DISCUSSION OUTLINE August 28, 2001

Coal Ash Management

I. Categories of Coal Ash Management

1) Used as product (i.e. concrete; asphalt filler; etc)
2) Used beneficially in the environment (i.e. structural fill; soil amendment/additive)
3) Beneficially used in active or abandoned coal/noncoal minesites
4) Disposal

II. Coal Ash Management Principles for Beneficial Use

- Proper coal ash characterization to insure adequate protection of public health and safety and the environment
- Reutilization
- Beneficial use of coal ash placement in mines:
  - Case studies and monitoring required by the states support the concept that coal ash is a manageable material in a mine environment.
  - Unique opportunity to increase usage for mine reclamation and provide a safe environment for disposal of ash.
  - Opportunity for cost effective placement of coal ash to help resolve the disposal/placement of increased amounts of coal ash being generated today and into the future.
  - Opportunity to save green space by minimizing the need to develop ash disposal sites near power plants, often in flood plains.
  - Opportunity to place ash back into its place of origin, usually in a geochemical environment conducive for such placement.

III. Coal Ash Regulatory Principles for Beneficial Use

- Coal ash is NOT a hazardous waste, but should be properly managed.
  - Few proven damage cases related to coal ash placement.
- States believe that through cooperation at the state AND federal levels we can make the best use of existing regulatory and statutory authorities to protect public health and safety and the environment.
- Flexibility and discretion are necessary for the achievement of successful program outcomes due to the difference in coal ashes, regional geology, regional climate, mine site conditions, types of uses, and other factors.
- Inter-agency cooperation:
  - State programs (i.e. mining programs, solid waste programs, air and water programs) have substantial experience and expertise in managing coal ash placement in a mining environment (often via coordination of efforts among state agencies).

- Present day regulatory framework in states demonstrates ability to manage coal ash acceptably.
- Opportunity for public involvement is necessary.
- Parameters for determination of beneficial use at mine sites:
  - Ash composition is compatible for intended uses
  - Use at selected site will not create problems or exacerbate existing problems
  - There must be a valid purpose for using the ash, which could include:
    - Acid Mind Drainage (AMD) remediation
    - Solid enhancement/replacement
    - Subsidence control
    - Approximate Original Contour
    - Appropriate Post-mining Land Use
    - Mine fire control
    - Mine reclamation

IV. Conclusions

- Approved beneficial use determinations by the states preclude the need for further waste regulation by EPA
- 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.
- State data and information supports these conclusions and are available for review.

V. Disposal/Placement at Minesites (other than Beneficial Use)

- Can be done safely and with adequate environmental controls under existing state and federal regulations (including SMCRA, CWA, state statutes and regulations)
- Potential program components include:
  - Waste characterization
  - Site considerations (i.e. site prohibitions; operation plans; approximate original contour; buffer zones; physical hazards; hydrologic analyses)
  - Environmental controls (i.e. volume restrictions; placement requirements; use of liners; compaction; state ground water protection plans; water quality standards; air quality standards; monitoring; reporting)
  - Determination of End Points (i.e. active mining = contemporaneous reclamation; abandoned mines = reclamation; disposal = closure)
  - Assurance of Project Completion (i.e. financial assurances (surety bonds, insurance, etc.); enforcement authorities; clean-up authorities and funds (CERCLA); risk analysis; other regulatory controls (BMPs, NPDES, Waste Regulations)).