

**Comments on
EPA Coal Ash Rule
Docket number EPA-HQ-RCRA-2009-0640.**

**The Learning Community
November 19, 2010**

Overview

The Learning Community is a nonprofit community organization in Cumberland County, TN. Its project, Cumberland Stewards, organized when private interests, Smith Mountain Solutions, targeted our county for a coal ash landfill, which was intended to accept TVA coal ash from the Kingston Disaster. We closely follow the company's application process to obtain a landfill permit from TDEC and have experienced the shortcomings of existing TN Department of Environment and Conservation permitting process and operational oversight of TVA coal ash landfills. In addition, we worked with others on a state bill to revise how TDEC permits coal ash landfills.

The Learning Community in these comments will outline our concerns we have for the state regulatory management of coal ash. We will share with you what we have learned about the permitting process in Tennessee. It is our position that EPA needs to set high standards for coal ash management and exercise oversight of state programs through adoption of the Subtitle C option.

Permit by Rule

On December 2, 2008, the Kingston Coal Ash Disaster occurred. Smith Mountain Solutions (SMS), based in Cleveland, TN, recognized that it could benefit by providing TVA a nearby site to dump the Kingston Disaster coal ash. The chosen site is on top a windy mountain up a winding mountain road on the eastern edge of Cumberland County, TN. The property is owned by a Canadian coal mining company, and the specific footprint of the coal ash landfill is in an area that is being reclaimed under OSM regulations. In February 2009 SMS was giving tours to OSM and TVA to get their feedback on moving forward with its business plan. In March 2009, the Canadian mining company, Hillsborough Resources Ltd., announced it has signed a MOU for sale of the site to SMS contingent on SMS getting a contract from TVA within a period of months

SMS submitted its Permit by Rule application to TDEC on June 18, 2009 ([Attachment 1](#)). Coal ash landfills in TN have been permitted under this rule, as was the Bivens Landfall that services the TVA Johnsonville Steam Plant. SMS felt confident that it, too, would receive similar treatment from TDEC. The attached email from TDEC reflects the possibility that TDEC could have accepted the SMS permit by rule application ([Attachment 2.](#))

A decision by TDEC to accept the permit by rule application would have foreclosed public participation opportunities. We submitted comments to TDEC on the permit by rule application

prior to its final ruling on the application. Our comments that covered the deficiencies of the application and the TDEC regulations that allow a coal ash landfill to be permitted under permit by rule:

- The proposal was not for a *mono-fill* dump. The project proposed to dispose of scrubber wastes, called by the applicant as *gypsum* (all the FGD washout sludge from the still under construction TVA Kinston Fossil Plant “gypsum pond”), not the “fly ash” and “bottom ash” allowed by Rule 1200-1-7-.02(c)(ii).
- The project was not proposed for “a highway overpass, levee, runway, or foundation backfill” or anything similar. What was proposed was to create a ziggurat profile mountain of coal ash. Permit by rule was clearly not intended for a ninety acre, 100 foot High Mountain of ash.
- It would have been an abuse of discretion for the Commissioner to determine that this use of coal ash, untried in Tennessee, was “similar” to the fills heretofore used to bring sites to grade for other uses.
- The final state of the project was inconsistent with the Permit by Rule provision for projects that are or are akin to “a highway overpass, levee, runway, or foundation backfill”. Such fills typically are “capped” by pavement. The cap in the SMS filing is described as a membrane covered by soil that will be revegetated with trees. While this may be the Office of Surface Mining preference for a coalmine reclamation, it is wholly inconsistent with the protection of a coal ash fill cap and membrane from damage from tree roots and assurance of decades of integrity as a barrier to water penetration.

Areas of concern that the Permit by Rule application did not adequately address included:

- Treatment of surface water runoff. The applicant merely stated that all stormwater will be diverted to a settling pond for soil to settle. No mention was made of the ash runoff and how that will be addressed.
- Potential harm caused by a slippage of the 100-foot high hill of ash during construction.
- The potential further disturbance of the Sewanee coal seam was not addressed by the applicant or plans to offset or treat new creation of acid mine drainage and any byproducts into already impaired streams.
- The potential conflicts between reclamation of an AMD mine site and a landfill.
- No ground water analytic data was provided by the applicant. There is no provision for providing such information at a later time. The applicant should be required to conduct a new well water survey.

- Related to the groundwater monitoring that is proposed, manganese was not listed despite the fact that manganese concentrations have been a problem at this site in the past.
- The applicant did not address the long-term impacts to the Obed River, a protected stream that flows through a National Park.
- Source of soil cover and water for dust control. The applicant claimed that there was not enough soil and rubble to complete the existing mine reclamation but then later says that there was enough of both for daily cover and the final cover. The applicant did not identify the water source for its dust mitigation procedures.
- Revegetation of the ash hill with shallow rooted trees is an untested method of final closure. It may cause perforation of the ash envelope, leading to groundwater contamination and ash slippage.
- Dust control. The applicant did not address the removal of ash from trucks leaving the landfill, ash released in transit, or plans for recovering ash in the event of an accident.
- An adequate environmental site assessment had not been performed by the applicant.
- Transportation deficiencies. While transportation issues are not covered under Permit by Rule, this particular site has significant deficiencies. The current road is not suitable for the kinds and number of proposed truck traffic. The Division of Solid Waste is aware of these problems and would be derelict in its responsibilities to protect the public to ignore these issues.

TDEC did reject the SMS permit by rule application and required it to submit an application for a Class II landfill with a liner. However, TN State regulations have not been changed, and a future TDEC ruling could allow a permit by rule if no EPA standards have been established.

Attempt to Change the Law

Cumberland Stewards looked forward to working with TDEC to help us address our concerns now that SMS had to submit its Class II application, which it did in July 2009. However, we found that the application did not even mention some of our most pressing concerns. Naively, we expected TDEC to share our concerns and require SMS to address them adequately. Instead, we discovered that because the way the current laws and regulations are written, TDEC had no authority over inappropriate siting, air quality, or transportation.

In response to our frustration, we set out to change the law. Our two state representatives agreed to sponsor a bill to put in place regulations to protect community interests and safety.

In January 2010, SB 2799 was introduced into the TN Senate by Senator Charlotte Burks. A companion, HB 2828, was introduced into the House of Representatives by Representative Eric Swafford. Prior to the bill's committee hearings, we met several times with Chuck Head of the Solid Waste Division of TDEC to develop an amended bill, which we all felt we could live with. TDEC gave an insignificant fiscal note to the bill, indicating that it did not oppose its passage. Attached is a copy of that amended bill. ([Attachment 3.](#))

We worked very hard to get this bill passed, meeting weekly with the members of the committees to which the bill had been assigned. Finally, the day came for the amended bill to have its hearing in the House committee. It died for lack of a second of the motion to hear the bill. We learned later from the House sponsor that the TN Chamber of Commerce had called the day before to say that it would oppose the passage of this bill. That single call from a special interest lobbyist was enough to deny even a hearing of the merits of the bill within the TN General Assembly.

So, at the end of the day, today in Tennessee we have no regulations which even begin to capture the lessons learned from Kingston. To help EPA understand the regulatory situation in TN, we will review with you what the bill would have changed.

- 1. Addressing coal ash definition.** The bill clearly identified all the kinds of coal ash that were included in the definition of coal combustion waste. Under existing regulations, FGD could conceivably be exempt from any regulation.
- 2. Addressing design considerations:** In May 2009, the TN General Assembly passed a bill to amend TN law to require that new or expanded coal ash landfills had to have "a liner and a final cap." ([Attachment 4.](#)) The half-page bill identified no criteria for either the liner or cap, essentially making it meaningless.

This is the bill referred to be TDEC in its rebuttal of the Southern Alliance for Clean Energy report on the inadequacy of TN coal ash landfill regulations ([see link.](#)) An applicant would be free under this law to claim that any liner and cap it chose to use complies with TN law.

Our bill specified that coal ash be disposed of only in Class I or Class II landfills that meet the design criteria of Class I landfills for geologic buffers, liner systems, a leachate collection system, and ground water protection.

As our bill was defeated, no such law or regulation exists with TN today.

3. Addressing inappropriate site locations

Running down the length of the Cumberland Plateau is the Sewanee coal seam, a layer of coal that is highly acidic and the primary source of Acid Mine Drainage (AMD.) It is impossible to prevent AMD once this seam is disturbed and exposed to water. It damages water quality and destroys aquatic life. AMD reclaimed sites require perpetual monitoring. The SMS site lies in

the Sewanee coal seam and is actively being mined by the Canadian company. It seemed reasonable to us that SMS had to prove that adding coal ash to a disturbed Sewanee coal seam would not increase and add to the risks of AMD. The interaction of the acidified water and coal ash might have long term unintended consequences.

Adjacent to the SMS site is the State of TN Catoosa Wildlife Management Area. The water from the site drains into the waters of the Obed River, which is designated a National Wild and Scenic River and flows through the Obed Wild and Scenic River National Park. The Obed River is designated a high priority stream by the State of TN. It seemed to us that it was wrong to dump coal ash in the headwaters of such a national treasure.

Our bill required the applicant to provide all information that is necessary to determine that the proposed site is safe for the long term disposal of coal ash without potential injury to surface waters, impounded waters, groundwater quality, or public or private drinking water supplies, or that there is no significant potential for contamination of such water supplies.

Our bill did not address protection of protected areas, so this concern and the concern of potential water contamination are not addressed by TN law or regulation.

As this bill did not pass, these issues are not currently addressed by TDEC regulations.

4. Expansion of existing landfills. Our bill addressed disposal of coal ash in already permitted Class I/II landfills. An operator would have to comply with the regulations set forth within this bill.

As this bill did not pass, this issue is not currently addressed by TDEC regulation.

5. Addressing the chemical composition of the CCP waste.

Under our bill, TDEC would be required to analyze the composition of the coal combustion waste to be disposed and provide prompt notice of changes in the composition or volume of that waste that might affect the toxicity, solubility, or other means of release of pollutants into the environment.

As this bill did not pass, this issue is not currently addressed by TDEC regulation.

6. Addressing transportation concerns

For us, transportation was a large concern. Smith Mountain Road was never intended to be used as SMS intended. This narrow, winding mountain road is not designed for the truck traffic proposed. Adding hundreds of truck trips on this winding country road per day is courting disaster: loss of life, property damage, and coal ash spills. SMS says that it will keep the road up to public safety standards, but it does not say who determines that standard and what cost the County must bear.

In the Kingston disaster, EPA required very careful transport of ash by railcars which were lined

and sealed. The safest routes were identified. Personnel were given gear to protect their skin and lungs. Vehicles were washed before leaving the site. We think this same level of protection should apply to future transport and ash handling activities.

TDEC was at first unwilling to address any transportation concern within our bill because it said that the TN Department of Transportation covered these issues. However, current TDOT regulations permits the transport of coal ash in open trucks covered only by a cloth tarp. This standard is clearly deficient in light of what we have all learned about the airborne release of coal ash.

Our bill would require the permit applicant to provide a description of the containment measures used during transport from the site of generation to the disposal site to avoid leakage, spillage or airborne release and the availability of adequate and timely emergency response to accidental releases of coal ash. The application documents or permit conditions would describe the means of transport, proposed routes, and the containment of the coal ash during transport.

This was a large step for TDEC to require a transportation plan, but TDEC would not have the responsibility to enforce this plan.

- TDEC does not identify rail transport as the safety standard, the standard EPA required in the cleanup of the Kingston Coal Ash Disaster.
- TDEC does not require utilities and contractors to address the safety of those living on the road or others using the road to be used for coal ash truck transport.
- TDEC does not require identification of who is responsible to maintain haul roads or rail.
- TDEC does not require transporters to mitigate routine and accidental release of coal ash or financial responsibility for an accident's cleanup.
- TDEC does not require that the road or rail can handle the safe transport of coal ash prior to site approval.

As this bill did not pass, coal ash haulers can still transport coal ash in an open truck with a cloth tarp down any road, safe or not.

7. Addressing Air Quality Concerns

The Smith Mountain Solutions site is on top of a windy mountain that had sufficient wind for TVA to test it for a wind generation site. We felt confident that since EPA required TVA to adhere to stringent air quality practices that TDEC would dismiss this site on its potential air quality concerns alone. Needless to say, we were astonished to learn that the only air quality parameter that TDEC would consider in the application is methane emissions.

Under our bill, no permit for coal ash disposal would be granted without solid waste permit conditions governing the air quality impacts of disposal operations under the permit.

As our bill did not pass, Tennessee communities and environment have no protection from coal ash impacts on air quality.

- TDEC does not hold coal ash landfill operators to stringent air quality control at all future coal ash land fill sites as it has for disposal of Kingston Disaster coal ash.
- TDEC does not consider wind profiles of candidate sites to avoid air pollution.
- TDEC does not require air quality monitoring or reporting.
- TDEC does not require truck wheel wash at the coal ash sites to prevent carrying coal ash offsite.
- Within the State of TN, an air quality permit covering coal ash air hazards is not required.

8. Addressing Utility Extended Responsibility

We felt that TVA should be required to maintain extended responsibility for its coal ash as part of its contractual agreement with landfill operators. TVA contract writing should be improved to tighten specifications enough that both TVA and the contractor can be held responsible for actions under the contract. This will ensure that TVA will responsibly manage its offsite disposal of coal ash.

Our bill would have required, in addition to any liability of the owner or operator of the landfill, the generator of coal combustion wastes would remain liable for environmental injuries arising from the disposal of the wastes.

As our bill did not pass, TVA is freed from any and all liability once a contractor takes the coal ash off its hands. EPA must require utilities to maintain extended responsibility for its coal ash as part of its contractual agreement with landfill operators. This will ensure that the utility will responsibly manage its offsite disposal of coal ash.

Conclusions

The Smith Mountain Solutions applicants have not followed through yet with drilling the additional wells in the footprint of the proposed landfill, which TDEC has required of them. As TVA took its Kingston Coal Ash Disaster ash to Alabama and has indicated that it will manage disposal of new coal ash on TVA-owned land, the fire seems to have gone out of the applicants to pursue getting the permit. Yet, we weekly make calls to TDEC to learn if there has been any new activity with the permit application. The community remains under the shadow of a poorly sited and insufficiently regulated coal ash landfill application.

We want EPA to incorporate the lessons learned from the Kingston disaster in its regulations affecting the future management of coal ash. TVA and the State of TN have been and are in compliance with existing EPA coal ash management regulations. If EPA should declare coal ash as non-hazardous, then Tennesseans and EPA can only expect that TVA and TDEC will continue their inadequate management of coal ash. EPA needs to set high standards for coal ash management and retain oversight of state programs. If we continue to do what we have always done, then we are going to get what we always got.

Subtitle C is the recommended option for adequately regulating coal ash waste. In fact, Subtitle C is the only viable option because it is the only option that offers comprehensive, federally enforceable, cradle-to-grave management of coal ash. States like Tennessee have shown that they are not proactively interested in proper regulation of toxic coal ash.

Thank you for the consideration of these comments.

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