



Florida and Coal Ash: Disposal, Contamination, and Inadequate Regulation

Coal-Fired Power Plant	Operator	Coal Ash Disposal Unit ⁱ	County
Big Bend Power Station	Tampa Electric Co.	11 ponds (10 unlined)/1 landfill	Hillsborough
Central Power and Lime Incomp	Arroyo Energy	Off-site disposal	Hernando
C.D. McIntosh, Jr. Power Plant	City of Lakewood	1 pond/1 landfill	Polk
Cedar Bay Generating LP (CEBAGE)	Cogentrix Energy	Off-site disposal	Duval
Martin Power Station	FL Power & Light Co	Data indeterminate	Martin
Indian River Power Station	Reliant Energy Inc.	Data indeterminate	Brevard
Deerhaven Generating Station	Gainesville Reg. Util.	2 ponds/1 landfill	Alachua
Lansing Smith (GUPC)	Gulf Power Co	2 ponds/ 1 landfill	Escambia
Crist	Gulf Power Co	13 ponds (5 unlined)/2 landfills	Bay
St. Johns River Power Park	JEA	2 unlined ponds/3 unlined landfills	Duval
Stanton Energy Center I	Orlando Utilities Com	1 unlined landfill	Orange
Crystal River	Duke Energy	4 unlined ponds/2 landfills (1 unlined)	Citrus
P L Bartow	Progress Energy- FL	Data indeterminate	Pinellas
Suwanee River Power Station	Progress Energy- FL	Data indeterminate	Suwannee
Seminole Electric Coop, Inc	Seminole Electric	landfill	Putnam
Indiantown Cogeneration Facility LP	US Operating Services Co	Offsite disposal	Martin
Northside Generating Station	JEA	4 ponds (2 unlined)/1 landfill	Duval
Polk	Tampa Electric Co.	Landfill	Polk
Scholz	Gulf Power Co.	3 Unlined pond	Jackson
Total: 20 plants		42 ponds (27 unlined) 14 landfills	

- **More than 12 Billion Pounds of Toxic Waste:** 6.1 million tons of coal ash are generated in FL each year.ⁱⁱ

- **Dangerous Coal Ash Disposal:** There are 42 ponds (27 unlined impoundments) at 8 plants and 13 landfills (6 unlined).ⁱⁱⁱ

- **Documented Groundwater and Surface Water Contamination:** Widespread contamination from coal ash in Florida includes (9 sites):

1. **C.D. McIntosh, Jr. Power Plant:** Groundwater around two unlined coal ash landfills and ponds is contaminated with arsenic, cadmium, lead, selenium, and other pollutants above federal and state standards. FDEP Consent Order was issued in 2001. In 2010, the drinking water std for arsenic was exceeded in 15 wells. Dumps are near Lake Parker, a recreational lake with densely populated shoreline.^{iv}
2. **FP&L, Lansing Smith Plant:** Drinking water standards exceeded for cadmium, chromium, fluoride sulfate, chloride, manganese and iron in on-site groundwater attributable to coal ash.^v
3. **Orlando Utility Commission, Curtis Stanton Energy Center:** For over 20 years, data reveal groundwater polluted with aluminum, chloride, iron, manganese, and sodium 5-100s of times state Groundwater Clean-up Target Levels. Surface water also exceeds FDEP Freshwater Surface Water Quality Criteria.^{vi}
4. **Seminole Electric Cooperative, Seminole Generating Station:** Coal ash ponds and a flue gas desulfurization landfill contaminated groundwater up to one mile from the landfill. Arsenic and lead exceed federal standards in groundwater by 19 and 10 times, respectively.^{vii} Deep and shallow aquifers are contaminated far above FL Clean-Up Target Levels for sulfate, chloride, iron, TDS and boron.
5. **Tampa Electric Company, Big Bend Station:** Off-site groundwater exceeds federal drinking water standards and FL Clean-up Target Levels for thallium, sulfate, chloride and manganese. Arsenic in on-site

groundwater was 11 times the drinking water standard, and many other pollutants were also measured onsite at levels far above FL Groundwater Clean-up Target Levels. Thallium was measured in off-site groundwater at more than twice the federal standard and at 8 times the standard in onsite wells.^{viii}

6. **Plant Crist:** Groundwater exceeds health advisories for arsenic, cadmium, manganese, and sulfate.^{ix}
7. **St. John's River Power Park:** Groundwater monitoring data show a history of exceedances of state and/or federal standards for aluminum, arsenic, beryllium, chloride, and sulfate.
8. **Gulf Power Scholz Power Plant:** In 2014, Earthjustice filed a federal lawsuit on behalf of three conservation groups to stop toxic water pollution, including arsenic, cadmium, chromium, lead and mercury, leaking into the Apalachicola River from Scholz' aging 40-acre coal ash dump. One test, in June 2013, found that arsenic in water from the unlined pits were 300 times the amount of arsenic considered safe for drinking water.^x
9. **Crystal River Power Plant:** In 2011, the FLDEP took enforcement action against the Duke Energy power plant for contamination of groundwater with high levels of arsenic and radioactive substances.

Damage to Water from Beneficial Re-use of Coal Ash: The Florida Department of Environmental Protection has determined that coal ash marketed as "EZBase" by JEA and used for road construction can leach toxic materials, if not properly compacted and applied.^{xi} FL DEP required JEA and homeowners to remove EZBase from several locations in Northeast Florida. Residents who used EZBase on their property may have to bear the high costs of removal, as well as the water contamination and dangerous fugitive dust. EZBase was found near a Middleburg elementary school and was removed after complaints from parents.^{xii} In 2013, Florida passed a law to reduce restrictions on reuse of coal ash. The law is fraught with problems, including utility self-reporting and no state oversight or enforcement mechanisms. This leaves the state and the public in the dark about how Florida's toxic coal ash is being reused.

Deficiencies in Florida Coal Ash Regulations: Florida law does not regulate coal ash ponds, and therefore there are no requirements in FL for liners, siting, design, maintenance, groundwater monitoring, financial assurance and closure. Furthermore, if coal ash is disposed in an onsite landfill at a power plant authorized under the Power Plant Siting Act (PPSA), no separate permits, including construction and operating permits, are required. Instead, the entire facility is covered under the PPSA certification.^{xiii} Florida is one of only two states (along with AL) that *relaxed* portions of their coal ash standards between 1988 and 2005.^{xiv}

Florida Communities Are in the Dark: Information on the condition of dangerous coal ash dams and the nature of coal ash reuse in Florida is inaccessible to the public.^{xv} This leaves the public in the dark about the safety of aging coal ash dams and the magnitude of the quantity, location, and reuse of coal ash in Florida.

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ⁱ See U.S. EPA database (2012) available at <http://www.epa.gov/osw/nonhaz/industrial/special/fossil/surveys/index.htm> and EPA, Response to FOIA, July 2012 available at <http://earthjustice.org/sites/default/files/Coal-Plant-CCW-Disposal-Units-from-ICR.pdf>.

ⁱⁱ U.S. EPA, *Regulatory Impact Analysis for EPA's Proposed RCRA Regulation of Coal Combustion Residues (CCR) Generated by the Electric Utility Industry*, Exhibit 3D (August 2010).

ⁱⁱⁱ U.S. EPA, Database of coal combustion waste surface impoundments (2009).

^{iv} Environmental Integrity Project, Earthjustice and Sierra Club. *In Harm's Way: Lack of Federal Coal Ash Regulations Endangers Americans and Their Environment* (August 26, 2010).

^v U.S. EPA. *Coal Combustion Waste Damage Case Assessments* (July 9, 2007).

^{vi} Environmental Integrity Project and Earthjustice. *Out of Control: Mounting Damages From Coal Ash Waste Sites* (February 24, 2010).

^{vii} *Id.*

^{viii} *Id.*

^{ix} Environmental Integrity Project, *Risky Business: Coal Ash Threatens America's Groundwater Resources at 19 More Sites* (Dec. 2011).

^x <http://jacksonville.com/news/florida/2014-06-05/story/groups-file-suit-over-coal-ash-claiming-power-company-dumping-ash>

^{xi} <http://www.folioweekly.com/folio0320wkl008.php>.

^{xii} See <http://earthjustice.org/blog/2013-may/tr-ash-talk-danger-in-the-schoolyard>.

^{xiii} U.S. EPA. *40 CFR Parts 257, 261, 264 et al. Hazardous and Solid Waste Management System; Identification and Listing of Special Wastes; Disposal of Coal Combustion Residuals From Electric Utilities; Proposed Rule* (June 21, 2010).

^{xiv} *Id.*

^{xv} See <http://www.cleanwateraction.org/files/publications/FL%20Coal%20Ash%20Report%20Final.pdf>,