



Managing Coal Ash & The Geosynthetic Industry

The USA must continue to burn coal to generate the energy needed to supply power. The combustion of coal means the creation of coal ash (fly ash) the byproduct of combustion; an estimate of coal ash generation in calendar 2007 is 131 million tons. Some of this material can be recycled into other products such as gypsum (wallboard stock) or used to enhance/extend concrete manufacture. But the majority of the coal ash must be stored. How to safely and effectively store this material is the purpose of this paper.

Coal ash has not been regulated by the U.S. Environmental Protection Agency. Seepage from coal ash storage has been implicated by the US EPA as a source of ground water contamination at 67 waste storage sites throughout the United States. The December 22, 2008 failure in Harriman, Tennessee provides graphic evidence of the effects of a failure occurring above ground. Many people both inside our government and with independent environmental action groups have been working to support regulations requiring additional containment measures. Chairman Rahall has recently introduced legislation to address this issue and GMA is very supportive of his efforts.

Contaminated Water

In 2007 the Environmental Protection Agency identified 67 coal or oil ash waste sites where ground water and wells had been contaminated over the past decades with heavy metals and other toxic materials. At 24 sites, the water had migrated to the extent that it could threaten human health.



GMA is in agreement with the increasing number of people and interest groups calling for the regulation of coal ash disposal on a national level. GMA's concern, and our frustration, is how long this matter will be studied, and what the regulations may look like when published. GMA's members are nearly all active participants in the solid waste disposal and containment industry. In 2007, the U.S. produced 254 million tons of solid waste. This waste is regulated under what is known as Subtitle "C" and "D" of the RCRA (Resource Conservation and Recovery Act: 42 U.S.C. §6901 et seq. (1976)). This waste is permanently stored at

facilities throughout the USA in an effective and efficient fashion. GMA member

companies produce materials which are used in design by licensed civil engineers and used to construct facilities where a much more variable waste stream than coal ash is received and stored on a daily basis. Groundwater contamination, runoff into streams and rivers and environmental contamination is contained and the country's natural resources are protected. This system and the applicable regulations are in place and working effectively. In fact, the American Society of Civil Engineers has consistently rated the Solid Waste Industry with the highest score in their annual report card on America's Infrastructure.

“Your household garbage is managed much more consistently” than coal combustion waste, said Dr. Thomas A. Burke, an epidemiologist at the Johns Hopkins Bloomberg School of Public Health, who testified on the health effects of coal ash before a Congressional subcommittee last year. “It’s such a large volume of waste, and it’s so essential to the country’s energy supply; it’s basically been a loophole in the country’s waste management strategy.” (New York Times)

GMA urges you to require the US EPA to extend the existing solid waste regulations to cover the disposal of coal ash. Industry knows how to do this and proves their capabilities every day. GMA does not see a need for another study or another investigation. There are tools in hand that work. If proper guidance is issued by Congress, our country's natural resources and people will be protected.



Above: A local house with sludge nearly reaching the roof. A coal ash pond ruptured and sent a billion gallons of toxic sludge across 300 acres of East Tennessee last month. A Tennessee Valley Authority employee surveyed the damage in Roane County. (Source: New York Times)