

STATE PERSPECTIVE ON MINE PLACEMENT OF COAL COMBUSTION BY-PRODUCTS

Gregory E. Conrad
Interstate Mining Compact Commission
Herndon, Virginia

Abstract

Since May of 2001, the Interstate Mining Compact Commission (IMCC) has sponsored a series of meetings between the States/Federal government, including representatives from the Environmental Protection Agency, the Office of Surface Mining, and the Department of Energy, to discuss potential adjustments to existing State regulatory programs relating to the placement of coal combustion by-products (CCBs) into surface and underground mines. Over the past several years, the States have had the opportunity to learn from one another about their existing regulatory approaches. Discussions have focused on the various operational, environmental, and economic issues associated with the practice of placing CCBs in mines, including how States can adjust or improve current regulatory practices and examine the impacts of various Federal regulatory proposals on the implementation of existing State programs. This presentation will report on the progress of State/Federal discussions concerning placement of CCBs in mines including the regulatory requirements under the Surface Mining Control and Reclamation Act (SMCRA) and the Resource Conservation and Recovery Act (RCRA) that attend mine placement of CCBs. The States believe that, pursuant to their regulatory programs under SMCRA and/or RCRA, they currently and historically have managed the placement of CCBs at mine sites in a safe, environmentally protective manner. There are no significant gaps in regulatory coverage and the States continually seek to improve and upgrade their programs where new requirements are identified through program benchmarking and/or Federal oversight. In the final analysis, the placement of CCBs at mine sites amounts to a beneficial use that generally enhances the environment and, in every case, is comprehensively and effectively regulated by the States.

Background

My objective today is to provide you with an overview from the States' viewpoint about where we are in the regulatory development process and, more specifically, about our on-going State/Federal initiative to inform one another about our existing regulatory approaches and what the future might hold.

Following EPA's publication of its Notice of Regulatory Determination on Wastes from the Combustion of Fossil Fuels in May of 2000 (65 FR 32214), the member States of the Interstate Mining Compact Commission (a multi-State governmental organization representing the natural resource and environmental protection interests of its 20 member States) suggested to both EPA and the Office of Surface Mining (OSM) that an intergovernmental forum would serve as a valuable mechanism to initiate discussions between State and Federal governments concerning next steps pursuant to the regulatory determination. This suggestion followed on the heels of a

resolution adopted by IMCC in May of 2000 affirming the appropriateness and effectiveness of State regulations and policies for the safe handling, recycling, beneficial use and placement of coal combustion by-products and supporting the management of CCB's without the application of Federal RCRA subtitle C requirements. The IMCC States were particularly focused on EPA's finding that, although coal combustion by-products (CCB's) (or coal combustion wastes (CCW)) did not warrant regulation under subtitle C of the Resource Conservation and Recovery Act (RCRA) as "hazardous waste," the agency had determined that national regulations under subtitle D of RCRA are warranted when these wastes are disposed in landfills or surface impoundments, and that regulations under subtitle D and/or possible modifications to existing regulations established under the Surface Mining Control and Reclamation Act (SMCRA) are warranted when these materials are used as fill in surface or underground mines. IMCC was especially concerned about the latter "mine placement" aspects of the determination given the significant interplay between approved State regulatory programs under SMCRA and any potential adjustments to the national SMCRA regulations (which serve as a template for State regulatory programs).

State/Federal Intergovernmental Forums

Both EPA and OSM saw the value of proceeding in this manner and the first intergovernmental forum on mine placement of CCB's was held on May 15 and 16 of 2001 in St. Louis, Missouri. The forum was open to all States, not just IMCC member States, and also involved tribal government representatives. Other Federal participants included the U.S. Geological Survey and U.S. Department of Energy. The forum began with several presentations from EPA, OSM, and State representatives regarding current mine placement practices and regulatory programs. These presentations also allowed attendees to hear about current issues and problems being encountered in the mine placement of CCB's in anticipation of the potential development of a new regulatory approach by EPA. One of the key objectives of the forum was to engage State and Federal representatives affected by a potential mine placement rule in an open discussion about current challenges being encountered in the field – identifying potential regulatory gaps, anticipating potential inter-agency jurisdictional conflicts, and discussing implementation concerns associated with any new rule. A key outcome of the forum was the establishment of an on-going dialogue among the States, Tribes and Federal representatives concerning the various operational, environmental and economic issues associated with the practice of mine placement of CCB's. A copy of the notes from the meeting can be found at EPA's website:

www.epa.gov/epaoswer/other/fossil/index.htm.

The intergovernmental forum was initially followed by a meeting of the States and Tribes that took place on August 13 and 14, 2001 in St. Louis. Among the issues discussed were: characterization methods and tests for CCB's; placement requirements; use of liners; closure requirements; site characterization and volume restrictions; definition of beneficial use versus classic disposal; the need for Federal regulations, guidelines or policies; and which Federal agency should take the lead: EPA or OSM. The outcome of this meeting was the development of a draft discussion outline that contains the basic position of the States/Tribes concerning the regulation of CCB placement at mine sites. The outline has served as the basis for continuing discussions with EPA and OSM regarding the need for national regulations given the adequacy of existing State and Tribal regulatory programs. A copy of the outline is available on EPA's

website. The outline addresses categories of coal ash management; coal ash management principles for beneficial use; coal ash regulatory principles for beneficial use; disposal/placement at mine sites other than beneficial use; and conclusions. Among the conclusions drawn by the States were the following:

- approved beneficial use determinations by the States preclude the need for further waste regulation by EPA or OSM
- experience at the State level in implementing existing State and Federal laws substantiates the adequacy of the existing regulatory structure
- comprehensive Federal regulations will be difficult to implement from a nationwide perspective due to differences in regional geology, climate, ash composition and other factors; and
- State data and information supports these conclusions and are available for review.

Throughout the discussions on mine placement of CCB's, the States and Tribes have attempted to reflect the input and positions of the various departments and/or agencies within each State that have jurisdiction over this matter. This often includes the mining regulatory agencies within the Departments of Natural Resources or Environmental Protection; the solid waste regulatory agencies within the Departments of Environmental Protection or Environmental Quality or the Departments of Health; and the water quality regulatory agencies within the Departments of Environmental Protection or Environmental Quality. IMCC has also coordinated its efforts with the Association of State and Territorial Solid Waste Management Officials (ASTSWMO), which has been active for many years on this issue and has been working on guidelines for non-hazardous industrial waste management that may serve as a model for potential guidance in the CCB mine placement arena.

In preparation for the second State/Federal dialogue, the States requested that EPA make available for State and Tribal review two draft documents that the agency had been developing: "Regulation and Policy Concerning Mine Placement of Coal Combustion Waste in 26 States" and "Mine Placement of Coal Combustion Waste – State Program Elements Analysis." Copies of both draft documents were provided to the States in November of 2001 and are available from EPA. These documents provide a detailed overview of State regulations and policy (under both mining and solid waste programs) concerning CCB mine placement, with an emphasis on coal mines. The reports summarize the elements of existing State programs that are applicable to CCB mine placement, including administrative program elements (i.e. permitting and public participation); planning and enforcement program elements (i.e. reclamation plans, site characterization and restrictions, and special requirements related to acid mine drainage); waste characterization and monitoring program elements (i.e. required chemical analyses, ground water and surface water monitoring); design and operational program elements (i.e. groundwater table restrictions, compaction, interim cover, fugitive dust controls, and erosion/surface runoff controls); and closure and post-closure program elements (i.e. final cover, revegetation, financial assurance/bonding, and post-closure site utilization restrictions).

These reports by EPA are dynamic documents and their accuracy and completeness will change as States continue to provide information to the agency concerning current State regulatory program requirements. Since the initial release of the reports, several of the States, including some that were not represented in the early drafts of the reports, have provided updates,

clarifications and new information to EPA in an effort to improve the nature and usefulness of the reports. In addition, EPA is incorporating changes to the reports based on site visits and interviews that the agency is conducting in various States. In the final analysis, the States and Tribes are hopeful that these reports will assist all of the parties to the discussion in determining what the agreed-upon program elements should be for the regulation of mine placement of CCB's and how effectively the States and Tribes are currently implementing those elements. The need for additional national guidance or regulation should emerge from our continuing discussion of these reports.

The second State/Tribal/Federal meeting took place on November 14 and 15, 2001, in San Antonio, Texas. Among the topics discussed at the meeting were: an explanation and status report on EPA's Minefill Risk Assessment/Modeling (MRAM) Project and its relationship to EPA's Coal Ash Regulatory Program; a presentation on the State of Illinois' Data Management System for Mine Placement Activities; Review and Discussion of EPA's Draft Reports mentioned above; an overview of EPA's program of site visits and interviews with individual State agencies that regulate mine placement of CCB's; and review and discussion of the States' outline on coal ash management, including the topics of use of coal ash (beneficial use versus disposal); principles for beneficial use of coal ash; the effectiveness of existing State regulatory programs (both coal and noncoal); and interagency cooperation and coordination – both within the States and within the Federal government. A copy of the meeting notes is available at EPA's website, noted above.

The third meeting of State/Tribal/Federal government representatives was held April 15 and 16, 2002, in Golden, Colorado in conjunction with OSM's technical interactive forum on "Coal Combustion By-Products and Western Coal Mines." At that meeting, representatives received updates on the MRAM project; on EPA's State program reports; and on EPA's site visits. The State of Indiana provided an overview of its CCB database and how the State is using this data to effectively monitor and regulate mine placement of CCB's. EPA and OSM presented more detailed responses to the States' outline on coal ash management, which were helpful in informing the on-going debate and clarifying EPA's and OSM's positions and concerns. Finally, and perhaps most valuable to our on-going discussions, the participants spent time reviewing EPA's minefill regulatory concerns, primarily from a RCRA perspective. This discussion was most promising in terms of bridging the gap between how the States currently operate under their respective SMCRA and RCRA programs and what EPA is anticipating based on its understanding of those RCRA elements that it believes should be applicable to mine placement of CCB's. As the States attempt to continue informing the debate on these issues, we anticipate building on the good work that EPA has undertaken to date in its two state regulatory program reports and the valuable efforts OSM has made to articulate the SMCRA regulations that apply to CCB's. We have also focused on providing an analysis of what the states could do to supplement the current permitting information and data that we collect and analyze as part of our SMCRA or other non-coal programs by specifically addressing those RCRA elements that appear to be different or that require additional information or approaches.

Over the course of the State/Federal discussions, the States/Tribes have consistently articulated the following concerns to EPA and OSM, several of which remain to be addressed or resolved

within the context of continuing State/Tribal/Federal government debate:

- SMCRA appears to serve as an adequate and effective baseline for any type of regulatory analysis concerning mine placement of CCB's. In this regard, we see the SMCRA permit serving as the platform for CCB mine placement at coal mines. For non-coal mines, we believe that the existing State permitting framework, which is often RCRA-based, is adequate.
- it is essential to examine the effectiveness and comprehensiveness of existing State/Tribal programs before adding additional regulatory requirements.
- there is a need to coordinate among all applicable statutes/regulations that impact the regulation of mine placement of CCB's, including SMCRA, RCRA, the Clean Water Act and the Safe Drinking Water Act. There is a sense that many of the necessary regulatory requirements are already in place in the context of these statutes and their respective regulatory programs.
- there is an absolute need for flexibility to accommodate differences among the States related to geology, climate, ash characterization and agency operation.
- there needs to be consideration given to both coal and noncoal sites and the differences between them (possibly a segmented approach).

As an overall objective in the area of regulating mine placement of CCB's, the States are hoping to strike a balance between existing State regulatory program requirements and any gaps that may be defined and justified. To date, although there are differences among the States in the way they regulate mine placement of CCB's (in terms of sharing jurisdiction among several State agencies; relying primarily on the SMCRA program for mine placement at coal mines; and differentiating between beneficial use and classic disposal), there has been little evidence of major gaps that require filling through new national regulations under either SMCRA or RCRA. And in those States that do not have well defined programs for mine placement of CCB's, it is usually because they have not had to deal with its beneficial use or disposal within their borders. Even in those States, a comparison of their programs with States who actively regulate mine placement of CCB's demonstrates that most, if not all, of the program elements are in place and would likely operate effectively when needed.

The few areas within State programs that have been shown to need some degree of shoring up can best be addressed through intergovernmental discussions, such as are occurring at the present time. Through a benchmarking type of approach, States can identify areas in their programs that would benefit from fine tuning and this can be accomplished by patterning these areas after other State programs. If and when specific regulatory gaps are found to exist in a significant majority of State programs, then it would be appropriate to consider national guidance from EPA and/or OSM. However, all of EPA's program analyses to date do not yet justify the need for such guidance, and OSM has stated on numerous occasions that it believes State programs are adequate (at least as far as SMCRA programs for CCB mine placement at coal mines are concerned). Interestingly, in those States without SMCRA regulatory programs (i.e. the non-coal States), their solid waste programs tend to play a more active role from a regulatory perspective and these States have structured their RCRA programs to address mine placement of CCB's from coal mines that is used beneficially or disposed of within their borders.

The most recent State/Federal meeting occurred on October 29 and 30, 2002 in Williamsburg,

Virginia. This followed a States-only meeting which had been held in July in Reston, Virginia at which a working group of States spent two days discussing EPA's regulatory concerns document. The States agreed that the best response would be to address four key areas that capture the essence of the debate. To this end, the States prepared four draft working documents, copies of which are on EPA's website. They address several components of the minefill program. The first document is a regulatory matrix that attempts to capture the minimum SMCRA and RCRA regulatory components applicable to mine placement of CCBs at mine sites. While the States had originally contemplated including examples of State regulations as well, it is difficult to match up the exact State regulation numbers with both the SMCRA and RCRA citations, so it was decided this would be too cumbersome and unproductive, particularly without a detailed explanation of the interrelationship between the State and Federal programs. However, each State stands prepared to provide this analysis, and both Illinois and South Carolina have examples of how their respective SMCRA and RCRA program line up with their Federal counterparts. The second document is a table that lists the various beneficial uses of CCBs, both in terms of use, applicable industrial standards, environmental and practical benefits, and the applicable "regulatory safety net" (which consists of state and federal requirements that are potentially applicable to each beneficial use). The third working draft is a narrative and diagram description of applicable jurisdictional authorities with respect to CCBs placement and utilization at active and abandoned coal and noncoal sites. This document is intended to serve as a summary of the states' understanding of overall jurisdictional authorities and requirements. The fourth document is a summary description of the applicability and impact of minefill regulations associated with abandoned mine land projects and sites.

All of these documents are interrelated and should be read together. They not only respond to EPA's regulatory concerns document, but compliment the analysis that OSM has done in response to those same concerns. Furthermore, and most importantly, the States assert that these working draft documents provide the case for why existing State regulatory programs under both SMCRA and RCRA are adequate and comprehensive enough to insure the appropriate regulation of minefilling practices where CCR is used. Any expanded jurisdictional or regulatory authority proposed by EPA or OSM should be based on a thorough review and response to these documents.

Facilitated Stakeholders Meeting

Our most recent undertaking was the sponsorship of a facilitated stakeholders meeting on May 19 and 20 of this year in Washington, DC. Many of the groups represented on the panel here today were present at that meeting and provided overviews of their perspectives and concerns with regard to minefilling practices. A copy of the summary meeting notes from this meeting is available on EPA's website. From the States' perspective, we believe this was a productive sharing of information and further informed the debate about the need for Federal regulation in the area of minefilling. We believe that the information presented at the meeting supports our view that the States are doing an effective job of regulating in this area and that the need for additional or supplemental Federal regulation has not been adequately demonstrated. The meeting also provided an opportunity to focus on the handful of issues that may require additional enhancements in some State regulatory programs such as post-closure care and financial guarantees, each of which can be addressed at the State level without expansive new

federal rules. In many instances, it is not so much a matter of the States not having regulations to address these issues, but rather tailoring existing regulations to account for some of the nuances that attend concerns associated with minefilling, such as long-term treatment or care.

Looking to the Future

What does the future hold? From the States' perspective, we are hopeful that EPA and OSM will now move forward expeditiously with a jointly-developed position on the need for additional Federal regulation of minefill practices for coal combustion by-products. We believe that all of the information required by the two agencies to make this decision is in hand and that they are well poised to render that decision. As part of that decision, we anticipate that EPA and OSM may appropriately recommend that the States continue their on-going efforts to work cooperatively with both agencies to assess the effectiveness of their respective regulatory programs and make appropriate adjustments. Furthermore, we anticipate that the States will continue their benchmarking initiatives, which provide for the analyses and comparison of State program elements with the overall objective of enhancing their respective programs through the adoption of lessons learned during program implementation and the incorporation of innovative approaches. In the end, we believe that our citizenry and the environment will be well served by State regulatory programs that fully comply with applicable Federal laws and that reflect the results of the laboratories of invention inherent in State primacy. We also believe that an effective regulatory regime for the mine placement of coal combustion by-products will insure that there are effective and safe alternatives to classic land disposal while enhancing the reclamation of both active and abandoned mined lands.

Greg Conrad is the Executive Director of the Interstate Mining Compact Commission (IMCC), a multi-State governmental organization representing 20 mineral producing States, since 1988. He is responsible for overseeing issues of importance to the States in the legislative and regulatory arenas. Prior to joining IMCC, Greg served for nine years as senior counsel with the American Mining Congress, which is now part of the National Mining Association. Greg has spoken and presented papers at conferences hosted by such organizations as the Eastern Mineral Law Foundation, the Conference of Government Mining Attorneys, the Colorado School of Mines, the Office of Surface Mining, the National Mining Association, the Environmental Law Institute and State government groups. He has written extensively on mining issues for professional journals and magazines. Greg holds degrees from Michigan State University in business administration and from the University of Detroit, School of Law.