

## Colorado Coal Ash Disposal in Ponds and Landfills

Summary of Coal Ash Generating Facilities in CO

Planti	Operator	Site	County
PSCo Hayden Station	Public Service Co. of Colorado	6 ponds/landfill*	Hayden
PSCo Pawnee Station	Public Service Co. of Colorado	7 ponds/landfill*	Morgan
Craig Power Station (TSGT)	Tri-State G & T Assn Inc.	2 ponds	Moffat
Nucla Power Station	Tri-State G & T Assn Inc.	1 pond/landfill*	Montrose
PSCo Arapahoe Station	Public Service Co. of Colorado	6 ponds	Denver
PSCo Cameo Station	Public Service Co. of Colorado	2 ponds	Grand Junction
PSCo Cherokee Station	Public Service Co. of Colorado	6 ponds	Adams
PSCo Comanche Station	Public Service Co. of Colorado	5 ponds	Pueblo
PSCo Valmont Station	Public Service Co. of Colorado	3 ponds/landfill*	Boulder
Rawhide Power Station	Platte River Power Authority	2 ponds/landfill*	Larimer
Martin Drake	City of Colorado Springs	landfill*	El Paso
Ray D. Nixon	City of Colorado Springs	landfill*	El Paso
Lamar Plant	City of Lamar		Prowers
W N Clark	Black Hills/Colorado Elec.Utility Co. LP		Fremont

<sup>\*</sup>indicates one or more coal ash landfills.ii

Amount of coal ash generated per year: Over 1.7 million tons. CO ranks 24th in the country for coal ash generation.<sup>iii</sup> Colorado has 14 coal-fired power plants.

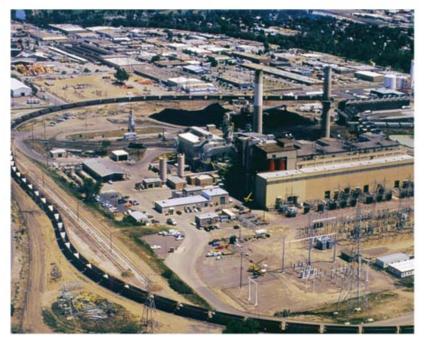
## Ash Ponds in Colorado

**Number of Coal Ash Ponds:** 40 ponds at 10 plants.iv

**Age of Ponds:** 31 ponds are over 30 years old, and 13 of those are over 40 years old. The age of these ponds makes it unlikely that they have safeguards like liners and leachate collection systems. Unlined coal ash waste ponds pose a cancer risk 900 times above what EPA considers "acceptable." vi

*Capacity and releases:* The EPA surface impoundment database contains storage capacity data for 32 of the 40 ponds in CO. These 32 ponds have a capacity of 3.4 million cubic yards. The 27 ponds for which size data are available cover an area of 136 acres. Ponds at the Comanche Station and Valmont Station plants had spills in 2007 and 2008, respectively.<sup>vii</sup>

**Deficiencies in Colorado Coal Ash Regulations:** Colorado regulations do not adequately protect health and the environment from coal ash. The regulations exempt on-site landfills and ponds from groundwater monitoring requirements. This exemption allows most coal ash disposal to escape monitoring requirements, since most coal ash disposal takes place at the plant site. In addition, for coal ash ponds, CO does not require a composite liner or a leachate collection system.



Arapahoe Station in Denver<sup>8</sup>

Documented Damage at Coal Ash Disposal Sites: Because the State of Colorado does not require coal ash disposal sites to conduct groundwater monitoring, there are not yet any documented cases of damage at the state's coal ash disposal sites.

## Potential Health Threats:

Residents who rely on private well water are particularly susceptible to groundwater contamination from coal ash storage. Private water wells are not government regulated, and therefore are not regularly monitored or required to meet health-based standards. The state has expressed concern that a share of the 200,000

groundwater wells in Colorado may have excessive levels of contaminants—particularly the carcinogen arsenic. Arsenic contamination has already been reported as a potential drinking water contaminant in two counties that contain coal ash ponds or landfills.<sup>x</sup> Arsenic is naturally occurring in some parts of Colorado, raising the risk that arsenic leaching from coal ash ponds or landfills could tip groundwater concentrations above maximum safe concentrations.<sup>xi</sup>

Coal Ash and Environmental Justice in Colorado: Statewide in Colorado, non-white individuals are over-represented in zip codes hosting coal fired power plants by 4 percent, and people living below the poverty line are over-represented by 62 percent.

For more information: contact Lisa Evans, Earthjustice, 781-631-4119, levans@earthjustice.org

<sup>&</sup>lt;sup>1</sup> U.S. EPA. Database of coal combustion waste surface impoundments (2011). Information collected by EPA from industry responses to Information Collection Request letters issued to the companies. Available at <a href="http://www.epa.gov/osw/nonhaz/industrial/special/fossil/surveys/index.htm">http://www.epa.gov/osw/nonhaz/industrial/special/fossil/surveys/index.htm</a>.

ii U.S. Department of Energy's Energy Information Administration, Form EIA-767, Annual Steam-Electric Plant Operation and Design Data. 2005.

<sup>&</sup>lt;sup>III</sup> U.S. EPA, Regulatory Impact Analysis For EPA's Proposed RCRA Regulation Of Coal Combustion Residues Generated by the Electric Utility Industry (Apr. 30, 2010) at Exhibit 3D.

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

vi Earthjustice, Coal Ash Pollution Contaminates Groundwater, Increases Cancer Risks, (Sept. 4, 2007), available at http://earthjustice.org/news/press/2007/coal-ash-pollution-contaminates-groundwater-increases-cancer-risks.

vii U.S. EPA. Database of coal combustion waste surface impoundments (2009) at Attachment B-2.

viii Steve Porter, State utilities prepare to meet coal-conversion, Northern Colorado Business Report, (June 4, 2010); See 6 CO ADC 1007-2:1-1.4.

ix See 6 CO ADC 1007-2:1-1.9.3.

<sup>×</sup> Arsenic in Domestic Well Water, Colorado Department of Public Health and Environment (June 2003), available at <a href="http://www.cdphe.state.co.us/dc/envtox/Arsenic DW">http://www.cdphe.state.co.us/dc/envtox/Arsenic DW</a> fact.pdf.

\*i Id.