National Hispanic Medical Association

Coal Ash and the Hispanic Community

What is Coal Ash?

Coal ash, or coal combustion residuals (CCR), is a waste byproduct created when coal-fired power plants burn coal to produce electricity. The United States produces around 110 million tons of coal ash per year[1], and over 130 million tons in 2014, making it one of the country's single largest sources of industrial waste.[2] Coal ash contains various harmful contaminants such as mercury, cadmium, and arsenic. Improperly managed, it "can pollute waterways, ground water, drinking water, and the air."[2]

Large coal ash disposal spills near Kingston, TN and Eden, NC, 2008 and 2014 respectively,[2] spurred federal action: In 2015, the U.S. Environmental Protection Agency (EPA) issued a final rule known as the Coal Combustion Residuals Rule which set up the first regulatory requirements on coal ash.[3] The regulation addresses risk from coal ash disposal (ground water leakage, contaminants in the air, and failure of coal ash surface impoundments) and "sets out recordkeeping and reporting requirements" for facilities to "establish and post specific information to a publicly-accessible website."[4]

For decades before the 2015 rule, the coal industry disposed of coal ash in unlined ponds where "toxins leak into groundwater." ***Data from the industry shows that "more than 95% of the coal ash ponds in the United States" and that "almost all" are contaminating groundwater that is above the levels that the EPA deems safe***. Without proper management, these contaminants can and continue to pollute waterways, groundwater, drinking water, and the air.[2]

Environmental Justice and Coal Ash

A 2016 environmental justice report by the U.S. Commission on Civil Rights recognized that heavy metals in coal ash are " ***'hazardous substances' and can potentially damage all major organ systems.***" Furthermore, the Commission found that EPA's final coal ash rule "will negatively impact low-income and communities of color disproportionately" because it requires these communities to "collect complex data, fund litigation, and navigate the federal court system." Toxic substances present in coal ash can also contaminate the environment "through spills, dam leaks, and sewage pipe breaks," leading to coal ash bioaccumulating up the food chain.[5]

Additionally, the environmental justice concerns in communities of color detailed in the U.S. Commission on Civil Rights report may become exacerbated in years to come. Responding to pressure from coal and utility companies, the Trump administration began a suite of regulatory rollbacks starting with a proposed rule issued in July 2018 revising the 2015 rule so that the requirement for groundwater monitoring could be lifted if if it is determined by EPA that there is "no potential for pollutants to move into certain aquifers." A study released by the Environmental Integrity Project in March 2019 looked at 265 coal plants throughout the United States and Puerto Rico and determined that ***91 percent "have unsafe levels of one or more coal ash constituents in downgradient wells that appear to be affected by onsite, regulated coal ash dumps."***[6]

Health Effects of Coal Ash Particulate Contact, Inhalation, and Ingestion

Various potential health risks are linked to increased coal ash exposure, including increased risk of cancer: A 2009 analysis from the EPA showed that people who live near coal ash dumps "have as much as a ***1 in 50 chance of getting cancer from drinking water contaminated by arsenic***," which is one of the most common pollutants from coal ash.[7] Coal ash contaminants and particulates can also cause dermatitis, respiratory irritation (through inhalation), and nausea, vomiting, and diarrhea (through ingestion).[8] Other health effects of coal ash also includes heart disease, reproductive failure, stroke, and brain damage on children.

Coal Ash in the Hispanic Community

The Coal Ash Crisis has affected the Hispanic community as evidenced by the number of "Coal Ash Units" in states with high numbers and concentrations of Hispanic populations. **Figure 1** displays all of the locations of Coal Ash Units in the United States. Texas has the second highest number of Hispanics per state (10.4 million) and third highest concentration of Hispanics per state (39% of the Texas population), Florida has the third most Hispanics per state at 4.8 million, Illinois has 2.2 million Hispanics, New Mexico's population is about 50% Hispanic, and Nevada's population is nearly a third Hispanic.[8,9]Across the United States, the total number of Coal Ash Units detected is totaled at 737 Coal Ash Units.[9] Texas has the most Coal Ash Units of any single state with 53 Coal Ash Units, Florida has a significant number of Coal Ash Units at 15 Coal Ash Units, Illinois has the third most Coal Ash Units per state at 44 Coal Ash Units, News Mexico has 3 Coal Ash Units, and Nevada and has 9 Coal Ash Units.[10]

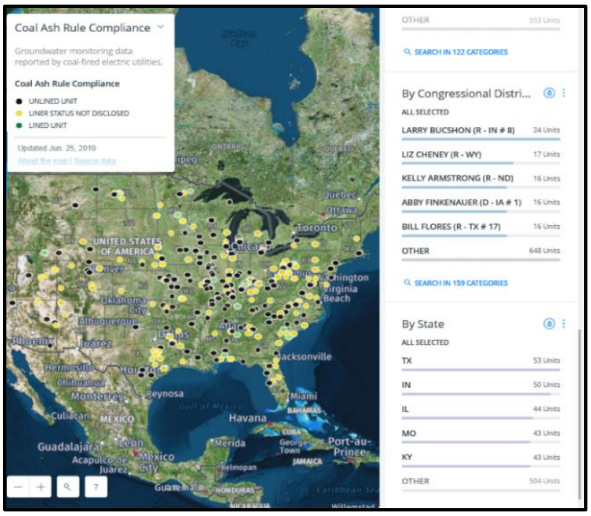

Figure 1. Coal Ash Unit Location Map[10]

Examples of real-life impact of coal ash pollution on Hispanic communities can be seen in Puerto Rico where the multinational energy giant ***AES Corporation dumped 2 million tons of toxic coal ash in 12 different municipalities from 2004 to 2011***[11] Since opening in 2002, AES has exposed the population to various public health hazards related to coal ash by ignoring regulations and leaving up to 1 million tons of coal ash waste completely unaccounted for.[10] In Puerto Rico, and in other areas across the country., the familiar and deadly combination of pollution in communities without strong political representation, lack of protective environmental regulations, and absence of enforcement of existing environmental laws created an avoidable pollution crisis , disproportionately harming Hispanic families.

Call to Action

The National Hispanic Medical Association urges you to contact your Representative and Senators to call on the EPA to reform its regulations regarding coal ash.

If you have any questions, please contact Ben Melano at bmelano@nhmamd.org.

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[1] "The Coal Ash Problem." Earthjustice, August 27 2019 https://earthjustice.org/features/the-coal-ash-problem
[2] "Coal Ash Basics." EPA, Environmental Protection Agency, 5 Feb. 2019, https://www.epa.gov/coalash/coal-ash-basics#03.
[3] "Mapping the Coal Ash Contamination." Earthjustice, 25 July 2019, https://www.earthjustice.org/features/map-coal-ash-contaminated-sites.
[4] "Disposal of Coal Combustion Residuals from Electric Utilities Rulemakings." EPA, Environmental Protection Agency, 14 Aug. 2019, www.epa.gov/coalash/coal-ash-rule#history.
[5] *Environmental Justice: Examining the Environmental Protection Agency's Compliance and Enforcement of Title VI and Executive Order 12,898*. U.S. Commission on Civil Rights, Sept. 2016, www.usccr.gov/pubs/2016/Statutory_Enforcement_Report2016.pdf.
[6] Environmental Integrity Project. *Coal's Poisonous Legacy: Groundwater Contaminated by Coal.* 2019. https://www.environmentalintegrity.org/wp-content/uploads/2019/03/National-Coal-Ash-Report-Revised-7.11.19.pdf
[7] "EPA Data Show Higher Cancer Risks For Those Who Live Near Coal Ash Dumps." *Earthjustice*, 24 Apr. 2014, earthjustice.org/news/press/2009/epa-data-show-higher-cancer-risks-for-those-who-live-near-coal-ash-dumps.
[8] "Coal Ash." *ATSDR*. Agency for Toxic Substances & Disease Registry, 15 October 2018, https://www.atsdr.cdc.gov/substances/coalAsh.asp.
[9] "Coal Ash Rule Compliance Map." *Earthjustice*, 10 July 2019, https://earthjustice.org/features/map-coal-ash-contaminated-sites.
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