Op-Ed

Blowing the Lid off Mountaintops

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THOSE OF US CONCERNED ABOUT THE IMPACT OF A CENTURY of unrestrained industrial pollution on Americans' health have plenty to be concerned about. Even before the US Congress's disastrous decision not to ratify the 1992 Kyoto Protocol, it seemed as if every effort to limit or reverse the damage done to the environment had been met by stonewalling and rejection by Congress and sometimes even the Environmental Protection Agency (EPA). We can take heart, however, that not all is as gloomy as it might seem. On the federal level, setbacks to the EPA, OSHA (Occupation and Safety and Health Administration), and MSHA (Mine Safety and Health Administration) may make efforts to control pollution seem hopeless. But a series of local initiatives, court cases, and regulatory decisions concerning the lead and asbestos industries provides a different picture. What can't be accomplished in Washington may be addressed through local court cases and decisions at the community level, which brings me to the topic of one of our oldest fossil fuels: coal.

In Appalachia, a prolonged and important court battle is being waged over mountaintop removal (MTR), the process of coal extraction that has damaged huge swaths of Virginia, West Virginia, Tennessee, and Kentucky. Beginning in the 1980s and accelerating throughout the 1990s as mine shafts were abandoned, MTR emerged as Appalachia's most profitable, and destructive, method of removing coal from beneath the bedrock of mountains. It is estimated that in the past 30 years, this process has seriously damaged more than 500 mountains in the region. The aesthetic damage to the landscape has been both massive and permanent as literally hundreds of feet of mountaintop are removed and "deposited," that is, dumped. The heavy diesel equipment with their polluting exhaust, the huge quantities of debris dumped in local watersheds, the use of explosives loaded with ammonium nitrate, the huge slag piles and dust created by blasting, the laying waste to thousands of acres of once-arable land are the visual insults. In addition, the

processing of the recovered coal ore itself releases arsenic, barium, mercury, lead, and chromium into the wells and water supplies of those living nearby.¹

The overarching rationale for this highly toxic means of coal removal is that mining is central to the Appalachian and the national economy and therefore its benefits outweigh the environmental costs. Locally, it is argued, mining is a substantial employer and a major source of taxes for the states. Nationally, coal provides energy for power plants providing electricity for homes and businesses. The destruction wrought, the coal companies maintain, is only temporary and is healed by either nature or the reclamation efforts of the mining companies themselves.

But studies have shown that neither the short-term nor the long-term damage is undone by nature or the mining concerns. One analysis found that 1 million to 1.2 million acres of the Appalachian range have been surface mined and that at least 500 mountains have been defiled, sometimes resulting in more than 600 feet of bedrock removed, moved, and dumped in a single site. Furthermore, "only twenty-six locations (6.3% of the total) host some form of verifiable post-mining economic development."^{2(p3)}

Health data have begun to reveal the lasting effects on residents' health and well-being. Recent studies using data from the National Center for Health Statistics on 1.8 million live births showed that the incidence of "circulatory/respiratory, central nervous system, musculoskeletal, gastrointestinal, urogenital," and "other" birth defects were significantly higher among those living in mountaintop-mining areas.³ More specifically, an extraordinary interactive website reveals, county by county, the growing mortality and the general disparities in West Virginia (<http://ilovemountains.org/the-human-cost>). What was once primarily a battle over CO₂ emissions, national air quality, and local water pollution has thus expanded dramatically, and it is clear that MTR is having a devastating impact on community health.

Coal mining has long dominated the politics of, and political struggles in, the Appalachian states. Not surprising, given the rich history of local struggles with coal interests, new forms of resistance from local groups have emerged. Legal battles have replaced actual battles between union members and company enforcers as groups like the Tennessee-based Statewide Organizing for Community eMpowerment, the West Virginia Highlands Conservancy and Coal River Mountain Watch, Southern

Appalachian Mountain Stewards, and the Ohio Valley Environmental Coalition organize demonstrations and lawsuits. Needless to say, the coal companies have been actively opposing every attempt by local groups, the EPA, and other federal agencies to limit their activities.

The EPA has been trying to minimize the environmental damage to the area by demanding that future MTR sites obtain permits under the 1972 Clean Water and the 1977 Surface Mining Control and Reclamation Acts. These landmark pieces of legislation established a permitting system by the US Department of Interior or an approved state agency. If waterways and water sources could be affected, the Army Corps of Engineers and the EPA have to approve the process as well. The EPA could deny permits for the disposal of mining waste and debris. Most recently, the EPA and the Army Corps of Engineers adopted an “enhanced coordination process” meant to consolidate the review of Clean Water Act permits.

Recently, a lawsuit by the National Mining Association and the Kentucky Coal Association (the trade groups for the coal companies), the states of West Virginia and Kentucky, and their allies asked the court to ban the EPA and the Army Corps of Engineers from coordinating their review of permit applications under the Surface Mining Control and Reclamation Act. After a district court ruled that the EPA had “exceeded its authority” by forming an “enhanced coordination process” by meeting with the Corps, the appeals court reviewed the decision and, on July 11, 2014, overturned it.⁴

This decision by the appeals court is a major setback for the coal companies and may signal a turning point in the ongoing legal battle between “Big Coal,” local community action groups, and allies in the Obama administration to limit the environmental destruction and health impacts wrought by coal mining.⁵ (In an extraordinary doctoral dissertation, Merlin Chowkwanyun laid bare the complex environmental and labor politics that have been at the heart of coal and environmental policy for the past 3 generations.) If the coal interests had succeeded in stopping the government agencies from coordinating their efforts, any federal action in the future might have been stymied, by leaving any agency decision open to legal challenge by coal interests. Sometimes change occurs despite policymakers’ actions, not because of them. Let’s hope we are witnessing one of those moments!

References

1. Pond GJ, Passmore ME, Borsuk FA, Reynolds L, Rose CJ. Downstream effects of mountaintop coal mining: comparing biological conditions using family- and genus-level macroinvertebrate bioassessment tools. *J North Am Bentological Soc.* 2008;27(3):717-737.
2. Geredien R. Post-mountaintop removal reclamation of mountain summits for economic development in Appalachia. Prepared for the Natural Resources Defense Council; December 7, 2009. http://www.ilovemountains.org/reclamation-fail/mining-reclamation-2010/MTR_Economic_Reclamation_Report_for_NRDC_V7.pdf. Accessed September 3, 2014.
3. Ahern MM, Hendryx M, Conley J, Fedorko E, Ducatman A, Zullig KJ. The association between mountaintop mining and birth defects among live births in central Appalachia, 1996-2003. *Environ Res.* 2011;111(6):838-846.
4. US Court of Appeals, for the District of Columbia Circuit, argued February 10, 2014, decided July 11, 2014. No. 12-5310, *National Mining Association et al., Appellees v Gina McCarthy, Administrator, U.S. Environmental Protection Agency, et al.*
5. Chowkwanyun M. *Dilemmas of Community Health Medical Care and Environmental Health in Postwar America* [dissertation]. Philadelphia: University of Pennsylvania; 2013.

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