



Will the Mayfly Kill Coal?

Coal supplies at least half of our nation's electricity needs. It powers millions of our homes and businesses. And for well over a century, it has provided a vital and sustaining economic engine for communities throughout our coalfields and beyond.

Sadly, to some extremists, coal is the new four-letter word. Simply type "coal" into YouTube and you will find hundreds of videos assailing coal as a "scourge on our land and people," a "mountain killer," a "devastating blight," and countless other injurious charges, all invented with the singular purpose of killing coal.

Of course, none of this is new or necessarily unique to our industry. But the level of extremism against coal today makes the rancor over health care reform look tame.

For their mascot, some extremists have turned to the past. In the 1970s, the anti-hydro lobby used the Snail Darter to kill a major hydroelectric dam on the Little Tennessee River. Twenty years later, the anti-timber lobby used the Northern Spotted Owl to kill logging in the Pacific Northwest. And today, the anti-mining lobby has found a critter of its own – the common mayfly of the Order Ephemeroptera, a winged bug whose adulthood spans a mere one or two days.

As the hypothesis goes, the discharge from a coal mine creates an "ionic imbalance" in the receiving creek; this imbalance affects mayflies; and the resulting shift in the bug population violates the Clean Water Act. This hypothesis leads almost inevitably to severe restrictions on conductivity, which is a measure of ionic strength, or total dissolved solids (TDS), which are correlated to conductivity. In Virginia, for example, the state has set ad hoc in-stream targets for TDS at or even below 300 mg/l, which is staggeringly low in comparison to nearly every other state with TDS standards on the books.

Never mind that this is an unproven hypothesis, one that has never been vetted through a meaningful public process. Never mind that the hypothesis is undermined by a number of confounding variables, like physical habitat, which appear to have a more direct and dominant impact on the bug population. Never mind that distinguished scientists dispute both the correlation to mining and the in-stream targets that have been

assigned (by way of example, one of Virginia's leading experts believes that functional bug populations are possible at TDS concentrations significantly higher than those assigned by the state). And lest we allow the practical to be the enemy of the good, never mind that those targets are probably unachievable at any cost.

Amazingly, the extremists' hypothesis and the resulting discharge restrictions have found their way into every major permit proceeding needed to lawfully mine coal – from the Clean Water Act Section 404 permit required for valley fills to the Clean Water Act Section 402 permit required to discharge from those fills. The U.S. Environmental Protection Agency has recently rallied to the mayfly's call, vetoing, threatening to veto or otherwise smothering with attention nearly a hundred permits pending or issued in the eastern coalfields – all based on the same unproven hypothesis.

The Clean Water Act sets a clear and inviolate process for defining the standards of quality for our nation's waters, and then imposing those standards through permits and other regulatory actions. Sadly, this process has been completely ignored in the precipitous campaign to protect the common mayfly.

In an ironic twist, it is usually the environmental groups who cry foul over defects in the public process. But here, those defects have a perverse, adverse impact on the mining industry. We all share an interest in protecting and restoring our nation's waters. But for our efforts to be effective, they must be properly and precisely tailored to the problem. If there is a problem with the mayfly then, come, let us engage in an informed public rulemaking process to understand both the cause and the cure. Until then, let us not allow the mayfly to kill coal.

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