

1915 West 18<sup>th</sup> Street, Suite A  
Indianapolis, IN 46202  
Phone: 317.685.8800  
Fax: 317. 686.4794  
[www.hecweb.org](http://www.hecweb.org)  
[hec@hecweb.org](mailto:hec@hecweb.org)



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RE: Testimony before the House Natural Resources Committee on the Surface Mining Control and Reclamation Act of 1977

Members of the Natural Resources Committee:

Thank you for this opportunity to speak on this important issue. My name is Brian Wright. I am the Coal Policy Director for Hoosier Environmental Council, a statewide environmental organization in Indiana that represents over 25,000 members. In the 9 years I have worked for the Council, I have spent hundreds of hours reviewing permit applications and ground and surface water monitoring records for Indiana coal mines. I have spoken with numerous citizens in Indiana and across the country about the effects of mining on the property rights, quality of life, health, and environment, and witnessed first hand damage to homes that coalfield citizens assert is from blasting at nearby coal mines. I have also played a central role in national campaigns to create national regulations on the disposal of power plant wastes in coal mines.

### **Introduction**

My comments are presented on behalf of coalfield residents and citizen advocacy groups in the Illinois coal basin. The basin stretches through southern Illinois and southwest Indiana. Mining in the area is mostly done by surface mining, but the number of underground mines is growing in both states. While SMCRA has addressed some of the most egregious mining practices, coalfield residents must still contend with contamination and loss of local ground water, blasting damage to homes, unresponsive regulatory agencies, large scale open dumping of industrial wastes into mines, and growing concern about subsidence from longwall mining.

In 1977, the US Congress decided that it would no longer allow the coalfields of this country to be treated as sacrifice zones and coalfield residents to be treated like second class citizens. SMCRA was passed with the goal that the mined land be returned to original or better uses instead of being reduced to moonscapes, that ground and surface water quality and quantity be protected instead of being rendered too acidic to support life, and that the homes and quality of life of coalfield residents would be protected instead of damaged or destroyed in the name of extracting the coal. In order to ensure that SMCRA was carried out properly, requirements for public participation were put into place in order to ensure citizens could hold mining companies and state and federal agencies accountable when mining laws and regulations were not followed.

So how effective has SMCRA been in protecting the property rights, quality of life, and environment of the residents of the Illinois coal basin from modern day mining operations? SMCRA has the skeleton of a good law, but in many areas it lacks the muscles and teeth needed to adequately protect coalfield residents and the environment. In the rural areas where these mines are located, ground water most often makes up the only reliable source of water for residents. SMCRA lays the ground work for good ground water protection. However, the language in SMCRA remains too vague to offer meaningful protection to this vital resource.

The law contains protections for homes from blasting damage, but I have visited many homes and received many complaints from coalfield residents who watch as large cracks appear in their walls and their foundation after the mines move in. When they bring these damages to the attention of the state mining agency, the damage to their homes is dismissed as the house settling. In our experience, coalfield residents are left feeling despair and hopelessness as no amount of documentation or evidence seems to change the state agencies explanation to the damage to their homes.

Regardless of the area of the country, the mining agency or official, or the mining company, I have heard the same consistent story time and time again from coalfield residents: agencies and mining companies dismiss the complaints of citizens no matter how well they can document damage to their property. Whether it is an issue on blasting damage to homes, harm to wells, or a rulemaking issue, citizens consistently find themselves placed in an adversarial relationship with the very agencies that are supposed to be protecting their interests.

Citizens seeking relief through the permit appeal process find the deck stacked against them. Even in instances where citizens can clearly document where a permit application fails to meet state and federal requirements, the state agencies still consistently side with the mining company. Citizens are then forced into devoting scarce resources into fighting the uphill legal battle of convincing the agency's own judges that their agency has acted in error in granting a deficient permit.

Beyond these threats and challenges posed to coalfield residents, there are two practices never envisioned by the writers of SMCRA that are becoming increasingly common in the Illinois coal basin. Coal mines in the Midwest and throughout the country are being used as open dumps for vast quantities of power plant wastes. SMCRA was never designed to regulate these types of dumping operations. Coalfield residents have been forced to fight an unjust double standard when it comes to dumping in mines. Disposal practices that would not be allowed anywhere else such as disposal into direct contact with groundwater are allowed in the coalfields. The National Research Council, in their 2006 report "Managing Coal Combustion Residues in Mines", found that national regulations are needed to prevent harm to the health of coalfield residents and their environment.

Based on my experience with the Office of Surface Mining (OSM) and state mining agencies, I say with complete confidence that coalfield residents will not get meaningful protection for their health and their water unless you step in and demand that

protection. For years, OSM and state agencies have fought against citizen requests for regulations similar to the recommendations made in the OSM report.

Mining companies in the Midwest are increasingly turning to underground mining. If these companies decide to use the longwall mining method, there are no federal laws or regulations in place to protect coalfield residents from the surface impacts of longwall mining. Unlike traditional coal mining, which leaves pillars in place to prevent collapse, longwall mines are allowed to collapse. This can cause the ground to drop as much as 4-5 feet. The subsidence from longwall mines has damaged homes, destroyed streams, and ruined farmland. The Illinois and Ohio Farm Bureaus have passed resolutions calling for regulations on longwall mining out of concern over the damage this mining method could cause to prime farmland and historic farms in the Midwest. SMCRA must be amended to regulate all surface impacts from underground mines. Otherwise, citizens are helpless towards protecting their property and their environment from the impacts of longwall mining.

### **Ground Water Protection**

Federal mining regulations require that coal mines “minimize disturbance of the hydrologic balance within the permit and adjacent areas, prevent material damage to the hydrologic balance outside the permit area, to assure the protection or replacement of water rights, and to support approved postmining land uses.” (30 CFR Sec. 816.41) The regulations also require that the mine conduct a thorough, site specific analysis of the local ground and surface water resources, the cumulative hydrological impact assessment (CHIA). If the water source of a landowner does become contaminated, the mine owner is required to replace it. These requirements create the good framework for protection of ground water resources in the coalfields, but in reality these regulations have been inadequately applied in order to protect the water of coalfield residents in the Midwest.

SMCRA and its associated regulations have never defined what it means to minimize disturbance within the permit area or prevent material damage. As a result, state programs are given too much latitude in deciding when a problem actually occurs. The Indiana ground water rule (327 IAC 2-11) makes it almost impossible to properly enforce these regulations. While the mine operation is occurring, a ground water management zone is established that extends 300 ft. from the mined area in all directions. Ground water standards are only applied at the boundary of the ground water management zone or beyond. No standards apply within the ground water management zone. This means that any contamination must migrate 300 ft. from the mine or the mine property boundary before any standards would be applied, meaning that any ground water pollution will be well established by the time it is subject to regulation.

Once the mine has achieved bond release, the permit area of the mine becomes designated as limited class ground water (327 IAC 2-11-4(d) (1)). The standards for this area become the existing levels of contamination within the mined area at the time of bond release. This rule runs completely counter to the requirements and intent of SMCRA. Instead of setting standards and requirements to prevent the contamination, the state allows existing levels of contamination to lower the bar and water quality.

Federal and state mining law require that mined land be reclaimed to original or better uses. 30 U.S.C.A. § 1265; Ind. Code § 14-34-10-2. However, the adopted ground water rule will automatically designate all ground water in mined areas damaged by the mining activities. Under this Rule, no mine can return an area to original or better uses if those uses relied on ground water, in violation of the federal and state SMCRA requirements.

Under SMCRA, all mining operations must also “minimize the disturbance to the prevailing hydrologic balance at the mine-site and in associated offsite areas and to the quality and quantity of water in surface and ground water systems both during and after surface coal mining operations and during reclamation.” 30 U.S.C.A. § 1265(b) (10); Ind. Code § 14-34-10-2 (13). Indiana’s rule eliminates any incentives to minimize impacts to ground water quality because the area will be designated as limited upon bond release. Furthermore, Section 4 of the Rule contemplates that the limited classification may apply to an undefined zone of influence around a coal mine area, outside the 300 ft. limit.

The Indiana Department of Natural Resources has stated that the limited use designation will not change the requirements for reclamation, but Section 4 of the Rule clearly states that the limited use designation will have an impact on Ind. Code § 14-34-4-7, coal mine permit or approval. Section 7 states what is expected of the mine operator in terms of protecting ground water in order for the permit to be approved. The fact that this section of mining law is affected by the limited use designation would seem to indicate that a lesser expectation of ground water protection would result. It is reasonable to expect some impact upon ground water within the mined area, but this rule would make mined areas permanent sacrifice zones in regards to ground water.

Indiana is not the only state that seems to remove mines from any accountability to ground water standards. The Illinois ground water rule (35 IAC 620) is similar to the Indiana rule. No ground water quality standards apply for inorganic constituents and pH within the area covered by the cumulative hydrologic impact area while the mine is in operation (35 IAC 620.450). Once bond release occurs, the ground water for mined areas is classified as “other groundwater”. The standard for this classification is the existing level of contaminants present in the mine area. This classification is also extended to coal mine refuse disposal areas not contained within an area from which overburden has been removed, a coal combustion waste disposal area at a surface coal mine, or an impoundment that contains sludge, slurry, or precipitated process material at a coal preparation plant (35 IAC 620.240).

It would be unrealistic to assume ground water in mined areas will remain in pristine condition. There should be a qualitative, numeric standard in place that establishes a clear line when an unacceptable amount of contamination occurs. SMCRA only creates a narrative standard and gives no real clarification on this issue. Without any real measure of when mines violate the ground water protection provisions of SMCRA, there is no accountability toward protecting the water of coalfield communities. When the drinking water of coalfield communities is at stake, the decision of when action needs to be taken should not be left to opinion. SMCRA needs to be amended to provide a clear, defined point where enforcement is needed.

In order to determine how to go about minimizing the damage to water resources within the mine area and preventing material damage outside the permit area, each mine is expected to complete a cumulative hydrological impact assessment (CHIA), which evaluates the probable impacts to the area's ground and surface water due to mining. The CHIA should examine site specific information in order to accomplish this task.

HEC reviewed five CHIAs prepared by the Indiana regulatory agency that covered mines in five separate counties across a large geographical area. In all five, almost identical boiler plate language was used to describe the geologic conditions, the geochemistry of sites and effects on groundwater after mining. None contained the detailed site-specific analysis required before a responsible determination can be made of the possible impacts on the ground and surface water and how to best minimize these impacts. All five CHIAs assumed that the mine had a clay layer to prevent downward migration of water. Not one contained any analysis -- much less acknowledgement -- that water moves sideways and downgradient.

There is little if any aquifer specific information in Indiana's strip mining permits; The state does not require that different aquifers be sampled individually for quality, or that bale tests or pump tests be performed on aquifers individually to determine their permeability, rate of flow or connections with other aquifers. The state is not requiring that recharge rates be calculated for individual aquifers or cumulatively for all aquifers in the area to be mined. The state assumes that the direction of ground water flow is according to the structural contour of the layers of earth, or simply quotes the US Geological Survey's estimate for general flow of ground water for the entire region. Indiana does not require that static water levels be mapped from individual aquifers to determine direction of flow. Without this aquifer specific information, a proper analysis of the possible impacts of the mining on nearby wells is not possible.

All five assessments also made the statement that the mine area had very little ground water regardless of the number of ground water users in the area. For example, the CHIA for the Farmersburg mine, permit # S-287-1, made this declaration despite the presence of hundreds of households within 5 miles of the northern end of the mine that used ground water as their primary source of drinking water.

The CHIA was supposed to be a valuable tool in addressing site specific ground water concerns at each mine. Instead, these assessments have become boiler plate reports used to belittle ground water concerns rather than address them. Without numeric standards in place or adequate site characterization, the drinking water supply for numerous coalfield communities is not being adequately protected.

### **Citizen Participation**

When SMCRA passed in 1977, it included ground breaking language on citizen participation. Citizens were given the right to actively participate in the permitting process, the right to file a Lands Unsuitable for Mining Petition (LUMP), the ability to hold agencies accountable when the law is not properly enforced, and the ability to recover legal costs when they are forced to take legal action to ensure proper

enforcement. Citizens were given tools including pre-blast surveys in order to protect their homes from blasting damage. The rights granted to citizens are one of the most important parts of SMCRA.

These rights are not being upheld by the state agencies. I spoke with a number of Illinois residents while doing research for this testimony. They have all encountered stonewalling, refusal to accept citizen petitions, refusal to hold a public hearing, and long delays in the administrative appeals process that can last for years by the Illinois DNR. The citizens of Indiana have encountered similar tactics from the Indiana DNR. In fact, lack of good public participation was the most consistent complaint I have heard from Illinois residents.

For example, at the closed Monterey Mine 2, ExxonMobil refused to place an impermeable cap over their 30 million cubic yard coal waste pile, claiming the pile wasn't contaminating the groundwater off-site even though high levels of arsenic were being detected in nearby drinking water wells. In 2002, Illinois DNR ignored the request for a Public Hearing about the high hazard dams that contain the waste. In 2003, The DNR granted a public hearing on the reclamation plan, but refused to answer any of the public's questions on the plan.

In 2003, the reclamation plan was approved despite the fact that the mining company did not tell where the monitoring wells on the site were located. Illinois DNR itself admitted in its own evaluation that this made it impossible to determine whether any possible contamination was migrating off site. Without this data, there is no way to address whether the reclamation plan adequately addressed possible ground water contamination at the site. The reclamation plan has been under appeal for over 4 years. The appeal is now at the federal level. Meanwhile, the first off-site sampling of the groundwater by the mine was performed in 2006 and showed contamination.

In August 2005, Illinois DNR found that the pipeline the mining company had been operating to pump diluted contaminated groundwater into the Kaskaskia River was an on-going regulated activity. As a result, the public had a right to a public hearing on the pipeline. Illinois DNR had agreed to hold a hearing, but backed down when ExxonMobile filed extensive legal briefs arguing against the need for a hearing and designation of the pipeline as regulated under mining law. DNR sent the legal arguments to the OSM for review, who found that the mine arguments were not valid. In December 2006, Illinois DNR nevertheless changed their position in favor of the mine. The appeal of that decision is still underway.

In a recent case in Indiana, citizens appealed the issuance of the mining permit for Vigo Coal Company's Chili Pepper Mine. The appeal was based on the fact that the mine permit application did not have all necessary documents required for approval of the permit. Indiana regulations (312 IAC 25-4-23) clearly require that the mine list the permit numbers or permit application numbers for other necessary permits. Even though the language of the regulation is clear and unambiguous, the Indiana Natural Resources Commission ruled in favor of the Indiana DNR on the grounds that the Commission always defers to agency interpretation of the regulations. The Natural Resources Commission is supposed to be the rulemaking body over the Indiana DNR, and is the

final step in the administrative appeal process. Yet, they admitted in the public hearing on this appeal that they will always defer to agency opinion.

The citizens filing the appeal did not have the resources to appeal the case to the state's courts so the precedent is established that agency interpretation of regulations will be a deciding factor in appeal cases. This has the effect of making any citizen appeal of a DNR decision a lost cause from the state unless they have the resources available to pursue the multi-year appeal process through the state and possibly federal courts. In short, the appeal process in Indiana is broken.

For the sake of brevity, I have only included two examples of how the permit appeal process has been skewed against citizens. More can be provided to the committee upon request. Coalfield residents wishing to appeal a permit must fight the uphill battle of convincing the agency's own judges to rule that their agency has acted in error. Before they can reach any truly independent court, they must spend a large amount of time and money going through the administrative process. This system does not provide true oversight.

### **Power Plant Waste Disposal**

Coal mines across the country are increasingly used as dump sites for coal power plant wastes (PPW). The disposal of millions of tons of PPW raises unique problems and issues that are very different from those created by mining. SMCRA is simply not written with the intent of ever regulating such disposal operations. State regulations and policies on mine disposal of these wastes consistently fail to enact the most basic environmental safeguards needed to adequately protect human health and the environment. Disposal practices that would be forbidden under solid waste laws for the same wastes are approved in mines.

The National Research Council (NRC) did a thorough study of the placement of PPW in mines throughout the country, "Managing Coal Combustion Residues in Mines" (2006). The study found that "enforceable federal standards are needed for the disposal of [coal combustion residues] in minefills to ensure that states have specific authority and that states implement adequate safeguards." The report found major deficiencies in existing state regulations on mine placement including inadequate waste and site characterization and the lack of enforceable performance standards.

The focus of SMCRA and the regulatory agencies in regards to protecting water quality is preventing acid mine drainage, which results from the oxidization of sulfur and iron deposits in the mine overburden. PPW, on the other hand, presents completely different kinds of concerns and thus requires very different solutions. The major concern with PPW is that wastes have the potential to produce toxic levels of a number of different pollutants when they come into contact with water.

The NRC's report found that "high contaminant levels in many [coal combustion residues] leachates may create human health and ecological concerns at or near some mine sites over the long term." PPW contains concentrated levels of different pollutants including arsenic, cadmium, lead, selenium, boron, and sulfates. Dozens of scientific

studies have found that contamination from PPW can cause deformities, reproductive problems, and death in mammals, fish, and reptiles. Despite all the available evidence of contamination problems from PPW, most state mining agencies refuse to admit that any threat is posed to ground and surface water quality by these wastes.

The OSM has announced that it will be conducting a rulemaking on the placement of PPW in mines. We are thankful to OSM for starting the process of developing these regulations, but we have serious concerns whether the OSM will develop regulations that offer a sufficient level of protection to citizens beyond the status quo. For many years, OSM and state agencies have vehemently opposed citizen requests to enact regulations similar to the recommendations made in the NRC report. In order to ensure that the proposed federal regulations adequately protect human health and the environment, HEC believes the following elements must be included into the rule:

*The proposed rule must include the basic requirements of the Resource Conservation and Recovery Act (RCRA).* The disposal of large quantities of PPW raises unique problems and issues that are very different from those created by mining. The proposed rule must include the basic safeguards laid out in the federal waste rule, the Resource Conservation and Recovery Act (RCRA), such as separation of the wastes from ground water, long-term ground water monitoring, and corrective action standards in order to ensure that these disposal operations are managed properly. Incorporation of RCRA into the rule will also ensure that citizens will receive a consistent level of protection for their health, water, and environment regardless of what kind of disposal facility they live next to.

The current system of some disposal sites being regulated under RCRA and some under SMCRA has resulted in a double-standard for citizens living next to mine disposal sites in violation to their right of equal protection under the law. Coalfield citizens have been exposed to disposal practices at mines that would be in violation of RCRA such as open dumping into direct contact with groundwater. We therefore ask that OSM choose its recommended options of either a joint SMCRA and RCRA rule on mine disposal or a RCRA Subtitle D rule that is enforceable through SMCRA permits. These options are necessary to ensure a rule that provides adequate and equal protection to coalfield citizens.

*The regulations should include at a minimum the basic environmental safeguards recommended by the National Research Council study.* These safeguards include waste characterization, site characterization, monitoring, standards for clean ups, and public input requirements. The study also recommends that contact between the wastes and water be minimized. We believe this would be best achieved by a requirement to prohibit disposal of the wastes below the pre-mining ground water table. These requirements should be enforced regardless of whether the PPW is being dumped or used for “reclamation” in active or abandoned mines.

*OSM should adhere to the Federal Advisory Committee Act (FACA) process in order to ensure that all stakeholders are brought to the table for an open discussion of the proposed rule.* Coalfield residents and citizens groups have been underrepresented at numerous OSM forums on the issue of mine placement of PPW. These stakeholder groups deserve adequate representation in discussions of the proposed rule. We ask that



regional public hearings be held on the proposed rule to ensure citizens have adequate opportunity to voice their concerns.

## **Longwall Mining**

In Illinois and Ohio, homeowners and farmers are very concerned about the increased use of longwall mining. Unlike traditional room and pillar mining, longwall mining removes the entire coal seam in thousand foot long panels beneath an area that can extend for tens of thousands of acres. The mines are allowed to subside, which can cause the surface to sink as much as four to five feet. Illinois DNR has claimed that it has no authority over longwall mines even though SMCRA regulates the surface impacts of underground mining (30 USC 1266).

The subsidence from longwall mining has caused a number of serious problems in Pennsylvania. Houses have suffered severe damage including being pulled off their foundation, fallen chimneys, broken window and door frames, and broken water and gas pipes. Longwall mining can also have a serious effect on ground and surface water. The subsidence can cracks to form in aquifers, which leads to dried up wells and springs. On the surface, it can alter the flow of streams, turning the waterways into isolated pools.

The major concern for residents of Montgomery County Illinois will be the impact on farmland. Many of the farms in the area are centennial farms that have been owned by families for generations. In Pennsylvania, longwall mining has altered drainage patterns and rendered farmlands too wet to be farmed. Over 27,000 acres of the farmland in this county is in bottomlands and subsidence of four feet would most likely disrupt drainage ways, and lead to more flooding of the farms. Subsidence from longwall mining has also opened up cracks and deep fissures in crop and pasture land that pose serious hazards to livestock and farm equipment.

The Illinois DNR has repeatedly refused to address citizen concerns about possible damage to their homes and farms on the grounds that SMCRA does not give them the authority to regulate underground mines. Citizens in Montgomery County have filed a petition to designate the area as lands unsuitable for mining. The Illinois DNR has denied the permit repeatedly on the grounds that it cannot accept such petitions for underground mines, but this would appear to directly contradict their own regulations, which declare the “An area shall be designated as unsuitable for all or certain types of mining operations.” (225 ILCS 720/7.02)

The Illinois DNR seems to be completely unwilling to take any sort of regulatory action in regards to longwall mining. This situation leaves citizens with no recourse for protecting their homes and their property from possible damage from longwall mines. Coalfield residents in Pennsylvania have also experienced the same resistance from their state agency. Congress must take action to protect the property rights and environment of citizens potentially impact by these mines. Currently, mines are given a green light to damage peoples’ property.

## **Conclusion**

While SMCRA is at its core a good law, the language needs to be strengthened in many places in order to adequately protect coalfield communities and their environment. The need for coal is not going away anytime soon, but that need must not grant companies a license to damage homes, quality of life, and drinking water.

We ask that you please consider taking the following steps to give SMCRA the muscles and teeth it needs to adequately protect coalfield communities and their environment:

- Define what it means to minimize disturbances and prevent damage to the hydrologic balance
- Create better oversight of the state agencies
- Require national regulations on mine disposal that at a minimum incorporate the recommendations of the National Research Council's report *Managing Coal Combustion Residues in Mines*
- Adopt requirements to minimize surface impacts from longwall mining

Thank you for the opportunity to testify on this important law.

Respectfully submitted,

Brian Wright, Coal Policy Director  
Hoosier Environmental Council