Testimony of

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Subcommittee on Water Resources and Environment

EPA Mining Policies: Assault on Appalachian Jobs—Part I

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Good Morning. I am Hal Quinn, president and chief executive officer of the National Mining Association (NMA). NMA is the national trade association representing the producers of most of the nation's coal, metals, industrial and agricultural minerals; manufacturers of mining and mineral processing machinery, equipment and supplies; and the engineering and consulting firms, financial institutions and other firms serving the mining industry.

I want to thank the Subcommittee for holding this hearing to examine policies that have been choking off economic and job-creating opportunities in the Appalachian coal fields. The Appalachian region produces one-third of our nation's coal supply. This coal is vital to the generation of the most reliable and lowest cost electricity and essential to the operation of our steel mills, cement plants and factories.

Twenty one of the twenty-five states with the lowest electricity costs rely upon coal for forty percent or more of their electricity supply. It is no coincidence that these states also have the highest concentration of manufacturing. The deliberate and disruptive policies that have slowed and stopped coal mines from receiving permits to open or expand have consequences that reverberate throughout the region. The consequences begin with the coal supply chain and the destruction of:

- High-wage coal mining jobs that on average pay almost twice the state average.
- The direct and indirect support jobs of suppliers, engineers and technicians.
- The jobs of those who design, build and maintain mining equipment.
- Railroad, barge and trucking jobs that move coal from mine to market.
- Power plant, steel mill, cement plant and other industrial jobs at facilities that consume coal as fuel or feedstock to make their products.

The collateral damage goes beyond the immediate supply chain and spreads to those who benefit from low-cost coal energy. Households earning less than $50,000—50 percent of U.S. households—spend as much as 20 percent of their after-tax income on energy, nearly twice the national average. Eugene M. Trisko, *Energy Cost Impacts on American Families, 2001-2011* (Jan. 2011). Increased gasoline costs account for 75 percent of the average household energy cost increase since 2001. More expensive electricity further erodes their economic position and spending power for such things as food, housing or health care. Higher

energy costs—especially higher electricity rates—are the most regressive of all taxes that can be placed on our citizens.

Our manufacturing sector is especially vulnerable to higher energy costs. We should all remember that any product that can be made today in the USA can be made elsewhere and imported. Kentucky, Ohio, Pennsylvania and West Virginia are industrial centers for automobile, chemical, steel and aluminum production—all energy intensive sectors. Access to low-cost and reliable coal electricity keeps them globally competitive by offsetting higher labor and regulatory costs. Last year, Kentucky Governor Beshear expressed to the President deep dissatisfaction about EPA's coal permitting policies. In doing so the Governor reminded the President that, "Kentucky's industrial development has occurred because . . . of relatively low electricity rates based on coal-fired generation."

The Permit Moratorium

Coal mining operations require various permits to commence operations, including two types of permits under the Clean Water Act (CWA): (1) section 404 permits, issued by the Army Corps of Engineers, to discharge fill material; and (2) section 402 permits, issued by states, for the discharge of water. A timely and efficient permit review process is critical to the success of the mining enterprise since new permits are necessary to expand existing operations or start new operations.

On February 13, 2009, the United States Court of Appeals for the Fourth Circuit issued an important decision upholding the longstanding § 404 permitting process administered by the Army Corps of Engineers. *Ohio Valley Envtl. Coalition v. Aracoma Coal Co.*, 556 F. 3d 177 (4th Cir. 2009). At a time when our economy was losing 600,000 jobs a month, the appeals court decision was welcome news because it allowed the Corps to finish the permit process for about 150 coal mine permit applications that the agency placed on hold pending a decision from the appeals court.

Shortly thereafter, EPA announced that it was going to take another look at several permit applications for which the agency had already had ample opportunity to provide comments to the Corps. We smelled a *de facto* moratorium, and we publicly said so. EPA quickly rebuked our characterization of the agency's plans saying "EPA is not halting, holding or placing a moratorium on any of the mining permit applications. Plain and simple." USEPA, Newsroom, EPA Statement on Mining Permit Applications (March 24, 2009).

However, the numbers plainly tell a different story. By May 2009, the permit backlog had grown to 235 applications, and two-thirds of them, or 190, had been previously deemed complete for final processing by the Corps of Engineers. June

23, 2009 Letter from General John Peabody, Division Engineer, to Rep. Zach Space. Yet, no permit decisions were forthcoming. A report prepared by the Minority Staff of the United States Senate Committee on Environment and Public Works documented that the permit moratorium was putting at risk 17,806 new and existing jobs, two billion tons of coal supply and 81 small businesses in the region. United States Senate Committee on Environment and Public Works, Minority Staff, *The Obama Administration's Obstruction of Coal Mining Permits in Appalachia* (May 21, 2010).

EPA Creates New and Unlawful Permit Process and Standards

EPA assured Rep. Hal Rogers (R-Ky.) that "EPA does not anticipate that the time requirements associated with [its] review of proposed permits for surface coal mining will be significantly different than the past." May 28, 2009 Letter from Michael Shapiro, Acting Assistant Administrator. This assurance was no less deceptive than the earlier EPA statement that the agency was not placing a moratorium on permits. Within weeks, EPA proceeded to radically alter the process and standards for obtaining CWA permits for coal mines by issuing:

- A Memorandum of Understanding (MOU) that set forth a series of actions designed to disrupt the timely and orderly processing of coal mine permits. The MOU committed several federal agencies to: eliminating Nationwide Permit 21 for coal mines; increasing EPA interference with CWA § 404 permit decisions by the Corps and CWA § 402 permit decisions by states; vacating an Office of Surface Mining regulation that provided much needed clarity on SMCRA's application to both surface and underground mines that encounter stream channels; and raising state-federal tensions in permitting by states under SMCRA.

- A so-called "Enhanced Coordination Procedures" (ECP) that restarts and revisits more than 100 permit applications that were ready to be issued when the Court of Appeals cleared the way for decisions by the Corps of Engineers. The ECP allows EPA to commandeer the CWA §404 permit process by placing itself as the initial screener of all applications filed with the Corps and, for all practical purposes, the final decision maker. The Corps is relegated to nothing more than a mail box for sending permit applications. See Exhibit A.

- A new *de-facto* water quality standard for CWA § 402 permits issued by states. Relying upon a draft agency report, EPA imposed a presumptive threshold for conductivity in streams—a level that was derived from data that did not follow the agency's standard methodology. The point and purpose of this new standard was revealed by the EPA Administrator's

description of its intended effect: "You're talking about no, or very few, valley fills that are going to meet this [new] standard." *Environmental regulations to curtail mountaintop mining*, Washington Post, April 2, 2010.

Bad Law and Bad Science

This was all accomplished through guidance documents and memoranda that did not resemble anything contained in the CWA or implementing regulations. Had the agency pursued the lawful route of first proposing and taking comment on policies that change existing regulations as required by the Administrative Procedures Act, it would have been forced to answer fundamental questions that reveal why its actions are unlawful.

- The CWA authorizes the Corps of Engineers to decide when and how to process §404 permits. The CWA does not authorize EPA to displace the Corps or to elevate itself to screen, negotiate or decide for the Corps when permits will be reviewed or issued. The Corps' regulations contain time frames for processing permits. The new policies ignore all of them.

- The CWA authorizes states with delegated programs to establish, interpret and apply water quality standards. It also provides those states with the sole authority for certifying whether a project meets those standards. Their certification is binding on the Corps. Nothing in the CWA provides EPA with the authority summarily displace states' water quality standards and certifications.

In short, EPA has exceeded its authority by improperly expanding its role, displacing the Corps and encroaching upon the role reserved to the states under the CWA. The agency has also changed the permit review process in a manner that is inconsistent with existing statutes and the codified regulations.

The science EPA relies upon for its new policy is tentative, weak and flawed. EPA's obsession with using conductivity as a measure of water quality impairment is simplistic and unfounded.

- The study upon which EPA based its new water quality standard for the Appalachian region did not find any direct correlation between changes in water quality and aquatic life based upon the number or location of excess spoil fills.

- EPA did not follow its own methodology guidelines. It relied on field data from uncontrolled settings rather than laboratory data as required by its standard methodology.

- EPA ignored robust data that show good aquatic organism populations in streams with conductivity substantially higher than the threshold it imposes under its new policies.

- The background conditions of streams in the region frequently exceed the threshold EPA established. In other words, there is no feasible way for the industry to meet the new standard under those conditions.

- Recent studies on mined and unmined watersheds within the same region EPA conducted its studies show no difference in terms of ability to perform stream functions.

- Various states have determined that using a composite variable like conductivity is not appropriate for developing a water quality criterion.

In sum, EPA's new standard is not based on sound scientific rationale or scientifically defensible standards. See Exhibit B.

Bad Consequences

These policies have exacted a serious toll. Coal mine operators have grown weary and many have withdrawn their permit applications. In fact, more permits have been withdrawn than issued. This was not what we had hoped would be the method for reducing the permit backlog.

Because of these policies, the Energy Information Administration has recently lowered its productivity projections for Central Appalachian surface mines by as much as 20 percent. U.S. Energy Information Administration, *Annual Energy Outlook- 2011,* pp 11-12 (April 2011). This represents a substantial regulatory penalty that will erode companies' competitiveness and threaten more coal jobs.

Conclusion

When you talk to coal miners about mining coal you hear in their voices the great pride they have in what they do and how well they do it. They often speak about their families, their country and jobs. But the jobs they speak about first are not their own jobs; rather they typically speak about all the other jobs they know depend upon them doing their job well.

Today, many of them question why their own government at times seems to put so much effort into working against them rather than supporting them and what they do for their country. They deserve a good answer. I remain at a loss for one.

Exhibit A

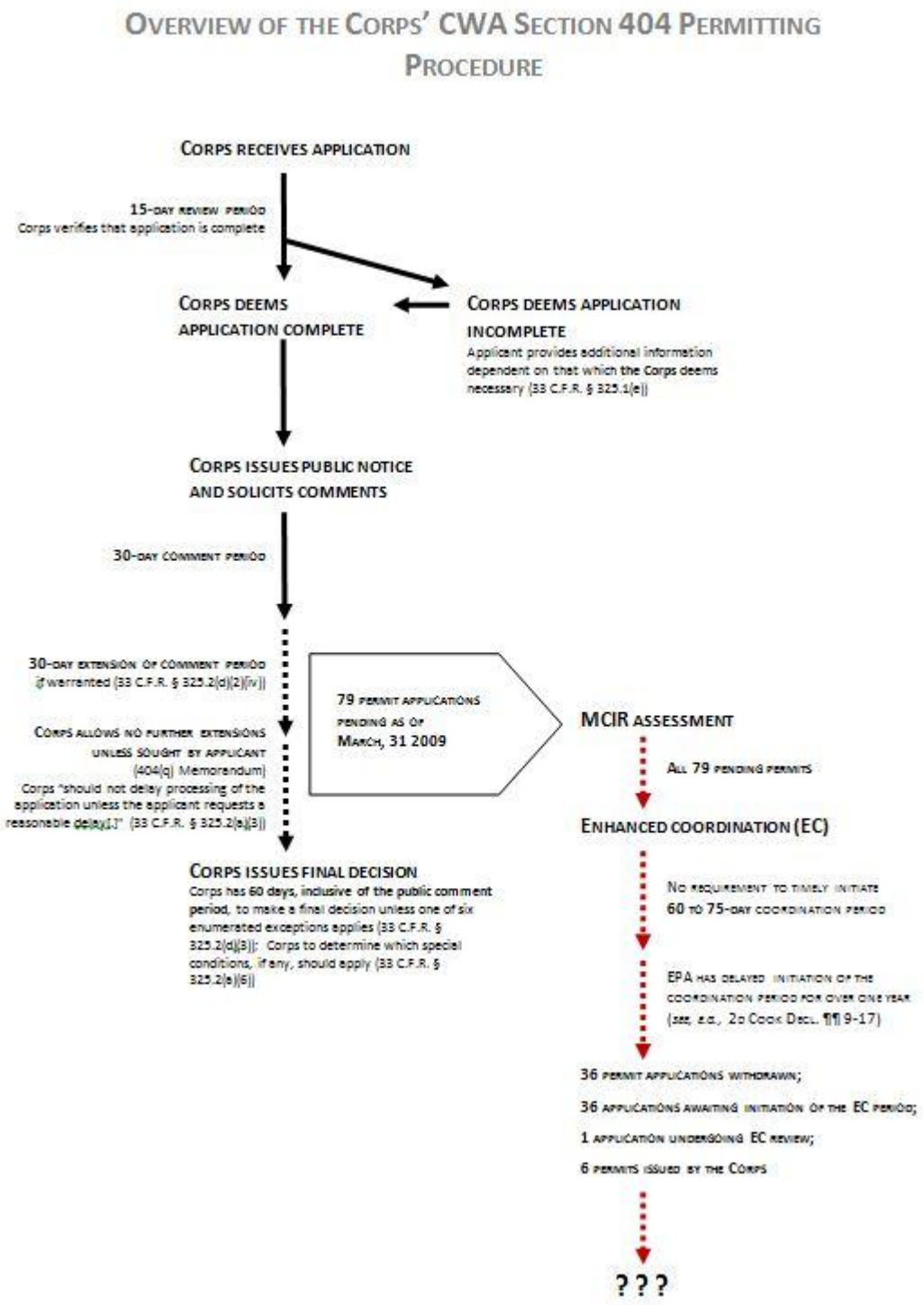

OVERVIEW OF THE CORPS' CWA SECTION 404 PERMITTING PROCEDURE
CORPS RECEIVES APPLICATION
15-DAY REVIEW PERIOD
Corps verifies that application is complete
CORPS DEEMS APPLICATION COMPLETE
CORPS DEEMS APPLICATION INCOMPLETE
Applicant provides additional information dependent on that which the Corps deems necessary (33 C.F.R. § 325.1(e))
CORPS ISSUES PUBLIC NOTICE AND SOLICITS COMMENTS
30-DAY COMMENT PERIOD
30-DAY EXTENSION OF COMMENT PERIOD if warranted (33 C.F.R. § 325.2(d)(2)(iv))
CORPS ALLOWS NO FURTHER EXTENSIONS UNLESS SOUGHT BY APPLICANT (404(q) Memorandum)
Corps "should not delay processing of the application unless the applicant requests a reasonable delay[.]" (33 C.F.R. § 325.2(e)(3))
79 PERMIT APPLICATIONS PENDING AS OF MARCH, 31 2009
MCIR ASSESSMENT
ALL 79 PENDING PERMITS
ENHANCED COORDINATION (EC)
NO REQUIREMENT TO TIMELY INITIATE 60 TO 75-DAY COORDINATION PERIOD
EPA HAS DELAYED INITIATION OF THE COORDINATION PERIOD FOR OVER ONE YEAR (see, e.g., 2a Cook Decl. ¶¶ 9-17)
36 PERMIT APPLICATIONS WITHDRAWN;
36 APPLICATIONS AWAITING INITIATION OF THE EC PERIOD;
1 APPLICATION UNDERGOING EC REVIEW;
6 PERMITS ISSUED BY THE CORPS
CORPS ISSUES FINAL DECISION
Corps has 60 days, inclusive of the public comment period, to make a final decision unless one of six enumerated exceptions applies (33 C.F.R. § 325.2(d)(3)); Corps to determine which special conditions, if any, should apply (33 C.F.R. § 325.2(e)(6))
???

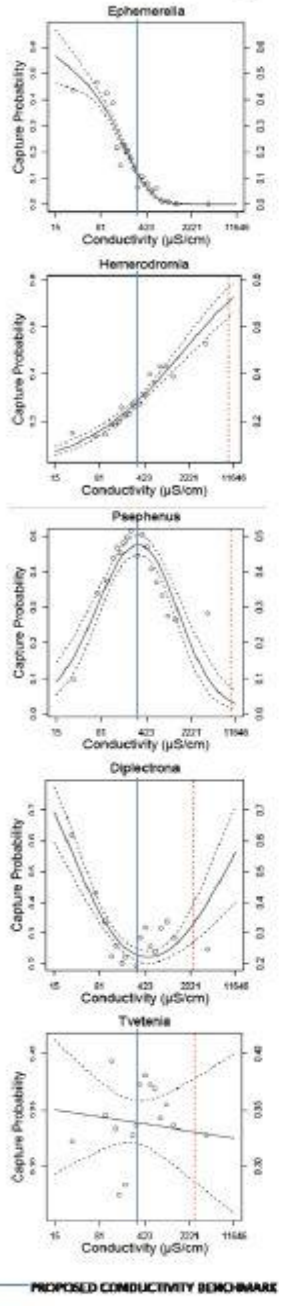
Exhibit B

Geotechnical
Environmental
Water Resources
Ecological

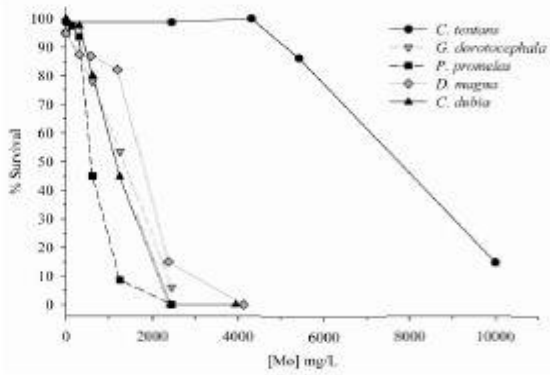
GEI Consultants

Primary Technical Concerns with Proposed EPA Conductivity Benchmark

1. Issues with conflicting stressor-response profiles and species-sensitivity methods



- As outlined in GEI (2010), the prime underlying principle governing the use of a species-sensitivity distribution (SSD) is that all of the organisms in the distribution exhibit a consistent response to the stressor.
- Specifically, each of the taxa should respond negatively to the stressor – only differing in their degree of sensitivity – as shown below (Canton et al. 2010).



- However, as illustrated to the left (from EPA 2010), there are five different ways the organisms used to derive EPA's benchmark respond to conductivity.
  - These differences do not reflect varying levels of sensitivity over a consistent response profile – rather, they are fundamentally different types of stressor-response profiles.
- These five stressor-response profiles provide substantially different answers to the question "*what conductivity concentration is necessary to provide the level of protection used by EPA?*"
  - Decreasing (*Ephemerella*): <300 µs/cm
  - Increasing (*Hemerodromia*): >300 µs/cm
  - Optimum (*Psephenus*): >75 and <2,500 µs/cm
  - Bimodal (*Diplectrona*): <200 and >2,000 µs/cm
  - No response/bimodal (*Tvetenia*): *None needed*
- There is no way to reconcile these widely conflicting stressor-responses into a single benchmark protective of the entire macroinvertebrate community.

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2. **Issues with EPA's "causal analysis"**

   - Although EPA conducted a relatively formal causal analysis, the weight of evidence scoring for each causal element was relatively subjective and open to clearly reasonable alternative interpretations.
   - The taxonomic patterns of sensitivity to conductivity are not yet clearly defined.
     - Although laboratory toxicity data exposing mayflies to actual or simulated mining effluents suggest they may be somewhat sensitive, effect concentrations are highly variable.
   - Toxicity to ions associated with conductivity also varies strongly as a function of specific ion composition and can be mitigated under conditions of elevated hardness.

3. **Issues with EPA's confounding factor analysis**

   - EPA assumed conductivity as a "given" – then tried to see if other factors changed that assumption, when, in fact, a confounding factors analysis should include rigorous and independent tests of the primary hypothesis. In other words, EPA should first determine whether conductivity is indeed the best predictor of biological impairment that is causally related in such a way as to justify the proposed benchmark value.
   - EPA's confounding factor analysis would benefit from a closer evaluation to determine whether other factors could provide alternative explanations for patterns in macroinvertebrate community structure relative to coal mining/valley fill activities:
     - *Habitat*: There are three problems with EPA's assertion that habitat presented little potential for confounding in their derivation of the conductivity benchmark:
       - First, the RBP habitat scores used by EPA in their analyses may not be the most rigorous measure of habitat quality.
       - Second, the RBP habitat scores are correlated with both conductivity and the biological response.
       - Third, EPA's analysis of potential confounding habitat factors focused almost exclusively on the relationship of Ephemeroptera, to the exclusion of the rest of the benthic macroinvertebrate community.
     - *In fact, their confounding factors analysis was conducted exclusively with Ephemeroptera*:
       - Relationships between all potential stressors (in addition to habitat) and Ephemeroptera were generally cited as reasons to reject the stressors as potential confounders in the analysis that ultimately relates to the entire aquatic benthic community.
       - There is a clear need to include similar analyses from other members of the invertebrate community to conclusively reject additional environmental factors as potential confounding stressors.
     - *Influence of rare taxa*: EPA attempted to control for the effect of rare taxa by including only those taxa that had been collected in at least one reference site and at least 30 general sites.
       - It may have been more appropriate to have controlled for the effects of rare taxa by including in their SSD only those genera that had a high capture probability in the reference sites.
       - A plausible argument against excluding rare taxa from the SSD would be that the taxon is rare because of the stressor. However, this argument would not be valid if the taxon is naturally rare, a phenomenon that could be analyzed using its capture probability in reference sites.

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4. **Issues with ecological relevance of the proposed conductivity benchmark**

    - GEI evaluated trends in macroinvertebrate community structure and function relative to conductivity using the data presented in EPA (2010). There are few observed changes in the proportional abundance of functional feeding groups within the regional pool of taxa at conductivity levels below approximately 2,500 µS/cm to 5,000 µS/cm.
    - EPA's proposed conductivity benchmark does not evaluate any other type of aquatic life, so levels of protection for the entire aquatic community is unknown.

Independent Statistical Evaluation

In addition to the aforementioned technical concerns associated with a detailed review of EPA (2010), GEI conducted an independent statistical evaluation of ecological factors most closely associated with patterns in benthic macroinvertebrate community structure using the WABbase dataset; i.e., the same West Virginia database used to derive EPA's proposed conductivity benchmark (GEI 2010). GEI's analysis indicated the following:

- Conductivity alone is not the most appropriate parameter when trying to explain the variation observed among the Central Appalachian macroinvertebrate communities with respect to water quality and physical habitat.
- Rather, a combination of ionic composition, substrate composition, and channel features appear to be more appropriate stressor variables to consider.
    - Total suspended solids, dissolved oxygen, and fecal coliforms appear to be additional variables to consider, as they are strong indicators of other anthropogenic disturbances in the watersheds.
- These analyses also indicate that other metrics, like total taxa and percent EPT abundance, may be better response variables, as opposed to a singular focus on Ephemeroptera.

References

Canton SP, Guenzel LG, Pargee S. 2010. Acute and chronic toxicity of molybdenum to the fathead minnow and four aquatic invertebrates. *In preparation*.

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