



Submitted via email and certified mail

February 13, 2024

The Honorable Michael Regan, Administrator
Environmental Protection Agency
1200 Pennsylvania Ave. NW
Washington, DC 20460
michael.regan@epa.gov

Re: Notice of Intent to Sue for Failure to Perform a Nondiscretionary Duty under the Resource Conservation and Recovery Act

Dear Administrator Regan,

This letter provides official notice that the Center for Biological Diversity, People for Protecting Peace River, Bayou City Waterkeeper, Healthy Gulf, Manasota-88, Our Santa Fe River, Portneuf Resource Council, RISE St. James, Sierra Club, Waterkeeper Alliance, and Waterkeepers Florida (*hereinafter* “Conservation Organizations”) intend to file a lawsuit against you and the United States Environmental Protection Agency (EPA) for failure to perform a nondiscretionary duty under the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6901, *et seq.*¹ As further specified below, you have violated your mandatory duty under 42 U.S.C. § 6974(a) to “take action” within a “reasonable time” on the Conservation Organizations’ petition requesting the EPA promulgate regulations to address the threat of phosphogypsum waste and process wastewater from phosphoric acid production.² Should this violation remain unresolved after 60 days, the Conservation Organizations intend to seek relief compelling EPA’s compliance and recovering attorneys’ fees and other costs of litigation.

I. INTRODUCTION

Phosphogypsum is radioactive, corrosive, toxic waste that threatens surface waters, drinking waters, clean air, communities, and the environment throughout the United States. The fertilizer industry generates phosphogypsum when it chemically digests phosphate rock with sulfuric acid to create phosphoric acid for fertilizer.³ This method of producing phosphoric acid also creates process wastewater, which is stored with the phosphogypsum in dangerous man-made waste

¹ Notice is provided 42 U.S.C. §§ 6972(c) to the extent deemed necessary by a court.

² People for Protecting Peace River et al., [Petition for Rulemaking Pursuant to Section 7004\(A\) of the Resource Conservation and Recovery Act; Section 21 of the Toxic Substances Control Act; and Section 553 of the Administrative Procedure Act Concerning the Regulation of Phosphogypsum and Process Wastewater from Phosphoric Acid Production \(2021\)](https://www.biologicaldiversity.org/campaigns/phosphate_mining/pdfs/2021_02_08-PG-petition-to-EPA-TSCA-RCRA.pdf) (“Petition for Rulemaking”), https://www.biologicaldiversity.org/campaigns/phosphate_mining/pdfs/2021_02_08-PG-petition-to-EPA-TSCA-RCRA.pdf.

³ EPA, Report to Congress on Special Wastes from Mineral Processing (1990) at 12-1.

mountains known as phosphogypsum stacks.⁴ Phosphogypsum and its leachate contain several toxic constituents that the EPA has determined present a hazard to human health and the environment, including arsenic, lead, nickel, cadmium, fluoride, chromium, silver, antimony, copper, mercury, thallium, and radionuclides.⁵ Process wastewater contains all of these toxic constituents as well as selenium, with toxicity at or above characteristic regulatory levels for selenium, cadmium, and chromium.⁶ Process wastewater is also acidic and corrosive with pH values typically lower than 2 and sometimes as low as 0.5.⁷

By its own account, the fertilizer industry generates 46 million tons of harmful and radioactive phosphogypsum waste annually, significantly more than the combined total of all regulated hazardous waste produced by all generators in the nation.⁸ More than 1 billion tons of phosphogypsum are already stored across 25 stacks systems in Florida alone.⁹ A consolidated domestic phosphate fertilizer industry — just three powerful fertilizer companies¹⁰ — continues to dump its massive waste burden onto the public, stacking it up in mountainous open-air piles hundreds of feet tall and hundreds of acres wide.¹¹

More than three decades ago, just prior to exempting phosphogypsum and process wastewater from hazardous waste regulation, the EPA correctly predicted that the industry would expand, increasing its hazard and contaminant release potential.¹² At the time, the EPA believed it would need to address phosphogypsum's anticipated harms via emergency authorities through site-specific abatement actions and through development of an alternative federal regulatory regime under the Toxic Substances Control Act (TSCA).¹³ The agency also promised it would revisit its Bevill regulatory determination for phosphogypsum and process wastewater if it found during its TSCA regulatory investigation that RCRA could better handle the problem.¹⁴ But EPA has done

⁴ EPA, [TENORM: Fertilizer and Fertilizer Production Wastes](https://www.epa.gov/radiation/tenorm-fertilizer-and-fertilizer-production-wastes), <https://www.epa.gov/radiation/tenorm-fertilizer-and-fertilizer-production-wastes> (Last Accessed July 23, 2023).

⁵ Report to Congress, *supra* note 3 at 12-7 —12-8. Chromium often tests above toxicity characteristic regulatory levels

⁶ *Id.* at 12-4.

⁷ *Id.* at 12-58. Battery acid has a pH of around 1.

⁸ [The Fertilizer Institute, Revised Request for Approval of Additional Uses of Phosphogypsum Pursuant to 40 C.F.R. § 61.206 \(2020\) at 6](https://www.epa.gov/sites/default/files/2020-10/documents/4-7-2020_pg_petition.pdf), https://www.epa.gov/sites/default/files/2020-10/documents/4-7-2020_pg_petition.pdf, compare with EPA, National Biennial RCRA Hazardous Waste Report (2021), <https://rcrapublic.epa.gov/rcrainfoweb/action/modules/br/summary/summarysearch>.

⁹ Francisco Macías et al., *Environmental Assessment and Management of Phosphogypsum According to European and United States of America Regulations*, 17 *Procedia Earth & Planetary Sci.* 666, 667 (2017).

¹⁰ Mike Nash, Argus Media, Just how consolidated is fertilizer supply globally?, <https://www.argusmedia.com/-/media/Files/white-papers/2020/2020-12-argus-wp-just-how-consolidated-is-fertilizer-supply-globally.ashx> (2020); The Fertilizer Institute, Appendix 7 to Petition for Additional Use of Phosphogypsum, https://www.epa.gov/sites/default/files/2020-10/documents/appendix_7_-_location_of_pg_stacks_0.pdf (Feb. 2020).

¹¹ EPA, TENORM: Fertilizer and Fertilizer Production Wastes, *supra* note 4; EPA, Major Fertilizer Producer Mosaic Fertilizer, LLC to Ensure Proper Handling, Storage and Disposal of 60 Billion Pounds of Hazardous Waste / Manufacturer committing close to \$2 billion in funding to address environmental impacts (Oct. 1, 2015), <https://www.epa.gov/enforcement/major-fertilizer-producer-mosaic-fertilizer-llc-ensure-proper-handling-storage-and>

¹² EPA, Report to Congress on Special Wastes from Mineral Processing at 12-59 (1990).

¹³ *Final Regulatory Determination for Special Wastes From Mineral Processing (Mining Waste Exclusion)*, 56 Fed. Reg. 27300 (June 13, 1991) [hereinafter 1991 Bevill Determination].

¹⁴ *Id.* at 27316; EPA, Risks Posed by Bevill Wastes at 7 (1997), <https://archive.epa.gov/epawaste/hazard/web/pdf/risks.pdf>

none of that. Instead, for the last 30 years while the industry has continued to grow its dangerous waste inventory as predicted, EPA has intervened only to designate one additional phosphogypsum stack facility as a Superfund site,¹⁵ and to negotiate settlements with individual fertilizer companies for the widespread illegal mixing of non-exempt hazardous waste with Bevill-exempt phosphogypsum and process wastewater in phosphogypsum stacks.¹⁶

Conservation Organizations have members that live in communities within the shadows of these toxic mountains. On February 8, 2021 they reminded EPA of its broken promises and petitioned the agency to initiate a rulemaking under RCRA to revisit its 1991 Bevill regulatory determination as to phosphogypsum and process wastewater and list them as hazardous wastes.¹⁷ Nearly three years later — enough time to see new liner tears in phosphogypsum stacks,¹⁸ phosphogypsum stack geologic instability,¹⁹ at least one new potential sinkhole,²⁰ and the near-collapse of the Piney Point NGS-S impoundment²¹ — EPA continues to delay even responding to the petition for rulemaking. And while EPA delays and the phosphogypsum stacks lurch beyond their containment capacity, the fertilizer industry continues to pursue dangerous *additional* – not alternative – disposal methods into roadways and aquifers.²² In light of the broken promises and ongoing, expanding risks to human health and the environment, these delays are egregious and unreasonable.

II. ENTITIES GIVING NOTICE

¹⁵ EPA has designated four phosphogypsum stacks as Superfund sites in total, with two listed on NPL prior to EPA's 1991 Bevill determination: Bunker Hill in northern Idaho, the Couer d' Alene Reservation in the Couer d EPA, [Bunker Hill Mining and Metallurgical Complex, Smelterville, ID, https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.docdata&id=1000195](https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.docdata&id=1000195) (Accessed Dec. 7, 2023). Eastern Michaud Flats in Pocatello, Idaho, listed in 1990; EPA, [Eastern Michaud Flats Contamination, Pocatello, ID, https://cumulis.epa.gov/superepad/SiteProfiles/index.cfm?fuseaction=second.cleanup&id=1001308#bkground](https://cumulis.epa.gov/superepad/SiteProfiles/index.cfm?fuseaction=second.cleanup&id=1001308#bkground) (Accessed Dec. 7, 2023); EPA, [Mississippi Phosphates Corporation, Pascagoula, MS, https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0403508](https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0403508) (Accessed Dec. 7, 2023); EPA, [Depue/ New Jersey Zinc/ Mobil Chemical Corp., Depue, IL, https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.cleanup&id=0500396](https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.cleanup&id=0500396) (Accessed Dec. 7, 2023).

¹⁶ Department of Justice, [Major Fertilizer Producer Mosaic Fertilizer, LLC to Ensure Proper Handling, Storage and Disposal of 60 Billion Pounds of Hazardous Waste](#) (Oct. 1, 2015); Department of Justice, [Justice Department Announces Settlement with J.R. Simplot to Improve Hazardous Waste Management and Reduce Emissions at Idaho Facility](#) (July 11, 2023); Department of Justice, [Settlement with PCS Nitrogen Fertilizer to Require Treatment of More Than a Billion Pounds of Hazardous Waste and Closure of Huge Phosphogypsum Waste Stacks and Impoundments](#) (July 14, 2022).

¹⁷ Petition for Rulemaking, *supra* note 2.

¹⁸ [Notices of Critical Condition, FDEP Facility ID MMR_FL0036421, Mosaic New Wales](#); [Notices of Critical Condition, FDEP Facility ID MMR_FL000761 \(Mosaic Riverview\)](#);

¹⁹ Center for Biological Diversity, Letter to EPA RE: EPA Must Take Immediate Action to Prevent an Imminent Environmental Emergency at the Country's Largest Phosphogypsum Stack, (July 21, 2022).

²⁰ FDEP, Wastewater Compliance Inspection Report, Mosaic New Wales Concentrates Plant (Oct. 20, 2023).

²¹ [Bryan Pietsch and Marie Fazio, New York Times, Imminent Collapse of Wastewater Reservoir in Florida Forces Evacuations \(April 3, 2021\)](#).

²² [Mosaic Fertilizer, LLC, Revised Request from The Mosaic Company for Use of Phosphogypsum in Road Construction Pilot \(August 2023\)](#); [The Fertilizer Institute, Revised Request for Approval of Additional Uses of Phosphogypsum Pursuant to 40 C.F.R. §61.206](#); [Mosaic Fertilizer, LLC, Initial Application to Construct Class I Injection Well System Hillsborough County \(October 17, 2023\)](#).

People for Protecting Peace River seeks to educate the public and fight for the extraordinary natural and agricultural lands and waterways of interior Florida. The goal of 3PR is to stop the damage by phosphate strip mining and fertilizer production.

Bayou City Waterkeeper protects the waters and people across the greater Houston region through bold legal action, community science, and creative, grassroots policy to further justice, health, and safety for our region.

Center for Biological Diversity is a national, nonprofit conservation organization with more than 1.7 million members and online activists dedicated to the protection of endangered species and the habitat and climate they need to survive. We believe that the welfare of human beings is deeply linked to nature — to the existence in our world of a vast diversity of wild animals and plants. Because diversity has intrinsic value, and because its loss impoverishes society, we work to secure a future for all species, great and small, hovering on the brink of extinction. We do so through science, law and creative media, with a focus on protecting the lands, waters and climate that species need to survive.

Healthy Gulf is a nonprofit organization dedicated to protecting and restoring the natural resources of the Gulf of Mexico. Since 1994, Healthy Gulf's mission has been to collaborate with and serve communities who love the Gulf of Mexico by providing the research, communications, and coalition-building tools needed to reverse the long pattern of over-exploitation of the Gulf's natural resources.

ManaSota-88 is a not-for-profit public health, conservation, and environmental protection organization. The corporate purposes of ManaSota-88 include the protection and preservation of water quality and wildlife habitat in Florida.

Our Santa Fe River's mission is to protect the aquifer, springs, and rivers within the watershed of the Santa Fe River.

The Portneuf Resource Council (PRC) is committed to helping build sustainable environmental communities that balance economic growth with the health of people and stewardship of their environment. Our focus is in the Portneuf River Valley, the city of Pocatello and its surrounding communities. We are actively engaged in Climate Solutions and Clean Water initiatives.

The mission of RISE St. James is to fight petrochemical industry in St. James Parish and throughout the River Parishes that continue to poison the air we breathe, water we drink and soil we need. To reclaim our community, to create a brighter future to inspire others. To rise above the broken promises fostered by misinformation and corporate greed and to preserve the rich culture and tradition of our parish, state and region.

The Sierra Club is America's largest and most influential grassroots environmental organization, with more than 3.8 million members and supporters. In addition to protecting every person's right to get outdoors and access the healing power of nature, the Sierra Club works to promote

clean energy, safeguard the health of our communities, protect wildlife, and preserve our remaining wild places through grassroots activism, public education, lobbying, and legal action.

Waterkeeper® Alliance is a global movement uniting more than 300 community-based Waterkeeper Organizations and Affiliates around the world, focusing citizen action on issues that affect our waterways, from pollution to climate change. The Waterkeeper movement patrols and protects over 2.75 million square miles of rivers, lakes, and coastlines in the Americas, Europe, Australia, Asia, and Africa.

Waterkeepers Florida is a regional entity composed of all 15 Waterkeeper organizations working in the State of Florida to protect and restore our water resources across over 45,000 square miles of watershed, which is home to over 15 million Floridians. Part scientist, teacher, and legal advocate, Waterkeepers combine firsthand knowledge of their waterways with an unwavering commitment to the rights of their communities and to the rule of law. Whether on the water, in a classroom, or in a courtroom, Waterkeepers speak for the waters they defend – with the backing of their local community and the collective strength of Waterkeeper Alliance.

III. REGULATORY FRAMEWORK

Congress enacted RCRA in 1976 to address the growing problem of municipal and industrial waste and to “promote the protection of health and the environment and to conserve valuable material and energy resources.”²³ Subtitle C of RCRA establishes the “cradle to grave” system, meaning that hazardous waste is managed safely from the time it is created to its disposal. “Hazardous wastes” are defined as any discarded material:

which because of its quantity, concentration characteristics, or physical, chemical or infectious characteristics may—

(A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or

(B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.²⁴

In 1980, Congress amended RCRA via the Bevill Amendment, which exempted “special wastes,” like mining and mineral processing wastes, from regulation under Subtitle C and required the EPA to complete a full assessment of each exempted waste and to submit a full report to Congress on the findings.²⁵

In 1990, the EPA completed its study of phosphogypsum and submitted it to Congress.²⁶ The report identified widespread groundwater contamination near phosphogypsum stacks, contaminated off-site wells and drinking water sources, and an increased risk for air pathway

²³ 42 U.S.C. § 6902(a).

²⁴ 42 U.S.C. § 6903(5).

²⁵ Solid Waste Disposal Act Amendments of 1980, Public Laws 96-482, 42 U.S.C. § 6921.

²⁶ Report to Congress, *supra* note 3 at 27.

cancer for those living near stacks.²⁷ The report also identified an increased risk of containment release potential for phosphogypsum and phosphoric acid production process wastewater (process wastewater) if the phosphate mining industry were to continue to expand without Subtitle C regulation.²⁸

Despite the risks outlined in this report, the EPA published its Final Regulatory Determination for Special Wastes From Mineral Processing Wastes (Mining Waste Exclusion) in 1991 and stated that regulation under Subtitle C of RCRA would be “inappropriate” for processing wastes, citing to the costs the industry would incur if required to adhere to Subtitle C.²⁹ Instead, the EPA announced its intention to regulate these wastes under the Toxic Substances Control Act (TSCA).³⁰ The 1991 Bevill Determination also stated that if more information became available indicating that RCRA is best suited to regulate phosphogypsum and process wastewater, EPA would revisit its 1991 Bevill Determination.³¹ However, to date, the EPA has not promulgated any rules under the TSCA for phosphogypsum or process wastewater nor has it revisited its 1991 Bevill Determination.

Under section 6974(a) of RCRA, “any person may petition the Administrator for the promulgation, amendment, or repeal of any regulation under this chapter.”³² The Administrator is compelled to answer “within a reasonable time following receipt of such petition.”³³ Additionally, under the Administrative Procedure Act (APA), agencies are required to conclude a matter presented to it in “reasonable time.”³⁴ The APA also authorizes reviewing courts to compel agency action “unlawfully withheld or unreasonably delayed.”³⁵

Under section 7002 of RCRA, any person may commence a civil action “against the Administrator where there is alleged a failure to perform any act or duty under this chapter which is not discretionary with the Administrator.”³⁶ Responding to the 2021 Petition is a nondiscretionary task that the Administrator must undertake within a “reasonable time.”³⁷

IV. EPA’S RCRA & APA VIOLATIONS

EPA has unreasonably delayed responding to Organizations’ February 8, 2021, petition for a rulemaking that would reverse EPA’s 1991 Bevill Determination for phosphogypsum and process wastewater, and list the wastes as hazardous wastes subject to Subtitle C.³⁸

²⁷ *Id.*

²⁸ *Id.*

²⁹ 1991 Bevill Determination, *supra* at 12.

³⁰ *Id.*

³¹ *Id.* at 17.

³² 42 U.S.C. § 6974(a).

³³ *Id.*

³⁴ 5 U.S.C. § 555(b).

³⁵ 5 U.S.C. § 706(1).

³⁶ 42 U.S.C. § 6972(a)(2).

³⁷ 42 U.S.C. § 6974(a).

³⁸ Risks Posed by Bevill Wastes, *supra* note 13 at 7; Petition for Rulemaking, *supra* note 2.

In the three years since the EPA received the 2021 Petition, several phosphogypsum spills and releases posing substantial hazards to human health and the environment have occurred. This includes a devastating intentional release of millions of gallons of process water mixed with dredge waste and rainwater into Tampa Bay to avoid the catastrophic collapse of the Piney Point Phosphate Processing Facility (Piney Point)³⁹ and ongoing seismic and sinkhole activity at the New Wales phosphogypsum stack.⁴⁰

An agency's delay is unreasonable where the delay is not guided by a "rule of reason," the delay is contrary to the statutory scheme, there are significant risks to human health and welfare, the agency does not have higher competing priorities, or where the nature of the interests prejudiced by delay are significant.⁴¹ A showing of bad faith is not required to demonstrate a delay has been unreasonable.⁴²

The EPA's delay in responding to the 2021 petition is unreasonable as it is not guided by the rule of reason, it frustrates the purpose of RCRA, threatens significant harm to human health and the environment, and prejudices impacted communities.

A. The EPA's delay is not guided by the rule of reason.

The most important factor in determining whether an agency's delay is unreasonable is whether the delay falls outside the rule of reason; here, EPA's delay in taking action on the RCRA provisions of the 2021 Petition is not guided by the rule of reason.⁴³ Where a statute indicates "the speed with which it expects the agency to proceed...that statutory scheme may supply content for this rule of reason."⁴⁴ The rule of reason is also influenced by the complexity of the task, the significance and permanence of the outcome, and the resources that are available to the agency.⁴⁵ RCRA explains EPA must reply to petitions for rulemaking "within a reasonable time following receipt of such petition."⁴⁶

In measuring whether the agency's delay is consistent with the rule of reason, the relevant inquiry is: *When did the agency first come under a duty to act?*⁴⁷ Here, the EPA has been under a duty to act on the regulation of phosphogypsum since it first recognized phosphogypsum and process wastewater have unaddressed environmental and health concerns more than 30 years

³⁹ Florida Department of Environmental Protection, Emergency Final Order No. 21-0323 (March 29, 2021), <https://floridadep.gov/sites/default/files/21-0323.pdf>; Governor Ron DeSantis, Executive Order 21-82 (April 3, 2021) https://www.flgov.com/wp-content/uploads/orders/2021/EO_21-82.pdf

⁴⁰ Ardaman & Associates, Letter to Santino Provenzano Re: Confirmed Critical Condition at Area of Interest 4, New Wales Plant South Gypsum Stack (SGS), Phase II West-North Area, Mosaic Fertilizer, LLC, New Wales Facility, Polk County, Florida (December 14, 2023).

⁴¹ *Telecomms. Research and Action Ctr. v. Fed. Comm'n's Research and Action Ctr.*, 750 F.2d 70, 80 (D.C. Cir. 1984); *Cnty. Voice v. EPA*, 878 F.3d 779, 784-86 (9th Cir. 2017).

⁴² *Id.*

⁴³ *Id.*

⁴⁴ *In re United Mine Workers of Am. Int'l Union*, 190 F.3d 545, 549 (D.C. Cir. 1999) (quoting *TRAC*, 750 F.2d at 80).

⁴⁵ *Sarlak v. Pompeo*, No. 20-35, 2020 WL 3082018, at *6 (D.D.C. Jun. 10, 2020); *Mashpee Wampanoag Tribal Council, Inc. v. Norton*, 336 F.3d 1094, 1102 (D.C. Cir. 2003).

⁴⁶ 42 U.S.C. § 6974(a).

⁴⁷ *Biodiversity Legal Found. v. Norton*, 285 F. Supp. 2d 1 (D.D.C. 2003) (finding that the U.S. Fish and Wildlife Service was under a duty to act years before a petition was received for revising critical habitat).

ago. In 1991, when EPA determined all of the mining and mineral processing special wastes would retain their temporary Bevill exemption from Subtitle C regulation, the EPA instead planned to develop a RCRA Subtitle D solid waste program with waste-specific tailored minimum federal guidelines to address remaining risks posed by 18 of the 20 exempt mining and mineral processing special wastes.⁴⁸ However, EPA specifically identified the other two special wastes — phosphogypsum and process wastewater — as having more unaddressed risks requiring more regulation than the rest.⁴⁹ In acknowledging that a tailored Subtitle D program for phosphogypsum and process wastewater would be insufficient and that there was a “need for action to address the risks,”⁵⁰ EPA announced a two-pronged approach: first, EPA would address site-specific phosphogypsum and process wastewater groundwater contamination problems by relying on authorities under RCRA §7003 or the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) §106; and second, instead of a tailored Subtitle D program, EPA would develop a regulatory program under the TSCA for phosphogypsum and process wastewater.⁵¹ However, the EPA later determined in 1997 that regulation for phosphogypsum and process wastewater would not be possible under TSCA, acknowledging that it must revisit the Bevill determination to evaluate if the exclusion remained appropriate.⁵²

Over 30 years have elapsed since the initial Bevill determination, the EPA has never revisited the Bevill determination, and the phosphate industry has continued to expand. Even assuming the EPA did not come under a duty 30 years ago when it determined that additional regulation was necessary, it certainly came under a duty to act when it received the 2021 Petition. This three-year delay does not fall under a rule of reason,⁵³ particularly in light of ongoing critical phosphogypsum stack failures since 2021.

The 2021 Petition detailed major releases of phosphogypsum to surface and groundwater that occurred since the EPA last comprehensively reviewed phosphogypsum in 1990.⁵⁴ Shortly after EPA received the 2021 Petition, Florida officials ordered the discharge of hundreds of millions of gallons of water from the top of the Piney Point phosphogypsum stack into Tampa Bay to avert a catastrophic collapse that threatened to send a wall of phosphogypsum and wastewater onto the nearby community.⁵⁵ Florida Governor Ron DeSantis declared a state of emergency for the

⁴⁸ Special Wastes From Mineral Processing (Mining Waste Exclusion), Final Regulatory Determination and Final Rule, 56 Fed. Reg. 27300 (June 13, 1991).

⁴⁹ *Id.*

⁵⁰ *Id.* at 27316

⁵¹ *Id.*

⁵² Risks Posed by Bevill Wastes, *supra* note 14.

⁵³ *Pub. Citizen Health Research Group v. Aucter*, 702 F.2d 1150, 1154 (D.C. Cir. 1983)(holding that a three year delay responding to a petition for the regulation of ethylene oxide was unlawful); *Pub. Citizen Health Research Group v. Comm’r, Food & Drug Admin.*, 740 F.2d 21, 35 (D.C. Cir. 1984) (finding that a two year delay in responding to a petition was “unreasonably dilatory” when lives were at stake due to the nature of the petition.).

⁵⁴ Petition for Rulemaking, *supra* note 2 at 33-35.

⁵⁵ See Kuizon, K. 2021. Breach at Piney Point would pose ‘significant danger to environmental and public health.’ Fox 13 News, <https://www.fox13news.com/news/reach-at-piney-point-poses-significant-danger-to-environmental-and-public-health>; Barnes, B., O’Donnell, C., Sampson, Z. 2021. Failure at Piney Point: Florida let environmental risk fester despite warnings. Tampa Bay Times, <https://www.tampabay.com/news/environment/2021/04/17/failure-at-piney-point-a-disaster-foretold/>.

surrounding counties and over 300 homes and the Manatee County Jail were evacuated.⁵⁶ The wastewater discharge into Tampa Bay contained high levels of inorganic nutrients, including ammonium and orthophosphate,⁵⁷ as well as 186 metric tons of nitrogen, which, in just one release event, far exceeded the typical total external nitrogen load estimates for all of the Bay in any given year.⁵⁸ The discharge of Piney Point wastewater fueled one of the worst red tide events the area has experienced in 50 years, killing so much marine life that the death toll could only be measured in tonnage of dead flesh and bone (600 tons in Tampa Bay alone).⁵⁹ Red tide produces brevetoxins that can kill fish, birds and other marine species, and harms human health by causing respiratory irritation.⁶⁰

Not only did the 2021 Piney Point disaster cause irreparable harm shortly after Conservation Organizations submitted their unanswered petition to EPA, it also opened the door for unchecked state and local regulators to permit, for the first time, the injection of process wastewater – which could be regulated hazardous waste but for EPA’s flawed 1991 Beville Determination – into a newly constructed Class I Underground Injection Control Well (UIC) below the Floridan aquifer.⁶¹ This permit moved forward without an extensive study of migration potential required for an exemption from RCRA’s land disposal restrictions prohibiting deep well injection of many hazardous wastes, including characteristic mineral processing wastes.⁶² This “out-of-sight, out-of-mind” means of discarding dangerous waste also undermines Florida’s longstanding statutory prohibition on new hazardous waste Class I UIC wells, enacted specifically to protect contamination-prone groundwater within Florida’s delicate karst geology.⁶³ Florida UIC wells have a history of failing,⁶⁴ but the fertilizer industry is now actively applying for at least one other Class I UIC well for process wastewater disposal, pending as of October 17, 2023. This

⁵⁶ Governor Ron DeSantis Provides Update on Piney Point; Meets with DEP and FDEM Leadership, Local Officials and Emergency Response Teams. Florida Gov, <https://www.flgov.com/2021/04/04/governor-ron-desantis-provides-update-on-piney-point-meets-with-dep-and-fdem-leadership-local-officials-and-emergency-response-teams/>.

⁵⁷ Morrison, E., et al. 2023. The response of Tampa Bay to a legacy mining nutrient release in the year following the event. *Frontiers Ecology and Evolution*, vol.11, <https://doi.org/10.3389/fevo.2023.1144778>.

⁵⁸ Beck, M. et al. 2022. Initial estuarine response to inorganic nutrient inputs from a legacy mining facility adjacent to Tampa Bay, Florida. *Florida Pollution Bulletin*, vol. 178, <https://doi.org/10.1016/j.marpolbul.2022.113598>.

⁵⁹ Lauren M. Johnson, [Large red tide in Tampa, Florida, has contributed to over 600 tons of dead fish](https://www.cnn.com/2021/07/19/us/red-tide-kills-marine-life-tampa-trnd/index.html), CNN (July 19, 2021), <https://www.cnn.com/2021/07/19/us/red-tide-kills-marine-life-tampa-trnd/index.html>.

⁶⁰ *Id.*

⁶¹ Jesse Mendoza, [Injection of Polluted Wastewater from Piney Point Underground Begins in Manatee County](https://www.heraldtribune.com/story/news/environment/2023/04/06/underground-injection-of-piney-point-wastewater-begins-in-manatee/70079416007/), *Sarasota Herald-Tribune* (April 6, 2023), <https://www.heraldtribune.com/story/news/environment/2023/04/06/underground-injection-of-piney-point-wastewater-begins-in-manatee/70079416007/>; Florida Department of Environmental Protection, [Notice of Permit, Class I Injection Well System, IW-1, DEP UIC Permit No: 0322708-002-UC/11 \(Dec. 16, 2021\)](https://www.dep.state.fl.us/water/underground_injection_control_wells/iucwells.htm).

⁶² 40 C.F.R. §148.20; 40 C.F.R. 148.18(a). EPA found in 1990 that many phosphoric acid facilities were producing characteristic (toxicity and/or corrosivity) hazardous phosphogypsum and process wastewater. 1990 Report to Congress at 12-48.

⁶³ Fla. Stat. § 403.7222; Wade L. Hopping & William D. Preston, *The Water Quality Assurance Act of 1983 – Florida’s “Great Leap Forward” into Groundwater Protection and Hazardous Waste Management*, 11 Fla. St. U. L. Rev. 599, 603-05 (1983).

⁶⁴ Abraham Lustgarten, [Injection Wells: The Poison Beneath Us — ProPublica](https://www.propublica.com/2012/06/21/injection-wells-the-poison-beneath-us/) (June 21, 2012).

application is for an active fertilizer facility with growing phosphogypsum stacks and process wastewater in Riverview, Florida, located near an environmental justice community.⁶⁵

Meanwhile, the New Wales facility in Mulberry, Florida has also been experiencing significant structural challenges. The New Wales facility generates more than 10 million tons of phosphogypsum per year.⁶⁶ New Wales sits atop karst, soluble carbonic rock prone to sinkholes, and has suffered massive sinkholes, geologic anomalies, and liner tears at both of its phosphogypsum stacks, including a sinkhole in 1994 and sinkhole-like geologic anomalies in 2004 and 2013.⁶⁷ The most recent confirmed sinkhole at New Wales occurred in 2016 and caused 215 million gallons of acidic process wastewater and an unknown quantity of radioactive phosphogypsum to collapse into the Floridan aquifer.⁶⁸ That toxic waste likely remains in the aquifer to this day, even as Mosaic continues to pump from recovery wells over seven years later in an attempt to recover contaminated groundwater.⁶⁹ An independent study found “there is uncertainty in the fate of the contaminant waste after the sinkhole collapse.”⁷⁰ Despite this history, the Florida Department of Environmental Protection has recently authorized the expansion of New Wales.⁷¹ In 2022, after Organizations submitted their petition for rulemaking, seismic activity beneath the active phosphogypsum stack temporarily halted stack expansion activities.⁷² In June 2023, a liner tear was confirmed, which created a void formation that the Florida Department of Environmental Protection believed “has the potential to develop into a sinkhole.”⁷³ In October 2023, another anomaly and potential liner tear occurred resulting in an unquantified volume of process wastewater loss incident at New Wales.⁷⁴ In December 2023, an independent geotechnical, environmental, and materials consultant informed Mosaic there is a critical condition at the stack system.⁷⁵

⁶⁵ [Mosaic Fertilizer, LLC, Initial Application to Construct Class I Injection Well System Hillsborough County \(October 17, 2023\).](#)

⁶⁶ The facility produces 1,890,000 tons per year of phosphoric acid and phosphogypsum at a rate of 5.3 tons per ton of phosphoric acid, for a total of 10,017,000 tons per year of phosphogypsum waste. Ardaman & Associates, Inc., Mosaic Fertilizer LLC FDEP Construction Operation Permit Application and Supporting Engineering Report, Volume I at 3-24 (October 25, 2019).

⁶⁷ Petition for Rulemaking, supra note 2 at 24-25.

⁶⁸ O'Donnell, Christopher, Tampa Bay Times, [Mosaic plant sinkhole dumps 215 million gallons of reprocessed water into Floridan Aquifer](https://www.tampabay.com/news/environment/water/mosaic-plant-sinkhole-dumps-215-million-gallons-of-reprocessed-water-into/2293845/), <https://www.tampabay.com/news/environment/water/mosaic-plant-sinkhole-dumps-215-million-gallons-of-reprocessed-water-into/2293845/> (Sept. 16, 2016).

⁶⁹ Ardaman & Associates, Inc., Mosaic Fertilizer LLC FDEP Construction Operation Permit Application and Supporting Engineering Report, Volume I at 1-17 (October 25, 2019).

⁷⁰ Sandu, Daljit et. al. 2018. [Fate and Transport of Radioactive Gypsum Stack Water Entering the Floridan Aquifer due to a Sinkhole Collapse](https://www.nature.com/articles/s41598-018-29541-0), *SCIENTIFIC REPORTS* 8: 11439, <https://www.nature.com/articles/s41598-018-29541-0>.

⁷¹ Ardaman & Associates, Application for FDEP Permit Renewal and Supporting Engineering Information (Feb. 6, 2023).

⁷² FDEP, Wastewater Compliance Inspection Report, Mosaic New Wales (Oct. 21, 2021).

⁷³ FDEP, Letter to Santino A. Provenzano Re: Subsurface Activity Early Detection System, Area of Interest 2 (AOI2) & Critical Condition Updates, New Wales Concentrates Plant – Phase II South Phosphogypsum Stack, Wastewater/NPDES Facility ID No. FL0036421 (June 2, 2022).

⁷⁴ Steve Newborn, *The troubled Mosaic phosphate mine reports a possible gypstack liner tear*, (Oct. 26, 2023), [Troubled Mosaic phosphate mine reports a possible gypstack liner tear | WUSF](#).

⁷⁵ “These conditions are indicative of a breach in the primary HDPE liner on the base of the stack caused by an anomaly in the underlying foundation and constitute a critical condition . . .” Ardaman & Associates, Letter to Santino Provenzano Re: Confirmed Critical Condition at Area of Interest 4, New Wales Plant South Gypsum Stack

The disaster at Piney Point and the ongoing issues at New Wales illustrate the dangers of EPA's under-regulation of phosphogypsum and demonstrate that the EPA is not acting under a rule of reason in unreasonably delaying action on the 2021 Petition. The rule of reason would dictate that EPA should move quickly to better regulate this growing waste problem rather than further delay meaningful measures.

B. The EPA's delay in responding to the 2021 Petition frustrates the purposes of RCRA and threatens significant harm to human health and the environment.

The EPA's delay in responding to the 2021 Petition frustrates the purposes of RCRA, which are to reduce the amount of solid waste generated and to ensure that these wastes are managed in an environmentally sound manner that protects human health and the environment from the potential hazards of waste disposal.⁷⁶ When an agency's delay has a significant impact on human health, it is very likely that it is unreasonable. "Delays that might be reasonable in the sphere of economic regulations are less tolerable when human health and welfare are at stake."⁷⁷ Subtitle C of RCRA outlines the system for controlling hazardous waste from the time it is generated to the time of its disposal.⁷⁸ As acknowledged by EPA, but-for EPA's irresolute 1991 Bevill Determination, phosphogypsum and process wastewater would in many cases be regulated as hazardous waste under RCRA Subtitle C.⁷⁹

Active phosphogypsum stacks, as currently managed, are entirely uncovered, open-air dumps.⁸⁰ This management strategy creates a significant risk for radon emissions, and the EPA has concluded that phosphogypsum stacks pose a considerable air-pathway cancer risk due to these radon emissions.⁸¹ Additionally, dust emissions that occur from construction vehicles driving over the stacks and removing the crust create an inhalation pathway for toxic constituents within phosphogypsum particles.⁸² These toxic constituents include arsenic, chromium, and radionuclides.⁸³ Based on these risks, the EPA concluded that phosphogypsum stacks present a total air pathway lifetime maximally exposed individual cancer risk of approximately 9×10^{-5} .⁸⁴

The inhalation of radionuclide-containing particulates and radon gas emitting from phosphogypsum contribute to an increased risk of fatal cancer for people living near

(SGS), Phase II West-North Area, Mosaic Fertilizer, LLC, New Wales Facility, Polk County, Florida (December 14, 2023).

⁷⁶ 42 U.S.C. § 6902(a).

⁷⁷ *Telecomms. Research and Action Ctr.*, 750 F. 2d at 80.

⁷⁸ 42. U.C.S. § 6921.

⁷⁹ "Because the available data indicate that process wastewater and phosphogypsum may exhibit the hazardous waste characteristics of EP toxicity and/or corrosivity, these materials would in many cases [subject to hazardous waste determinations if not specifically listed by EPA as RCRA hazardous wastes] be regulated as hazardous waste under RCRA Subtitle C were it not for the [temporary] Mining Waste Exclusion [indefinitely extended by the 1991 Bevill Determination for special wastes.]" 1990 Report to Congress at 12-48.

⁸⁰ Petition for Rulemaking, *supra* note 2 at 26.

⁸¹ Report to Congress, *supra* note 3 at 12-24.

⁸² *Id.*

⁸³ *Id.*

⁸⁴ *Id.*

phosphogypsum stacks.⁸⁵ Phosphogypsum, phosphogypsum leachate, and process wastewater also contain several toxic constituents that present a hazard to human health and the environment,⁸⁶ including arsenic, lead, nickel, cadmium, chromium, silver, antimony, copper, mercury, thallium, and fluoride.⁸⁷ Process wastewater is corrosive, with pH values typically lower than 2 and as extreme as 0.5 (battery acid has a pH of around 1).⁸⁸ Process wastewater also contains toxic constituents, with concentrations of cadmium, chromium, and selenium meeting or exceeding EPA regulatory levels in 1990.⁸⁹

Several studies have noted an association between chronic exposure to high levels of arsenic and lung cancer in occupationally exposed subpopulations.⁹⁰ Ingesting arsenic has been reported to increase the risk of cancer in the skin, liver, bladder, and lungs, and the U.S. Department of Health and Human Services has determined that inorganic arsenic is known to be a human carcinogen.⁹¹

The toxic effects of lead exposure include adverse impacts to neurological, renal, cardiovascular, hematological, immunological, reproductive, and developmental systems, especially in children, even at levels of less than 5 µg/d.⁹² In fact, the Centers for Disease Control and Prevention states that “no safe blood lead level in children has been identified.”⁹³ The U.S. Department of Health and Human Services classifies lead and lead compounds as reasonably anticipated to be human carcinogens.⁹⁴ Occupational exposure to airborne nickel has caused chronic bronchitis, reduced lung function, and cancer of the lung and nasal sinus. The U.S. Department of Health and Human Services has determined that metallic nickel may reasonably be anticipated to be a human carcinogen.⁹⁵

Long-term exposure to cadmium through air, water, soil, and food leads to cancer and organ system toxicity such as skeletal, urinary, reproductive, cardiovascular, central and peripheral nervous, and respiratory systems.⁹⁶ Breathing air with very high levels of cadmium can severely damage the lungs and may cause death.⁹⁷ Chronic exposure to low levels of cadmium in the air results in a build-up of cadmium in the kidney and may result in kidney disease.⁹⁸ Lung cancer

⁸⁵ The increased risk of fatal cancer is 9 in 100,000 for the maximally exposed individual. National Emissions Standards for Radon Emissions from Phosphogypsum Stacks; Final Rule, 54 Fed. Reg. 51654, 51675 (Dec.19, 1989).

⁸⁶ Petition for Rulemaking, supra note 2 at 19-38.

⁸⁷ Report to Congress, supra note 3 at 12-8.

⁸⁸ *Id.* at 12-58.

⁸⁹ The Extraction Procedure test has since been replaced by the more rigorous TCLP test. 40 C.F.R. § 261.24(a).

⁹⁰ Hughes, James et. al. 1998. Evaluation and Synthesis of Health Effects Studies of Communities Surrounding Arsenic Producing Industries, 17 INT’L J. EPIDEMIOLOGY. (2):407, <https://pubmed.ncbi.nlm.nih.gov/3042651/>.

⁹¹ *Id.*

⁹² *Id.* at 3

⁹³ *Id.*

⁹⁴ *Id.* at 5

⁹⁵ *Id.* at 6.

⁹⁶ Rahimzadeh, Mehrdad. 2017. Cadmium Toxicity: An Update, Caspian J Intern Med. 8(3): 135–145, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5596182/#:~:text=Long%2Dterm%20exposure%20to%20cadmium, hair%2C%20nail%20and%20saliva%20samples.>

⁹⁷ Agency for Toxic Substances and Disease Registry, Toxicological Profile for Cadmium (2012) at 4, <https://www.atsdr.cdc.gov/toxprofiles/tp5.pdf>.

⁹⁸ *Id.*

has been found in some studies of workers exposed to cadmium in the air.⁹⁹ Chronic ingestion of cadmium can lead to a build-up of cadmium in the kidneys and kidney disease.¹⁰⁰ Chronic exposure to low levels of cadmium can also cause bones to become fragile and break easily.¹⁰¹ The U.S. Department of Health and Human Services has determined that cadmium and cadmium compounds are known human carcinogens.¹⁰²

The primary effects associated with exposure to chromium (VI) compounds are respiratory, gastrointestinal, immunological, hematological, reproductive, and developmental, while the primary effects associated with exposure to chromium (III) compounds are respiratory and immunological.¹⁰³ Numerous epidemiological studies recognizing the association between chromium inhalation and lung cancer have been published since the 1940s.¹⁰⁴ The International Agency for Research on Cancer (IARC) has determined that chromium (VI) compounds are carcinogenic to humans.¹⁰⁵

Exposure to dust containing relatively high levels of silver compounds may cause breathing problems, lung and throat irritation and stomach pain.¹⁰⁶

Electrocardiogram abnormalities were found in about 50% of the workers exposed to antimony compounds.¹⁰⁷ Other health effects that have been observed in animals orally exposed to higher doses of antimony include hepatocellular vacuolization, hematological alterations including decreases in red blood cell counts and hemoglobin levels, and histological alterations in the thyroid.¹⁰⁸

Long-term exposure to copper dust can irritate the nose, mouth, and eyes, and cause headaches, dizziness, nausea, and diarrhea.¹⁰⁹ Water that contains higher than normal levels of copper may cause vomiting, stomach cramps, or diarrhea. High intakes of copper can cause liver and kidney damage and even death.¹¹⁰

⁹⁹ *Id.* at 5.

¹⁰⁰ *Id.*

¹⁰¹ *Id.*

¹⁰² *Id.*

¹⁰³ Agency for Toxic Substances and Disease Registry, Toxicological Profile for Chromium (2012), <https://www.atsdr.cdc.gov/toxprofiles/tp7.pdf>.

¹⁰⁴ Lees, Peter S.J. 1991. Chromium and Disease: Review of Epidemiologic Studies with Particular Reference to Etiologic Information Provided by Measures of Exposure, 92 ENVIRONMENTAL HEALTH PERSPECTIVES 93, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1519377/pdf/envhper00388-0095.pdf>.

¹⁰⁵ Agency for Toxic Substances and Disease Registry, *supra* note 96 at 4.

¹⁰⁶ *Id.*

¹⁰⁷ Agency for Toxic Substances and Disease Registry, Toxicological Profile for Antimony and Compounds (2019), <https://www.atsdr.cdc.gov/toxprofiles/tp23.pdf>.

¹⁰⁸ *Id.*

¹⁰⁹ Agency for Toxic Substances and Disease Registry, Toxicological Profile for Copper at 6 (2004), <https://www.atsdr.cdc.gov/ToxProfiles/tp132.pdf>.

¹¹⁰ *Id.*

The nervous system is highly sensitive to mercury.¹¹¹ Permanent damage to the brain has been shown to occur from exposure to sufficiently high levels of metallic mercury.¹¹² The kidneys are also sensitive to the effects of mercury, because mercury accumulates in the kidneys and causes higher exposures to these tissues, and thus more damage.¹¹³ All forms of mercury can cause kidney damage if large enough amounts enter the body.¹¹⁴

Thallium can affect the human nervous system, lung, heart, liver, and kidney if large amounts are eaten or drunk for short periods of time.¹¹⁵ Temporary hair loss, vomiting, and diarrhea can also occur, and death may result after exposure to large amounts of thallium for short periods.¹¹⁶ Thallium can be fatal from a dose as low as 1 gram.¹¹⁷ As in humans, animal studies indicate that exposure to large amounts of thallium for brief periods of time can damage the nervous system and heart and can cause death.¹¹⁸ Animal reproductive organs, especially the testes, are damaged after drinking small amounts of thallium contaminated water for 2 months.¹¹⁹

Excess fluoride can result in dental fluorosis and in an increased prevalence of bone fractures in the elderly or skeletal fluorosis.¹²⁰ Direct contact with fluoride can result in tissue damage.¹²¹ At high concentrations, fluoride can cause irritation and damage to the respiratory tract, stomach, and skin following inhalation, oral, and dermal exposure, respectively.¹²²

Selenium is a naturally occurring trace mineral and byproduct of sulfuric-acid production, and people exposed to elevated air concentrations of selenium have reported dizziness, fatigue, and irritation of mucous membranes.¹²³ The EPA has also established drinking water regulations at .05 µg/L for which exposure above this amount can cause numbness and circulatory problems in humans.¹²⁴

A study examining mortality over decades in a cohort of Florida phosphate fertilizer plant workers found significant elevated mortality due to all causes, including cancers like lung cancer and leukemia, as compared to the overall U.S. population and the population of Florida, as well as increased incidence of mental disorders and chronic obstructive pulmonary disease

¹¹¹ Agency for Toxic Substances and Disease Registry, Toxicological Profile for Mercury (1999), <https://www.atsdr.cdc.gov/toxprofiles/tp46.pdf>.

¹¹² Agency for Toxic Substances and Disease Registry, Toxicological Profile for Mercury (1999), <https://www.atsdr.cdc.gov/toxprofiles/tp46.pdf>.

¹¹³ *Id.*

¹¹⁴ *Id.*

¹¹⁵ Agency for Toxic Substances and Disease Registry, Toxicological Profile for Thallium (1992), <https://www.atsdr.cdc.gov/toxprofiles/tp54.pdf>.

¹¹⁶ *Id.*

¹¹⁷ *Id.*

¹¹⁸ *Id.*

¹¹⁹ *Id.*

¹²⁰ Agency for Toxic Substances and Disease Registry, Toxicological Profile for Fluorides, Hydrogen Fluorine, and Fluorine at 17 (2003), <https://www.atsdr.cdc.gov/toxprofiles/tp11.pdf>.

¹²¹ *Id.*

¹²² *Id.*

¹²³ Agency for Toxic Substances and Disease Registry, Toxicological Profile for Selenium at 5 (2003), <https://www.atsdr.cdc.gov/ToxProfiles/tp92.pdf>.

¹²⁴ [National Primary Drinking Water Regulations | US EPA](#).

(COPD).¹²⁵ Although the authors could not establish an exposure-response relation due to limitations of the study, they noted that phosphate processing results in exposures to aerosolized radiation, acid vapors, and other airborne toxins.¹²⁶ Radiation exposure routes to fertilizer plant workers and local residents near fertilizer plants include external radiation, inhalation and ingestion of radionuclide-containing dust, and inhalation of radon and radon daughters.¹²⁷

The EPA's delay in responding to the 2021 Petition is unreasonable because it frustrates Congressional intent in enacting RCRA and creates a significant risk to human health and welfare hazards to human health and the environment.¹²⁸ While EPA refuses to take action, the phosphogypsum and process wastewater burden continues to grow at an unmanageable rate. Global annual phosphogypsum production, at a rate of approximately 5 tons of phosphogypsum per one ton of phosphoric acid produced in a toxic chemical reaction known as the wet process, climbed to approximately 441 million tons of phosphogypsum in 2021, up from approximately 332 million tons in 2009.¹²⁹

C. The communities closest to these phosphogypsum stacks are prejudiced by the EPA's delay.

EPA's continued delay prejudices the interests of Organizations' members in the health of their communities located near phosphogypsum stacks. Fence-line communities are located next to an industrial facility and are directly affected by the operation of the facility.¹³⁰ African Americans are 75% more likely to live in these fence-line communities than the average American.¹³¹ This is not a coincidence, as many companies take advantage of communities with lower levels of political power.¹³² Multiple phosphogypsum stacks are located near such communities,¹³³ and EPA's continued exemption of phosphogypsum and process wastewater from Subtitle C regulations without developing an alternative means of addressing the risks posed by these wastes means that these communities have even less protection from the toxicity and pollution.

Many of these communities are in the Gulf region where phosphogypsum stacks are prone to dam breaches and susceptible to hurricane damage and some of the highest rates of sea level

¹²⁵ Yiin, James et al. 2016. A Study Update of Mortality in Workers at a Phosphate Fertilizer Production Facility, 59 AM J IND MED. 12, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4913354/>.

¹²⁶ *Id.*

¹²⁷ Kim, Kwang Po et al. 2006. Characterization of Radioactive Aerosols in Florida Phosphate Processing Facilities, 40 AEROSOL SCIENCE AND TECHNOLOGY 410, <https://doi.org/10.1080/02786820600643313>.

¹²⁸ National Archives, Resource Conservation and Recovery Act, <https://www.federalregister.gov/resource-conservation-and-recovery-act-rcra->.

¹²⁹ Statista, Production volume of phosphoric acid worldwide from 2009 to 2021, <https://www.statista.com/statistics/1287057/global-phosphoric-acid-production/>. Ninety-six percent of phosphoric acid is produced using the phosphogypsum and process wastewater generating wet process. [EPA, Background Report, AP=42, Section 5.11 Phosphoric Acid](#), https://www.epa.gov/sites/default/files/2020-09/documents/final_background_document_for_phosphoric_acid_section_8.9.pdf.

¹³⁰ NAACP and Clean Air Task Force. 2017. Fumes Across the Fence Line: The Health Impacts of Air Pollution from Oil & Gas Facilities on African American Communities, <https://naacp.org/resources/fumes-across-fence-line-health-impacts-air-pollution-oil-gas-facilities-african-american>.

¹³¹ *Id.*

¹³² *Id.*

¹³³ See, e.g., EPA, EJ Screen, Mosaic Riverview, Mosaic Uncle Sam, <https://ejscreen.epa.gov/mapper/>.

rise.¹³⁴ Active stacks continue to expand, and endangerments continue unabated, despite environmental justice concerns and President Biden's recent executive order committing agencies to environmental justice for all.¹³⁵ For example, the active phosphogypsum stack at Mosaic's active phosphogypsum stack at its Riverview plant is adjacent to the historically black community of Old Progress Village. Progress Village was designed in the 1950s as a means to provide home ownership to Tampa's segregated Black residents, who lived primarily in housing projects and were purposefully displaced by construction of an interstate.¹³⁶ The community fought against the approval of the phosphogypsum stack intended to be located near a school, but Hillsborough County Commissioners ultimately approved the proposal in 1984.¹³⁷ The community has been subject to the hazards imposed by the Riverview phosphogypsum stacks for decades.¹³⁸ And there is no end in sight as active stack expansion construction activities continue despite concentrated seepage outbreaks in January and August of 2022,¹³⁹ continued exceedances of groundwater standards,¹⁴⁰ and multiple recent liner tears, with two of the latest known liner tears occurring in October of 2023.¹⁴¹

Another stack near a predominantly Black community, the Uncle Sam facility in St. James, Parrish, Louisiana has been moving laterally since 2019, putting surrounding communities and downstream Mississippi River at risk.¹⁴² The EPA determined that Louisiana stacks should be no more than 40 feet tall because of weak soil,¹⁴³ but the Uncle Sam stack, under state regulation and not federal hazardous waste regulation, is now more than 200 feet tall and suffering stability issues as a result.¹⁴⁴

This environmental injustice is all too common in the management of toxic waste, and the EPA needs to elevate the interests of these communities. With regard to phosphogypsum specifically, fence-line communities have been effectively ignored in decision-making for decades, and the EPA needs to respond to the 2021 Petition to acknowledge these interests that have been overlooked by the unreasonable delay.

¹³⁴ Lindsey, Rebecca (National Oceanic and Atmospheric Administration). 2012. Climate Change: Glob.

¹³⁵ Executive Office of the President, Executive Order 14096, [Revitalizing Our Nation's Commitment to Environmental Justice for All](#) (April 21, 2023).

¹³⁶ Baum, Laura E. 2016. Neighborhood Perceptions of Proximal Industries in Progress Village, FL, UNIVERSITY OF SOUTH FLORIDA SCHOLAR COMMONS (2016) at 7-8.

¹³⁷ *Id.* at 74.

¹³⁸ *Id.* at 67.

¹³⁹ Occurring after Mosaic implemented a change in operations to accommodate the latest planned lateral expansion. [Ardaman & Associates for Mosaic, Application for FDEP Permit Renewal and Supporting Engineering Information, FDEP Permit No FL000761, Riverview Facility, Attachment I, Site Information at 6.](#)

¹⁴⁰ [Ardaman & Associates for Mosaic, Application for FDEP Permit Renewal and Supporting Engineering Information, FDEP Permit No FL000761, Riverview Facility, Attachment III, Groundwater Monitoring, at 5-9.](#)

¹⁴¹ [Mosaic Fertilizer, LLC – Riverview Critical Condition 10/11/2023 \(via e-mail October 11, 2023\).](#)

¹⁴² Louisiana DEQ, Uncle Sam Facility, Government Review of Root Cause Analysis (March 2, 2020).

¹⁴³ Report to Congress, *supra* note 3 at 12-19.

¹⁴⁴ Wright, Tom. Mosaic says it can keep wastewater on site in case of breach, The Lens (Feb. 19, 2019), <https://thelensnola.org/2019/02/13/mosaic-says-it-can-keep-wastewater-on-site-in-case-of-breach/>.

V. CONCLUSION

For the foregoing reasons, the EPA is in violation of RCRA and the APA for the unreasonable delay in responding to the 2021 Petition. If the requests under RCRA are not answered on or before the 60th day after receiving this notice, Conservation Organizations intend to file a legal action to compel an answer.

Sincerely,

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