Exactly six years ago today, a dike ruptured near Kingston, Tennessee, dumping into the Clinch River some 1.1 billion gallons of coal ash slurry — or to use the more technical term, coal combustion residue. Last Friday, EPA issued a new regulation to deal with the issue. The rule is intended to protect groundwater from leaching from the ponds, prevent future spills, and encourage recycling of coal ash (for instance, as an ingredient in bricks). It strongly discourages the use of surface impoundments for new or expanded disposal sites, but has limited effect on existing sites.

In issuing the rule, EPA had to choose between two approaches. The proposed regulations — which date back to 2010 — set out two alternatives: regulating coal as "special waste" under RCRA's hazardous waste provisions (subtitle C) or as non-hazardous waste under subtitle D. For those who are not familiar with the statute, RCRA is the primary federal statutes providing standards for waste disposal. Thus, EPA was asking whether to treat coal ash as hazardous waste or equivalent to ordinary trash.

The practical differences between the two proposals were more subtle. As EPA explained at the time of the proposal,

"Both options will provide for the first time on a national basis that liners and ground water monitoring are in place at new landfills handling coal ash in order to prevent leaching of contaminants to groundwater and resulting risks to human health. Under the Subtitle C proposal, EPA is adopting measures intended to phase out the wet handling of CCRs and existing surface impoundments; under the Subtitle D proposal, existing impoundments would require liners, which will create strong incentives to close these impoundments and transition to safer landfills which store coal ash in dry form. Both proposals will ensure stronger oversight of the structural integrity of impoundments in order to prevent accidents like the one at Kingston, TN."

The biggest difference between the two proposals related to implementation: the subtitle C option involved a permit program while the subtitle D option doesn't. (There's a nice table comparing the two original proposals here). This made the subtitle C option more effective: EPA projected a 100% compliance rate for that option as opposed to 50% for the subtitle D option. Reportedly, EPA first proposed regulating under subtitle D, but the White House insisted on including the subtitle D option.

EPA sat on its hands after it issued the 2010 proposal. It finally agreed to move forward with the process as part of a consent decree after it was sued by environmentalists.

As predicted by most observers, the final rule adopts the subtitle D approach. Indeed, the

White House seems to have succeeded in further pushback against EPA. The final rule is actually weaker than the original subtitle D proposal. In particular, it requires liners for existing disposal sites only if there is evidence of groundwater contamination or if they violate location requirements. In terms of location, the ruler restricts disposal sites "above the uppermost aquifer, in wetlands, within fault areas, in seismic impact zones, and in unstable areas."

EPA predicts significant benefits from the rule:

While EPA was not able to monetize all of the benefits of the rule because of a lack of data in certain areas, the Agency has attempted to monetize benefits associated with the prevention of structural failures at surface impoundments, prevention of groundwater contamination from, and the increase in the beneficial use of CCRs [coal ash], which reduces consumption of virgin materials and the associated costs and environmental impacts of their use. The average annual monetized benefits are estimated to be $232 million per year using a seven percent discount rate. Using a three percent discount rate the average annual benefits are estimated to be $289 million per year. These monetized benefits do not include a number of important benefits which EPA was not able to quantify. This includes benefits to communities near coal ash impoundments, for example by reducing nuisance dust and non-cancer risks from fish consumption.

EPA's estimate of costs is higher, however, than the estimated monetized benefits. (See Table 1 on p. 21 of the prepublication version of the rule.) Interestingly, the cost-benefit ratio is worse when using a 3% discount rate versus a 7% rate, which is unusual for an environmental regulation. This suggests that the benefits are front-loaded compared with the costs, which isn't usually the pattern in environmental regulations. Maybe this is due to the increased costs of securing the site at the time of closure. In any event, it's easy to see why the White House wasn't enthusiastic about proceeding with the regulation and why EPA went forward only under judicial duress. Yet cost-benefit analysis seems legally irrelevant since section 4004(a) allows a site to be classified as a sanitary landfill, and thus allowed to continue to operate, "only if there is no reasonable probability of adverse effects on health or the environment." Cost also seems irrelevant to whether a type of waste is "hazardous," though the standards governing that seemingly simple question are require byzantine.

The rule leaves environmentalists unhappy and industry feeling relatively pleased — but probably not pleased enough to keep House Republicans from pushing legislation to overturn or modify the rule. Sen. James Inhofe and Shelley Capito the new Senator from West Virginia, immediately issued a statement saying they will fight the rule, which they

view as part of the “war on coal” by the Administration. Given the White House’s lack of enthusiasm for regulating coal ash, maybe it will be willing to accept a rider on the subject as part of some kind of legislative deal.

In the meantime, the lawyers no doubt are gearing up. Unless Congress intervenes, we’ll find out what the courts say about whether coal ash really is a non-hazardous waste and whether the new rules meet the standard of “no reasonable probability” of harm.