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AES Corporation is located in Guayama, near the towns of Salinas and Arroyo.

Ashes to Ashes: Puerto Rico's Coal Combustion Problem

Story by Huáscar Robles

"Toward the end of last February we started to see the trail of ashes," Miriam Gallardo recalls. "The first thing they did was dig a wide ditch and everything was filled with ashes."

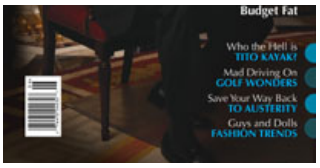
Gallardo, a soft-spoken English teacher, details the harrowing day trucks hauling ashes from AES Corporation rode into the San Antonio neighborhood; AES tractors dug 30-feet deep into the ground and the trucks spread ashes produced at the company's coal plant in Guayama.

Gallardo is but one of many concerned neighbors from the Arroyo municipality who gathered that tempestuous night at the Arroyo Cultural Center to lead a fight against AES, a company that burns coal to generate electricity for the Puerto Rico Electric Power Authority (PREPA). The citizens worry about the potential health effects on their community because some of them have already experienced respiratory problems, forcing them to relocate.

Such is their concern about the long-term health hazards posed by the ditches dug in the San Antionio and Miramar I and II neighborhoods that the group organized itself into the Community of Arroyanos for the Environment (known for the Spanish acronym CAPA) to halt the environmental assault on their community.

AES Corporation is well aware of the discontent among locals. The company argues that their substance is not ash but an aggregate produced at the plant. According to tests performed, the aggregate is not toxic and complies with the federal and local standards, but environmentalists warn that these standards are lax and that lack of regulation by the Environmental Protection Agency (EPA) and the Environmental Quality Board (EQB) would lead to damage to human health, perhaps not now, but over time when it may too late.

Coal into Question



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Coal plants are fast-becoming a source of energy for households across the United States. The US Government's Energy Information Administration (EIA) lists 617 facilities that burned coal for energy in 2007. Data from the EIA's 2009 Annual Energy Outlook project that coal ought to generate 47 percent of the energy produced in 2030. That the current level is only two percentage points under that distant forecast, is troubling when coupled with a forecast of a 19 percent increase in coal fired power by 2030.

Energy generated at coal plants is less expensive than oil-based energy. Industry pundits argue coal-based energy lowers the rising cost of electricity for consumers. But this cost effectiveness comes at a price. Coal-fired power plants contribute to more than 30 percent of carbon dioxide (CO2) emissions, a Reuters report stated in May 1, 2009, and CO2 is a primary contributor to the greenhouse gases that expedite global warming.

The American Clean Energy and Security Act, recently passed by the U.S. House of Representatives, provides a version of the cap and trade program under which heat-trapping gasses, carbon dioxide included, would be reduced 17 percent by 2020. If the bill passes in the Senate, some detractors believe the provisions for cap and trade that allow purchasing of new fossil fuel plants with trade credits could result in more plants.

More coal plants would mean more carbon combustion residues or CCRs. CCRs are the material left over after burning coal such as fly ash, bed ash, flue gas desulfurization or FDG material and others. According to the American Coal Ash Association, in 2007 the United States produced 131 million tons of CCRs; 43 percent was used beneficially and almost 75 million tons were disposed of through landfill.

Environmental advocates like the Sierra Club have strictly opposed coal plants and the use of CCRs, in hopes that the material is categorized as hazardous waste. The environmental group's hopes are far from being realized. The Resource and Conservation and Recovery Act (RCRA), the federal law that manages hazardous waste, excludes CCRs from this category.

Recent events and evidence in environmental reports have forced regulators to reassess coal's harmful effects. On December 22, 2008, dikes holding millions of cubic yards of coal ash mixed with water broke, spilling over 400 acres of land in Kingston, Tennessee. The company, the Tennessee Valley Authority, is accountable for the clean up, estimated at $825 million.

The coal industry hardly had a chance to dust itself from the bad press, when environmental groups reported on March 4, 2009 that the EPA under the Bush Administration delayed publication of a 2002 Risk Screening Report on coal ash dumpsites from over 21 states. The report, made public seven years after its publication, evidenced high cancer risk for one in every 50 Americans living near the 200 landfills and wet ponds used to dispose ash and scrubber sludge, another coal byproduct. The Environmental Integrity Project and Earthjustice, two non-profit, non-partisan, environmental organizations, analyzed the EPA data in the report "Coming Clean: What the EPA Knows About the Dangers of Coal Ash," and acknowledged 100 landfills and 110 surface impoundments examined by the EPA that, according to the groups, lacked effective synthetic liners to prevent leaks.

The report warns of the dangers of contaminants trapped inside the combustion residue, fly ash. Fly ash is known to contain traces of the heavy metals boron, cadmium, arsenic, lead and mercury among others that are considered dangerous to human health.

Dr. José Seguinot-Barbosa, a professor at the Department of Environmental Health at the University of Puerto Rico's Graduate School of Public Health worries that the underlying problem in coal ash is its leaching capabilities, especially in tropical weather with considerable precipitation.

"Ashes contain high amounts of metals, especially heavy metals and, the other possible problem – without being an ash expert – is that we live in a country where it rains a lot," he says. His main concern is that rain could cause these heavy metals to percolate from the material.

Health risks associated with heavy metals are several. Arsenic is associated with low production of red and white blood cells and heart problems. Lead, another heavy metal found in coal ash, is easily absorbed by children. Experts believe lead can impair a child's ability to learn.

"Environmental problems are synergistic," Seguinot-Barbosa explains. "There is a combination of many factors." He adds that many agencies and lawmakers tackle environmental threats separately. "When one contaminant combines with another that perhaps is under the [accepted federal] standards, that mixture of two contaminants can lead to a very dangerous situation."

Víctor Alvarado, director of the community organization Diálogo Ambiental, rallies community leaders, health specialists and doctors to raise awareness of these potential health risks. Alvarado and members of the community point to the aquifers lying below the southern terrains of Guayama and Salinas, where the Jobos Bay National Reserve of Estuary Research is located.

His organization represents citizens of Salinas, a town on the southern coast of Puerto Rico, where developers are using the ash aggregate in several public and private construction projects.

"They are depositing [the residue] over the aquifers," says Alvarado, 38. He also complains that the ashes aren't properly covered to avoid dusting into the air. "We are near schools, neighborhoods and these ashes fly off and people breathe them because the particles are very small and we don't know

what kinds of diseases this could cause."

Metro visited the area and confirmed the substance's use at several projects. At the new development in the Marbella urbanization in Salinas, Martín Santiago, a construction worker and foreman, told Metro the ash aggregate came from AES Corporation.

The material is being used as structural fill in a new mini mall where the aggregate was left uncovered. Alvarado claims that when it's dry, a cloud of dust hovers over the surface.

He also recalls that the material was used near the Margarita neighborhood and in a lot adjacent to the Estela Márquez public school.

Activists like Alvarado complain that health risks are disproportionately spread across classes and that low-income and middle-class families are the most affected.

Several stateside studies confirm his allegations. One such study was "In the Wake of the Storm: Environment, Disaster and Race After Katrina." The study was lead by several researchers including Manuel Pastor, a professor of Geography and American Studies and Ethnicity at the University of Southern California (USC), where he also directs the Program for Environmental and Regional Equity (PERE). The study measured the prevalence of environmental and disaster risks of low income and racial minorities.

The report notes, "lower-income minority communities, like those of New Orleans' Lower Ninth Ward, are disproportionately exposed to hazards and other disamenities." The document also adds that Katrina accelerated the environmental injustice experienced by low-income classes and minorities in the region. The quality of the environment for US southerners is "markedly different from that of other regions of the country," according to the data and "lax enforcement of environmental regulations has left the region's air, water, and land the most industry-befouled in the United States."

More alarming is the report's conclusion that lower income neighbors are more prone to environmental risks because it is less expensive to operate where the disenfranchised live. Pollution prone companies find cheaper land in these regions where residents often trade health risks for affordable housing; Mitigation costs are also far less in these areas.

In Guayama, Puerto Rico, where AES is located, almost half of the families live under the poverty level. According to the US Census Bureau's estimates for 2007, residents of Guayama earn a median household income of $17,848. Only 53.5 percent of the town's working-age population is in the labor force; 41.3 percent of families live below poverty levels. Data from the Department of Housing and Urban Development (HUD), which is used to determine eligibility for public housing under Section 8, shows Guayama is one of the towns with the most citizens eligible for the program. A household of one person earning less than the $14,000 income cap qualifies.

The Census shows similar poverty estimates for Salinas and Arroyo, where the ash aggregate is used in construction projects. In Salinas only 46.8 percent of people aged 16 and over are in the labor force and the median household income is $13,465; 53.6 percent of the families live under the poverty level. The estimates for Arroyo date to 2000, and state that only 37.6 percent of people ages 16 and over, work and the median household income is $11,484; 52.2 percent of Arroyo's families live under the poverty level.

Before AES set up shop, this southern region had its share of environmental threats. A 2005 study by the UPR's Public Health Department and the National Oceanic and Atmospheric Administration (NOAA) revealed the presence of mercury and other heavy metals in fish at the Jobos Bay in Salinas. The former Secretary of the Department of Natural Resources (DNR), Javier Vélez Arrocho attributed the contamination to the Aguirre Central, an industrial sugar plant that operated in the Aguirre region of Salinas from 1902 to 1990. The plant used chemicals in its operations after its industrialization in 1947.

Also located in the Aguirre neighborhood, a thermoelectric plant run by PREPA has been associated with several health problems. Neighbors complain about the pollution from the plant's flares and the exhaust fuming from the company vehicles. The local EPA reported that the plant's emissions exceeded the accepted federal levels for sulfur in 1999. Nevertheless, the company complied with federal standards in 2007.

The area was also targeted for a gas pipeline by the administration of former Gov. Aníbal Acevedo Vilá in 2007. Protests by the community halted the initiative.

Despite the overwhelming evidence of past and present affronts on the region's environment, these findings have not led to a thorough health assessment of the area. While researching the residents' relation to the Jobos Bay National Estuarine Research Reserve, Dr. Seguinot-Barbosa found that 24 percent of 525 residents interviewed have experienced respiratory problems. The sample came from citizens living in eight geographical zones, including Aguirre. The neighborhoods lie in an area directly affected by the industries' emissions. The report concluded that "[this] confirms the fact that the residents' environmental health can only improve if the existing atmospheric conditions improve."

Data from the Puerto Rico Central Cancer Registry indicates a high incidence and mortality rate for lung and bronchus cancer in Guayama and Salinas. From 2000 to 2004, 20.1 in 100,000 residents reportedly died of lung and bronchus cancer in Guayama. In Salinas, the mortality rate was 22.4 in

100,000 residents. From 1999 to 2003, 18.9 new cases for each 100,000 residents were diagnosed in Guayama; In Salinas, 22.4 new cases were reported for each 100,000 residents.

At this construction site in Salinas, trucks laid a thick layer of ash aggregate.

Puerto Rico's Green Future?

Gov. Luis Fortuño has pledged to protect the environment and reduce dependence on oil-based and fossil fuel energy, which includes coal. On June 16, 2009, he announced the creation of the Green Energy Fund as part of the "Puerto Rico: Green Island" initiative, a shot in the arm for the island's economy to foster green jobs and renewable resources using federal funds.

"The problem is that the existing technology allows us to generate from these [renewable] resources, but at a much higher price than what it costs to generate energy from oil, coal, natural gas and other fossil fuel," he said in his speech at the First Economic Development Summit last June. The fund, he said, would expedite the creation of non-fossil fuel energy sources.

But the governor's assertion differs from the perspective of PREPA's Director Miguel Cordero, who believes that coal based plants, a fossil fuel industry, are a key element to provide customers with low cost energy.

"We are going to open more units using this kind of energy," says Cordero.

AES sells PREPA energy at 4 cents per kilowatt-hour. This is less than half the cost of what it takes PREPA to produce energy, which is 9 to 17 cents per kilowatt-hour, according to Cordero, who added that the price of coal-generated energy is more stable over time.

When confronted with the EPA's 2002 Risk Screening Report regarding the use of coal ash, he stated that "here, we won't allow [a company] that my experts say is making people sick." AES, he reiterated, meets all the environmental requirements.

Who is AES Corporation?

AES Corporation came to Puerto Rico in 1993, but it wasn't until November 2002 that the plant was completed. The company has a 25-year contract with PREPA and represents an investment of over $800 million financed by 28 banks.

Globally, AES Corporation has a wide portfolio of energy sources including biomass, coal, gas, hydropower, diesel, solar and wind that provides energy in 29 countries.

Guayama's plant generates 454 megawatts of power at low cost to 15 percent of the population. It is a zero liquid discharge plant, which means the plant reuses rainwater and prevents thermal discharge of water heated at the plant into adjacent bodies of water.

"The idea of this power plant is giving low cost energy to Puerto Rico because at that time [the government] was 100 percent dependent on oil..," says AES Puerto Rico President Al Dyer.

Dyer explains that the plant generates energy by burning subbituminous coal imported from Colombia. Using Circulating Fluidized Bed (CFB) technology, the plant burns at a very low temperature that allows the use of limestone to mitigate sulfur dioxide from the coal, which produces less smog.

"We are burning at a much lower temperature," Ramiro Rivera, AES Puerto Rico's Engineering Manager says. "Our formation of smog is much less." Rivera adds that when the limestone absorbs sulfur what remains is calcium sulfate, commonly known as gypsum.

The carbon combustion residue of this process is fly ash; bed ash is produced at the bottom of the furnace. At the plant, the fly and bed ash is mixed with water to make the aggregate they call Agremax.

Dyer explains that the aggregate is used for structural fill, daily landfill cover, in cement and for road base—the so-called beneficial uses approved by the EPA.

This is allegedly how the 300,000 short tons of ash produced yearly are being handled. "AES does not have ash ponds like the ones in Tennessee Valley spill," Dyer stresses. "Our ash is dry; we don't have a pond here. Our exposure of having ash spill is zero."

Some environmental activists were concerned with the amount of CCRs that the plant generated; some claim that AES is in breach of their Power Purchase Agreement by not properly disposing of the hazardous byproduct.

Juan Rosario, a community leader with a master's degree in science and a specialty in environmental health from UPR's Graduate School of Public Health, has monitored AES since its beginning. He questioned the final destination of the ashes at the first public hearings.

"What are they going to do with all these ashes?" he remembers asking. "We are talking about 500 to 600 tons each day." The ashes, he recalls, were to have been taken to the United States or Colombia. "We knew that would never happen," says Rosario.

Initially, AES did not produce Agremax. The ashes were either stored in Puerto Rico or taken to the Dominican Republic. Then in 2006, the Dominican government sued AES for allegedly disposing of 60,000 tons of ashes produced in the Guayama plant in two coastal cities.

According to an Associated Press report, the Dominican government demanded AES Corporation pay $80 million to the Caribbean country for environmental damages. A lawsuit also singled out several former government officials from the Dominican Republic for allowing the ashes to enter their shores.

A communiqué from the Dominican government stated that after the ashes were deposited, residents from Samaná and Montecristi experienced lung and skin diseases and that tourism diminished significantly. The ashes were deposited between October 2003 and March 2004.

Dyer denies AES's responsibility in the Dominican ash scandal pointing to a third party, which he alleges, was in charge of taking the ashes to the Dominican Republic. "He [the responsible party] was supposed to have his agreement and from our understanding he did have his agreements," he explains.

Ultimately, a settlement between the Dominican government and AES Corporation was reached. "There was a lawsuit and it was settled, and the Dominican government reaffirmed that the ashes were not toxic and it was not harmful," Dyer explains.

AES Corporation started Agremax operations in 2004.

In Breach of Contract?

Rosario also argues AES's contract with PREPA required that the CCRs have both a beneficial and commercial purpose. Metro obtained a copy of the Power Purchase Agreement that reads as follows: "the operator warrants that any combustion waste or by-product by the operation of the Facility, which cannot be used for beneficial commercial uses, will not be stored anywhere in the Commonwealth of Puerto Rico for a period in excess of one hundred eighty (180) days and that it will not be disposed of anywhere in the Commonwealth of Puerto Rico or its neighboring waters."

Dyer agreed that the contract required a commercial exchange. He later added that: "We don't share [your view] with you that being sold is the definition of commercial product."

When asked for evidence that the aggregate was being sold, Dyer answered that such documents were for their own private screening.

The AES top executive added that Cemex, one of Puerto Rico's cement producers, is one of Agremax's biggest clients. Another big client is the municipality of Salinas. Mayor Carlos Rodríguez Mateo of Salinas confirmed a contract between the AES and the municipality. But he called the contract "symbolic."

"They charged a representative price because they wanted to make a contribution," he says. "I don't remember the amount, but I think it was one or two cents per truck." He also said that the aggregate was used to widen municipal roads and build new streets.

"**They are using the entire island as a landfill"**

Activists who believe AES is in breach of their Power Purchase Agreements also question the beneficial use of a product they are allegedly giving away.

AES Puerto Rico produces 300,000 short tons of ash per year, an amount that would double if another coal plant begins operation on the island as Cordero, PREPA's director, predicts. The ash production could also grow at a disparate rate to the island's capability to put it to beneficial use.

Rosario believes that the results could be detrimental to the community. "They are using the entire island as a landfill," he says emphatically. "And what is worse, they are using the waste areas on top of aquifers."

AES states the company is not responsible for the aggregate after it's purchased; the party using the aggregate is.

"The EQB and the DNR would regulate whether any single project can or cannot be done if there is an aquifer or if it's close to the river or a natural source of water," AES's Dyer says.

EQB Press Secretary Luis Ocasio, wrote in a very general statement that the developer must provide an "environmental document" that describes the details of the ashes' handling, among other documents and must also obtain a permit from the EQB to start construction.

Residents and environmentalists worry about long-term consequences of the aggregate on the bodies of water.

The EQB President Pedro Nieves, also said the aggregate was already tested in 2005. "We emitted the Toxicity Characteristic Leaching Procedure (TCLP) test on the product, which demonstrated that it wasn't harmful," he says.

Nieves added that monitoring procedures are costly and not a fiscal priority. "Those tests are expensive and we are in a dire fiscal situation," he says. "When we see a company with such a record—well, we have to focus on other areas."

But future monitoring on ground and water will determine if the aggregate is as beneficial as the industry claims. Several studies examining heavy metals in the water have been funded by local and federal agencies. Angel Dieppa, research coordinator for the Jobos Bay National Estuarine Research Reserve, indicates that numerous studies have been performed in conjunction with the agency between 2002 and 2005. The 2005 study by NOAA and the UPR Public Health Department yielded positive for mercury and other heavy metals in the bay's fish, but according to Dieppa the levels didn't exceed the EPA hazard standards.

The aggregate has only been utilized in the area since 2004. It is too early to determine the damage—if any—to the surrounding water sources.

Rules and Regulations

Because in most states or in such territories as Puerto Rico, there are few or no regulations for CCRs, environmental groups are putting pressure on Washington to set uniform standards across the nation to handle carbon waste.

The Director of the Coal Combustion Waste Initiative at the Environmental Integrity Project, Jeff Stant, believes lax federal requirements allow companies to dispose of CCRs indiscriminately.

"The question about aggregate is that there is not a rigorous regulation process," Stant says. He adds that the only safe place to add the aggregate is within another product such as cement or road pavement, but stateside jurisdiction's lack of minimum requirements allows companies to do much more with the combustion residue.

"Because there are no minimum requirements, companies can do what they can and can do anything," adds Stant.

Stant also insists that the CFB process renders more combustion product than through other processes. "[It's] five times as much CCWs [carbon combustion waste]," he says. "They need to find a way to get rid of it. They want to convince you that it is just as good as putting it in your cornflakes in the morning."

The AES plant burns low sulfur subbituminous coal, which is considered less dirty than lignite and other types of coal. But even this coal renders high concentrations of metals. Some experts understand that when the coal is burned it is reduced and the concentration of metals increases.

Robert Gadinski, a former hydrogeologist, supervisor and special projects manager for the Pennsylvania Department of Environmental Protection's Northeast Regional Office, explains that trace metals will concentrate during the burning process. "…any trace metals will be concentrated as a result of the combustion of coals," he indicates. "The lower the grade of coal, the higher the metal concentrations."

Stant adds that the technology to reduce emissions is creating even more toxic residue.

"The reason that clean coal technologies create a problem with the CCW is that those technologies are usually aimed at reducing the emissions from coal combustion," Stant explains. "Because matter does not disappear, this means it has to go somewhere, which means it ends up in the waste. In other words, the more a power plant tries to control its emissions, the more solid waste is created and the

more the pollutants and other impurities in the coal are captured in the waste so it is often more toxic. And there is no coal that is "clean." All coals, no matter what rank or level of purity, contain a lot of material that does not combust, becomes more leachable [sic] once the coal is burned and when left behind in the ash, can contaminate air and water."

Ash aggregate produced at AES Corporation is used in construction sites such as this one in Salinas.

Test to the Test

Federal and local agencies do not classify ashes or CCRs as hazardous waste, and—as Stant commented—the EPA does not regulate them.

EPA's Caribbean Division Director in Puerto Rico, Carl Soderberg, recalls that the CCRs were not included in the RCRA law. "Because it is excluded, this waste has to be regulated as non hazardous, and the EPA does not get involved," says Soderberg. According to Soderberg, the aggregate is handled as a raw material.

The test by which agencies determine if metals can leach or percolate from substances is called the Toxicity Characteristic Leaching Procedure or TCLP. According to Lisa Evans, an attorney for Earthjustice, new scientific evidence has prompted the EPA's Science Advisory Board and the National Research Council (NRC) to reconsider the TCLP to measure leaching capabilities.

"The TCLP does not safely determine the amounts of hazardous contaminants," she says. Evans, who has worked on coal issues since 2000 and was an attorney for the EPA, points out at the EPA's study named "Improved Leach Testing to Evaluate Fate of Hg and Other Metals from Management of Coal Combustion Residues," states that the test is not accurate in predicting leaching behavior for this residue.

Earthjustice also advocates for the use of liners to prevent contamination, based on their interpretation of the EPA's 2002 report. "We took our position directly from the EPA's risk assessment, which said, in very clear language, that composite liners are necessary for waste ponds and for landfills in order to reduce the risk of contamination."

The CCRs from AES go neither on ponds nor landfills, according to the company. Evans explains that if there aren't any ponds, then there is pressure to put it to beneficial use, which is not always an option. For places where CCRs are used as structural fill, it is recommended to use a liner and to monitor the soil, she explains.

But shifting regulations comes at a cost, one that utility companies aren't willing to pay, Evans opines. When asked why garbage is considered hazardous waste as opposed to coal ash or aggregate, she answers that: "The reason is you have very powerful corporations that did not want their waste product regulated; they've been able to operate much more cheaply without having to dispose of their regulations in landfills, and the electric utilities like it that way."

Evans also argues that the cost for burning coal is so low precisely because they do not need to address the problem of safely disposing of their waste. "It makes clean energy appear expensive, because they haven't paid the true cost of burning the coal," she says. "In other words, if you required these utilities to safely dispose of their waste, the generation of the waste maybe will become more expensive." This, she concludes, will level the field for renewable sources of energy like wind and solar power.

What about Washington?

Some observers argue that the cost of regulations will be passed on to consumers, but a study at New York University School of Law's Institute for Policy Integrity, titled "No More Excuses" indicates that the benefits of regulation outweigh the costs.

The report stated that regulation of toxic ash from these plants would make financial sense. In a summary by reporter Ken Ward Jr., author of "The Curse of Coal," an investigative article written during a fellowship with the Alicia Patterson Foundation, he outlined the potential costs of putting these companies in compliance. For an average disposal facility the cost of compliance oscillates between $11.2 million and $20.4 million. The report noted that coal should be stored in dry conditions and in synthetically lined covered facilities, to reduce risk. AES Corporation's aggregate complies with the former. Other major benefits of regulations and compliance are reducing leaks of coal ash waste and reducing exposure to toxic chemicals to those who live near facilities or eat fish from waters near the facilities.

Enforcing regulations would save lives and improve the quality of the environment. These benefits are hard to put in numbers; therefore, the cost of regulations is hard to calculate. But past tragedies serve as examples of the benefits of preventive measures inherent in regulations. The TVA spill's clean up cost is estimated between $525 and $ 825 million. The improvements to their coal ash facilities that would have prevented the catastrophe would have cost approximately $25 million.

The TVA spill put regulations back on the congressional table. "The EPA currently has, and has in the past, assessed its regulatory options, and I think it is time to re-ask those questions," EPA Administrator Lisa Jackson told the Senate Environment and Public Works Committee last January.

The TVA also became the critical timetable for the reconsideration of ash as a hazardous substance. The chairman of the House Committee on Natural Resources, Rep. Nick Rahall (D.-W.Va.) introduced legislation that would put the Department of the Interior in charge of setting uniform design and engineering standards for coal ash ponds in power plants across the country.

Senate committee head, Sen. Barbara Boxer, (D.-Cal.), told Jackson the authority to regulate coal ash issues fell on the EPA.

Organizations like Earthjustice are also pounding Capitol Hill. A letter signed by over 100 executive directors of environmental groups from all over the US signed a letter asking Administrator Jackson, among many things, for stricter regulations for CCRs.

The utilities companies and detractors to new regulations are not taking this sitting down. Twenty five US Senators wrote to Jackson, pleading not to change federal management standards, which would allegedly boost electricity costs and limit the beneficial use of CCRs. The missive added that the regulations could lead to the shutdown of certain plants. The letter asked that CCRs uphold their current RCRA categorization under Subtitle D as a non-hazardous substance.

At Home

RCRA's current label for CCRs and the tests conducted with the TCLP procedure is the reason local elected officials deem unnecessary to pursue change in regulation or further investigation. Also, the aggregate, although a coal combustion byproduct, is not considered ash.

"We have to clarify that the problem is that we talk a lot about ash that could be hazardous to the bodies of water, but it is not ash," says Salinas Mayor Rodríguez Mateo. "One thing is ash; the other aggregate."

Detractors opine that the aggregate is just as bad as ash, and often the lack of regulations will too help the coal industry continue its use for construction in areas near wetlands and aquifers. The TCLP test to determine how toxic aggregate or any combustion product is, is now being scrutinized. The battle requires regulation changes at the helm of the EPA and some severe arm-twisting in Congress.

Meanwhile, Puerto Ricans wait.

"In Puerto Rico, I don't think that any environmental or community group has the knowledge that the EPA has and so far the EPA has not issued any warnings," Rodríguez Mateo says. "But as a doctor, I understand that if it is determined that the material is toxic, we will take the necessary measures in our legislature and the administration would have to regulate [the material] in this municipality."

PREPA foresees the opening of a new coal plant and the current administration has professed its intention to continue working in partnership with the private industry. The approval of the much-touted Public and Private Alliances (PPA), marked a new path in the government's relationship with the private industry. This government initiative, part of Gov. Fortuño's economic recovery plan, allows any governmental agency to team up with private companies in future projects. This would be a clear obstacle for municipalities or community groups trying to regulate private energy co-producers.

Rodríguez Mateo, believes that there are alternatives to low-cost coal plants. "It's a reality that we have to rely less on oil[-dependent energy]," he says. "I believe coal is one of the alternatives, but not the only one…We have to sit down and analyze what is best for Puerto Rico. We can't depend on oil, but we can't place all our bets in coal; we can look at alternative resources."

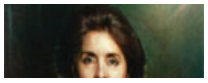
According to Diálogo Ambiental Director Víctor Alvarado, when the ashes dry up, a cloud of dust hovers over the terrain.

Pensamiento Da Cor: La Nueva Exposición de Marcano

La nueva exposición del artista José Marcano se titula ***PENSAMENTO DA COR,*** del portugués que en español se traduce a "Pensamiento de Color". Consta de 17 piezas de impasto con rayado en veladura, con transparencia sobre tela en formato grande.

Ashes to Ashes: Puerto Rico's Coal Combustion Problem

"Toward the end of last February we started to see the trail of ashes," Miriam Gallardo recalls. "The first thing they did was dig a wide ditch and everything was filled with ashes."



Power Gallery

When people—be they constituents, journalists or dignitaries—visit the governor inside La Fortaleza, they often wait in El Salón de Los Gobernadores, a foir

adorned with official paintings of Puerto Rico's governors.

Rebel or Revolutionary: The Story of Tito Kayak

Love him or hate him, De Jesús sits at the epicenter of Puerto Rico 's modern environmental justice movement.

Hell or Highwater

Now well into the second 100 days as Governor of Puerto Rico, the wee morning hours of Nov. 5, 2008, are just a memory to Luis Fortuño. He barely recalls his Brooks Brothers shirt still damp with sweat after a 20-hour day that culminated with his acceptance speech before a throng of New Progressive Party faithful drunk with victory.

The Everyman

If baseball is theater, perhaps an apt title is Everyman, the 15th century morality play about fleeting materialism. In the modern MLB version, Carlos Delgado personifies the protagonist because he is a man possessing a multitude of talents.

Off the Beaten Path

Whether your fantasy getaway calls for a secluded beach bungalow, a centuries-old plantation in the mountains, or a jungle-wrapped rainforest retreat, chances are you won't have to wander too far from home— Puerto Rico has just the ticket for turning your craving into a reality.

Not Saying Adiós

As Fox's talent showcase “American Idol” crowns its eighth winner this month, Puerto Rican participant Jorge Nuñez wonders what could have been and what might still be...

Legacy of a Legend

The Latin music community mourns the passing of prominent music impresario Ralph Mercado. Guarded by his family, Mercado, who managed and recorded artists including Marc Anthony and Tito Puente, lost his battle with cancer, leaving behind a legacy of award-winning songs and seminal music concerts that helped define the salsa and Latin music industry.

What’s in a Name?

Dressed in an impeccable suit, Donald Trump entered the Ritz Carlton ballroom and sat down flanked by his children Ivanka, Eric and Donald Jr. The ballroom filled to capacity; television cameras and reporters festooned the front row. The brouhaha could have easily been confused with a J-Lo sighting, but it was in fact a reception for one of the world’s foremost businessmen.

Gearing Up for Success

The production of her first music video should have exhausted Maxinne. But the electro pop star, whose career is just blossoming, soldiers on, practicing choreographies, doing yoga and meditation and gearing up for her Puerto Rican media tour that begins this month.

World Baseball Classic:Play Ball!

The World Baseball Classic, Major League Baseball’s answer—they hope— to the world craze over soccer, begins its second run on March 5. Sixteen nations are playing each other for the title of “world champ.”

Green Acres

When it comes to the Puerto Rico Open, scheduled for March 9-15, perhaps the saying goes: “the second time is the charm.” The Donald Trump-owned championship golf course that hosts the open has been improved to enhance the degree of difficulty on those championship links.

Beautiful Minds

Beauty of intellect, soul and character: Five of Puerto Rico's shining lights share with Metro San Juan the attitudes and philosophies that helped them overcome obstacles and build successful lives.

Comedy King

Once the hearse and its accompanying cars drive past him, Santiago continues his commute home, silently. That scene became more poignant on Jan. 15, when Muñiz passed away at age 86 after battling ill health for over a decade.

Oscar Picks

Special Feature

New Kid on the Block

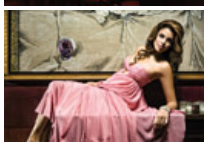
Most Boricua audiences are just now hearing the name Jorge Alberti, but if you ask soap opera fans in Mexico and Chile, chances are they are very well acquainted with that name. The 31-year-old actor already has a well-established resume in Latin TV soaps with the fan base to go along with it.

Heaven & Hell at the San Juan Star

On a smoldering Saturday afternoon deep in August, I realized The San Juan Star was finished.

Beating The Holiday Blues

The ghost of the recession has prevented some diners from enjoying a good night out, but Metro has found a way to beat the recession blues. This article serves as a map to some of the hottest, most relaxed and – above all cost effective– hangouts of the season.



Just A Girl

Mayra Matos steps out of her navy-blue sedan, revealing long, elegant legs. They're covered in skin-tight jeans and her bell sleeve shirt reveals a hint of her smooth shoulders. She stands about 6 feet tall in high heels. She wears faux Dolce and Gabbana sunglasses and a frown.

METRO ARCHIVE

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