver.org

Protect Our Watersheds (POW)

www.protectourwatersheds.us

What Floridians Should Know About Phosphate Strip Mining



TELEVISION ADS AND BILLBOARDS portray phosphate strip mining as a wholesome industry that creates jobs and feeds the world. A closer look reveals that phosphate mining is extremely harmful to our wetlands, water quality and quantity, and wildlife habitat. Phosphate mining companies own or have mineral rights to over 400,000 acres, mostly in the Peace and Myakka River watersheds, with mining projects planned for over 62,000 acres.

Approximately 340,000 acres have already been mined in Florida yet fewer than 70,000 acres have been reclaimed and released. Moonscapes of un-reclaimed land are left for years in spoil piles and deep pits, the destruction often hidden from view by tall trees or berms surrounding the mine sites.



Watch this 4-minute film that shows the real face of phosphate mining:
www.youtube.com/watch?v=spzER-HYeKw



Phosphate Mining = Massive Water Use

Mosaic, a large phosphate mining company, claims to recycle 95% of their water, giving the impression that their usage is low. But to meet their operational needs they also withdraw massive amounts of ground water daily to supplement their recycled water. **Mosaic has requested a 20-year permit to withdraw up to a yearly average of 69 million gallons of groundwater per day!** This astronomical water use robs wetlands, streams, and rivers of water needed to keep them healthy.

Phosphate mining's massive groundwater withdrawals and destructive strip mining practices are leading causes of flow loss in the Peace River. Documented by the United States Geological Survey, this loss of water flow is linked to the formation of sinkholes as well as the loss of springs and seeps in the upper river including Kissengen Spring. Reduction of fresh water flows can cause serious downstream impacts to Charlotte Harbor and its estuary—changing the salinity and damaging fish habitat. The counties where mining occurs are in the Water Use Caution Area. **Florida residents are frequently subject to water use restrictions unlike the phosphate companies which may continue withdrawing groundwater as usual.**



Mining and Radiation

Mined lands have elevated levels of radioactivity from radium-226 and other radionuclides including radon. Radon (222) is a radioactive gas whose negative health effects are well documented. Even so, mining companies have opposed USEPA surveys which would help the public understand the health risks from this radioactivity. **It has been reported that USEPA estimates that cleanup of former mine sites could cost \$11 billion.**



Huge Profits for Mining Companies—Not the Public

A study prepared for the Charlotte Harbor National Estuary Program revealed that the Peace River watershed has an economic value of nearly \$7 billion in 2010 dollars. That value depends on clean, plentiful water and healthy wildlife habitat. More than one million people are employed in Florida's fishing, tourism, recreation and agriculture industries while phosphate mining has fewer than 10,000 jobs statewide with only 3,300 in the Peace River watershed. The economic contributions from outdoor recreation, fisheries and agriculture are much greater than those of phosphate mining. Recent studies in Hardee, DeSoto and Manatee counties show that short-term mining jobs will displace long-term agricultural and ranch jobs. Displaced farm or ranch workers are not likely to be hired by mining companies because they don't have the needed skills or because experienced workers follow the jobs as mining moves south.

Mosaic reaps enormous profits while counties where mining occurs receive minimal financial benefits compared to the value of the phosphate ore that is extracted. **What is the real benefit for our citizens and our state when over 60% of Mosaic's product is shipped to countries outside of the U.S. and Canada and our watersheds are left in ruin?**



Impacts on Communities

Mining is often incompatible with adjacent land uses. Nearby landowners are not compensated for the disruptions to their quality of life but must put up with land clearing and years of dust, truck traffic, the constant drone of pumps and bright lights as huge draglines operate night and day. Decades can go by before mined land is reclaimed and released.



Reclamation: Not Good Enough, Delayed for Decades

“Reclamation” does not mean that land is restored to its pre-mining condition. Subsurface ground-water systems that are destroyed by mining cannot be reclaimed. Mining companies reclaim land by filling in mine pits, re-contouring and re-vegetating a site—a process that can take 25 years to complete. Some habitat types such as forested wetlands and scrub are especially difficult to reclaim and take decades to mature.

Mining companies are routinely allowed to change approved reclamation plans by being granted a “variance.” Variances can be given for different reasons. One example is not having enough sand for reclama-

tion because so much phosphate ore and clay is removed by mining. A variance can be granted that delays reclamation for 10 years! Another type of variance allows deep pit lakes that do not contain enough oxygen for fish to live in them.

Waste clay or slime ponds, known as clay settling areas (CSAs), hold water which decreases aquifer recharge and flows to streams. **Even after reclamation, CSAs will permanently cover over 40% of an average mine site and have limited uses. There is also a history of spills from CSA dam breaks that pollute waterways and kill fish.**