

Studies for the Draft Environmental Impact Statement Demonstrate that the Environmental Harm From Mountaintop Removal Coal Mining and Valley Fills Is Substantial and Irreversible – Yet the Bush Administration Proposes to Weaken, Not Strengthen, Environmental Protections

On May 29, 2003, the Bush administration released a long-awaited (and long-overdue) Environmental Impact Statement (EIS) assessing the environmental destruction and social harm caused by mountaintop removal coal mining – a form of strip mining in which the coal companies literally blast hundreds of feet off the tops of mountain peaks and push millions of tons of mining waste rubble into surrounding valleys, burying hundreds of miles of streams.

The studies accompanying the draft EIS show that the harm caused by this practice is far more pervasive and permanent than previously believed. Yet, the EIS's "preferred alternative" suggests weakening existing environmental protections on mountaintop removal and valley fills. These changes include getting rid of the surface mining law's buffer zone rule that prohibits mining activities to disturb within 100 feet of larger streams, eliminating the current limit on using nationwide permits to approve valley fills in West Virginia that are larger than 250 acres, and giving the Office of Surface Mining a greater role in Clean Water Act permitting (which OSM does not have under the law).

Mountaintop Removal Causes Significant, Irreversible Environmental Harm

The data contained in the draft EIS and its accompanying studies confirm that the environmental harm caused by mountaintop removal and valley fill operations is significant and likely to be irreversible. For example, the data show that:

- Approximately 1200 miles of headwater streams "were directly impacted" by mountaintop removal and valley fills between 1992 and 2002. An estimated 724 stream miles were covered by valley fills from 1985 to 2001. Certain watersheds were more significantly affected than others.¹
- No scientific basis could be established for arriving at an environmentally "acceptable" amount of stream loss and it is "difficult if not impossible to reconstruct free flowing streams on or adjacent to mined sites."²
- Stream chemistry monitoring efforts show significant increases in conductivity, hardness, sulfate, and selenium concentrations downstream of mountaintop removal operations.³ Selenium is highly toxic to aquatic life at relatively low concentrations.

¹ Draft EIS at ES-8. It is important to note that many studies indicate that these reported stream impacts are likely to be a gross underestimation of the stream miles filled in the study area. The inventories used in the EIS rely heavily on topographical maps that often do not map smaller headwater streams, despite their ecological importance. *See* Testimony of J. Bruce Wallace, Professor, University of Georgia, before the US Senate Committee on Environment and Public Works, June 6, 2002. In watersheds where mining activity is occurring or has occurred, up to 30 percent or more of the headwaters have been filled.

² See MTM/VF EIS Steering Committee, "Problems Identified/Confirmed/Inferred by Technical Studies," August 15, 2002 working draft.

³EPA's stream chemistry study found that "The selenium data clearly show 'hot spots' with higher concentrations of selenium in each of the five watersheds [that were studied] and located downstream of 'Filled' sites ONLY. There are 66 violations of the

- There is "no evidence that native hardwood forests . . . will eventually recolonize large mountaintop mine sites using current reclamation methods."⁴
- Large-scale surface coal mining "will result in the conversion of large portions of one of the most heavily forested areas of the country, also considered one of the most biologically diverse, to grassland habitat."⁵

EPA and other federal agencies prepared a January 2001 Preliminary Draft EIS and extensive technical studies, including an inventory of valley fills, and analyses of the impacts of valley fills on streams, wildlife, land use, and the economy.⁶ The studies that accompanied the 2001 Preliminary Draft EIS (released to the public in the spring of 2002) found that, left uncontrolled, mountaintop removal and valley fills could destroy an <u>additional 500 miles of streams and 350</u> square miles of land that now contains free flowing streams, diverse and productive hardwood forests, and habitat for many species.⁷

The Preliminary Draft EIS Analyzed Real Alternatives – The 2003 Draft EIS Does Not

Unlike the DEIS released by the Bush administration, which does not even consider an alternative involving new limits on valley fills, the Preliminary Draft actually analyzed alternatives that would significantly limit the size of mountaintop removal valley fills. The Preliminary Draft evaluated four options, including "no action" (essentially relying on existing law pre-1998 to regulate mountaintop removal), a 0 to 75 acre limit (which would allow fills primarily in ephemeral streams only), a 75 to 250 acre limit (which would allow fills intermittent streams, too) a fourth alternative that examined a scenario with no acre cap but with other regulatory changes to reduce the effects of valley fills on the environment and communities.⁸

The Preliminary Draft EIS more accurately reflected the cumulative impact study that analyzed the effects on aquatic and terrestrial resources and species of several different scenarios for future mountaintop removal mining, including 1) no limits on the size of valley fills, 2) a 250 acre limit, 3) a 150 acre limit, 4) a 75 acre limit and 5) a 35 acre limit on the size of fills.⁹ (These were also roughly the same scenarios considered in the economic study discussed below.)

Not surprisingly, the cumulative impact report found that the 35-acre limit would result in the fewest environmental impacts on streams, forested areas, and species -- although there would still be significant environmental damage, especially to small headwater streams.

The uncontrolled scenario would result in the greatest environmental impacts. Essentially, that is what the Bush administration's draft EIS proposes in its "preferred alternative," which would have no "bright line," hard and fast acreage limits on valley fills – not even on even on using general permits to permit valley fills, let alone a complete cap on valley fill size regardless of whether an individual or general permit is used. A complete limit on the size of valley fills is what the cumulative impacts study evaluated.

stream water quality criteria identified and each is at a filled site. No other category of site had violations of selenium!" Email from Gary Bryant (EPA WV) to William Hoffman (EPA Region 3), March 27, 2002 (capitalization and exclamation point in original). For EPA's selenium fact sheet, go to <u>www.epa.gov/ost/selenium/factsh.html</u>.

⁴ MTM/VF EIS Steering Committee, "Problems Identified/Confirmed/Inferred by Technical Studies."

⁵ Id.

⁶ EPA disclosed this PDEIS and most of the studies on which it was based in response to FOIA requests from Kentuckians For The Commonwealth and the Charleston Gazette. A copy of the executive summary of the PDEIS is available at http://wvgazette.com/static/series/mining/reports/EIS/Executive%20Summary.pdf

⁷ See Gannett-Fleming, "Landscape Scale Cumulative Impact Study of Future Mountaintop Mining Operations," March 2002, pp. ii, iv.

⁸ Mountaintop Mining / Valley Fill EIS, Preliminary Draft, January 2001, ES-6.

⁹ Gannett-Fleming, "Landscape Scale Cumulative Impact Study of Future Mountaintop Mining Operations."

New Restrictions on Mountaintop Removal Would Not Cause Significant Economic Harm

Economic studies prepared for the EIS indicate that significant restrictions on the size of valley fills, and even a prohibition of valley fills in waters of the US, would not cause serious economic harm, as the Bush administration claims. These studies appear to be completely ignored in the draft EIS released on May 29.

As part of the EIS effort, EPA contracted with Hill & Associates (H&A), an economic modeling firm, to model the economic impacts of the various alternatives – still under consideration at that time – for restricting the size of valley fills. In a December 2001 final report to EPA, H&A concluded that even the most severe restriction on valley fills studied in the report – one that barred fills covering watersheds more than 35 acres – would raise the price of coal by only \$1 per ton and raise the cost of electricity by a few cents per megawatt-hour.¹⁰ In a March 2002 slide show presentation to senior EPA officials in its Washington Headquarters, EPA Region 3 officials characterized these effects as "a minimal impact on the price of coal" and "virtually NO impact on electricity prices."¹¹ The presentation revealed that:

- Sufficient coal reserves appear to exist under the 250, 150, 75, and 35-acre restriction scenarios necessary to meet demand during the 10 year study period . . .
- Restricting valley fills to 250, 150, 75, or 35-acre watersheds will increase the price of coal by only \$1/ton under each respective restriction scenario.
- Restricting valley fills to 250, 150, 75, or 35-acre watersheds will increase the price of electricity by only a few cents/MWHr under each respective restriction scenario.¹²

Another EPA draft study, dated April 23, 2002, concludes that, even under the 35-acre watershed restriction, annual average impacts to total statewide employment in Kentucky and West Virginia are no more than 0.3% of total year 2000 employment. In addition, there are no "notable differences in [wholesale electricity] prices or generation levels among the alternative [restrictions] . . . due to the competitive nature of the energy markets."¹³

There Is No Connection Between the EIS Study Findings and the Bush Administration's "Preferred Alternative" – Weakening Environmental Protections

The environmental and economic studies prepared for the EIS do not lend any support to the administration's proposed "preferred alternative" that would result in the weakening of existing environmental laws that limit the size and location of valley fills. In fact, the studies support the opposite conclusion: mountaintop removal must be much more strictly limited to head off additional and significant devastation of the Appalachian region's natural resources – and the communities that depend on those resources now and for future generations.

For More Information, Contact Joan Mulhern, Senior Legislative Counsel, 202-667-4500

¹⁰ Hill & Associates, "Economic Impact of Mountain Top Mining and Valley Fills, Environmental Impact Statement," for U.S. EPA, December 2001. The H&A study assumed that valley fill restrictions would apply immediately to all existing mines, while the court's order only applies to future permits. The study therefore overstates the economic impacts of prohibiting any future § 404 permits to dump waste into waters. On the other hand, the study evaluated a restriction on valley fills of no more than 35 acres, while a ban on the discharge of coal waste in any waters of the U.S. may be more restrictive in some watersheds. The study may therefore understate the economic impacts of enforcing the law in this respect.

¹¹ Mountaintop Mining EIS Presentation, EPA Office of Water, Office of Federal Activities, and Office of General Counsel, March 5, 2002 (emphasis in original).

¹² Id.

¹³ Gannett Fleming, <u>Draft Economic Consequences Study for MTM/VF EIS</u>, April 23, 2002.