

C O M M E N T S

BAD POLICY, DISASTROUS CONSEQUENCES: COAL-FIRED POWER IN PUERTO RICO

by Barry E. Hill

Barry E. Hill is a Visiting Scholar at the Environmental Law Institute and Adjunct Professor at Vermont Law School. He served as Director of EPA's Office of Environmental Justice from 1998-2007 and currently resides in Puerto Rico.

In September 2019, in an article entitled “The Market Has Spoken: Coal Is Dying,” Matt Egan of CNN Business wrote:

President Donald Trump has gutted regulations on the coal industry, falsely claimed that windmills cause cancer and installed a former coal lobbyist to lead the [U.S. Environmental Protection Agency] EPA. In the face of those efforts to rescue coal country, America's aging fleet of coal-fired plants continues to shrink. New plants are not getting built. Trump's vow to rip up environmental rules has been overwhelmed by an even more powerful force: the free market. Coal just can't keep up with dirt-cheap gas and increasingly affordable renewables.¹

This Comment examines the regulations regarding coal ash that the Trump Administration has issued to protect the special interests of the nation's coal industry at the same time as major power companies are facing low-cost natural gas, declining costs of renewables, low interest rates, decisions whether to keep nuclear energy plants operating, and so on. It specifically examines the adverse impacts of these regulations on fence-line communities, focusing on one such community in Guayama, Puerto Rico.

In 1913, President Woodrow Wilson stated: “The government which was designed for the people, has got into the hands of the bosses and their employers, the special interests. An invisible empire has been set up above the forms of democracy.”² Arguably, President Wilson's prescient words accurately describe the current leadership of EPA. And fortunately or unfortunately, this takeover of our federal environmental regulatory agency is being accomplished in plain sight for all Americans to witness.

Public records show that in 2009, the current EPA Administrator, Andrew R. Wheeler, joined the energy and natural resources practice of the law firm Faegre Baker Daniels to lobby the federal government on behalf of Murray Energy Corp., the country's largest coal mining company at that time.³ The company of 7,000 employees was then owned by the coal baron, Robert E. Murray, one of President Trump's prominent financial supporters.⁴

Two months after President Trump assumed office, Wheeler organized a March 29, 2017, meeting between Murray and the new U.S. Secretary of Energy Rick Perry, where a 3.5-page “action plan” was unveiled.⁵ This document and Murray's earlier March 1 memo to Vice President Michael Pence advocated for, among other things, elimination of the Barack Obama-era Clean Power Plan; withdrawal of the United States from the 2015 Paris climate change agreement; and suspension of EPA's 2009 endangerment finding that required the Agency to regulate

1. Matt Egan, *The Market Has Spoken: Coal Is Dying*, CNN Bus., Sept. 20, 2019, <https://edition.cnn.com/2019/09/20/business/coal-power-dying/index.html>. See also Benjamin Storrow, *Bankrupt Giants Hand Unwanted Coal Mines to Unknown Firms*, E&E NEWS, Nov. 4, 2019, <https://www.eenews.net/climatewire/2019/11/04/stories/1061428779>.
2. WOODROW WILSON, *WHAT IS PROGRESS* (1913), <https://teachingamericanhistory.org/library/document/what-is-progress-2/>.

3. OpenSecrets.org, *Lobbyist Profile: Andrew Wheeler*, <https://www.opensecrets.org/lobby/lobbyist.php?id=Y0000039030L&year=2009> (last visited Nov. 14, 2019). Between 2009 and 2017, Murray paid the firm and its affiliates an average of more than \$300,000 annually for Wheeler's lobbying work. OpenSecrets.org, *Client Profile: Murray Energy*, <https://www.opensecrets.org/lobby/clientsum.php?id=D000022123&year=2017> (last visited Nov. 14, 2019); see also Alexander C. Kaufman, *This Coal Baron No Longer Needs a Lobbying Firm Now That His Favorite Lobbyist Is Head of the EPA*, MOTHER JONES, Feb. 1, 2019, <https://www.motherjones.com/environment/2019/02/this-coal-baron-no-longer-needs-a-lobbying-firm-now-that-his-favorite-lobbyist-is-head-of-the-epa/>.
4. On October 29, 2019, Murray Energy Corp., filed for Chapter 11 bankruptcy, representing the eighth coal company that filed for bankruptcy in 2019. Mr. Murray stepped down immediately as CEO. Administrator Wheeler, however, remains as head of the Agency. See also Lesley Clark, *Trump Hasn't Saved Coal. Can DOE?*, E&E NEWS, Nov. 25, 2019, <https://www.eenews.net/energywire/2019/11/25/stories/1061639081>; Dylan Brown, *Bob Murray: The Last Coal Baron?*, E&E NEWS, Nov. 5, 2019, <https://www.eenews.net/greenwire/2019/11/05/stories/1061470285>; Heather Richards et al., *3 Takeaways From Murray Bankruptcy*, E&E NEWS, Oct. 30, 2019, <https://www.eenews.net/greenwire/2019/11/05/stories/1061470285>.
5. Kate Aronoff, *Exclusive Photos Contradict Murray Energy CEO's Claim He Had "Nothing to Do With" Rick Perry's Coal Bailout*, IN THESE TIMES, Dec. 6, 2017, http://inthesetimes.com/features/murray_energy_trump_doe_coal_industry_grid_plan.html; see Lisa Friedman, *How a Coal Baron's Wish List Became President Trump's To-Do List*, N.Y. TIMES, Jan. 9, 2018, <https://www.nytimes.com/2018/01/09/climate/coal-murray-trump-memo.html>.

carbon emissions.⁶ In short, Murray's 14-point action plan advocated for the rollback of environmental regulations and for protections for the coal industry. Since then, the White House and other federal agencies have implemented most of the wish-list requests of Murray's action plan.

Moreover, on July 11, 2018, in his first message to EPA employees as acting administrator, Wheeler said, as reported on the C-SPAN network: "I did work for a coal company and I'm not at all ashamed of the work that I did for the coal company. . . . I'm actually proud of the work that I did."⁷ Wheeler has served as the EPA deputy administrator from April to July 2018, and as acting administrator from July 2018 to February 2019. On February 28, 2019, he became the 15th EPA Administrator.

During this period of Wheeler's ascendance at EPA, on February 11, 2019, President Trump tweeted: "Coal is an important part of our electricity generation mix and @TVAnews should give serious consideration to all factors before voting to close viable power plants, like Paradise #3 in Kentucky." In other words, the president publicly advocated that the Tennessee Valley Authority, a federally owned corporation created by the U.S. Congress in 1933, needed to save an aging power plant in Kentucky that purchased the bulk of its coal from Murray Energy Corp.⁸

On July 24, 2019, still further, President Trump delivered remarks at a private fundraiser hosted by Murray in Wheeling, West Virginia—right in the heart of coal country. Murray had advised attendees in a June 17 letter to make donations of at least \$150 per person, including children, to the Trump Victory fundraising committee, and he wrote: "The future of the coal industry and our family livelihoods depend on President Trump being re-elected."⁹

In short, with an unabashed former coal lobbyist as the EPA Administrator and his best-paying former client as one of the president's top financial supporters, arguably a special interest group as "[a]n invisible empire has been set up above the forms of democracy." This reality, however, provides little comfort to the residents of Guayama, Puerto Rico, who are exposed to coal ash from a nearby power plant, or other similarly situated communities throughout this country.

This Comment takes Guayama as a case study of the consequences of a single Administration rollback—the efforts to revise the April 2015 Final Coal Ash Rule. First,

to establish the context of the situation that the Guayama residents find themselves in, it examines the content of bad environmental policy being advanced by EPA Administrator Wheeler. Second, the Comment describes the people who live in the Guayama community, as well as the public health issues that they face on a daily basis as an environmental injustice issue. It then concludes with four observations regarding how Guayama, other communities in Puerto Rico, and similarly situated communities throughout the United States can fight back against the "invisible empire" in administrative agencies and in the courts, by using the full panoply of environmental laws and their implementing regulations to address instances of environmental injustice.

I. Bad Environmental Policy—Revisions to EPA's Final Coal Ash Rule of 2015

A. The Obama Administration's Measured Approach

Coal ash, or coal combustion residuals (CCR), is the waste that is left after coal is burned to produce electricity. It is a toxic byproduct of burning coal for electric power. Coal ash includes "fly ash"—the fine powdery particles that are carried up the smokestack and captured by pollution control devices—and "bottom ash"—the coarser materials that fall to the bottom of the furnace.¹⁰ These residuals vary in their size and texture, but all contain "contaminants of environmental concern."¹¹ In 2012 alone, according to EPA, 470 coal-fired power plants in the United States burned upwards of 800 million tons of coal and produced approximately 110 million tons of coal ash.¹²

Power plants generally store coal ash on-site in aging piles that are at varying degrees of risk of protracted leakage and catastrophic structural failure. Because coal ash contains, according to EPA, carcinogens and neurotoxins, including many contaminants such as high levels of aluminum, boron, cadmium, chloride, chromium, fluoride, lead, lithium, molybdenum, selenium, sulfate, thallium, mercury, and arsenic,¹³ the unsafe and unregulated on-site storage and the off-site disposal of toxic coal ash pose serious environmental and public health risks. On-site storage can cause these contaminants to leach into and contami-

6. Nicole Einbinder, *A Coal Executive's "Action Plan" for Trump Is Made Public*, PBS, Jan. 10, 2018, <https://www.pbs.org/wgbh/frontline/article/a-coal-executives-action-plan-for-trump-is-made-public/>.

7. *Acting EPA Administrator Wheeler Remarks to Staff*, C-SPAN (July 11, 2018), <https://www.c-span.org/video/?448243-1/acting-epa-administrator-andrew-wheeler-defends-lobbying-coal-company>.

8. Will Wade & Ari Natter, *Trump Backs Kentucky Power Plant Burning Coal From Donor Murray*, BLOOMBERG, Feb. 11, 2019, <https://www.bloomberg.com/news/articles/2019-02-11/trump-lobbies-to-keep-kentucky-coal-power-plant-operating>.

9. Jamie Corey, *Murray Energy CEO to Host Trump Fundraiser*, DOCUMENTED, July 15, 2019, <https://documented.net/2019/07/murray-energy-ceo-to-host-trump-fundraiser/>.

10. See Hazardous and Solid Waste Management System; Identification and Listing of Special Waste; Disposal of Coal Combustion Residuals From Electric Utilities, 75 Fed. Reg. 35127, 35137 (June 21, 2010).

11. *Id.* at 35138.

12. U.S. EPA, *Coal Ash (Coal Combustion Residuals, or CCR)*, <https://www.epa.gov/coalash> (last updated Nov. 4, 2019).

13. Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities, 80 Fed. Reg. 21301, 21449 (Apr. 17, 2015).

nate the groundwater,¹⁴ or result in a major coal ash spill that can contaminate the local environment.

The risk of a major toxic coal ash spill came to fruition in Kingston, Tennessee, when, on December 22, 2008, approximately 5.4 million cubic yards of toxic coal ash was released into Swan Pond Embayment and three adjacent sloughs, eventually spilling into the main Emory River channel. Moreover, one of the coal ash impoundment walls broke and spilled more than one billion gallons of toxic coal ash slurry. This release of toxic slurry and its contaminants extended approximately 300 acres outside of the fly ash dewatering and storage areas of the Tennessee Valley Authority's Kingston Fossil Plant.

In direct response to this major toxic coal ash spill, in March 2009, then-EPA Administrator Lisa P. Jackson, serving under President Obama, initiated the Agency's CCR Assessment Program of more than 500 coal ash impoundments across the country. As part of its ambitious national effort to assess the management of coal ash impoundments, EPA released to the public the final contractor reports assessing the structural integrity of impoundments and similar management units containing coal ash at coal-fired power plants.¹⁵ EPA assessed all of the known units with a dam hazard potential rating of "high" or "significant" as reported in the responses provided by electric utilities to EPA's information requests, and additional units identified during the field assessments. The 559 impoundments were rated as follows: "Satisfactory"—241 units; "Fair"—166 units; and "Unsatisfactory"—152 units.

Further, on June 21, 2010, then-EPA Administrator Jackson issued a proposed rule entitled "Disposal of Coal Combustion Residuals From Electric Utilities."¹⁶ The purpose of the proposed rule was to regulate the disposal of toxic coal ash. The Agency requested public comment on whether coal ash should be regulated as a "hazardous waste" under Subtitle C of the Resource Conservation and Recovery Act (RCRA)¹⁷ or as a "non-hazardous solid waste" under Subtitle D of the Act. Designating coal ash

as a hazardous waste would have allowed EPA to directly enforce the regulations, whereas regulating it under Subtitle D would restrict the Agency's enforcement authority.¹⁸

On December 19, 2014, then-EPA Administrator Gina McCarthy signed the final rule that authorized the Agency to regulate the on-site management and off-site disposal of coal ash under RCRA Subtitle D.¹⁹ On April 17, 2015, EPA issued the Final Coal Ash Rule.²⁰ The Agency declared that the currently available information demonstrated that the risks posed to human health and the environment by certain CCR management units warranted regulatory controls. EPA finalized:

- National minimum criteria for existing and new CCR landfills and existing and new CCR surface impoundments and all lateral expansions consisting of location restrictions, design, and operating criteria;
- Groundwater monitoring and corrective action;
- Closure requirements and post-closure care; and
- Recordkeeping, notification, and Internet posting requirements.

The final rule, among other things, required any existing unlined CCR surface impoundment that was contaminating groundwater above a regulated constituent's groundwater protection standard to stop receiving CCR and either retrofit or close by April 2019, except in limited circumstances. It also required the closure of any CCR landfill or CCR surface impoundment that could not meet the applicable performance criteria for location restrictions or structural integrity. Importantly, because the final rule was promulgated under Subtitle D, as opposed to Subtitle C, the main enforcement mechanism would be initiated by individuals bringing citizen suits against separate facilities that were not in compliance with federal standards.²¹

14. On December 14, 2018, Earthjustice released its report entitled *Utilities Admit Coal Plants in 22 States Are Violating Federal and State Pollution Standards by Leaking Toxic Chemicals Into Groundwater*. The report stated that major utility companies admitted that contaminants like arsenic, chromium, and radioactivity from 67 coal-fired power plants across 22 states have polluted groundwater in excess of state and/or federal standards. Press Release, Earthjustice, *Utilities Admit Coal Plants in 22 States Are Violating Federal and State Pollution Standards by Leaking Toxic Chemicals Into Groundwater* (Dec. 19, 2018), <https://earthjustice.org/news/press/2018/utilities-admit-coal-plants-in-22-states-are-violating-federal-and-state-pollution-standards-by-leaking-toxic-chemicals-into-groundwater>.

15. See U.S. EPA, COAL COMBUSTION RESIDUALS ASSESSMENT REPORTS, https://www.epa.gov/sites/production/files/2016-06/documents/ccr_impoundmnt_asesmnt_rpts.pdf.

16. Hazardous and Solid Waste Management System; Identification and Listing of Special Waste; Disposal of Coal Combustion Residuals From Electric Utilities, 75 Fed. Reg. at 35127-264.

17. 42 U.S.C. §§6901-6992k, ELR STAT. RCRA §§1001-11011. RCRA gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also sets forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA

enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances.

18. Subtitle D neither grants EPA direct enforcement authority nor requires states to adopt or implement its requirements. *Id.* §6041.

19. EPA Administrator Jackson left the Agency on February 15, 2013, to join the private sector. Gina McCarthy became the new EPA Administrator on July 13, 2013.

20. Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities, 80 Fed. Reg. at 21301-501.

21. Litigation was immediately commenced against the Agency in July 2015. Five petitions were filed by industry groups, a collection of industry trade associations and utilities, including the Utility Solid Waste Activities Group; Applied Energy System-Puerto Rico, LP (AES-PR); the Edison Electric Institute; the National Rural Electric Cooperative Association; and the American Power Association. One petition was filed by a municipality, and a coalition of environmental groups also filed a petition. On July 17, 2015, the U.S. Court of Appeals for the District of Columbia (D.C.) Circuit consolidated the seven cases as *Utility Solid Waste Activities Group v. Environmental Protection Agency*, No. 15-1219 (D.C. Cir.).

On August 21, 2018, the appellate court held that "EPA acted arbitrarily and capriciously and contrary to RCRA in failing to require the closure of unlined surface impoundments, in classifying so-called 'clay-lined' impoundments as lined, and in exempting inactive surface impoundments

However, on December 16, 2016, President Obama signed into law the Water Infrastructure for Improvements to the Nation (WIIN) Act.²² Among other things, this Act authorized EPA-approved state permitting programs to regulate coal ash disposal. And because EPA was limited in its enforcement capabilities under RCRA Subtitle D, the WIIN Act provided EPA and the states the authority to enforce directly the final regulations. Thus, in accordance with the WIIN Act, states were allowed to develop and operate their own permitting programs that adhered to, or were at least as protective as, the criteria set by EPA in its corresponding RCRA regulations. EPA, moreover, was required to regulate toxic coal ash in states that chose not to implement permitting programs or that had inadequate programs.

The regulatory decisions of the Obama EPA were not by any means perfect, but they manifested a commonsense measured approach, based upon sound science, to address the environmental and public health problems related to the storage and disposal of toxic coal ash.

B. *The Trump Administration's Special-Interest Approach*

The Trump Administration has embarked on a concerted effort to deregulate the April 2015 Final Coal Ash Rule, and, consequently, to save industry (electric utilities and independent power producers) tens of millions of dollars per year in compliance costs. According to her July 30, 2019, public statement, Lisa Evans, senior counsel for Earthjustice, categorically stated:

The Trump EPA, led by Andrew Wheeler is doing everything in its power to gut essential public health protections from toxic coal ash in the 2015 rule. . . . Despite compelling and damning scientific evidence highlighting the harm to groundwater from coal ash, and court victories by community groups requiring the EPA to strengthen the 2015 rule, Wheeler is giving this gift to his former employers at the cost of public health. It is a disgrace to everything the EPA stands for, and we will do everything in our power to stop it.²³

at inactive power plants from regulation.” Util. Solid Waste Activities Grp. v. Envtl. Prot. Agency, 901 F.3d 414, 449, 48 ELR 20151 (D.C. Cir. 2018). Thus, the appellate court struck down certain provisions of the April 2015 final rule that allowed unlined and clay-lined impoundments to receive coal ash and exempted inactive impoundments, finding that the Agency’s approach “does not address the identified health and environmental harms documented in the record.” *Id.* at 429.

The ruling came after then-EPA Administrator Scott Pruitt sent a letter, dated September 13, 2017, to the industry petitioners advising them that the Agency will reconsider the provisions raised in their petitions. On November 7, 2017, moreover, EPA filed a motion to voluntarily remand to the Agency six provisions of the April 2015 final rule. On November 15, 2017, EPA filed a status report with the appellate court detailing the provisions that it was reconsidering. The list included provisions that were not being challenged in the litigation.

22. Pub. L. No. 114-322, 130 Stat. 1628 (2016).

23. Press Release, Earthjustice, Trump EPA Removes More Critical Toxic Coal Ash Protections (July 30, 2019), <https://earthjustice.org/news/press/2019/trump-epa-removes-more-critical-toxic-coal-ash-protections>.

On March 1, 2018, then-EPA Administrator Scott Pruitt, serving under President Trump, released the first of two rules that would amend the April 2015 Final Coal Ash Rule. The proposed Phase One rule was entitled “Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals From Electric Utilities; Amendments to the National Minimum Criteria (Phase One).”²⁴ EPA’s regulatory impact assessment stated that this proposal, if finalized, would save the utility sector up to \$100 million per year in compliance costs. The proposed rule included more than a dozen changes to the April 2015 Final Coal Ash Rule.

The proposal would “incorporate flexibilities” in regulating utilities, and would allow alternative performance standards for toxic coal ash disposal units with operating permits issued under an approved state or federal coal ash permit program. The proposal included, among other things:

- A change to allow a state regulatory program to establish alternative risk-based groundwater protection standards for constituents that do not have an established maximum contaminant level (MCL), rather than the use of background levels that were currently required. The proposal also requested public comment on whether a facility may be allowed to establish alternative risk-based standards using a certified professional engineer or other means, subject to EPA oversight.
- A request for public comment on modifying the location restrictions and associated deadlines concerning construction or operation of a CCR landfill or surface impoundment in certain areas.
- Changes to allow states to establish alternative requirements for how facilities respond to and remediate releases from CCR landfills and surface impoundments. The proposal also requested comment on allowing states to determine when an unlined surface impoundment that is leaking may undertake corrective action rather than be forced to stop receiving CCR and close.
- The addition of boron to the list of constituents for which facilities would need to perform assessment monitoring.
- Streamlined administrative procedures that a facility may comply with if there was a non-groundwater release that can be addressed within 180 days. EPA also requested comment on whether this time period is appropriate.

24. Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities; Amendments to the National Minimum Criteria (Phase One), 83 Fed. Reg. 11584-616 (Mar. 15, 2018).

- Modification of the performance standard for vegetative slope protection to protect against erosion and failure of a surface impoundment.
- A change to the closure provisions to allow the use of coal ash during the closure process and to allow non-CCR waste to continue to be placed in a CCR surface impoundment that is subject to closure.

On July 30, 2018, acting EPA Administrator Wheeler finalized the Phase One rule, which undoubtedly weakened the requirements for managing toxic coal ash storage areas.²⁵ The new standards would extend the life of some existing toxic ash ponds from April 2019 until October 2020; empower states to suspend groundwater monitoring in certain cases; and allow state officials, instead of professional engineers, to certify if utilities' facilities met "adequate" standards. EPA estimated that it would save the industry between \$28 million and \$31 million per year in compliance costs. According to an EPA press release:

"These amendments provide states and utilities much-needed flexibility in the management of coal ash, while ensuring human health and the environment are protected," Wheeler said in a statement. "Our actions mark a significant departure from the one-size-fits-all policies of the past and save tens of millions of dollars in regulatory costs."²⁶

On July 30, 2019, EPA Administrator Wheeler released a second set of proposed regulations that amended more provisions of the April 2015 Final Coal Ash Rule.²⁷ The proposed rule is entitled "Enhancing Public Access to Information; Reconsideration of Beneficial Use Criteria and Piles." This proposal, according to the Agency, is the first of three additional proposed revisions to address matters raised in litigation, legislation, petitions for reconsideration, and implementation. The following changes are being proposed:

- Replacing the 12,400-ton threshold that triggers an environmental demonstration with specific location-based criteria (e.g., placement in an unstable area, wetland, floodplain, or seismic zone) derived from existing criteria for CCR disposal units.
- Establishing a single approach that would apply to all temporary placement of unencapsulated CCR on the

land, regardless of whether the pile is on-site or off-site, or destined for beneficial use or disposal.

- Revising the annual groundwater monitoring and corrective action reporting requirements to make the data easier to understand and evaluate, including a requirement to summarize the results in an executive summary.
- Establishing an alternative groundwater protection standard for boron using the same methodology used for other CCR constituents, which would be finalized if boron is added to the list of constituents for assessment monitoring.
- Revising the CCR website requirements to ensure that relevant facility information required by the regulations is immediately available to the public.
- Including a demonstration or test to ensure coal ash that is stored in ponds or landfills without protective coverings could still be used "in an environmentally protective manner," such as being used in landscaping or playgrounds and as structural fill for road construction.

The negative reaction to this proposed rule from a number of environmental organizations (e.g., Clean Water Action, the Natural Resources Defense Council, the Environmental Integrity Project, the Southern Environmental Law Center, etc.) has been swift. For example, Lisa Evans of Earthjustice stated:

The Trump administration's proposal, which comes in response to industry requests, exempts coal ash waste piles—often mountainous heaps of non-containerized waste placed on land—from regulatory safeguards designed to protect public health.

In addition, the proposed Trump administration change encourages greater use of toxic coal ash as a cheap alternative to soil as a filler in construction and landscaping by removing all volume restrictions for any waste projects. The proposal allows projects where coal ash is placed on land for any purpose, usually without barriers, to contain unlimited volumes of coal ash and subjects users to completing safety demonstrations only when coal ash is placed in inherently dangerous areas, such as within five feet of groundwater, in floodplains, and over sinkholes. There is no required notification to the public that such projects are occurring and no requirement to share demonstrations with the public unless directly asked. EPA data shows there are many known re-use projects using coal ash that have contaminated water, including drinking water in excess of federal safety standards.²⁸

25. EPA Administrator Pruitt had been forced to resign on July 6, 2018, amid an ethics scandal.

26. *EPA Eases Rules on How Coal Ash Waste Is Stored Across the Country*, TRIBLIVE, July 17, 2018, <https://archive.triblive.com/news/world/epa-eases-rules-on-how-coal-ash-waste-is-stored-across-the-country/>.

27. Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities; Enhancing Public Access to Information; Reconsideration of Beneficial Use Criteria and Piles, 84 Fed. Reg. 40353-71 (Aug. 14, 2019).

28. See Press Release, Earthjustice, *supra* note 23.

On October 2, 2019, EPA convened a public hearing in Arlington, Virginia, on this proposed rule. Evans of Earthjustice was one of the 40 people who testified, stating: “This proposal is not only immoral and contrary to science, it is illegal. . . . We will see you in court.”²⁹ Another speaker, Aimee Montoya, who represented a Puerto Rican group, CCR Resistance, stated: “It is the EPA’s job to spend taxpayer’s money to protect us; why do we have to create volunteer-based groups to do that?”³⁰ As described in news reports, “Speakers at the hearing sometimes veered from remarks on the proposed rule to impassioned pleas for EPA to confront the perils posed by coal ash inhalation and contamination.”³¹

The comment period ended on October 15, 2019.

II. The Affected Community in Guayama

Communities across this country have been adversely impacted by EPA’s reconsideration, under President Trump, of the April 2015 Final Coal Ash Rule. Guayama is just one clear example of the result of bad environmental policy developed and implemented by President Trump’s “invisible empire.”

It is important to first understand who has lived and who currently lives in Guayama. According to a December 8, 2016, article entitled, “In Puerto Rico, Environmental Injustice and Racism Inflammes Protests Over Coal Ash,” by University of Rhode Island Anthropology Prof. Hilda Lloréns:

The struggle over coal ash is rooted in colonial and economic policies that have turned Puerto Ricans into migrants, consumers and debtors over the past century. These circumstances illustrate what Princeton University’s Rob Nixon calls “slow violence”: a steady accumulation of gradual, and often invisible, environmental harms endured by vulnerable individuals and communities during capitalist expansion.

Southeast Puerto Rico was populated in the 18th century by enslaved Africans, and later free blacks and mixed-race individuals, who worked on sugarcane plantations. When the island industrialized in the mid-20th century, many workers left farms for factories, while others sought agricultural work in the United States. Massive immigration to U.S. cities became a way of life for Puerto Ricans, and multinational corporations began to build factories on empty agricultural land.

Like many places that struggle with environmental injustice, Puerto Rico’s Guayama-Salinas region along the island’s Caribbean coast is a low-income area with a high fraction of minority residents. The median yearly household income is US \$15,000, and more than half of [the] residents live below the [federal] poverty line. According to the 2010 U.S. Census, 17 percent of people in the region self-identified as black or African-American, compared to the national average of 12.4 percent. (In Puerto Rico, large concentrations of black residents are a marker of poverty.)

The area has suffered historically from high unemployment and poverty rates. It lies far from the national capital, San Juan, and was highly dependent on sugarcane agriculture for many years. Because of this legacy, the coastal environment is especially valuable to residents. It provides resources to buffer them against local and global crises—much like resource-dependent communities along the U.S. Gulf Coast that face similar environmental justice struggles.³²

In economically developing countries around the world, inadequate supplies of clean and safe drinking water and sanitation make hygiene difficult and, most assuredly, increase the risk of infectious diseases to the health of a population and increase the threats to public health.

Puerto Rico is a territory of the United States. And although the island is significantly less developed than the mainland United States, it is considered developed since the United States is overall a developed country. Puerto Rico is classified as a “high-income country,” defined by the World Bank as countries with a gross national income per capita of \$11,116 or more.³³ Access to clean and safe drinking water and sanitation, however, is a problem in some parts of Puerto Rico.³⁴

Some of the residents of Guayama do not have ready access to clean and safe drinking water and sanitation as a result of being exposed to highly toxic coal ash from a nearby coal-fired power plant. The low-income residents of Guayama’s Santa Ana, San Martin, and Miramar communities use well water. The substances detected in the well water and subsoil include aluminum, boron, selenium, sulfate, thallium, chromium, radium, arsenic, molybdenum, as well as other harmful chemicals that promote the devel-

29. Amena H. Saiyid, *EPA Put on Notice Over Coal Ash Proposal: “See You in Court,”* BLOOMBERG ENV’T, Oct. 2, 2019, <https://news.bloombergenvironment.com/environment-and-energy/epa-put-on-notice-over-coal-ash-proposal-see-you-in-court>.

30. Sean Reilly, *Industry, Enviros Blast EPA Proposal*, E&E NEWS, Oct. 2, 2019, <https://www.eenews.net/eenewspm/2019/10/02/stories/1061191959>.

31. *Id.*

32. Hilda Lloréns, *In Puerto Rico, Environmental Injustice and Racism Inflammes Protests Over Coal Ash*, CONVERSATION, Dec. 8, 2016, <http://theconversation.com/in-puerto-rico-environmental-injustice-and-racism-inflammes-protests-over-coal-ash-69763>. Professor Lloréns is a native of southeast Puerto Rico.

33. Welcome to Puerto Rico!, *Economy*, <https://welcome.topuertorico.org/economy.shtml> (last visited Nov. 14, 2019).

34. *Id.* Additionally, Puerto Rico is poorer than the poorest state in the United States, with 45% of its population living below the federal poverty line. In 2016, according to the U.S. Census Bureau, 46.1% of the population lived below the federal poverty line, which is nearly double the poverty rate in Mississippi, the most impoverished of the 50 states.

opment of cancer if inhaled or ingested. Scientific studies have shown repeatedly that prolonged intake of these chemicals by humans intensifies the chances of developing cancer of the skin, lungs, liver, bones, and the lymphatic system, and causes infertility and miscarriages, skin lesions, heart problems and brain damage, anemia, cataracts, tooth fractures, and death.³⁵

EPA did not designate coal ash as a hazardous waste in the April 2015 Final Coal Ash Rule. But the Agency has determined that living near coal ash ponds increases the risk of damage to human health from cadmium, lead, and other toxic metals. According to EPA, the risks to humans associated with exposure to the identified contaminants in toxic coal ash include elevated probabilities of “cancer in the skin, liver, bladder, and lungs,” as well as non-cancer risks such as “neurological and psychiatric effects,” “cardiovascular effects,” “damage to blood vessels,” and “anemia.”³⁶ Both cancer and non-cancer risks to infants “tend[] to be higher than other childhood cohorts, and also higher than risks to adults.”³⁷ In sum, toxic coal ash as a solid waste contains myriad carcinogens and neurotoxins.³⁸ The U.S. Geological Survey, moreover, has determined that many trace elements in coal ash, such as chromium, arsenic, and mercury, can be toxic to humans at relatively low concentrations in groundwater aquifers, rivers, and lakes, which provide drinking water to American towns and cities.³⁹

Since 2002, the Applied Energy System-Puerto Rico (AES-PR) facility has been located on the south coast of Puerto Rico, approximately 3.4 miles southwest of downtown Guayama.⁴⁰ AES-PR is a bituminous coal power plant that generates and sells electricity to the Puerto Rico

Electric Power Authority (PREPA)⁴¹ with a total power generation capacity of 454 megawatts. This represents approximately 17% of the electricity consumed on the island. AES-PR imports its coal from Colombia.

AES-PR also produces a manufactured aggregate known as Agremax using its own CCRs. Agremax is a partially solidified mixture of coal ash fractions containing calcium carbonate (as pulverized limestone and/or hydrated lime) as a solidifying agent. AES-PR currently maintains two separate Agremax stockpiles in its stockpile area. One stockpile includes the Agremax inventory produced and stored before October 17, 2015. The second stockpile has Agremax inventory produced on or after October 17, 2015. According to a 2016 annual inspection report, dated September 19, 2016, the approximate volume of Agremax contained in the stockpile produced on or after October 17, 2015, was 120,000 tons. The stockpiles are more than five stories high, and occupy about seven acres.

AES-PR generates more than 300,000 tons of coal ash per year, and from 2004 to 2011, more than two million tons of coal ash were either dumped in 13 municipalities across the territory or used as fill material at construction sites above the South Coast Aquifer in southeastern Puerto Rico. AES-PR coal ash was deposited within a few meters of public water wells, irrigation canals, streams, farms, wetlands, beaches, and sensitive areas. The South Coast Aquifer is the sole source of potable water for approximately 53,000 residents of Salinas and Santa Isabel, and many more thousands of people in the municipalities of Guayama, Peñuelas, Ponce, Juan Díaz, and Arroyo, Puerto Rico.⁴²

It should be noted that AES-PR never intended to store its CCRs on-site or to dispose of the toxic coal ash in Puerto Rico by developing Agremax based upon its 1996 permit applications. Instead, according to Professor Lloréns:

The company’s initial strategy was to ship thousands of tons of ash to two rural coastal communities in the Dominican Republic. But after local doctors reported increases in spontaneous abortions and birth defects near those areas, AES was ordered to clean up the ashes and paid \$6 million in a legal settlement with the Dominican Republic’s Environmental and Natural Resources Agency.⁴³

On April 2, 2016, moreover, Bloomberg News reported that AES Corporation, the parent company, settled a lawsuit with the parents of children who suffered birth defor-

35. See ERICA BURT ET AL., UNIVERSITY OF ILLINOIS AT CHICAGO SCHOOL OF PUBLIC HEALTH, SCIENTIFIC EVIDENCE OF HEALTH EFFECTS FROM COAL USE IN ENERGY GENERATION (2013), available at https://noharm-uscanada.org/sites/default/files/documents-files/828/Health_Effects_Coal_Use_Energy_Generation.pdf; Muhammad Ehsan Munawer, *Human Health and Environmental Impacts of Coal Combustion and Post-Combustion Wastes*, 17 J. SUSTAINABLE MINING 87-96 (2018), available at <https://www.sciencedirect.com/science/article/pii/S2300396017300551>; Julia Kravchenko & H. Kim Lyerly, *The Impact of Coal-Powered Electrical Plants and Coal Ash Impoundments on the Health of Residential Communities*, 79 N.C. MED. J. 289-300 (2018), available at <http://www.ncmedicaljournal.com/content/79/5/289.full>.

36. Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities, 80 Fed. Reg. at 21451.

37. *Id.* at 21466.

38. See Hazardous and Solid Waste Management System; Identification and Listing of Special Wastes; Disposal of Coal Combustion Residuals From Electric Utilities, 75 Fed. Reg. at 35128, 35153, 35168.

39. See U.S. GEOLOGICAL SURVEY, TRACE ELEMENTS IN COAL ASH, <https://pubs.usgs.gov/fs/2015/3037/pdf/fs2015-3037.pdf>. See also U.S. ENVIRONMENTAL PROTECTION AGENCY, *Drinking Water Contaminants, in AMERICA’S CHILDREN AND THE ENVIRONMENT* (2015), https://www.epa.gov/sites/production/files/2015-10/documents/ace3_drinking_water.pdf.

40. The AES Corporation (NYSE: AES) is a Fortune 200 global power company that provides energy to 17 countries through a diverse portfolio of distribution business as well as thermal and renewable generation facilities. The AES Corporation has a workforce of 19,000 people, with 2016 revenues of \$14 billion, and ownership of \$36 billion in total assets. In Puerto Rico, the AES Corporation has its 24 megawatt (MW) Illumina solar power plant as a producer of renewable energy, and its 454 MW coal-fired power plant as a generator of electricity. Both facilities are located in Guayama.

41. PREPA is an electric power company and the government-owned corporation of Puerto Rico responsible for electricity generation, power distribution, and power transmission on the island. PREPA operates as a government monopoly. On September 20, 2017, Hurricane Maria destroyed PREPA’s distribution network. On January 22, 2018, then-Gov. Ricardo Rosselló announced that all assets of PREPA will be sold in a general privatization of this heretofore government monopoly.

42. See Ruth Santiago, *Coal Ash Contamination in Puerto Rico*, OPENDEMOCRACY, Nov. 25, 2016, <https://www.opendemocracy.net/en/democraciaabiarta/coal-ash-contamination-in-puerto-rico/>.

43. See Lloréns, *supra* note 32.

mities or were killed after the AES-PR facility dumped toxic coal ash on beaches in the Dominican Republic.⁴⁴

In its initial power purchase agreement with PREPA, AES-PR committed to exporting its CCRs to the Dominican Republic. But because of the environmental and public health problems that AES-PR created in the Dominican Republic, according to Professor Lloréns:

AES [-PR] then developed a construction product Agremax, a filler based on coal ash. Some two million tons of coal ash were used throughout Puerto Rico to build roads, parking lots, malls and as fill in tract housing developments, including sites near public water wells, farms, wetlands and beaches. Alarmed by fugitive dust and other impacts, environmental groups sued. In 2014, lacking customers, Agremax was retired from the construction market.

In response, Puerto Rico's Environmental Quality Board and the island's public power company (which buys the coal plant's electricity) allowed AES[-PR] to reverse its pledge and deposit coal ash in local landfills. But according to the EPA, a majority of Puerto Rico's 29 landfills are over capacity, and some are open dumps that do not comply with current regulations. The [A]gency currently has legal agreements to close 12 landfills. In sum, the ash disposal controversy is worsening a landfill crisis.⁴⁵

In spite of its initial storage and disposal plans, AES-PR's operation has resulted in significant environmental and public health problems in Puerto Rico.⁴⁶

An August 17, 2017, hydrogeologic study revealed that the area surrounding the AES-PR stockpiles is underlain by fill material to an average depth of 10 feet below ground surface (bgs.)⁴⁷ The fill material consists of fine to medium sand and sandy clay with rock fragments. The fill stratum is underlain by the uppermost aquifer, which extends from about 10 to 25 feet bgs. This shallow aquifer comprises alluvial deposits consisting of layers of sandy clay, clayey sand, fine to medium sand, and clayey silt. The lower bound of the uppermost aquifer was intercepted at depths ranging from 23 to 28 feet below existing grade, and consists of stiff clay of high plasticity. In short, the groundwater below the

stockpiles indicated that it was susceptible to being reached by the chemicals in the toxic coal ash.

Five groundwater monitoring wells were installed to comply with EPA's April 2015 Final Coal Ash Rule.⁴⁸ According to that same August 17, 2017, EPA-ordered hydrogeologic study, it showed that the AES-PR stockpiles were releasing large quantities of chemicals into the groundwater and that the contamination was already migrating.

A March 15, 2018, article examined the various toxins in the well water, and the adverse impacts that the toxins were having on the health of the nearby residents.⁴⁹ The article captured succinctly the public health problems of the residents in the nearby communities as follows:

Erasmus Cruz-Vega is puzzled.

"Three weeks ago, the neighbor from up there died of lung cancer and another one who lived nearby died of the same cause last year," he said whispering. "He wasn't 60 years old."

While looking at his hands and counted each one with his fingers, he added that on Street D, another friend younger than 50 years old "already has the same diagnosis and Hector had x-Rays done that showed a bunch of spots throughout his body. His has already spread."

Erasmus is 71 and has lived in Guayama's Santa Ana sector for 65 years. His parents arrived in the area when the zone was still covered in sugarcane.

Now, surrounded by a poverty different from that of the last century, in an area dominated by multinational industries such as pharmaceutical companies Baxter and Pfizer, and the AES coal-fired power plant, the Puerto Rico Electric Power Authority retiree does not stop wondering why so many people in his community of 400 houses suffer what he called "a cancer epidemic."

"Back here there are three with prostate cancer," he said. "And over there alone, on a street in the San Martin sector, seven people have died of cancer. But many more have died in Miramar." The Santa Ana, San Martin and Miramar communities are located less than a mile from the AES plant.

"That's alarming, and the worst thing is that people aren't even fazed anymore. When they tell you that so-and-so has cancer, it's as if they told you they caught a cold," he lamented.⁵⁰

44. See Jef Feeley & Mark Chediak, *Power Company AES Settles Claims That It Killed or Deformed Babies With Dumped Coal Ash*, BLOOMBERG, Apr. 4, 2016, <https://www.bloomberg.com/news/articles/2016-04-04/aes-settles-suit-over-coal-ash-dumping-in-dominican-republic>.

45. See Lloréns, *supra* note 32.

46. AES-PR is also shipping its toxic coal ash to a landfill in Osceola County, Florida, which has a high concentration of Puerto Ricans, according to a June 10, 2019, Truthout op-ed entitled "Corporations Are Poisoning People in Puerto Rico With Coal Ash," by Jack Aponte, <https://truthout.org/articles/corporations-are-poisoning-people-in-puerto-rico-with-coal-ash/>.

47. DNA-ENVIRONMENT, LLC, GROUNDWATER MONITORING SYSTEM & SAMPLING AND ANALYSIS PROGRAM—AES PUERTO RICO LP, GUAYAMA, PUERTO RICO (2017), available at http://aespuertorico.com/wp-content/uploads/2017/10/AESPuerto-Rico_Groundwater_Monitoring_System.pdf.

48. 40 C.F.R. §257.91 (2015).

49. Omar Alfonso, *Toxins From AES's Ashes Are Contaminating Groundwater in Puerto Rico*, CENTRO DE PERIODISMO INVESTIGATIVO, Mar. 15, 2018, <http://periodismoinvestigativo.com/2018/03/toxins-from-aess-ashes-are-contaminating-groundwater-in-puerto-rico/>.

50. *Id.*

III. Conclusion

This Comment is intended to chronicle the environmental and public health atrocities experienced by the residents of Guayama, Puerto Rico.

AES, as a multinational corporation, is answerable to its shareholders only, and is dedicated to providing electricity and making a profit in the process. The AES-PR plant is not expected to make a moral decision related to protecting the human right of its neighbors to clean air, clean land, and clean water. The AES-PR plant is expected to comply with its air and water permits, as well as its permits to store and dispose of toxic coal ash. These permits are all essentially “licenses to pollute” granted by the island’s Environmental Quality Board, which is the agency whose main function is to protect and conserve the environment as well as to maintain a balance between economic development and the environment.

Moreover, an EPA led by Administrator Wheeler is also not expected to make a moral decision related to protecting the human right to clean air, clean land, and clean water of neighboring communities to coal-fired power plants in Puerto Rico or elsewhere throughout the United States. Instead, EPA, as an environmental regulatory agency, must develop, implement, and enforce strong regulations that control the slow and consistent leaching of pollutants from coal-fired power plants into the groundwater, which, if ingested, can take decades to cause cancer and other public health problems.

However, EPA must also ensure that minority and/or low-income communities are not disproportionately exposed to environmental harms and risks as compared to other communities based upon President William J. Clinton’s February 11, 1994, Executive Order No. 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.⁵¹ A principal purpose of Executive Order No. 12898 is to provide minority and/or low-income communities greater opportunities for public participation in, and access to, public information on matters relating to human health and the environment. Further, according to EPA guidance documents, achieving the goal of environmental justice for all communities is embedded into all legislation that the Agency administers.

There is no secret formula that must be followed in order for AES-PR and EPA to address the legitimate environmental injustice concerns of the Guayama residents. But I offer some observations that other similarly situated communities, based upon the Guayama experience, may want to consider in order to ensure that environmental hazards do not disproportionately affect their communities.

A. Observation One: The Importance of Community Empowerment Organizing

Community empowerment refers to the process of enabling communities to increase control over their lives. Empowerment essentially refers to the process by which people gain control over the factors and decisions that shape and affect their lives. Community empowerment, therefore, is more than the limited involvement, participation, or engagement of community residents in the government’s decisionmaking processes. Community empowerment is, in actuality, a process of renegotiating power in order to gain more control. Thus, power is a central component of community empowerment. In order for community empowerment to be realized, however, there must first be community organizing.

According to Luke Cole’s brilliant 1992 article, “Empowerment as the Key to Environmental Protection: The Need for Environmental Poverty Law”:

In the environmental poverty law context, empowerment means enabling those who will have to live with the results of environmental decisions to be those who actually make the decisions. . . . Rather than solving a problem *for* a community, the empowerment model calls upon attorneys to help community members to solve their own problems.⁵²

Community groups throughout southern and southeastern Puerto Rico have been organizing in opposition to the toxic coal ash contamination at the AES-PR facility for a number of years. For example, since 2014, community groups have protested the fugitive dust and other significant negative environmental and public health impacts of coal ash generated by AES-PR. AES-PR transported toxic coal ash through neighborhoods in the municipalities of Humacao and Peñuelas to landfills in dozens of truckloads on a daily basis. Those truckloads exposed nearby residents to inhalation of fugitive dust from the toxic coal ash.

Moreover, in November 2016, a number of people were arrested because of civil protests against the trucking of AES-PR coal ash to the Peñuelas Valley Landfill and 13 other municipalities throughout Puerto Rico. The toxic coal ash had been used as a daily cover for garbage at landfills or just left in mounds exposed to the Caribbean wind and rain, which led to fugitive dust and groundwater contamination. The landfills in Puerto Rico are unlined and the coal ash was and still is seeping through the ground and into the groundwater, contaminating the groundwater. According to a March 2019 article entitled “Confronting Puerto Rico’s Coal-Ash Crises”:

As [Centro de Periodismo Investigativo] explains, the environmental dangers are deeply ingrained in the local

51. Exec. Order No. 12898, 59 Fed. Reg. 7629 (Feb. 16, 1994).

52. Luke Cole, *Empowerment as the Key to Environmental Protection: The Need for Environmental Poverty Law*, 19 *ECOLOGY L.Q.* 619, 660-61 (1992).

landscape—not only because there are virtually no protections against ongoing contamination through rain and runoff, but because the pollution was literally engineered into the infrastructure of the impacted communities, as “landfill in residential and commercial projects, as well as roads and water retention ponds.”⁵³

The problem was so widespread that initially two of the 78 municipalities in Puerto Rico prohibited, by municipal ordinances, the use of toxic coal ash as fill material at construction sites and in their landfills. Eventually, 43 other municipalities prohibited the use of coal ash at their landfills. Finally, on July 4, 2017, then-Gov. Ricardo Rosselló signed into law S.B.-81, Ban on the Deposit and Disposal of Coal Ash or Coal Combustion Residuals in Puerto Rico Act.⁵⁴ The law stated that “[t]he deposit and disposal of fly ash or coal combustion residuals in any roads, lands, including landfills, sanitary landfills, and water bodies within the territory of the Government of Puerto Rico is hereby banned.”

It took considerable organizing by community groups to become empowered, and their legal counsel, through community empowerment lawyering and litigation in local courts and federal district court, to claim victory with the enactment of S.B.-81 into law, as well as with the enactment of the predecessor municipal ordinances. However, according to Ruth “Tata” Santiago, an attorney who represented several community groups pertaining to the enactment of the law:

SB-81 was not a big victory because a last-minute change in the language of the statute was interpreted to exempt Agremax. . . . We are closer to a victory because community groups resisted the enforcement of the law that would have allowed the use of AES coal ash waste in PR and the former Governor [Rosselló] announced that AES would stop burning coal by the end of 2020. We have yet to see whether the current Governor [Wanda Vázquez Garced] will take the same position.⁵⁵

53. Michelle Chen, *Confronting Puerto Rico's Coal-Ash Crisis*, NATION, Mar. 13, 2019, <https://www.thenation.com/article/puerto-rico-coal-ash/>. See also Santiago, *supra* note 42.

54. Ban on the Deposit and Disposal of Coal Ash or Coal Combustion Residuals in Puerto Rico Act, No. 40, 18th Leg. Assemb. (P.R. 2017).

55. Interview with Ruth Santiago, Attorney, Comité Diálogo Ambiental (Sept. 11, 2019). According to an April 8, 2019, article, Governor Rosselló stated in a press release: “We are in talks with AES Energy Systems, the firm that owns Puerto Rico’s coal plant in the municipality of Guayama, in order to identify a cleaner form of energy by next year.” Governor Rosselló’s statement was based on the recently passed Energy Public Policy Act that called for Puerto Rico to use only renewable sources of energy by 2050. The article stated:

The new law allows for the replacement of coal-burning plants with another fuel as a transition toward 2028, when coal use will be banned. Also, it allows for certain contracts, such as AES Puerto Rico’s, which generates 17% of the island’s electricity with coal, to be amended if the plant is modified to use renewable sources.

B. Observation Two: Community Empowerment Lawyering Is Key

With respect to community empowerment lawyering, this Comment recognizes the cogent observations set forth in Prof. William P. Quigley’s seminal law review article, “Reflections of Community Organizers: Lawyering for Empowerment of Community Organizations.”⁵⁶ Professor Quigley wrote:

The purpose of empowerment lawyering with community organizations is to enable a group of people to gain control of the forces which affect their lives. The substance of this lawyering is primarily the representation of groups rather than individuals. This style calls for lawyering which joins, rather than leads, the persons represented.⁵⁷

Professor Quigley’s 10 themes of community empowerment lawyering are as follows:

The primary goal is building up the community.

- Lawyers can disempower groups by creating dependency.
- Litigation is only one of many means to the end.
- Learn community organizing and leadership development.
- The community must be involved in everything the lawyer does.
- Never become the leader of the group.
- Be willing to confront the lawyer’s own comfort with an unjust legal system.
- Be wary of speaking for the group.
- Understand how much the lawyer is taking as well as giving.
- Be willing to journey with the community.

Since that 1995 article, there have been a number of excellent law review articles on various aspects of what has been referred to as “community empowerment lawyering” or “community lawyering.”⁵⁸ According to Luke Cole, who practiced environmental poverty law with California Rural Legal Assistance:

Puerto Rico Gov Says Island Will End Coal-Based Power Generation Next Year, CARIBBEAN BUS., Apr. 8, 2019, <https://caribbeanbusiness.com/puerto-rico-gov-says-island-will-end-coal-based-power-generation-next-year/>.

56. William P. Quigley, *Reflections of Community Organizers: Lawyering for Empowerment of Community Organizations*, 21 OHIO N.U. L. REV. 455-80 (1995).

57. *Id.* at 455.

58. See, e.g., Michael A. Diamond, *Community Lawyering: Introductory Thoughts on Theory and Practice*, 22 GEO. J. ON POVERTY L. & POL’Y 395 (2015); William P. Quigley, *Revolutionary Lawyering: Addressing the Root Causes of*

“Empowerment law” is more a *method* than a *product*, a practice through which the lawyer helps the group learn empowering methods of operation. Empowerment of clients is the answer to the political organizers’ eternal question: “What happens when we go away?” By helping people take control over the decisions which affect their lives, an attorney leaves the community stronger than when she first arrived.⁵⁹

The residents of Guayama are fortunate to have a person working with them who is not only a skilled community organizer, but also a respected environmental advocate who practices community empowerment lawyering. Her name, as mentioned above, is Ruth “Tata” Santiago. Professor Lloréns captured the story of Ms. Santiago in her May 5, 2017, article entitled “The Making of a Community Activist.”⁶⁰ Professor Lloréns wrote:

Due to her family’s dire economic situation, after graduating from high school Tata moved stateside to attend college; she won a scholarship to attend Lehigh University in Pennsylvania. After earning her bachelor’s degree, she went on to Columbia University’s law school. Throughout, she was active in advocating for students of color and tenants’ rights.

After graduation, she worked for a law firm on New York City’s Park Avenue. But on a vacation to Puerto Rico in 1986, Tata was moved again by the appalling conditions in the southeast. Her time and energy, she realized, could be better spent working to improve life for the poor and marginalized in her own home region.

Tata moved back to Puerto Rico in 1987 and took a job with a law firm. Over the following decade, she became deeply involved with community activism. Along with activist Nelson Santos and other community residents, Tata organized community events, wrote articles for a community newspaper, and helped organize a committee to help the children in the public housing project where she grew up. She and other residents restored a historic theater building, where they began showing films and hosting music and dance performances. She worked with community activists to plan alternative development projects focusing on ecotourism and sustainable agriculture, and she helped create an adult education and training

school that offered English language, cooking, sewing, ceramics, and furniture-making classes.

Since 1997, Tata has been an environmental lawyer for *Comité Diálogo Ambiental, Inc.* (Environmental Dialogue, Inc.), an environmental advocacy organization founded that same year by Víctor Alvarado Guzmán, a local community activist.⁶¹

With respect to community empowerment lawyering, Ms. Santiago agreed wholeheartedly with Professor Quigley’s 10 themes, and simply stated: “People living in these situations know better than us lawyers what they are experiencing. What we do as lawyers is provide the technical legal mechanisms. It is not possible for us lawyers to represent effectively the residents any other way.”⁶²

C. Observation Three: Participation in EPA’s Decisionmaking Process Gives You a Seat at the Table

As Sen. Elizabeth Warren (D-Mass.) recently said, “Everybody in this room knows the basic rule: If you don’t have a seat at the table, you’re probably on the menu.”⁶³ From an environmental justice perspective, this basically means that if a community is not represented at EPA’s decisionmaking table, the community’s views will be left out, or worse yet, the community is on the table for the siting of another pollution-generating facility. Public participation is, therefore, very important.

Public participation in environmental decisionmaking is a hallmark of many environmental regulatory regimes worldwide over the past few decades. Individuals, communities, and organizations affected by development approvals, operating permits, land use plans, and other types of regulatory processes have increasingly demanded greater consultation, and more transparent and accountable decisions by government decisionmakers.

Thus, Section 5-5 of Executive Order No. 12898 provides that federal agencies, including EPA, wherever practicable and appropriate, may translate crucial public documents, notices, and hearings relating to human health or the environment for limited English-speaking populations. Finally, federal agencies must work to ensure that public documents, notices, and hearings relating to human health and the environment are concise, understandable, and readily accessible to the public.

Poverty and Wealth, 20 WASH. U. J.L. & POL’Y 101 (2006); Jennifer Gordon, *Concluding Essay: The Lawyer Is Not the Protagonist: Community Campaigns, Law, and Social Change*, 95 CAL. L. REV. 2133 (2007); Anthony V. Alfieri, *Fidelity to Community: A Defense of Community Lawyering*, 90 TEX. L. REV. 635 (2012); Michael A. Diamond, *Community Lawyering: Revisiting the Old Neighborhood*, 32 COLUM. HUM. RTS. L. REV. 67-131 (2000); Angelo N. Ancheta, *Community Lawyering*, 81 CAL. L. REV. 1363 (1993).

59. Cole, *supra* note 52, at 662.

60. Hilda Lloréns, *The Making of a Community Activist*, SAPIENS, May 5, 2017, <https://www.sapiens.org/culture/jobos-bay-community-activist/>.

61. *Id.*

62. Interview with Ruth Santiago, Attorney, Comité Diálogo Ambiental (Sept. 11, 2019).

63. Goodreads, *Elizabeth Warren Quotable Quote*, <https://www.goodreads.com/quotes/1508163-everybody-in-this-room-knows-the-basic-rule-if-you> (last visited Nov. 14, 2019).

Moreover, EPA defines “environmental justice” as:

the *fair treatment and meaningful involvement* of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. . . . *Meaningful involvement* means that: (1) potentially affected community residents have an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health; (2) the public’s contribution can influence the regulatory agency’s decision; (3) the concerns of all participants involved will be considered in the decision-making process; and (4) decisionmakers seek out and facilitate the involvement of those potentially affected.⁶⁴

Based upon Executive Order No. 13166, Improving Access to Services for Persons With Limited English Proficiency, and the Administrative Procedure Act,⁶⁵ which sets forth the federal government’s standards of due process, transparency, and accountability, on August 9, 2019, Ms. Santiago, representing Comité Diálogo Ambiental, Inc., together with other organizations, sent a letter to EPA requesting that at least one public hearing regarding the proposed Phase Two coal ash rule be held in Guayama and that the documents be published in Spanish. Ms. Santiago argued that the low-income and Spanish-speaking Puerto Rican communities such as Miramar, Puente de Jobos, and Santa Ana de Guayama were impacted regularly by coal ash dust carried from the AES-PR waste pile by the wind, and their voices needed to be heard.⁶⁶ The Agency, however, refused the request.

Ms. Santiago believes that it is important for communities to be engaged in the government’s decisionmaking process. She stated:

We are invisible communities. We must take the opportunity to be visible. We participated in the Phase One rule process, and we are participating in the Phase Two rule process. We are developing the administrative record. We encourage the residents to attend Council meetings and government hearings. They must have a seat at the table as a first step to get the government and industry to address the harmful health impacts of a facility’s operations.⁶⁷

D. Observation Four: Use Existing Environmental Laws and Their Implementing Regulations to Address Environmental Injustices

Over the years, there is a long list of instances of EPA’s Office of General Counsel, Agency leadership, and outside attorneys consistently and categorically stating that environmental laws and their implementing regulations can be used effectively to address environmental injustice situations.

For example, on December 1, 2000, EPA’s general counsel, serving in the Clinton Administration, issued a legal memorandum entitled “EPA Statutory and Regulatory Authorities Under Which Environmental Justice Issues May Be Addressed in Permitting,” which

analyze[d] a significant number of statutory and regulatory authorities under the Resource Conservation and Recovery Act, the Clean Water Act, the Safe Drinking Water Act, the Marine Protection, Research, and Sanctuaries Act, and the Clean Air Act that the Office of General Counsel believes are available to address environmental justice during permitting.⁶⁸

On August 9, 2001, EPA Administrator Christine Todd Whitman, serving under President George W. Bush, issued an agencywide memorandum, “EPA’s Commitment to Environmental Justice,” stating: “Environmental statutes provide many opportunities to address environmental risks and hazards in minority and/or low-income communities. Application of these existing statutory provisions is an important part of the Agency’s effort to prevent those communities from being subject to disproportionately high and adverse impacts, and environmental effects.”⁶⁹

In 2001, the Environmental Law Institute (ELI) issued a comprehensive legal treatise, *Opportunities for Advancing Environmental Justice: An Analysis of U.S. EPA Statutory Authorities*. ELI “review[ed] the provisions contained in the principal federal environmental laws administered by EPA, in order to identify authorities that potentially could be used to advance a variety of environmental justice goals in the agency’s programs.” ELI stated that “[a] fuller understanding of EPA’s authorities to promote environmental justice is important because the public has a vital role to play in the effective implementation of EPA’s environmental protection programs.”⁷⁰

64. U.S. EPA, TOOLKIT FOR ASSESSING POTENTIAL ALLEGATIONS OF ENVIRONMENTAL INJUSTICE (2004) (EPA 300-R-04-002), *available at* <https://www.epa.gov/sites/production/files/2015-02/documents/ej-toolkit.pdf>.

65. 5 U.S.C. §§551 et seq.

66. Letter from Ruth Santiago, Attorney, Comité Diálogo Ambiental, to Peter Wright, Assistant Administrator, U.S. EPA Office of Land and Emergency Management, Docket Number EPA-HQ-OLEM-2018-0524: Request for Translation of Proposed Rule and Associated Written Documents and Renewed Request for a Public Hearing in Guayama, Puerto Rico, and the Extension of the Comment Period (Aug. 9, 2019).

67. Interview with Ruth Santiago, *supra* note 62.

68. Memorandum from Gary S. Guzy, General Counsel, U.S. EPA, to Steven A. Herman, Assistant Administrator, U.S. EPA Office of Enforcement and Compliance Assistance et al. (Dec. 1, 2000), https://www.epa.gov/sites/production/files/2015-02/documents/ej-permitting_authorities_memo_120100.pdf.

69. Press Release, U.S. EPA, Administrator Whitman Reaffirms Commitment to Environmental Justice (Aug. 21, 2001), https://archive.epa.gov/epa-pages/newsroom_archive/newsreleases/41a2df9798d627a185256aaf0067e435.html.

70. ELI, OPPORTUNITIES FOR ADVANCING ENVIRONMENTAL JUSTICE: AN ANALYSIS OF U.S. EPA STATUTORY AUTHORITIES (2001), *available at* <https://www.eli.org/sites/default/files/eli-pubs/d11-04.pdf>.

Still further, in December 2011, EPA's general counsel, serving under President Obama, issued a document entitled *EJ Legal Tools*. The Office of General Counsel reviewed all of the legal authorities under the environmental statutes administered by EPA "that may have contributive application in the effort to advance environmental justice under Plan EJ 2014—the Agency's overarching strategy for advancing environmental justice."⁷¹ The purpose of this quick trip down memory lane is to demonstrate to communities that all of the environmental laws administered by the Agency can be used effectively to address environmental injustices.

Ms. Santiago firmly believes that using environmental laws and their implementing regulations is an important way for communities to secure relief from the environmental and public health conditions that they find themselves living in. She stated: "There must be more than just persuasive legal arguments. There must be enforcement by the government against corporate actions. Environmental laws and their implementing regulations provide compliance mechanisms for corporate behavior."⁷²

Ms. Santiago's statement regarding the importance of environmental laws on the regulated community is eerily similar to the April 14, 1967, statement of the Reverend Dr. Martin Luther King Jr. at Stanford University regarding the effects of civil rights laws on the regulated community:

Now there is another notion that gets out, it's around everywhere. It's in the South, it's in the North, it's in California. It's the notion that legislation can't solve the problem; it can't do anything in this area. And those who project this argument contend that you've got to change the heart and that you can't change the heart through legislation.

But after saying this, let me say another thing which gives the other side, and that is that although it may be true that morality cannot be legislated, behavior can be regulated. Even though it may be true that the law cannot change the heart, it can restrain the heartless. Even though it may be true that the law cannot make a man love me, it can

restrain him from lynching me. And I think that's pretty important also. And so while the law may not change the hearts of men, it can and it does change the habits of men. And when you begin to change the habits of men, pretty soon the attitudes will be changed; pretty soon the hearts will be changed. And I'm convinced that we still need strong civil rights legislation.⁷³

In conclusion, this Comment began with President Wilson's prescient quote about "an invisible empire . . . set up above the forms of democracy." It proceeded to discuss how the Wheeler-led EPA final and proposed toxic coal ash regulations manifest bad environmental policy that, consequently, adversely affects minority and low-income residents of communities like Guayama. Corporations like AES-PR, according to community activists, have built coal-fired power plants in the poorest communities, exploited the lack of enforcement of regulations by government agencies, and reaped profits from producing and distributing electric energy, while, at the same time, according to the Agency, emitting a slew of identified carcinogens and neurotoxins in toxic coal ash that include elevated probabilities of cancer in the skin, liver, bladder, and lungs, as well as non-cancer risks such as neurological and psychiatric effects, cardiovascular effects, damage to blood vessels, and anemia. This is environmental injustice.

The Comment offers four observations surrounding the Guayama experience related to community empowerment organizing; community empowerment lawyering; participating in the government's environmental decisionmaking process; and using effectively environmental laws and their implementing regulations to address this environmental injustice situation. It is axiomatic that affected communities might not be able to defeat entirely every rollback of Wheeler's EPA, but they can slow down significantly some of the more egregious initiatives and relegate them to the "dustbin of environmental history" where they so rightfully belong. For affected communities and the environmental law and policy community to wage war against the "invisible empire" at EPA is arguably to preserve, protect, and defend our democracy.

71. U.S. EPA, PLAN EJ 2014: LEGAL TOOLS (2011), available at <https://www.epa.gov/sites/production/files/2015-04/documents/planej2014legaltools.pdf>.

72. Interview with Ruth Santiago, *supra* note 62.

73. Dr. Martin Luther King Jr., The Other America, Speech at Stanford University (Apr. 14, 1967), available at https://auroraforum.stanford.edu/files/transcripts/Aurora_Forum_Transcript_Martin_Luther_King_The_Other_America_Speech_at_Stanford_04.15.07.pdf.