SURFACE MINING: FREQUENTLY ASKED QUESTIONS

What is surface mining?
Surface mining is a highly-regulated, highly-sophisticated mining method used to mine coal that is near the surface of the earth. It relies on advanced hydrological and civil engineering techniques to safely extract coal in an environmentally and economically responsible manner.

How does surface mining work?
Multiple coal seams are uncovered by removing the rock situated above and between the seams. This rock is then placed on previously mined areas, or within engineered "fill" areas.

The "cut and fill" process used in surface mining is the same process that has been used for years in highway construction and real estate development projects.

Who regulates surface mining?
All mining – including surface mining – is highly regulated. Thousands of pages of federal and state regulations control how mining operations are conducted in order to protect the environment and the public. The laws that specifically regulate mining include, among others, the Surface Mining Control and Reclamation Act (SMCRA), the Clean Water Act, the Clean Air Act, the Endangered Species Act and the Federal Mine Safety and Health Act. Multiple agencies, including the Office of Surface Mining and Reclamation Enforcement, the U.S. Army Corps of Engineers and the Environmental Protection Agency, participate in oversight and regulation mining operations.

Is it true that surface mining demolishes mountains?
Surface mining does not flatten or remove mountains; one type of surface mining technique flows from one side of a mountain ridge to another. By law, the mined area must be restored to a valuable use or purpose after mining. Studies show that only 3 percent of the Appalachian region has been disturbed by surface mining,[i] and all mines that are not active are reclaimed and restored.

What is the impact of surface mining on streams and the water supply?
About 95 percent of "streams" that are covered with "fill" material are actually gullies that only carry water when it rains. There are more water resources during and after mining in the form of ponds and wetlands, in addition to restored and re-created streams. That is because segments of streams affected by mining must be replaced or new streams are created.

All mining operations, including surface mines, must secure permits and comply with regulations under the Clean Water Act. While the states have an oversight role in this process to ensure compliance with state water quality standards, the U.S. Army Corps of Engineers issues permits for the discharge of fill material into jurisdictional waters under Section 404 of the Clean Water Act. The Environmental Protection Agency (EPA) provides comment during this process and can veto a permit where it determines the impacts will have an unacceptable effect on municipal water supplies, fish and wildlife or recreational areas.

What happens to the land when mining is finished?
Before mining even begins, companies must submit – and both the government and landowner must approve – a comprehensive land restoration and reclamation plan. Some areas are reforested, others commercially developed to improve the quality of life for residents.

For example:

> Working with the state government and the Rocky Mountain Elk Foundation, mining companies in eastern Kentucky reintroduced 1,500 elk to properly reclaimed mines over a five-year period. The elk herd now numbers more than 10,000 animals.[ii]

> Mining operations have created much needed level land throughout Appalachia. Today

communities benefit from commercial developments such as shopping malls, airports and recreational facilities, leading to a higher quality of life and greater economic diversity and prosperity in the region.

How is surface mining important to the economy?
About 70 percent of U.S. coal is mined using various surface mining methods. The National Mining Association estimates the direct value of surface mining activity at more than $5 billion. Billions more come from the purchase of mining equipment, costs for coal transportation, use of engineers and consultants, and tax payments to government.[iii]

What kind of tax payments does government get from coal mining?
In addition to payroll, personal income and corporate taxes, severance taxes, property taxes and other taxes on coal represent tens of millions of dollars in tax revenue for the Appalachian states. Education and emergency response services are just two of many vital government services funded through coal mining. This revenue is even more important when states are facing major budget shortfalls because of the weak economy.

Why is coal important to me?
Coal supplies half the electricity consumed by Americans.[iv] Thanks to coal, we enjoy some of the lowest electricity rates in the world. Surface mining operations alone provide enough energy to power more than 25 million American homes.[v]

What role does coal play in the economy?
The average mining wage is more than $66,000 per year, approximately 57 percent higher than the average wage for other industrial jobs.[vi] For every coal mining job, an additional 3.5 jobs are created elsewhere in the economy.[vii] In other words, coal mining keeps about 500,000 people – including an estimated 125,000 coal miners – on the job and earning a paycheck, so they can support themselves and their families.[viii] Furthermore, according to the National Mining Association, coal mining will need 50,000 new employees over the next 10 years, because of increasing demand for coal and retiring coal workers.[ix]

Is coal a significant source of energy in the United States?
The U.S. has enough coal to power America for the next 240 years. In fact, coal accounts for more than 90 percent of America's fossil fuel reserves, and America's recoverable coal reserves are equal to all the oil reserves in the Middle East.[x]

How is coal important to U.S. energy security?
Coal is the lifeblood of our domestic energy supply. Our modern economy depends on reliable electricity. Coal allows us to avoid further dependence on other nations for the energy we need to go about our daily lives.

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[i] National Mining Association. Mountaintop Mining Factbook (pg. 9). http://www.nma.org/pdf/fact_sheets/mtm.pdf

[ii] National Mining Association. Mountaintop Mining Factbook.(p.4). http://www.nma.org/pdf/fact_sheets/mtm.pdf

[iii] National Mining Association. Mountaintop Mining Factbook. (pg.2) http://www.nma.org/pdf/fact_sheets/mtm.pdf

[iv] National Mining Association, Fast Facts about Coal. <http://nma.org/statistics/fast_facts.asp>

[v] National Mining Association. Mountaintop Mining Fact Book (p.2)

[vi] National Mining Association. Mountaintop Mining Factbook. (pg. 2) http://www.nma.org/pdf/fact_sheets/mtm.pdf

[vii] National Mining Association. Fast Facts about Coal. http://nma.org/statistics/fast_facts.asp

[viii] MSHA 2007 employment (using EIA surface & underground ratios)
Multiplier (3.5 avg.) from NMA Economic Contributions study (2007)
Note - Employment numbers include contractors
and all prep plant workers. http://www.nma.org/pdf/pubs/mining_economic_report.pdf

[ix] National Mining Association. Fast Facts about Coal. http://nma.org/statistics/fast_facts.asp

[x] National Mining Association. U.S. Coal Reserves by State and Type – 2007. http://www.nma.org/pdf/c_reserves.pdf