

Comments of the
Ohio Valley Environmental Coalition (OVEC)
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on the

Draft Programmatic Environmental Impact Statement on
Mountaintop Removal Mining/Valley Fill Activities in Appalachia

The Social and Cultural Effects of Mountaintop Removal/ Valley Fill Coal Mining

Submitted in supplement to comments prepared for OVEC by James Hecker and Joseph Lovett, counsel for the West Virginia Highlands Conservancy and OVEC

Compiled by Vivian Stockman, Ohio Valley Environmental Coalition, from information collected from coalfield residents, field observations, news reports and websites. Coal River Mountain Watch and Delbarton Environmental Community Awareness Foundation assisted in collecting this information.

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Introduction

The Ohio Valley Environmental Coalition (OVEC) is a grassroots environmental group based in Huntington, W. Va. OVEC's members oppose mountain removal / valley fill coal mining. We have about 1500 members, mostly from West Virginia, many from regions where MTR is practiced.

These Draft Environmental Impact Statement (DEIS) comments are submitted as a supplement to the comments prepared for OVEC by James Hecker and Joseph Lovett, counsel for the West Virginia Highlands Conservancy and OVEC. Please refer to those comments for specific arguments detailing how the DEIS violates the 1998 Bragg Settlement Agreement by failing to include Action Alternatives to minimize environmental impacts. That document enumerates many other outrageous failures to adhere to law within the DEIS.

The DEIS on mountaintop removal / valley fill coal mining (MTR) fails miserably to study, measure, quantify, report and make recommendations on the social and cultural effects of mountaintop removal coal mining. Some of those effects are detailed herein, but this is by no means an exhaustive accounting of the full spectrum of MTR's social and cultural impacts. The agencies in charge of creating a valid scientific EIS on MTR must make every effort to exhaustively study and quantify the social and cultural impacts of mountaintop removal. At the very minimum, the social and *current* cultural effects of MTR removal listed herein must be taken into account in the EIS. The EIS recommendations must accurately reflect these effects and must include recommendations for actions that will relieve and eliminate the negative social and cultural impacts of mountaintop removal / valley fill coal mining.

If you take a drive in regions where coal companies practice MTR, some of the social and cultural effects of this form of mining are readily apparent. Follow a public road in Kanawha County, W. Va., heading toward the community of Republic. You'll find a gate across the *public* road. Community gone, access denied, MTR underway. Head toward Mud in Lincoln County. Only one home remaining, and that's in Arch Coal's cross hairs. The homes that were up Connelly Branch are gone, the home sites and the branch itself buried under millions of tons of former mountains. In Logan County, all that is left of Dehue are the broken foundations of homes. Where there is MTR, you'll find this scenario repeated. THE EIS must make an effort to list the communities lost forever to MTR and document or quantify what the losses mean for Appalachian culture.

Early in 2004, the Falling Mountain music label will release the musical CD, "Moving Mountains: Appalachian Voices Rise Up." Artie, W.Va., resident Joe Barnett has a track on this CD, in which he speaks about MTR. His words give a good summary of the various MTR-related social and cultural impacts suffered by people and communities that have the misfortune of being near MTR operations:

My name is Joe Barnett. I live in Artie WV. I live up in the head of a little hollow that has been affected by MTR in a very adverse way. The coal company came in initially and said that they were going to do a little strip mining and said that it wouldn't do any harm to our community. So they got their permits and they came in and they started to cut timber and ran off all the wildlife, and then they started their valley fill, polluted our streams, killed off our fish. Basically they came in and they raped our community.

Then, as a result of that we got a flood that washed a lot of people's properties out. And they came in to repair the damage from the flood and they cut our water supply off. And everything that we have got them to do we have had to force them with a lawyer to do. It makes us feel like we are second class citizens.

They also effectively turned neighbor against neighbor, family against family. It's really...not only did they rape the mountains and the hollows but they are splitting up the communities too.

I've worked in the mines since 1974, but it was all underground mining. And this valley fill mining that comes in...they first come in and they just cut down every tree in sight, that's called clear cutting. They just completely clean the mountainside off. And then they start dynamiting and shaking your homes up. Then once they start blasting, the rock they just start pushing it over into whatever valley is nearby. They fill in stream beds and they run off game.

Us country people like to dig up ramps in the spring and we like to ginseng in the fall. They wipe out both of those. We deer hunt and fish. That's no longer available to us. They have successfully destroyed our way of life and our communities, is what they've really done.

We have people in the community who are in their mid-eighties, and in all their lives they have never seen floods in the hollow like this. In 1997 the first flood came and it cost two people their lives in our community, a woman and a little boy. And in 2001 we had three floods. Each flood does its fair share of damage. The companies not only get away with this, the state will approve permits for them, and the biggest insult to our community and our way of life is then the company goes public and calls it an act of God. And that infuriates me, because God did not set those mountains and valleys there to be destroyed.

A lot of times when the coal companies go before judges they can get judges to look at it from an industry point of view and call it big business, and call it progress. And a lot of judges rule for it and the common man does not always have much say in it.

As far as the home goes--my home is 12 years old--what the blast damage did not mess up...the flooding affected my land, and I probably couldn't sell my home now. I probably wouldn't get anything for it now. We live in fear. The whole hollow is in a state of anxiety now every time it storms. We've learned that they've been permitted to start another strip mine on the other side of the hollow, so now we are going to have it behind us and in front of us.

The way we gauge it is that if the pond (sediment pond below a valley fill) starts to overrun into some spillways we know that it is only a matter of time that the little streams will be full in the hollow. So different ones of us go up and just check it regularly, even in the middle of the night some of us check it.

We've lost two: 34-year-old woman, and a 15-year-old boy, stepping into their yard. The little ditch in front of their yard that normally carried off a little bit of road water had washed out to the extent that they did not realize that the ditch had washed out. We did

not find them until the next day--right in front of her home. (Ed. Note: **Flood waters gushing off a valley fill killed these two people.**)

I always like to say that every law that has been written on safety was signed with someone's blood, 'cause its always been through accidents that there's any improvements in our laws. Apparently the lawmakers in the state are swayed by lobbyists and special interest groups. They come in and make big political contributions to candidates. Its corruption at its highest level, that's what you'd have to call it. The common man, the working man, is not able to get out and go to the statehouse to all these meetings and try to lobby, because we are out trying to provide for our families. And these special interest groups come in and throw a little money around and they pretty well get whatever they want and it angers us--the working class. We elect people into office who make us all kinds of promises.

I would like to see enforcement of the existing laws, and as we learn of new problems for the law, to develop new laws and enforce them. If they continue to wash away and flood everywhere there's not going to be any people living in any of these hollows. West Virginia is going to become one giant strip mine.

Any time you come in and you destroy a stream and the fish in that stream and the animals in the mountains you're affecting God's creation. And I don't like to see anything come in and do that. And not only is it affecting the animals, it's affecting God's people.

If a common guy like myself goes out there and throws anything in the creek, DEP will fine me severely for it. But a big corporation can come in and bury miles of streams and they are committed to doing that. And it bothers me that the same law that holds me won't hold the coal companies.

As MTR assaults the basics that sustain life—water, land and even the air (see blasting, coal dust), so it assaults the basics that sustain the Appalachian culture. The EIS recommendations must accurately reflect these effects and must include recommendations for actions that will relieve and eliminate the negative social and cultural impacts of mountaintop removal / valley fill coal mining.

Blasting

In section II.A.6 of the DEIS, the federal government asserts:

The regulatory review and study conclusions confirmed that existing regulatory controls provide adequate protections from coal-mining related blasting impacts on public safety and structures including wells.

Findings further indicate the existing regulatory programs are intended to ensure public safety and prevent damage rather than eliminate nuisances from coal mine blasting activities.

Some blasting within legal limits may still constitute a nuisance to people in the general area. As with all nuisances, the affected persons may have legal recourse regarding blasting nuisances through civil action.

Consequently, blasting is not considered a ‘significant issue’ and no actions are considered in this EIS.

Perhaps blasting is “not considered a significant issue” to someone living outside the areas where mountaintop removal is occurring. But, to residents who live in the near MTR operations, blasting is a highly significant issue. Most would probably consider the above quoted statements from the DEIS to be absurd and insulting. Residents look to regulatory agencies to take actions that will protect their lives, their quality of life, their health, their homes and their water supply. Coal companies should obey the law and the government should do its job in enforcing coal mining laws; residents should not be forced to take on the expense and burden of hiring attorneys to protect themselves and their property from the blasting associated with MTR.

Note that in the above paragraphs the DEIS carefully talks about “blasting within legal limits.” Of course, many citizens believe that much blasting occurs outside legal limits. Even for MTR-blasts that are within legal limits, many citizen complaints to the West Virginia Department of Environmental Protection (WVDEP) and the corresponding Kentucky agency would suggest that these blasts affect lives and property at levels that far exceed the “nuisance” level. *Please refer to the attached document listing recent MTR-related blasting complaints made to the WVDEP.* Remember, the blasts that coal companies set off for their MTR operations can be anywhere from ten to 100 times the force of the blast that cracked open the Oklahoma City Federal Building, killing 168 people. People living as far away as 12 miles from MTR sites have called in complaints about MTR-related blasting to WV DEP. Many coalfield residents keep very detailed logs of the blasts that shake their homes. Citizens have reported to environmental groups that they feel like their complaints about blasting to officials are not taken seriously. Some believe the DEP maintains a “chronic complainers” list and tends to discount their calls. We suggest that the EIS include several samples of these citizen logs. We also suggest that the DEP’s entire database on blasting complaints from citizens be included in the EIS.

In early 2003 author Dennis Burke e-mailed: “Approximately 2,500 tons of high explosives are used against the mountains of West Virginia and Kentucky each work day. Every four days, therefore, more explosives are used against Appalachia's hills than were used by the US military in the entire Afghanistan bombing campaign. Every day in Appalachia, the blasting is the equivalent of 1,000 Oklahoma City bombings.” No wonder coalfield residents are saying they feel like they are being terrorized.!

Citizens who experience these blasts obviously know that existing regulatory controls DO NOT provide adequate protections from coal-mining-related blasting for public safety and structures, including water wells. Nor do the existing regulatory programs prevent damages from MTR-blasting:

- For example, near Van in Boone County, W. Va. one family’s house insurance will not be renewed because MTR-related blasting destroyed the foundation of the family’s home to the point the home has been condemned. *See the picture of this crumbled foundation in the “Photos of Surface Mining Blasting Effects” attachment.* Note that WVDEP inspectors refused to admit that MTR-blasting caused the damage. The family knows the truth. The EIS should list all people who can no longer obtain insurance from their homes due to blasting damages or potential blasting damages.

- Numerous residents have publicly stated that they have either lost their well-water or had their well water become unpotable after MTR-related blasting began shaking their homes. “Insignificant”? Hardly! The EIS should document these losses and include an analysis of the short-term and long-term costs of water replacement efforts for individual families, communities and the state.
- Numerous residents have stated publicly that MTR-related blasting has cracked their foundations, cracked walls and ceilings, rattled windows, knocked doors out of plumb, dashed decorative items off walls and onto floors, etc. The EIS should not dismiss these damages as “insignificant”!
- Residents have complained that rock has been blasted off MTR sites, crashing through their roofs and into rooms, or landing in yards where children play and adults garden, or upon roads where people drive. There is a photo circulating of one of these rocks that is about as big as a compact car! “Insignificant”? Hardly!
- People have been evacuated from their homes after “fly rock” destroyed a neighbor’s home. “Insignificant”? Hardly!
- The value of people’s homes has dramatically decreased as MTR-related blasts have weakened the structures, and/or as potential homebuyers refuse to move into areas where blasting is occurring. “Insignificant”? Hardly!

Significantly, these regulations and programs are NOT protecting people’s health and from impacts related to MTR-blasting, including the health effects from:

- The rock dust and chemical-laden dust (the blasts are created by ammonium nitrate and fuel oil, coupled with emulsifiers, blasting caps and other products) that the blasts launch into the air.
- The cumulative physiological effects of the blasting noise—even when a warning siren prepares residents for the upcoming blast, each and every blast still makes a person’s heart jump, pulse race and stomach knot up.
- The physiological and psychological effects of the worry residents feel from the blasts, which include wondering if their homes’ foundations can take the blasts, wondering if they can afford the costs of repairing damage from the blasts, wondering if they should bother repairing homes as the blasts continue and fear for personal safety.
- The physiological and psychological effects of the fear residents feel that arises from the blast, which include fear of bodily harm for their families and fear for their future health; for example, people fear the rock dust might cause silicosis (silica is found in much of the rock strata).
- Some have likened the ongoing fear and related stress to post-traumatic-stress disorder.
- Sedentary lifestyles—parents have said they keep their children from playing outside for fear that fly rock (or boulder!) may rain down upon them.

News stories document some of the above-listed effects of MTR-related blasting. For instance, the August 15, 2002 edition of the *Louisville Courier Journal* carried a story by Alan Maimon, “Boulder from strip mine rips through Pike home; Dangling rocks threaten other residents in hollow.” Excerpts from that article:

A strip-mine blast in Pike County this week sent an 11-foot boulder over a hillside, crushing a mobile home. Four other homes were evacuated by state mining regulators because massive rocks were dangling from a hill above them.

While no one was injured in the remote hollow near Varney, Jerry Pinson, 44, said his life won't be the same for a while.

Pinson, a railroad worker, was shopping when the boulder, blown from a Lodestar Energy strip mine, crashed through his mobile home nearly 1,000 feet down a hillside from the blasting zone.

The "fly rock" event comes a year after state regulators vowed to crack down on companies whose blasting practices allow rocks and other debris to fly off sites that are being cleared for strip mining. As a result of Monday's incident, regulators say they plan to take additional measures to fix the problem.

"My house is tore up, and I don't know what to do," Pinson said. "It didn't even occur to me that something like this could happen."

Lodestar, based in Lexington, has been issued a notice of noncompliance and ordered to stop blasting at the site until the state approves a new blasting plan, said Kerry Holt, a spokeswoman for the Kentucky Cabinet for Natural Resources and Environmental Protection.

This is Lodestar's second fly rock violation since January 2001. In the earlier incident, which occurred at a different strip mine in Pike County, no one was injured but another mobile home was leveled. The company was assessed the maximum fine of \$5,000.

State regulations prohibit fly rock -- the debris forced into the air by explosions set off to expose underlying coal -- from leaving the property covered by a mining operation's permit.

Mike Francisco, Lodestar president, didn't return telephone calls seeking comment.

As workers tried to remove the boulders hanging precariously from the hillside late yesterday afternoon, Pinson was joined by several neighbors at a Pikeville motel.

Pinson said he had grown accustomed to the blasting that took place on the hillside above his home for about two years and thought of it as only a minor nuisance that caused dishes and pictures to rattle.

"I've lived there my whole life and never saw any fly rock," Pinson said.

But when he returned from shopping, Pinson found his home in ruins. Stunned, he sifted through the rubble for a few articles of clothing and left for the motel.

Derrick Scott, an officer with the Johns Creek Volunteer Fire Department, which first responded to the accident, said Pinson was lucky he wasn't home when the boulder came crashing down. "He definitely could have been killed," Scott said.

State inspectors, who were trying to both secure the area and conduct an investigation, said they were not sure when the residents would be able to return home.

"It's still a dangerous situation," said Jeff Taylor, a supervisor with the Kentucky Department for Surface Mining Reclamation and Enforcement. "Nobody can go back until the area's been stabilized."

Carl Campbell, commissioner of the state Department for Surface Mining, said the incident has convinced him to give several inspectors the fulltime responsibility of monitoring blasting practices at strip-mine sites.

After a spate of fly-rock incidents in the first half of last year, Campbell ordered the department's nearly 120 inspectors to take additional training on dangerous blasting methods, but no inspectors had blasting issues as their sole responsibility.

"I feel like no matter what I do there will be some, but we have to do all we can to reduce them," Campbell said.

The Associated Press reported on the same event:

Jerry Pinson, who lived in the mobile home, was shopping when the boulder crashed through the bedroom area of the mobile home.

His neighbor, Melissa Logan, said she heard a blast that was louder than usual. "Just a few seconds after that was the big crash," she said. "And I looked out my window and saw that. I was just amazed. I was shocked."

Logan said the incident has shaken everyone living near the mine site.

"I'm just really scared about my kids," she said. "We're all the time outside playing, and I'm afraid it could happen here, wipe my house out."

On April 15, 2003, in an article headlined "Miner who resigned settles suit" which appeared in the Lexington Herald Leader, Roger Alford of the Associated Press reported:

An Eastern Kentucky coal miner who resigned rather than detonate blasts that could have bombarded homes with rocks will receive \$142,500 from his former employer.

Oat Marshall, who is being heralded as a hero by some coalfield residents, claimed in a lawsuit that he refused to buckle under pressure to violate state blasting requirements.

The Jackson man had said he feared setting off the blasts might have injured people or damaged property in the Letcher County community of Deane. He couldn't be reached for comment yesterday.

Marshall, a blasting supervisor, resigned in August 2001 and filed a lawsuit in November 2001 against El Dorado Chemical Co. and Consol of Kentucky, claiming that by pressuring him to violate state requirements the companies had essentially forced him from his job. El Dorado was a blasting contractor for Consol.

The lawsuit was scheduled for trial today in U.S. District Court in Pikeville.

"My client walked away from a good-paying job based on the fact that they had asked him to do something illegal," said Prestonsburg lawyer Ned Pillersdorf.

Pillersdorf acknowledged yesterday that the settlement had been reached. He also acknowledged the amount of the settlement.

Neither Bruce Cryder, a Lexington attorney representing Consol, nor Randall Scott May, a Hazard attorney representing El Dorado, could be reached for comment yesterday.

Carla Anderson, of Letcher County, said Marshall should be praised.

"It's a good thing, what he did," said Anderson, who says her home has been damaged by blasting in the McRoberts area. "I wish someone would stand up for us in McRoberts."

While the DEIS states that "...existing regulatory controls provide adequate protection from coal-mining related blasting impacts on public safety and structures" and "the existing regulatory programs are intended to ensure public safety and prevent damage rather than eliminate nuisances from coal mine blasting activities..." the public, as evidenced above, strongly disagrees. The West Virginia Legislative Auditor apparently also disagrees. *Please see the attached West Virginia Legislative Auditor's document from Dec. 2002: "Preliminary Performance Review, The Office of Explosives and Blasting, The Office of Explosives and Blasting Is Not Meeting All Required Mandate."* Just because regulations are in place doesn't mean they are being followed.

From page 5 of the Auditor's document:

The Office of Explosives and Blasting (OEB) was created by Senate Bill 681 during the 1999 session of the 73rd West Virginia legislature. In this report, the legislative Auditor reviewed seven mandates that are outlined for the OEB in Chapter 22, Article 3a of the *Code*. Of the seven mandates reviewed, the Legislative Auditor Concludes that the OEB has met and continues to meet three, 1) implementation of the pre-blast survey process; 2) education, training, examination and certification of blaster; and 3) proposal of legislative rules. However, there are four mandates which are not being met to the extent to which OED was created:

1. **Regulation of Blasting on Surface Mine Operations** - OEB is charge with regulating blasting on all surface mine operations. However, the majority of tasks regulating blasting operations are currently being performed by the Division of Mining and Reclamation, not the OEB.
2. **Setting of Qualifications for Individuals Performing Pre-Blast Surveys** - The OEB has set the qualifications for individuals conducting pre-blast surveys in its legislative rules. However, the primary requirement of these rules is that individual (sic) performing pre-blast surveys undergo training from the OEB. The OEB has no initiated any training for these individuals.
3. **Maintaining and Operating a System to receive Complaints** – The OEB has been in the process of developing a system to receive complaints. However, staffing difficulties has delayed the completion of this system.
4. **Establishing a System for the Investigating of Claims** – There is currently a significant backlog in claims alleging damage, which need resolved.

Significant indeed. Please consider this article by Ken Ward, Jr. in the Aug 3, 2003 edition of the Sunday Gazette-Mail:

Mining study: Blasts not 'significant'

Federal regulators have determined, in their new study on mountaintop removal, that mine blasting is not a “significant issue” in need of additional restrictions.

The federal Office of Surface Mining and other agencies say citizen complaints about blasting probably will continue.

As strip mines have gotten bigger, the agencies said, so have the explosive blasts used on them. At the same time, federal blasting limits have not been updated for 20 years.

But, the agencies said, complaints of property damage by blasting seldom are justified.

Coalfield residents, the agencies said, should hire private lawyers and go to court if they feel blasting near their homes is a nuisance.

“No additional actions to control blasting are warranted at this time,” concludes the 5,000-page draft report issued in late May. “As with all nuisances, the affected persons have legal recourse regarding blasting nuisances through civil action.”

The OSM, U.S. Environmental Protection Agency, Corps of Engineers and the Fish and Wildlife Service spent 4 1/2 years working on the report.

In December 1998, the agencies agreed in a court settlement to conduct a comprehensive study of mountaintop removal. Their goal, they said at the time, was to consider new rules to “minimize the potential for adverse individual and cumulative impacts of mining operations.”

Instead, the Bush administration has proposed a plan to streamline mine permitting. The plan includes no concrete new limits on mountaintop removal.

As part of their study, federal officials abandoned consideration of additional blasting restrictions. They dropped the issue when they narrowed the list of “significant issues” that deserved detailed examination.

In mountaintop removal, coal operators use explosives to blast off entire hilltops and uncover valuable, low-sulfur coal reserves. Leftover rock and dirt is dumped into nearby valleys, burying streams.

Over the past five years, complaints about noise, dust and property damage from blasting have been a consistent concern of citizens at public meetings about mountaintop removal.

In the first national exposé on mountaintop removal, Penny Loeb of U.S. News and World Report focused on the dangers of mine blasting.

“Blasts are made with the same mixture of ammonium nitrate and fertilizer and fuel oil used in the bomb that killed 168 people in Oklahoma City two years ago, but the mining explosions are 10 to 100 times stronger,” Loeb wrote in August 1997.

In November 1998, a task force appointed by Gov. Cecil Underwood called for better policing of mine blasting.

A few months later, during the 1999 session, the Legislature created a new Office of Explosives and Blasting within the Department of Environmental Protection.

In their new report, federal officials praise West Virginia for its “leadership role in passing laws and regulations that highlight the importance of mining companies being good corporate neighbors and addressing citizens’ blasting concerns.”

But in a study released in December 2002, West Virginia’s Legislative Auditor found that the DEP blasting office wasn’t doing its job.

For example, the audit report said, the office had not yet taken over policing of mine-related blasting from the DEP’s Division of Mining and Reclamation. The office had not yet trained anyone to perform pre-blast surveys or set up an in-house database to track blasting complaints.

More importantly, the office reported a backlog of complaints that had not been inspected, let alone resolved. At the time of the audit, 39 of 202 complaints filed with the blasting office had not yet been assigned to an inspector. Fifty-four of the 202 claims were resolved. But of the 148 open claims, only five had been sent to a claims administrator for resolution, the audit found. More than one-third of the open claims were more than a year old, the audit said.

“Citizens with open claims could be living in hazardous conditions due to damage sustained in a blasting incident,” the audit concluded. “In addition, the property values of individuals waiting for the resolution of claims could be affected until the damage of the property is corrected.” (Note: All emphasis added)

In their new draft study, federal officials quote Underwood’s task force finding that **“blast detonations associated with the larger mines have increased from approximately 100,000 pounds to over 1 million pounds of explosives.**

“In addition to more explosives used in blasting, the time periods over which blasting may occur in a general location have changed,” the draft study says.

“For example, as the location of a typical contour mine nears a house and passes, **blasting influence may last for weeks or perhaps a few months,**” it says. **“For a large mountaintop removal mine, removing multiple coal seams, the blasting near a home may last years.”**

The new report cites an OSM study of 1,300 blasting complaints nationwide. The study found that “no instances of blast-induced vibration damage were found attributable to the mining operation by the regulatory authority.”

Federal rules already outline a variety of restrictions on blasting, the new study says.

Mine workers directly responsible for explosives must be trained and tested. Coal operators must place blasting-schedule announcements in local newspapers. Residents within a half-mile must be mailed a schedule. Mining operators offer pre-blast surveys to residents within a half-mile of the permit area.

“Once blasting is initiated, it must be conducted in a manner to prevent personal injury, damage to public or private property beyond the permit boundary, and adverse impacts to nearby underground mines or surface and groundwater availability outside the permit area,” the study says.

The report says these rules “have not changed substantially” since 1983 — before the huge growth in mountaintop-removal mining.

“The agencies recognize that, in spite of enforcement of the existing regulations and implementation of the recent program improvements, blasting concerns/complaints will continue,” the study concludes.

“Regulations provide a limited ability to control nuisance impacts,” the study says. “The regulations were designed to minimize damage potential and only indirectly address nuisance; however, citizens retain the right to take civil action against a mining operation for nuisance-related concerns.

“There have been court cases in the coalfields where mining activities have been ordered to adjust operational procedures (i.e., above-and- beyond existing regulatory program controls) to reduce public nuisances.”

It is flat-out wrong, insulting and disgusting for the DEIS to dismiss blasting impacts as insignificant. We repeat: Coalfield residents should not have to, as a matter of government policy, sue to protect their homes and their health from MTR-related blasting. That’s an arrogant, outrageous suggestion! Whoever inserted that preposterous idea into the DEIS is no public servant, but a blatant coal industry apologist. That person ought to be fired from public office and go back to openly working for the coal industry. We also reiterate that coalfield residents have repeatedly expressed concern that regulatory agencies frequently fail to attribute to MTR-related-blasting damages that citizens clearly feel are related to MTR-blasting.

To go deeper into the MTR-related blasting issue, please consider the following information, lifted from Penny Loeb’s website, www.wvcoalfield.com (emphasis added):

BLASTING: WHAT’S CAUSING ALL THESE PROBLEMS?

The Surface Mining Control and Reclamation Act was passed to stop coal mines from “damaging the property of citizens...(and) creating hazards dangerous to life and property by degrading the quality of life in local communities.”

“It is the purpose of this Act to ...(b) assure that the rights of surface landowners and other persons with a legal interest in the land...are fully protected” and “(m) where ever necessary, exercise the full reach of Federal constitutional powers to insure the protection of the public interest through effective control of surface coal mining operations.”

INTRODUCTION

When I picked up my yearly list of complaints from DEP in March 2000, I discovered just as many blasting complaints as in previous years, and at mines I had never heard of. So I decided to find out if there is any difference between the blasts that people complain about and those that they don't.

I collected data on 1,134 blasts at nine mines of various sizes. Of these, 369 had caused problems—such as vibration or noise or dust—for nearby residents. In about three-quarters of the problem blasts, they did differ in some significant way from the blasts that did not cause problems. The differences varied by mine, and not all applied to any one mine. The specifics are discussed under the sections on each mine. But general characteristics include: air blasts over 115 dB, larger shallow binder shots, low-frequency shots, large amounts of explosive per delay, blasts that exceed the scaled-distance formula, cast blasting, two or more shots at the same time, and larger shots closer to homes.

Experts say that other factors can cause blasts to be troublesome as well, including the way explosives are placed in holes, brand of explosive, and misfirings. These could not be determined from the information available.

This analysis is based on a database of the information on the blasting logs. Blasting logs contain two pages of information on each blast, including: time, location, number of holes, amount of explosive per hole, blast design and length of delays between holes. Sometimes there will also be information on ground vibration, air blast levels and frequency from seismograph readings. Some mines are required to seismograph all blasts, while others have been seismographed by DEP after complaints from residents.

I determined which blasts caused problems in two ways. Some resulted in complaints to DEP. Others were noted on lists kept by people living near the mines. In every community except one, I got a list kept by at least one resident.

The regulations say the director can give the public access to the blasting logs. But they don't require copies, so Libby Lindsay (a retired miner and summer intern at the West Virginia Organizing Project) and I had to take laptops to the mines. When we had to sit on boxes and use pails as tables in the guard shack at White Flame (the first mine), we thought we were in for a rough summer. Fortunately, accommodations improved, but varied greatly. Paynter Branch required us to go to a lawyer's office in Charleston and

assigned a young secretary to watch. Pen Coal had a supervisor hand us each blasting log, one by one, and asked for a copy of the data.

For all mines but one, we used the time period of the beginning of 1999 through Spring 2000. The other mine had ceased blasting for part of 1999 so we also looked at older records. We entered every blast that generated a complaint to DEP. We tried to enter at least two full months of blasts during the months when there were the most problems. That way we could compare blasts that were problems to others that were placed nearby at the same time of year. Ideally, we would have tried to gather another 500 blasts, but our time was limited with each mine. We have gone back to as many mines as possible and checked the data.

I have spoken with seven blasting experts, read both the OSM and DEP blasting manuals, reviewed studies and court testimony and have discussed my findings with DEP and officials at the mines. I asked all the mines for a response. Paynter Branch, Bandmill and Mingo Logan did not respond. Pen Coal officials and I are still trying to set a date for an interview.

This study is about both nuisance problems and damage. The law gives citizens the right to enjoyment of their property. Yet, in every community where there is blasting, there are certain shots that cause houses to shudder, items on walls and shelves to shake. The blasts can be very loud or cause a lot of dust. At most mines, these types of blasts only occur about a dozen days out of the month. The others don't bother people.

In fact the Secretary of the Interior stated in the Federal Register, when OSM issued its blasting regulations in 1983, that citizens' health and safety should be protected as to "create the least discomfort." "OSM believes that prevention of excessive noise, especially in populated and residential areas, is within the ambit of 'health and safety or welfare.'"

The coal company officials, and to some extent DEP officials, sometimes dismiss the people who claim problems as "chronic complainers." Sure these people exist. But I am confident that the people from whom I got complaints had legitimate problems and did not exaggerate.

My purpose was not to determine exactly what made those blasts problematic. There is not enough information on the logs for such precise findings, nor do I have the expertise. What I wanted to find out is whether there is enough suggestion of difference to warrant further study.

The mines usually abide by the regulatory limits of 1 inch/second ground movement and 133 dB air blast. Vibration is supposed to be minimized by separating the explosions of each delay by at least 8 ms. Mines usually use a "scaled-distance formula." This limits the amount of explosive per delay period. For example, the limit for a blast 2,600 feet from the closest protected structure is 2,234 pounds per delay period. The closer a mine gets to a house, the less explosive per delay is allowed. The formula does not have to be followed if a seismograph is at the closest house.

When a citizen files a complaint, the DEP inspector, in nearly every case, will write that blasting was within the regulations and go away, leaving angry citizens. They feel as if they are in the Twilight Zone. How can the inspector say blasting is being done properly when their house shakes? Some inspectors have even pinpointed types of blasts that cause problems under these limits, especially air blasts above 115 dB (these are explained in the analysis of each mine below). Yet, DEP and OSM refuse to look beyond these standards.

The regulations are based on research done 15-20 years ago by the Bureau of Mines. None was done in West Virginia, and research was with smaller blasts and partly on a new house built specifically to test blasting. Two recent bodies of research have been developed that refute the accepted limits. (I can supply copies to anyone who wishes).

Sam Kiger, Dean of Engineering at the University of Missouri, was the expert for the Bim blasting case, which was tried in court in Boone County in March 1999. Kiger is an international expert in protecting federal buildings from blasting damage. After examining 6,000 blasting logs, he testified that there is about a 95 percent chance of damage at a vibration limit of .5 inches/second, if you count each of the holes shot (50 on average) as a separate vibration. In the Bim case, he also testified that low-frequency waves (2 Hz-11 Hz) generated by some blasts can be more damaging. The frequencies can match that of a house and amplify the shaking.

Freda Harris, who had a blasting case with a mine in Indiana, gathered many documents during the case and subsequent FOIAs of OSM. She wrote a manual for Citizens Coal Council. One of her most intriguing findings was that there can be “hot spots” in a community where the geography can make blasts worse. She emphasizes that damage and vibrations can feel worse if a house’s natural frequency is approximately between 4 Hz and 12 Hz. The above-ground part of the house often vibrates more than the ground outside and the foundation. Yet, the DEP/OSM standard is based on ground vibration.

Most of the blasting studies of the Bureau of Mines were done by the David Siskind. The FOIAs provided much correspondence between Siskind and other experts, some of it quite critical. **A top official of Vibra-Tech, a leader in designing blasting technology, said: “Any criteria...which ignores the frequency of a structure and the frequency content of the ground motion is overly simplistic...Your criteria, as proposed, will neither protect the interest of the citizen and the homeowner, nor will it protect the blaster from alleged damage claims.”**

After the Bureau of Mines was shut down by Congress, Siskind became a private consultant. He testified for the coal company that lost the Bim case. The majority of the blasting cases have overturned his studies, and thereby the limits used by DEP and OSM. As he wrote an OSM official on June 17, 1997: “The battles I am now seeing are not 0.5 in/sec versus 1.0 in/sec. Complainants are trying to dismiss all the science as biased, wrong or nonapplicable. For the most part, they are succeeding in ways that pay off.”

Interestingly, the DEP “Surface Mine Blasting Study Guide” acknowledges that the response of the human body is greater at lower frequencies: “This explains why people file complaints even when the blasting is conducted at safe (no damage) levels.”

The guide recommends seven ways to possibly reduce ground vibration, including: use less explosive per delay, increase the length of delay, detonate the blast away from houses, increase the scaled distance formula. Interestingly, many of the problem blasts violated one of those seven recommendations.

The study guide also notes that blasting complaints will be likely when air blasts exceed 115 dB. It has nine recommendations on how to reduce air blasts, including using enough cover over the explosives in the holes, avoid cloudy days and temperature inversions and avoid open sides in the direction of homes. Again these were often disregarded during problem blasts.

DEP regulations give the Director the power to order mines to reduce blasts to prevent harm. The regulation currently reads: “The director may prohibit blasting on specific areas where it is deemed necessary for the protection of public or private property, or the general welfare and safety of the public.”

DEP has tried to strengthen the language in revised regs now before the Legislature: “The director may prohibit blasting or prescribe alternative distance, vibration and air blast limits on specific areas, on a case by case basis, where research shows it is necessary, for the protection of public or private property, or the general welfare and safety of the public.”

At DEP’s public hearing in August (2000), the industry submitted criticisms, and Mike Mace, director of the new Office of Explosives and Blasting, thinks it might not pass the legislature. Even if it passes, the question is will it ever be used.

Darcy White, assistant chief of the Office of Explosives and Blasting, agrees that blasts can be refined and reduced a bit. She has found that the frequency problem can be eased by lengthening the delay periods between blasts. This would eliminate a lot of the problems. But she sees it as a continual negotiation between inspectors and the mines. **Never, she thinks, will DEP have the authority to order the changes that are needed. The sad thing is that these aren’t major changes. Nor would they result in much slowing of production.**

The response of homes can be measured before blasting. Response Spectra Analysis is a mathematical procedure that takes into account the structure’s natural forces and the amplitudes and frequencies transmitted by a blast. This requires firing test blasts first. Vibra-Tech’s West Virginia office offers this service, which they sometimes use when blasting will be near a hospital or computer operations. One hole is fired for a week, and vibrations measured. Mines don’t use it, the Vibra-tech official said. “If the speed limit is 55mph, would you drive 50 mph,” he said, explaining that mines only do the legal minimums.

OSM actually considered requiring Response Spectra Analysis, but rejected it in 1983 as too expensive.

The other weakness of the DEP system is that inspectors don't know the scope of the blasting problems. Only a small percentage of the problematic blasts get reported to DEP. Some people don't know who to call or even that DEP exists. **Others give up after being told repeatedly that the blast "was in compliance."** Within two hours, I can find the person(s) in a community keeping lists of the blasts. But there is no DEP policy requiring inspectors to regularly canvass a community for problems with a mine.

From this study, it appears that blasting could be moderated enough to reduce problem blasts by at least 50 percent. With the recent appropriation of additional state and federal money for DEP, the blasting office will hire about a dozen blasting inspectors. If inspectors had a complete record of all the problem blasts at every mine, they could require modifications in the blasting until the problems abate.

Clinton Evans, engineer for an explosives firm in southwestern Virginia, is regarded as one of the leading experts on blasting in the Kentucky, West Virginia and southwestern Virginia area. He has been a blaster since 1976, and his firm supplies powder to Tri-County and advises the mine occasionally. It is also doing the blasting for the Route 10 widening in Man. The firm does blasting at surface mines, though none currently in West Virginia.

He offered many insights on why certain kinds of blasts can cause problems and kinds of improvements that can be made. He agreed that there are things that can be done to make blasting less bothersome. I will explain what he said about some of the most common problems.

Binder shots, which have short holes (generally less than 10-feet deep), frequently result in loud air blasts, which cause complaints. Mines use these when they have to shoot a narrow layer of overburden to reach coal. The top coal layer is usually fairly deep (50-100 feet below the top of the mountain). Then there can be a few coal seams close together with just a little cover. The holes are so short that there is no room for adequate cover to absorb the sound. The best way to cope is to use gravel to cover the explosive instead of the drill cuttings normally used. His firm uses gravel for binder shots on construction jobs. But it would be practically impossible for coal companies to absorb that cost, he said. Barry Doss, the chief engineer for West Virginia operations for Addington, said that mines tend to use binder shots with too many holes because they are so easy to drill. The data shows that smaller binder shots generally don't cause problems.

Evans said that they concentrate much more on the effects of the low frequencies than on per particle velocity. The per-particle reading almost never goes higher than .3 inches, well below the regulatory limit of 1 inch per second. However, just as Sam Kiger and Freda Harris determined, the low frequencies are bothersome. "We try to change to a higher frequency so don't get as high a jolt," he explained. DEP recognizes that lengthening the delays can raise the frequency. However, Evans also tries decreasing the burden a foot at a time, and then possibly the spacing as well.

Air blasts that exceed 115 dB frequently cause complaints. He said the best time to shoot when there is a potential for air blast is from noon until 2 p.m. because temperature

inversions and clouds are least likely. However, a lot of mines like to shoot at shift changes around 4 p.m. Another way to reduce air blasts is to slow down the delays down the rows. The data shows at least half the mines use 9ms delays down the rows. He said those short delays can actually end up, depending on the design of the blast, being less than the regulatory limit of 8ms between delays. Some mines use these very quick row shots to cast the overburden. This saves a lot of time and reduces the cost of moving the overburden. The explosion just tosses the material away from the coal.

There needs to be better training of both blasters and inspectors, he said. “One of the biggest problems in the industry,” he said, “Is that we have a lot of explosive companies with well-trained people, but more intensive training of the blasters at the sites needs to be done.” There will be times with difficult blasts, he said, that blasters will need advice from explosives companies. However, their resources are stretched thin, as well. Larger mines will generally get more attention just because they do more blasting.

He recommends that at least some of the new blasting inspectors at DEP have worked as blasters. He also advises aggressive public outreach, which is what his company does when they start blasting in a new area.

Analysis of nine mines

COWEN Evergreen (Addington)

“It feels like an earthquake,” Bowman said. **Sometimes, the blasts have shaken the deer heads off the wall, cracked the windows and made the house shift so doors won’t close properly. The water has drained out of the two ponds behind his house, and he can’t keep enough in the ponds for his pet fish.**

Dust from the blasting filled the long valley three times this summer: once in June, once in July and again on August 2. One day it was so bad that Bowman couldn’t see to drive down the road.

Roger Hollandsworth agrees that the blasting is bad. Hollandsworth has lived in his tidy home for 34 years. The yard is filled with flowers, Rose of Sharon and other flowering trees and shrubs. His mother lives just up the road, a bit closer to the mine.

Like the Bowmans, his mother keeps a careful record of the blasts. After a couple years of problems, the mine now calls her and a few other nearby residents when a blast is about to go off. But that doesn’t stop the blasts from being annoying. She only writes down the bad blasts, with notations like: “Very bad-loud-shook house.”

“They are hurting us down here,” Hollandsworth said. During the summer, someone put up a sign: “Blasting next six miles. “It will blow you off the highway.”

For the most part, the residents have dealt mainly with the mine management. In one case early in 2000, an improperly designed blast blew the windows out at the Falls’ garage, which is usually the closest protected structure. Mr. Falls said that some of the holes of

one blast had not gone off. Then when a new blast was set off nearby, the unfired holes went off as well. This was not reported to DEP, however.

When the DEP inspector is called, he does a thorough inspection. Most of the time, he accompanies his findings with a one-page explanation of blasting. Each time, he writes: "Air blasts often feel like ground vibrations and are similar to the sonic booms generated by jets breaking the sound barrier. Air blasts over 115dB are known to be irritating to persons in the area and often result in citizen complaints." Most of the blasts at this mine for which there are decibel readings do exceed 115 dB. In fact, Evergreen got a violation in April 8, 1999 when it blasted 139 dB, well over the 133 dB limit.

(Note: I spoke with Roger Hollandsworth in early March 2001. He said the blasting is much, much better now. There are still some loud blasts, but there haven't been the fumes or the shaking of the past few years. He said inspector Keith Evans is at the mine two or three days a week. He has them adjust the blasts and shoot earlier in the day. Roger and Keith visit regularly so that Keith knows how the blasts are impacting the community. They seem to have developed a plan that could be a model for other communities.)

Of the 111 blasts analyzed, 47 generated problems for residents. A few were complaints filed with DEP, while the rest were noted by Mrs. Hollandsworth or the Bowmans.

Most of the complaints stemmed from two factors: Blasts that exceeded the scaled-distance formula or came close to it. And the larger, shallow binder shots.

This mine most frequently exceeded the permissible limits for explosives per delay. As the inspector noted, regulations allow this since the mine placed a seismograph at the nearest protected structure, usually the Falls or the Hughes houses. Mr. Falls said that he was protected from the blasts by the mountain, unlike his neighbors. **The mine never told him, he said, that it could have larger than allowed blasts because the seismograph was at his house.**

All nine blasts that exceeded the limit caused complaints. Six triggered a seismograph, with air blasts measuring between 124 dB and 131 dB.

Of the 12 blasts that were more than 50 percent of the permitted amount per delay, eight generated complaints.

The other factor that appeared to cause a lot of complaints were the larger binder shots. Because these have holes that usually aren't more than 10 feet deep, they don't shoot a lot of explosive. But the shortness of the holes often makes them generate more vibration and larger air blasts. It is difficult to design an efficient blast with such shallow holes. The adverse impacts could be reduced with holes of smaller diameter. But I have not seen any mines that use 6-inch diameter holes. Usually the holes are either 7 7/8 or 9 inches. The mines say it would be too expensive to buy smaller drills.

A blasting supervisor for Evergreen said that the mine shoots a lot of binder shots because the coal lies close to the surface in numerous areas. Of the 35 shots less than 10

feet deep, 12 generated complaints. Half of those were over 9,000 pounds. Of the other 23 binder shots that did not cause problems, only two were more than 9,000 pounds.

This mine and Mingo-Logan and Princess Beverly were the three that shot two or more times nearly at the same minute. There were 19 shots within minutes of each other. Twelve of those combined shots caused complaints. The ones that did not were less than 10,000 pounds or a small fraction of the permitted amount per delay.

The few other troublesome blasts that were not explained by these factors had notations on them about unusual design or problems with the blast.

I spoke with Barry Doss, chief engineer for Addington's West Virginia mines. He said that the major reason for the high air blasts is that this area has a lot of cloudy days. When clouds are low, the sound waves will bounce back to the ground at wider angles, which is why air blasts can sometimes be heard two miles away. He doesn't know what can be done about the clouds. But he said air blasts can be lowered by reducing the amount of explosives per hole and by increasing stemming (cover over the explosives in the hole).

Evergreen uses a dragline, which is why its blasts sometimes exceed scaled-distance limits and why it uses larger holes than the other mines. The dragline has to have a lot of rock to keep working steadily, he said.

I asked him about the shots that generated a lot of dust and smoke. If the smoke was yellow and smelled, the holes may have been wet, he explained. If a blast has to sit overnight before being detonated water can get into the holes. The best way to avoid problems is to load the holes and detonate them immediately.

Both Evergreen and Princess Beverly tend to shoot two or more blasts at the same time because it is more economical. This way they only have to clear the area once, and generally they do the simultaneous blasts at the afternoon shift change.

The men who design and shoot the blasts don't get to go to seminars, he said. So they rely on the expertise of the explosives company when they have problems. "There are always minor adjustments can be made because blasting more of an art than science," he said.

CYCLONE Paynter Branch Mining

"My husband works for the mines, but they can't tear up my house," Barbara Jeffries of Cyclone, interview August 2000.

Like Tri-County in Dingess, this is a small mine with small blasts. Yet it was frequently within 1,500 feet of the community and caused a lot of problems. The mine stretched for about a mile, its perimeter following Route 10 through Cyclone, never more than 2,000 feet away up on the mountain.

The complaints about blasting began to come into DEP towards the end of 1997. **By 1999 though, people were tired of complaining, since the problems didn't seem to be easing.** Still they filed a dozen between March 1999 and February 2000.

“Blasting on 6-24-99 at 4:15 p.m. was extremely loud and shook her house so hard that it scared her visiting grandson who was inside of the house at the time of the blast,” wrote the DEP inspector about a complaint from Barbara Jeffries. Her neighbor, David Robertson, complained on March 23, 1999: “Blasting from Paynter Branch Mining has been shaking the complainant’s residence and on 3-22-99 at approximately 4 p.m. a blast occurred that ‘shook’ the dwelling hard and caused items to fall off of shelves in the den of the dwelling.”

Dust from the mines was a problem, partly because the fairly large community was so close to the mine. Though the mine is not visible from the road, its location on the edge of the mountain was similar to the Dal-Tex mine in Blair. This allowed the **dust to float out over the houses.**

The blast on Aug. 25, 1999 was particularly dusty and generated two complaints. David Robertson took photos that clearly showed the dust. The DEP inspector wrote: **“Paynter Branch Mining Inc. has agreed to wash Mr. Robertson’s house as he requested after mining has progressed away from the location of the house.” The mine agreed to wash other houses as well. Yet more than a year later, no houses have been washed.**

Unfortunately, the one person who was keeping a log of the blasts threw it out because the mining was ending and she saw no use for her records. This is the one mine, where the complaints are based solely on complaints filed with DEP.

However, this mine was one of two that regularly seismographed the blasts. It did seem that the machine was close to one group of homes and not to another. The blasts were loud enough to trigger the seismograph 30 of the 35 times that the closest structures were houses 57, 88 or 91 (all near the Jeffries and Roberts). It did not trigger when the blast was closest to house 152.

Interestingly, all but five of the 35 air blasts recorded were over 115dB. Several DEP inspectors have said they found complaints start coming in when air blasts are over 115 dB.

The DEP inspector was quite thorough. After one of the first complaints in late 1997, he wrote a letter with his findings. This time, he found that the mine was using the wrong closest structure. The log said it was 1,800 feet away when it was actually only 1,400 feet. This reduced the allowable amount of explosive per delay from 1,070 pounds per delay to 648 pounds per delay. Then the blaster timed the shot incorrectly, causing 1,200 pounds to detonate instead of the 648 pounds.

WHAT THE DATA SHOWS

We reviewed 103 blasts, of which nine generated complaints to DEP. Without a more complete list of problem blasts, it is somewhat difficult to determine what is different

about the blasts that did cause problems. However, the presence of seismograph data is helpful.

Location of the blast appeared to be one factor. The complaints only came when the blasts were in just seven of the 80 grids where blasting took place. The blasting logs require mines to include the grid numbers. Grids look like a graph paper and the letters and numbers generally start in the top corner at the left, just like in a spreadsheet. So the grid will read J-19 or NN-46. All the grids where bothersome blasts occurred were towards the center of the mine: J-19 through QQ-41.

As noted above, the air blasts were particularly high here. The highest (132dB) occurred on the day that Barbara Jeffries said the house shook so much it scared her grandson.

Interestingly, the majority of blasts that caused complaints were detonated in the direction of the nearest protected structure, even though DEP recommends detonating away from homes in order to reduce vibration.

The data on the frequencies of the blasts is also enlightening. The Bureau of Mines has found that frequencies between 4 and 11 Hz can magnify the shaking feelings if the house is responsive to the frequency of the blast. Most of the frequencies from these blasts were between 7 Hz and 11 Hz.

DINGESS Tri-County Coal

Perhaps the smallest of the nine, this mine stretches along the ridges of the mountains that hug the northeast side of County Route 3 through Dingess. Two local men bought this permit from Pen Coal a couple of years ago and are operating a contour mine without any valley fills.

Blasting problems have been associated with the large, mountaintop removal jobs where blasts can be 50,000 pounds to 250,000 pounds and even as much as 1 million pounds. Tri-County refutes that theory and shows the complexities of blasting. **The largest blast we recorded was 43,942 pounds, with nearly half less than 10,000 pounds.**

Stanley Marcum, a disabled miner in his 50s, lives where he was born, in a two-story house on the banks of the West Fork of Twelvepole Creek. Steel blue, the house has been carefully restored. Birds gather at the feeders near the creek bank, and Marcum built a garage a few years ago. His wife has a beauty parlor in the rear of the house and is home most of the day.

When Pen Coal was blasting about half a mile down the road three years ago, Marcum did complain to DEP a few times even though his home wasn't among the closest. Last year and this past winter, his house was frequently just about the closest to Tri-County. Blasting was occurring on the ridges lying to the northeast, across the creek and road from his house. Only now, he was reluctant to complain because he had gone to school with one of the owners.

Still, his wife kept careful track of the blasts, noting down the ones that were the most bothersome. Marcum believes the cracks in the foundation have grown worse because of the blasting. He showed me how the bottom wall of his living room bows outward into the room. Whether these irregularities were caused by blasting will be up to an engineer. What is clear, though, is that the blasting is annoying and sometimes scary. The house just shakes and shakes, according to Marcum and his son.

The Marcum family has been working in the mines for decades. Stanley worked as a deep miner at Marrowbone for more than 20 years. In the early 1990s, Marrowbone ousted the UMWA, but Marcum stayed on. He had the misfortune to be in a mine fall, breaking his back in several places. Though he is fortunate to be able to walk, he can't go back to work. The mine paid the medical bills for his accident, but he is now like many disabled miners in their 50s and early 60s: without medical coverage until he reaches retirement age. Marcum's son drove a coal truck at Pen Coal, but recently switched to driving for Marrowbone.

A new permit for Marrowbone's mountaintop mine is approaching Marcum's house from the southwest. The pond for the valley fill will be about 300 feet from his backyard. "I was born here," he said. "But if they bought me out, I would leave."

The Marcums aren't the only ones who were bothered by the blasts, either. Roger Meade and his wife live across the street. Dishes in their house have been knocked off shelves and broken.

WHAT THE DATA SHOWS

The most obvious reason for these blasting problems would be because the blasting was very close to the homes.

Of the 130 blasts we entered in the database, Mrs. Marcum noted 27 were especially bothersome. These blasts were either closer, deeper, had a larger number of holes, a larger amount of powder per delay or shorter delays.

12 of those were 1000 feet from the closest house. There were another nine blasts that were also within 1000 feet. But the ones that caused problems had significant differences with all but one of the less offensive blasts. Two were nearly twice as deep (59 and 68 feet, compared to 30 feet). Seven had more holes. Seven had fewer delays (17ms and 42ms, compared to 17ms, 42ms and 109ms).

The other 15 troublesome blasts were located in just 10 other grids. (Blasting was done in 26 different grids). In four of those grids, nearly every blast was bothersome.

In the other grids, the bothersome blasts differed in significant ways. The most obvious were the delay timing and delay designs.

The amount shot per delay ranged from two at 1,394 pounds to one at 10 pounds. There were a number of blasts between 255 pounds and 782 pounds. Interestingly, of the 10 blasts at 697 pounds, only three were bothersome. All three were in the two of the 10 grids closer to the Marcums.

It would seem that blasting at this mine would have benefited from closer attention from DEP. Numerous blasts were listed on the log as 1,000 feet from the closest protected structure. However, the name of the owner was never given as it is at most other mines. **It is quite possible that some of the blasts were actually within 1,000 feet of homes and would have required site-specific blasting plans.**

There were no complaints up to March 2000. A few complaints were filed after that. **But because there had been no previous complaints, it appears that DEP did not pay close attention to the blasting.**

This is the one mine where management seemed to genuinely want to try to lessen the impacts of the blasting. In fact, the mine manager asked me to tell him if I found any reason why the people were having problems with the blasts.

After the mine received complaints from people soon after starting up early in 1999, the powder company studied the vibration patterns and recommended altering the frequencies. It appears that the delays were lengthened on many, but not all, of the blasts. Unlike other mines, the blasting logs sometimes seemed as if they were carbon copies. As we were inputting, we sometimes felt like the blast from the previous day had just been copied onto that day's log. Perhaps, they did shoot nearly identical blasts on consecutive days, but it seemed odd.

Bill Dye, the mine manager, said the complaints in April-June of this year resulted from an unusual rock formation. The blasters unexpectedly encountered fractures as large as 6 inches in the rock. They had to increase the powder in order to try to break up the rocks, some as large as houses. But the fractures and increased amount of powder made for larger air blasts, he explained. There was no way, that he knew, to discover the fractures before shooting. He said they tried to tell residents what was happening.

I asked him whether the mine could afford to shoot less per delay. He said that they tried to break the shots up into two or three smaller groups when they are close to houses. However, he said, that it would probably cost too much in time delays to do that with larger shots further away from the community. They do try to do preline, breakup and production shots, and have minimized the shots as much as possible.

He said that community residents are understanding if they are called ahead of time. However, it would be difficult, he said, for a mine or DEP to survey a community to discover the full extent of the problems.

FOSTER Elk Run Massey

Dickie Judy could be the poster child for blasting. For six years, he has gone to every level of state and federal agency and governing body. Amazingly, most agree that the blasting from the mine is causing problems. Yet, none wants to order something done.

Dickie Judy builds houses for a living. So when it came time for his dream home, he wanted everything perfect. The location is idyllic, more than 100 acres at the end of Foster Hollow in Boone County, an ample flat lawn, and even a visiting bear. He let the large white colonial settle a year before moving in—only to be greeted with a notice that he needed a pre-blast survey.

The survey was done in September 1994. Another survey was done of Judy's older rental house nearby. Within a few months Judy filed his first of years of complaints. Bill Cook has been the DEP inspector the entire time. After nearly two decades with the forestry department, he had moved over to DEP with an unusual enthusiasm for enforcement. He jumped right in and issued a violation: "failed to prevent damage to private property outside of the permit area; Elk Run Coal Co. must provide a list of repairs that it is willing to make and a time frame for such repairs by Friday 3/24/95."

On March 30, 1995, OSM inspectors Mike Superfesky and Richard Frazier inspected the Judy's two houses along with Bill Cook. About the older house, OSM found: "I totally agree with the WV DEP that it is obvious that the paneling separations in three different rooms of the house was caused by blasting; It is also obvious that the age, type of construction, and type of foundation make this older structure more vulnerable to both air and ground-induced loading. **The dynamic response of non-conventional pier or rock footings and non-conventional floor and wall framing to ground vibration is different from that normally expected in the more conventional system; therefore a larger scaled distance factor is required to insure protection of a non-conventional structure.**"

About the Judy's new house OSM wrote: "has also sustained additional cracking from the time of the pre-blast survey conducted in September, 1994. Currently many of these cracks are considered minor or threshold cracks, particularly the cracks in the room corners and at the intersection of walls and ceilings; however, there are documented changes in the size and number of cracks since blasting commenced. Based on the age and the excellent quality of the design and construction of this house, it is evident that this house can resist greater air or ground-induced loading than the older, non-conventional house. It is also very possible that in addition to air blast, this house is being subjected to low-frequency ground vibration that are near the natural frequency of single family frame structures and particle velocities could be amplified within the structure." And this was happening when the blasting was 5,000 feet away.

DEP inspector Cook issued three violations for blasting, which forced DEP to issue a cessation order. Massey appealed to the Surface Mine Board, which overturned the blasting violations in July 1995.

Next OSM issued a Ten Day Notice on August 8, 1995, saying that Elk Run failed to conduct blasting operations so as to prevent damage to private property outside the permit area. In December 1995, OSM issued a violation and ordered Elk Run to improve its blasting designs. In March 1996, Federal District Court ruled in Elk Run's favor and overturned the OSM order.

Meanwhile Judy had gone to Washington, D.C., to testify before Congress about the harm of cutting OSM's budget, which happened anyway.

Interestingly, his case became a dilemma for OSM's Nationwide Blasting Work Group in early 1996. OSM had found damage at the older house at a vibration of .2 inches/second. Blasting regulations are based on the theory that no damage will occur below 1 inch/second. Since the Work Group has not issued a final report, the resolution is a mystery.

OSM made another inspection on April 2, 1997. After finding two air blast readings of 128dB, the inspector recommended more stemming (cover over the explosives in the holes) and smaller diameter holes. It appears that holes were reduced from 9 inches in diameter to 7 and 7/8 inches only about a third of the time.

In the summer of 1998, Dickie Judy hosted a tour of the legislative committee studying blasting. He also lobbied the legislature for better laws.

After a series of particularly hard blasts last Fall, (then) DEP Director Mike Castle issued an order that air blasts should be reduced. However, Massey threatened to sue, and DEP backed off the order. Instead, Darcy White and Jim Miller of the Office of Explosives and Blasting convinced the mine to submit a revised blasting plan, which included longer delays and shots in sections. In March 2000, the mine got a new manager, Mike Snelling. He said he could minimize the complaints, but not eliminate them. However, from the Spring through November, the blasting and mining was being done in an area of the mine far away from the Judy's home. Inspector Bill Cook said they won't be able to determine how much the new blasting plan has helped until the blasting comes closer to the homes in a few months.

Most recently, the engineering expert for Bailey & Glasser found that Judy's home has \$5,000 in damage from blasting. However, it is too small an amount for them to take on as a lawsuit. **Mike Mace, director of DEP's Office of Explosives and Blasting, refused to order the mine to fix the damage based on the engineer's finding.**

Dickie Judy doesn't know where to turn next.

WHAT THE DATA SHOWS

We examined 88 blasts of which 23 caused problems. First, this mine has the biggest blasts. Of the 88 blasts, 37 were more than 100,000 pounds. Evergreen, the next largest, had 20 of 111 over 100,000 pounds. Granted, large blasts can be barely noticeable if properly designed. **But the Judys repeatedly characterize the blasts as feeling like they are being blown off the earth.**

More than half – 42 blasts – were more than 1,200 pounds per delay, the only mine to shoot such a high percentage. Regulations permit such large shots because the blasting was usually between 3,000 and 9,000 feet of the Judy's house. However, when the large amounts were shot within 4,600 feet, there was usually a problem. Those blasts include: 1,954 lbs/delay at 3,200 feet, 2,858 lbs./delay at 3,500 feet and 5,162 lbs./delay at 4,300 feet.

In fact, 17 of the 23 problem blasts shot more than 1,900 pounds per delay. Four of the other 6 problem shots were binder shots.

Binder shots were a problem at this mine, as at all the others where they are used. This time, only about half the binder shots caused problems. All those that did cause problems were 9 inches in diameter. Several of the less bothersome used both 9-inch and 7 7/8-inch holes.

KISTLER Bandmill Massey, formerly Pittson

For more than three years, Everett Dickerson of Kistler kept careful records of the blasts at the Pittson mine on the mine above his house. When his neighbors started to have blasting problems a few blocks away, he showed them how to make lists, too.

But now Dickerson has given up. The lists and complaints didn't do much good. The only thing that might help now, he says, would be a lawyer.

This mine, which was owned by Pittson until mid-1998, stretches along the top of the mountain on the north side of Route 10, reaching from Taplin to Kistler. The mine ceased operation for about a year while it was being sold to a subsidiary of A.T. Massey but reopened early in 1999.

About 110 houses in Kistler and Taplin are within half a mile of the blasting. Kistler is a tight little community with houses close together on narrow streets. Several residents described the blast as reverberating through the neighborhood.

“Blast today at 8:36a.m. shook trailer and scared everyone in the neighborhood,” Cornella Morgan told the DEP inspector on April 23, 1998.

Larry Conn, a teacher, told DEP that the blast shook their house on March 6, 1998. **“Very upset that blasting seems unregulated.”**

The DEP inspector was not as assiduous as those for Evergreen and Paynter Branch. But his investigation of the blasting complaints did shed some light on why particular blasts caused problems. When Larry Bragg complained that a blast on Aug. 21, 1999, “shook his house really bad,” the inspector noted that the blast included “pre-split holes, which are usually very loud.” A number of blasts examined were a combination of pre-split and production blasts.

Interestingly, a month before that problematic blast on Aug. 21, the inspector had recommended that the mine “use more delays in pre-split shots to cut down noise levels and reduce number of complaints.” It doesn't appear that the delays were changed.

Larry Conn reported that the blast on March 10, 1999, shook his house. The inspector wrote that the blast was “on a point with two open sides and weather was cloudy with light snow contributing to increased air blast.”

As for the blast on April 23, 1998 that scared everyone, the inspector found it was “parts of three holes un-detonated in previous blast. Would have been very loud.”

WHAT THE DATA SHOWS

We examined 182 blasts, of which 51 caused problems. This mine was different from the others because we examined blasts in 1997 and 1998 as well as 1999 and 2000. This is because the mine did not operate for part of 1999, and people had given up keeping complete records by 2000. We also had to use a different kind of blasting log, with different information for the 1997 and 1998 blasts. Mine officials could only find the records kept by the blasting contractor, but not the official logs that were kept when the mine had a different owner.

There seemed to be four factors associated with the problem blasts: location, amount of powder per delay, combined pre-split and production, and unusual shots.

This mine had the third largest blasts, after Elk Run and Evergreen. When the blasts were the closest to houses (3,600 feet), the problems came from those of more than 900 pounds per delay and in just two of the grids.

With the older blasts, the problem ones usually were again in just a dozen grids and had higher powder factors (more than 1 and as high as 1.5). There were a few other blasts with high powder factors in those grids. But they were mostly just production shots, and did not pre-split at the same time.

As the DEP inspector noted, pre-split shots did prove to be troublesome most of the time. Of the 29 combined production and pre-split shots among the 100 older shots, 22 caused problems.

AMEAGLE/COLCORD/DOROTHY Princess Beverly (Addington)

When you watch a blast go off from the top of Kayford Mountain, it seems like it is in the middle of nowhere. And the blasting logs note that for nearly every blast Stanley Park is the closest protected structure (usually 2,700 to 3,900 feet away). This is the cemetery and campground atop Kayford that was preserved by Larry Gibson.

But the map shows that the southern end of the mine follows Route 1 as it winds along from Whitesville to Dorothy to Ameagle. Nearly all the blasts take place southwest and south of Stanley Park, putting them less than a mile from Route 1. And it was the Litos brothers, George and Manuel, who kept lists of the blasts that seemed bothersome at their store along Route 1 between Colcord and Ameagle. They even filed a complaint on Sept. 16, 1999 that the blasts vibrated their windows.

A couple dozen other complaints have been filed about the blasting. But some people didn't know which mine was blasting, and didn't know how to contact DEP.

The complaint investigations were only cursory. The only significant finding by the inspector was that the Sept. 16 blast was actually two shots fired in close succession. The

inspector noted this “creates more noise than normal, but would not be out of compliance according to the scaled distance formula.”

In fact in another complaint investigation, the inspector wrote: “In the case where it is believed that blasting has caused damage, the DEP’s jurisdiction falls within one half mile of the blasting site. According to current laws and regulations, any structures outside of one half mile are not considered in danger of blast damage.”

WHAT THE DATA SHOWS

We examined 106 blasts, of which 57 were noticeable enough to be noted by the Litos brothers or cause a complaint.

Again binder shots were a factor, with 19 of the 30 being problematic. As the inspector noted, sometimes two blasts went off nearly simultaneously and fairly close together. This happened 14 times, and nine caused problems. Three of the others were small blasts.

Generally, it was the blasts with larger amounts of explosive per delay that caused problems. The closer they were to the communities (and further from Stanley Park) the more likely the larger blasts were to cause problems. For example, there was not a problem with a blast of 1,392 pounds per delay when it was 2,500 feet southwest of Stanley Park. But there was a problem when the blast was 3,200 feet southwest of the park and had 1,386 pounds per delay.

This was one mine, though, were there was more variation in delays. Theoretically, longer and more delays will moderate the ground vibration. At this mine, longer delays did seem to make a difference in some of the blasts.

For example, on March 8, 1999, a blast of 1,200 pounds per delay went off 3,750 feet southwest of Stanley Park. It did not cause a problem and had delays of 9 ms., 200 ms., and 600 ms. A blast that did cause problems on March 43, 1999, was located in the same area and shot 1,294 pounds per delay. It only had delays of 9 ms. and 200 ms.

PIE Mingo Logan, Arch Coal

Deborah Hatfield has taken her most precious photos and knick knacks off her walls. Too many times, she says, things have fallen off and broken when the mine behind her home let off a blast. One morning in September of 1999, the house shuddered and pictures shook. Quickly she called the DEP Logan office. By now, she knows the number by heart.

The blasting is actually just the most recent insult from the mining. For five years, the Hatfields have suffered though one of the worst cases of subsidence from the long- wall mining under the Pie area of Pigeon Creek. The cement steps on the porch shifted, their lawn sank, numerous cracks formed and their well went dry. So it’s hard to tell which damage is coming from blasting. It certainly is annoying, though.

Patricia Bragg, the lead plaintiff on the valley fill lawsuit was dragged out of her quiet life as a housewife six years ago when her next-door-neighbor’s well went dry just as she

moved into her new house. Trish was able to get replacement wells for a couple dozen in the community. She avoided subsidence damage, and life with the mine was not overly eventful for a couple of years. Then the blasting began. Her house is older, and the roof has begun leaking. Whether the blasting has caused cracks and shifting is yet undetermined. Just recently, though, the mine offered her (as required) a subsidence survey. That way they would know how the house appeared before long wall mining began underneath.

Over Labor Day weekend, there was not one, but two washouts from the sediment ponds for the valley fill up Nighway Branch behind the Braggs and Hatfields. DEP determined that the mine had not cleaned the sediment and mud out of the ponds, and the muddy water washing off the unfinished fill had no where to go except down Nighway Branch. Bragg's home was spared, but the water went up to the second step of her neighbor's porch (the same one who lost the water six years ago).

It's getting hard to tell where the damage is going to come from next in this little community.

WHAT THE DATA SHOWS

We examined 154 blasts, of which 51 caused problems. When we went to look at the logs, the mine official gave us three sets of files for three different permits. We found that the mine sometimes blasted twice or even, a couple of times, three times within two or three minutes. The mine official said he did not know that was happening. Every one of the 12 occasions that we found resulted in a problem blast.

The Bragg house is about 500 feet southwest of a house that was used as the closest protected structure in at least half of the blasts. This is another mine that shoots a large amount per delay. Ninety of the 154 blasts were more than 600 pounds per delay. Of those, 35 caused problems. A few of the non-problem blasts were about 5,000 feet from the nearest protected structure.

But what seemed to make the most difference was timing. DEP maintains changing timing can make a significant difference. In fact, it is the one change DEP has experimented with. All but seven of those that caused problems used only two different delays. They varied: 100 ms and 42 ms, 100 ms and 9 ms, or 42 ms and 9 ms (all with 500 ms. down holes). On the other hand, 30 of the 55 larger blasts that did not cause problems had more delays, generally 9ms 42 ms and 100 ms, with 500 ms down holes.

The seismograph triggered on 16 of the problem blasts. The frequencies of 12 blasts were within the 4 Hz to 11 Hz range can amplify the shaking of a house. Only two air blasts exceeded 115 dB, however. This mine only had a couple of binder shots with one causing a problem.

VARNEY White Flame

When White Flame blasts on the mountain above Varney Grade School, there's often a palpable shudder at Judy Justice's home, about half a mile southwest of the mine. At

Jackie Keck's house, which is on the road up to the mine on the southeast side, things shake on the wall when the afternoon blast goes off. He's been considering trying to videotape the movement. Keck did some blasting while in Vietnam and other stints in the military. He thinks the solution would be to do a series of smaller blasts, like sections, instead of one big blast. That way there would be smaller amounts of compression to dissipate.

Several people have filed complaints, and Justice kept a detailed log, which often says whether the blast was light or hard. As a condition of its permit, White Flame also had to seismograph the blasts, so there is an extensive record of air blasts and frequencies.

The problematic blasts often seemed the ones with air blasts above 115 dB. Harold Ward, one of the DEP inspectors for the mine, said that over the past few years they have found complaints start when blasts go over 116 dB.

Justice believes her home may be more susceptible to the low frequency ground vibrations because it is newer and built on solid rock. Its natural frequency could be closer to that of the blasts. Indeed, the frequencies of the blasts are generally in the 4 to 11 Hz range.

WHAT THE DATA SHOWS

We examined 134 blasts, of which 63 caused problems.

Air blasts were one factor. Of the 25 problematic blasts for which there was a seismograph reading, 20 were 115 dB or greater. Of the 71 that did not generate complaints, only 16 were large enough to trigger the seismograph. Of those only five had readings of 115 dB or larger.

Amount per delay was also a problem. Of the 42 blasts of more than 700 lbs./delay, 27 generated a complaint.

The frequency readings are quite revealing. Thirty-five of the problem blasts generated a frequency reading. And 28 of those were within the 4 to 11 Hz range that OSM has found to amplify the vibrations of a house. Only 16 of the non-problem blasts generated readings, and only 4 of those were with the susceptible range.

Coal dust

The DEIS should document the numbers of non-miners who live in MTR regions and have breathing-related health problems such as asthma, and coal-dust-related disease such as black lung. The problem with coal dust is related, in part, to coal trucks (see below) and coal trains. Now that trucks are more frequently tarped, coal dust is less prone to roil off the vehicles. But, it still roils off coal trains, often time directly onto nearby homes. (Non-coal dust is still a huge problem with coal trucks, see below.)

Coal dust problems associated with coal processing plants are perhaps best documented for the town of Sylvester, W.Va.

Jury finds Massey subsidiary liable in coal dust case

By Martha Bryson Hodel, Associated Press Writer, Feb. 7, 2003

MADISON, W.Va. (AP) -- A jury on Friday ordered a Massey Energy subsidiary to pay residents of a coalfield town about \$1 million in economic damages caused by coal dust falling on nearby houses, vehicles and other property. However, jurors did not award any punitive damages.

The six-person jury deliberated about 18 1/2 hours over three days before delivering its decision against Elk Run Coal Co. in Boone County Circuit Court.

The verdict came in a lawsuit filed by more than 150 residents of Sylvester who claimed Elk Run's operation, located no more than 750 feet from some of their homes, has destroyed property values, making it impossible for them to sell their homes and move.

Residents had submitted 110 individual damage claims seeking total economic damages of at least \$3 million. Jurors awarded a total of about \$1 million, said plaintiffs' attorney Brian Glasser.

One plaintiff, Mary Miller, said Sylvester residents have been "prisoners in our homes" because of coal dust falling from Elk Run's operations.

"I don't want money. My goal is to stop the coal dust so we can live our lives again," Miller said.

Jurors found that Elk Run had created a nuisance and had negligently harmed the plaintiffs. The jury also determined that Elk Run had failed to comply with federal and state surface mining laws by failing to control air pollution or failing to protect offsite areas from damage from its operations.

However, jurors declined to award punitive damages, saying Elk Run did not act with intentional or reckless disregard.

Jurors also answered an advisory question that gives Boone County Circuit Judge Lee Schlaegel the authority to place Elk Run's operation under the court's supervision. Jurors said "yes" when asked if Elk Run is creating a nuisance that is causing damage to any of the plaintiffs.

It will be up to Schlaegel to decide whether to order court supervision of Elk Run's operation.

The trial started in October and jury deliberations began Wednesday.

Because the jury found that Elk Run had violated the federal Surfacing Mining Act, residents will ask the court to order the company to pay an estimated \$2 million in legal fees and costs associated with bringing the case to trial, Glasser said.

He said residents also will ask Schlaegel to require Elk Run to implement a dust control plan the company outlined during the trial. A hearing on the company's dust control requirements could be held within two weeks.

That plan would include covering coal conveyor belts and truck and rail loading points. The number of trucks hauling coal into the plant would drop from 35,000 to 7,000 a year. Residents also want the judge to order that the trucks carry no more than 80,000 pounds, the legal weight limit on most state roads.

"If it's good enough for court, it's good enough for them to follow," said Glasser, whose firm has been working on the case for five years.

After the verdict, Glasser told about 50 plaintiffs: "This will provide some insurance that you won't have to put up with this in the future."

Another plaintiff, Pauline Canterberry, said she was happy with the verdict but feared residents would have to continue to police Elk Run.

"I wish I can say no to that question, but they are people you just can't talk to, and they have been from day one," Canterberry said.

Massey Energy spokesman Jeff Gillenwater said he had not seen the verdict and could not comment.

Sylvester residents in the audience applauded the verdict as the jurors were excused.

Unfortunately, Sylvester residents are reporting that the problems are not yet solved. Can the DEIS possibly document the social and cultural toll associated with living in a coal-dust coated town? We repeat, the numbers of people suffering illnesses that could possibly be related to both short- and long-term exposure to coal dust should be documented in the DEIS. How can the EIS assign value for lost time and increased aggravation for people who have to clean their homes daily? Sylvester residents relate having to wash previously washed dishes *before* meals because dust has settled on them. Elderly people put their health at risk when they undertake frequent, vigorous cleanings of their homes' walls and roofs. Also related to coal dust is property devaluation. Property values for homes and other buildings before and after MTR encroached on a community should be included in the DEIS. Stress again comes into play—both young people and the elderly residents worry that their homes, for which they have worked their whole lives, will be valueless should they have to sell.

Coal trucks

The dust from the big trucks and from the traffic going into the mines is awful and the company knows it's awful, but I almost have to beg the company to put down water to settle the dust. The large supply trucks going to the mines are slowly breaking down the truss bridge, which is the community's only outlet to the main highway. --Richard Bradford (see below: "Comments from individuals.")

Much publicity and political posturing has surrounded the issue of coal trucks in southern West Virginia's coalfields. While the issue is not solely a MTR issue, it is partly. Where coal is

shipped by truck from MTR mines, the DEIS should examine associated social and cultural impacts. As with all MTR issues, the impacts on peoples' health should be quantified. Fear, worry and stress are big aspects of this issue—which take a real toll on human health. Since people driving the narrow, winding mountain roads have been killed by coal trucks, fear is not unwarranted.

Coal trucks also induce noise-related and other stresses for people who live near coal-preparation plants. For instance, people living along Rt. 65 near the Delbarton Mining Company (in a scenario repeated all around the coalfields) have to put up with intense coal truck traffic. (A Massey Energy processing facility there apparently processes both underground and MTR-mined coal.) Trucks literally rattle the houses all day, from early in the morning until late at night, interrupting sleep. Mud the trucks' tires gather while traveling on the processing plant's unpaved roads dries to dust and flies off the trucks, coating peoples' homes. Sitting on the porch is no longer an option. Garden vegetables are covered in dust. Some people have abandoned summertime back yard barbeques. A walk across the street to get one's mail is perilous, as is pulling out from one's driveway onto the road. All these factors increase stress, and therefore health problems, for coalfield residents. Properties are potentially devalued.

Also, as with all MTR issues, people suffer from disenchantment with the political process. Coalfield residents feel their voices are ignored, while coal industry lobbyists get their way. Indeed, citizens attempting to lobby their legislators on this issue have had doors closed in their faces and have had to sit through legislative hearings where legislators openly consult and consort with coal industry lobbyists. Politicians are so obviously in the pocket of the coal industry that citizens lose faith in the political process. The DEIS should attempt to examine what this means for society's future.

In a June 11, 2002 *Charleston Gazette* article by Paul Nyden, "Coal truck debaters meet at Riverside High School; Citizen arguments pit safety against jobs," Prenter Hollow, Boone County, W.Va., resident Patty Sebok is quoted as saying that most residents did not favor an increase for coal truck weight limits: "Since most southern [West Virginia] residents and the northern truckers and residents do not want a weight increase, it seems to me that the citizens are not currently controlling our state government.

"Instead of government for the people, by the people and of the people, it appears as if it's government for the coal companies, by the coal companies and of the coal companies."

Another issue that the DEIS should examine, quantify and report on is the externalized costs that taxpayers pay when coal trucks from MTR mines damage roads and bridges.

Hernshaw residents fighting coal trucks; Attorney general, delegates offer to help with effort

By Brian Bowling, *Charleston Daily Mail*, Sept. 21, 2001

Hernshaw residents tired of coal trucks breaking state laws and endangering their lives developed a two-pronged strategy for solving the problem.

One prong is Delegates A. James Manchin and Mike Caputo, both D-Marion. The other prong is Attorney General Darrell McGraw.

More than 70 residents squeezed into a basement meeting room at the Hernshaw Methodist Church Thursday evening for a 90-minute strategy session.

Randall Boyd, the resident who organized the meeting, said residents are tired of dodging speeding coal trucks, having chunks of coal and strips of recapped tires striking their vehicles and coal dust coating their houses and lungs.

"I'm not against coal mining," Boyd said. "I'm not against trucking. But it has reached an unreasonable level."

The residents agreed on several goals including a petition drive to gather 5,000 signatures supporting changes in state law to make it easier for state weight-enforcement officers to document that coal companies are deliberately overloading coal trucks.

In imitation of John Hancock signing the Declaration of Independence, Manchin signed one of the petitions in large handwriting.

"There'll be no mistake where we stand, eh Mike?" he said to Caputo.

Manchin said they attended the meeting at the behest of the United Mine Workers and assured citizens that they would back their efforts even though no one in the room could vote for them.

"Whatever it takes, we're going to try to get it done," he said.

Most of the coal trucks traveling W.Va. 94 through Hernshaw come from Massey Energy Co. mines. The union is campaigning against the mostly non-union Massey to highlight how its operations affect coalfield residents.

The residents adopted Boyd's proposal that they hold a second meeting when the Legislature is in Charleston for its October interims. While the focus will be on talking with the Kanawha County legislators, Boyd said they plan to invite all 134 delegates and senators.

Cam Lewis, head of the Division of Highways' weight-enforcement program, said he's been trying to get the authority for years to use coal loading and unloading records.

"This is the first time in years that anyone in the Legislature has shown any interest," he said.

He also suggested residents push for a tarp law that would require coal trucks to cover their loads. Currently, an enforcement officer has to actually see coal falling off a truck before he or she can cite the driver for having an unsecured load, Lewis said.

Meanwhile, McGraw told the group that his office could seek injunctions against the companies selling and buying the coal as well as the trucking companies for conspiring to break the current state law limiting trucks to 80,000 pounds.

Once a judge issues such an injunction, all the companies involved become subject to fines and contempt of court actions if they overload another truck, he said.

Before his office can act, however, it has to receive authorization from the governor.

Coal truck safety weighs on minds of area residents

By Charles Owens, Bluefield *Daily Telegraph*, August 10, 2003

WELCH - When a coal truck snagged a cable line outside of Jerry Duncan's home in the small Filbert community, the man realized that congested coal truck traffic along the narrow County Route 13 was getting a little too close for comfort.

"They hit the line that crosses the highway, and it jerked it out of the room that I had fixed for a television room," Duncan said. "It just jerked that cord out, and ended up turning it loose, and it actually jerked the videocassette recorder around. I guess it was jerked out of the little cabinet it was in."

Duncan said the coal truck dragged the cable line about 75 feet down the road just past the residence of Gary Mayor Henry Paul. The incident happened last year, and it wasn't the first time a coal truck damaged the man's home.

"The coal trucks also ripped the guttering off of the side of the house once," Duncan said. "I was laying in bed, and all of a sudden I heard a thump and a roar."

Duncan, and many of his neighbors, have fought in recent years to keep coal trucks off Route 13 between Gary and Filbert because it is difficult for vehicles and coal trucks to pass each other on the small and narrow road.

"It's too narrow for two cars to pass - not to mention a truck," Duncan said. "We don't really need those coal trucks right here. The sidewalk is actually up against the side of my house."

"Me and most of my neighbors live between four bridges that are 16-ton weight limits, and they are already cracking on both ends that connect to the highway," Neve said. "That's due to old age and years of overweight coal trucks. My concern is one day we are going to wake up and not be able to get out of here. But our main concern is for the safety of our citizens here. I would say 80 to 95 percent of the folks who live here in Filbert are all retired. This is more like a retirement village."

Neve said mud and dust from coal trucks also is a problem in the Elbert community.

Comments from individuals

Below are comments (*italics added for emphasis*) from individual coalfield residents (and a few non-coalfield residents) as given to Coal River Mountain Watch, Delbarton Environmental Community Awareness Foundation and the Ohio Valley Environmental Coalition (original copies enclosed). Many of the people who gave comments to these groups may *not* have made their own individual comments directly to EPA. Nevertheless, they wanted to share their

thoughts on MTR for inclusion in our DEIS comments. *Please pay special attention to the voices of the affected people. These words tell the story of MTR that the DEIS fails to document.*

As you read these comments, please watch for recurring themes. Fear and anger are real in the MTR regions. These emotions are not to be dismissed because they are, well, emotions. They arise from the reality of life in the shadow of MTR operations. They arise from facts--health problems, flooding, blasting, political marginalization, loss of culture. They have a real toll on society and culture in the coalfields, which the DEIS must document and address.

Blackwater spills, fear for lives

My name is Patsy Carter and I live on the Tug Fork River. As I watch the beautiful green river, it makes me feel so peaceful and relaxed, then all at once the river turns black from a Massey Coal sludge spill. I am not against coal mining, but we need to deep mine coal and mine responsibly. There is no need to destroy these mountains and streams and our children's future to mine coal.

I fear for my life and my family's life when it rains. I think of ways to run for the hills for my life, from the floods caused by strip mining. I plan to keep my family pictures close to me so that I can save them.

The strip mining is taking everything from us and our children. They will have no future and will never be able to live as true mountaineers as we have and that is part of our children's heritage.

Under this blackened, horrible life we are forced to live with, because of irresponsible mining – this has made our state “Almost Hell” – instead of – “Almost Heaven.” The people in Logan and Mingo county need to wake up.

Stop Mountaintop Removal and stop valley fill mining---stop filling the headwaters of our streams.

--Patsy Carter

Blasting damages

Monroe has lived here for 55 years and hadn't had any problems like this:

Mirrored tile fell in bathtub. Had to put up new shower wall.

Water now seeping in basement. Wall cabinet fell – broke all my dishes. (basement).

Had to buy new dishwasher and oven doors wouldn't shut.

Had to have main door repaired. Wouldn't shut enough to lock.

All doors inside house including cabinet doors won't shut good.

Ceiling tile on sun porch falling.

Floor hooved up in living room, dining room and bathroom.

Walls in 3 bedroom bowed out. Tile and mirrored tile in bathroom coming down.

Had to screw paneling back in 3 bedrooms where it came loose.

Counters unlevel now. Furniture stayed. Covered with dust. Pictures wont hang straight now.

All windows have to be screwed shut. Have white shingles on roof, which is now black.

Since '95, I have had 3 heat pumps put in.

Blocks in basement cracked. Can see outside – we put silicone in crack. Several large cracks by meter box outside.

Out building has large cracks – water now coming in cellar

--Margaret and Monroe Crouch

Flooding and fear, ruined water

(Comments deliverable at EIS public hearing in Charleston, W. Va.)

My name is Maria Pitzer. These are my children, Jessie and Chrystal Gunnoe. We are from Bobwhite in Boone County. We are against Mountaintop removal. **We are a family that lives in the constant shadow of mountaintop removal, valley fills and slurry ponds.** The mining around us has destroyed our quality of life. The blasting from the mines is a constant reminder of why our lives have changed so much. My children are not allowed to play in the water that runs through our property because the ponds run straight into it. The aquatic life in this stream is all but gone. **Catching bait or fishing is a waste of time now there isn't anything there to catch,** unless it would be some incurable disease. Who can say that, with the utmost certainty, this will not endanger my children's health? You, the panel of people who say that what the mine companies are doing is okay. I'm sorry but this has not yet been a trustworthy source.

I have lived on this same property for 35 years of my life. In the same town with the same people, that's all saying the same thing "Mountaintop removal is going to run us out of our homes and off our land like it has so many before us" and I'm beginning to wonder, are they right?

We were flooded in 2001--3 times. With each rainstorm the creek and river fills up more with rocks and debris. In 2002 we were flooded once again. The creek now runs much deeper and faster than it ever has. Then on June 16th of 2003 we were flooded horribly. The storm was what the mine company called a once-in-a-hundred year storm. I heard it was an act of God, which is like saying that the Buffalo flood was an act of God. *I remember when I was a child it rained until I was running in water to my knees in this same yard that is now gone. These catastrophic floods didn't happen then. Why are they happening now? MTR is why. I'm not sure what all the scientific tests tell you, but Common sense tells me that if you pour water onto a rock it's going to roll off, if you pour it into soil it will absorb.*

The flood on June 16th has ruined our life. The rains came and the hollow coming through our property rose so fast that we didn't have a chance to react. We were trapped in every direction. The river running by me was still clear and the hollow washing into this river was raging. I was being flooded by a stream that 3 years ago, before the stripping started, I could step over. Within 3 hours after it started raining we had lost almost everything. The water coming by me was sent in on mudslides that filled the creek and move the water closer to our house. The mudslide tore through my barn and through my orchard of fruit trees, where there was one of our dogs was tied out. The water and mud came so fast that we couldn't get our dog out. The next morning his collar was lying in the water's new path. As the water and mud continued down it filled a 5-foot culvert that had just recently been put back in from the storms of 2001. From 1981 until 2001 it was 3-foot culvert. It was part of our access. The water washed around the 5-foot culvert and took out my septic system, my bridge and all of my drive way and most of my yard. My yard now drops into a 15-foot crater. It's not safe for my children to play in their own yard. The entire path that this creek took through our property has been destroyed. There is still more mudslides in this creek's path waiting to come out. The quality of our well water has compromised to say the least. Up until the 16th we had good water but now it's terrible. We are now carrying water.

Thank God that the flood water and mud stopped 20 feet short of our house. Our house as of right now is okay. **OUR HOME IS DESTROYED!** *The life that we have always known is now non-existent. Hikes through our own land are now unsafe. We have so many slides and mining breaks. We are of Cherokee nationality and we have always been taught to live off the land. This heritage will no longer be passed down because it is being destroyed with each blast. Everyone that has a hand in allowing this mining practice to continue is allowing WV and its heritage to fade away. We the people of WV are going to pay the ultimate price. We have to live here after the coal is gone. The mine companies don't care to leave us in ruin and leave our people poor. Leaving for us would mean a complete change of lifestyles, something we are not willing to do.*

*As a family we use to love to sit on my front porch and watch a storm come and go. Now it terrifies us to see a storm come. When the rains start everyone gets scared of what going to happen next? If it's raining no one in our house sleeps. My daughter at 9-years- old is constantly worried with the mining going on around us. She seen a sticker that said, "Coal keeps the lights on." She replied by saying, "Yeah, but the trees keep our air clean. She knows what affect MTR, valley fill and ponds are having on us. Yet the college-educated scientist is still looking for the reasons we are all getting flooded so horribly, so often. Hopefully this will open up your eyes and make you see that *the community impact of MTR is simply devastation.* The rights of people in Baghdad it seems are more important than the rights of the U.S. Citizens. *I know our rights to life, liberty and the pursuit of happiness are pretty much gone, thanks to MTR and its practices.* If you can sleep with yourselves, I guess we have no choice but to stay up with the storms.*

--Maria Pitzer

Surface mining destroying Whitesville

I wanted to voice my opinion AGAINST Mountaintop Removal Valley Fill mining. This mining is NOT producing jobs, just the opposite, it is destroying jobs

The town of Whitesville is dying with each new surface mine. The surrounding communities are disappearing from the effects of Mountaintop Removal, the blasting and the flooding. The animals are running from the hills from lack of habitat, and are coming down into our homes and yards.

The blasting is destroying people's homes, and then we have floods caused by this type of mining. Our children will NOT have a place and our mountain culture and heritage is being destroyed with each mountain.

We are the poorest people and we live in the coal rich counties. Why?

The coal companies DO NOT put anything back of economic development. There is NOT one development site on the 90,000 acres destroyed in the Coal River Valley. The coalfield schools are being closed and as a matter of fact – 2 schools were closed this year, and both are within 1 mile of many Massey Energy mines. Coal is NOT giving anything back.

President Bush should come to these hollows and talk to the people who live with the effects of this mining. The recommendations in this study is pure HOGWASH!!!!!!!!!!

P.S. I live in the coalfields, born and raised.

--Lisa Henderson

Brother left homeless by floods, doesn't find wild things in the mountains anymore

My name is Jack Brown, Jr. and I live at 104 Finley Circle in Walhonda Village, which is in the Clear Creek Hollow. I am a lifetime resident of the great state of West Virginia. I was born in 1935 at Edwight, WV and my dad was a retired coal miner. I watched him die of black lung 6 years ago.

When I was a small boy living in the coal camp at Edwight, Whitesville and the surrounding areas there were thousands of coal miners working in the mines, not like today when only a few work in the mines.

I have seen the streams run black with coal dust. But not the whole tops of mountains leveled. The sludge dams they have built and the water they have polluted, coal trucks ruining the highways--for only a few real jobs? Believe me, I am not against jobs.

When they polluted in the old days, at least 10's of 1000's of coal miners had good paying jobs. Then the let down happened; the mines shut down and the coal market dried up, people left the state to find work.

But here we go again. Big coal companies have found a cheaper way to get the coal. Not like my dad got it, but by removing 1000's of mountaintop acres, filling in the little hollow streams. I used to catch spring lizards for fish bait. We don't find the wild things in the mountains like that any more.

Big coal has bought and paid for politicians they own and don't give me much of a say so in the matter. They promise me better, but big coal uses their money to change the laws to suit them.

I watched the flood waters wash over my brothers house, killing his animals and leaving him homeless. I saw what happened to Boger Hollow and Sycamore Hollow when the sludge ponds broke. I watched my friends and neighbors cry wondering what to do next. Now what did big coal do? Not our fault; an act of God; It wasn't our fault the dam busted and you cry-babies lost everything you had.

In finishing this little letter--I'm going to stay here in my little home and I'm going to fight with the big coal for a decent place to live without a polluted environment like we have now and not one law maker to go to bat for me.

I guess I'll be fighting for a long time or at least until someone does something to stop this land raping, polluting the water like big coal is doing. Oh yes, before I close, the Governor of our State will only be a one-term governor, so if you can stop the raping of my beautiful mountains and stand up to big coal. Please give me your name. I want to stand behind you and support you for governor.

--Jack Brown, Jr.

Cost of buying drinking water

I live in the city of Lexington, which is in the Bluegrass region of Central Kentucky. Most of the population of the state is here in Central Kentucky. We get our water from rivers such as the Cumberland, Kentucky, and Licking Rivers. All three of these rivers originate in the mountains

of Eastern Kentucky, where *mountaintop removal is annihilating watersheds and contaminating our water supply. We, who live here in Central Kentucky, are forced to pay for the cleanup costs of mountaintop removal through extra water purification costs that are passed on to us through our water bill.* And you can't tell me that the water's clean, even after all that processing at the water plant. It just means they have to put more chemicals in, which pollute our water further. The heavily chlorinated smell of the water around here makes me sick - *and here's another indirect cost of mountaintop removal that's passed on to me every day: I buy filtered water from the health food store, which I cannot afford.* Because of health conditions, I drink a lot of water, and these costs add up. Mountaintop removal is breaking my bank while it's ruining my state.

--Perrin de Jong

Kentucky Heartwood

P.O. Box 555

Lexington, KY 40588

Massive Ruination

Mountaintop Removal is Massive Ruination, not only to the beautiful Appalachian Mountains of West Virginia, but also to every creature whose existence depends on these mountains for their survival, from the streams covered by Valley Fills to the valleys below, where citizens dwell.

It leaves barren lands, valleys filled with debris and polluted streams and airways from rock dust and coal dust. It destroys land, citizens' possessions and their health, it leaves slurry impoundments of toxic disposal seeping into our water table.

What once started as an asset to the State of West Virginia has become a liability and the State of West Virginia taxpayers are paying for their damages.

Hazards of Mountaintop Removal

- Barren Mountains
 - Endangered Species
 - Endangered Trees
 - Flooding
 - Toxic Valley Fills
 - Air Pollution
 - Contaminated Water
 - Destruction to Citizens Property
 - Blasting Damages
 - Health Hazards
 - Damaged Highways
 - Damages Bridges
 - Unsafe Run-off ponds
 - Slurry Water Spills
 - Dammed-up Rivers
- (Not signed)

Psychological scars

My scars from mountaintop removal have been more psychological than physical.

All my life, I have been free to roam the mountains and valleys near my home. Now, I would be considered a lawbreaker and a trespasser if I were to go back to these places. The first thing a coal company does when it takes a lease is to build a gate, hire security guards (whom they dress as county deputies to intimidate the public), and install cameras to limit access. I consider this to be an infringement of my civil rights.

Sometimes a blast from a nearby mountaintop surface mine will rattle the windows and doors in my house, even to the point of hearing the sheetrock tear from the nails in the ceiling, and if the blasting gets closer the whole house may slip off the props holding it up and slide onto the railroad tracks down below.

And maybe a large boulder from the cliffs up above the house will be dislodged by the blasting and destroy the house.

I have Public Service District water, but I also have a deep well, which I hope will not be harmed by the blasting.

The dust from the big trucks and from the traffic going into the mines is awful and the company knows it's awful, but I almost have to beg the company to put down water to settle the dust.

The large supply trucks going to the mines are slowly breaking down the truss bridge, which is the community's only outlet to the main highway.

My yard is full of squirrels, rabbits, and bears that have been chased out of the mountains by the blasting of the strip miners and by the logging, which is a precursor to mountaintop removal stripping. The little animals coming out of the mountains are nothing more than skin and bones because their food source has been removed. I love to feed these little animals, but I would like to see the coal companies and logging companies pay part of the feed bill.

I would say that mountaintop removal strip mining has had a severe impact on my life and the life of my community.

--Richard A. Bradford

Delbarton, Mingo Co. citizen concerns about coal waste impoundments, coal dust, blasting, floods

1.

I, as a resident and business owner of Mingo Co., think if you build these ponds around residents you should buy us out and relocate us. Don't put people in danger. Coal is not worth our health or our lives. Put in mind first, I'm all for mining coal but do it safe and there won't be no problems. After all as a owner of a pizza place, if I don't do it right the people would put me out of operation. So lets do it right and there wont be no problem. And I wouldn't blame them.

Thank you

P.S. So do it right. That's the only way!

--Troy Columbia

2.

Coal waste impoundments are an accident just waiting to happen. I base this opinion from past experiences; Buffalo Creek, Logan County, WV. And Wolf Creek Martin County, KY.

Also I can see no possible way that the people in this valley could be evacuated in case the impoundment fails.

--William Hall

3.

I am opposed to the slurry pond impoundment. With all the rain I am afraid it will break and we will have a disaster like Buffalo Creek. *I live below the pond, in a valley, and if it breaks there will be no place to go fast enough to reach safety, lives are endangered here, also the more they blast and mine, the worse our water gets – the dust is awful.*

--Dottie Maynard

4.

We have noticed some cracking in our sidewalk. We would be very concerned if a pond was installed in our area. We don't want to see another disaster from this action. A crack in the sidewalk is very minor compared to the disaster a pond would possibly make. We can live with sidewalk cracks, hopefully that's all that will occur.

--Gary and Brenda Hunt

5.

I am against blasting and the mining underground. If they were to mine we would be forced to move yet again from the area. Slurry ponds are not a necessity around such a rural area. They will cause grief and worry for residents all around Hull Creek as well as Hull Creek Hollow. Also Mountaintop Removal causes sludge to run into streams, creating even more unsafe water for all life, not just humans. We must take care of what we've got, because if we don't do something, some heartless bastard will!

--Bobby Sturgill

6.

Structural damage, cracks all in garage floor, crack in blocks and cracks (hair line) all over driveway, one large one, caused by blasting in early morning hours. Value of the property dropped when sludge pond was approved by state. We were declared as living in high-risk zone. Noise from mine equipment day and night, and coal dust damage. Several occupants would prefer to relocate, and would like to be bought out for a fair market price and relocation expenses. New garage, cement and home improvements app. 5 yrs. old.

--Fred Smith, Delbarton

7.

I worry about the safety of my children and grandchildren. I don't think these impoundments can be made safe. The underground mining in the area could affect this impoundment. The mineral rights I own can never be recovered because of the presence of this coal waste impoundment. It has devalued my property. The added truck traffic and trains have made our lives miserable. Our well water quality has been affected as well.

--James F. Maynard

8.

Living near a coal waste impoundment, not only depreciates the value of the property for the home owner, or puts the ground water supply into question, or anxiety during heavy rain periods, thinking this may break, but it devaluates life itself.

To anyone not living in the coalfields... we are giving up our environment so you may light yours. Please think of us hillbillies, when flipping your light switch.

--Walter Young

9.

Having a coal waste impoundment within a quarter mile upstream is a very anxious situation, not to mention the dust and coal truck traffic every day, which is a very unhealthy environment to any one. Just wonder what it is doing to our underground water supply, just to put in words, its like living in exile, it has destroyed our way of life.

--Carol Young

10.

First you wonder what the coal companies are releasing into the water. If it will make you sick or cause death before your time. If it don't kill you, the next thing you worry about is if this thing burst will you be alive or if everything you work for will be destroyed. *You live in a "panic" from one minute to the next and if it rains from 2 or 3 days you get very anxious. I don't think this is any way to live!* Next you wonder what these coal companies are hiding.

--Leroy Runyon

11.

Fear, anxious, panicky, afraid – these are a few words I use to say how I feel about coal waste impoundments. When the TV or radio give a flash flood warning you wonder if you are going to be alive the next minute or not. If it is going to be another Buffalo Creek or Martin County. You wonder what the coal company are releasing from the coal impoundment in the water tables that you are drinking and why are they so secret about these coal impoundment.

--Geneva Runyon

12.

My family and I feel threatened by the presence of the impoundment that is constructed at Delbarton Mining Company. When it rains heavy, we worry what could happen if it broke. We are also concerned about how the underground mines will affect the stability of the impoundment. Also, there is more dust in the area, which is hurting people and causing breathing problems.

--Larry and Alisa Maynard

13.

Blasting shakes my foundation. Coal dust is all over everything. 18-wheelers running overloaded way too fast. Our well water is mined. The slurry pond is too dangerous for all of us that live here in this area. So many of the ponds break for different reasons. Don't want to be one of the ones to get washed away.

--Betty Wilson

14.

The fact that no one let me or my family know about the sludge pond at the mine site really upsets me. It's a scary thing to think that it could break and wash us away like other sludge ponds has done in other places and to see this in newspapers and on TV. I would really hate for this to happen in my neighborhood. *I have two children I try hard to protect. I can't protect them from this!*

--Dorothy F.

(End of comments from Delbarton residents.)

Ecocide

MTR desecrates the earth God made for us all to be good stewards of and destroys this earth that future generations will depend on to live. Whole ecosystems are being wiped out along with streams that supply water and valleys where crops can grow. This is a crime against Mother Earth and her people and affects the wellbeing of the whole planet.

--Barbara Warner

1955 Tatum Lane
Lebanon, KY 40033

Lost Tourism

I love to visit the mountains. If the mountains are gone, there will be no reason for me to visit. I do not care to visit a MTR site or a valley fill, even a "reclaimed" one. I don't think we should be replacing out natural landscapes with non-native organisms. We must stop destroying God's gifts.

Ray Barry
Lexington, KY

Holocaust

I wish to enter my comments into the record about mountain top removal.

I was born in WV and have lived here all my life except for a short period of time. I am deeply concerned about this type of mining, as it will effect the environment harshly. This will destroy streams, forestland, fish wildlife, that were created by God. We need to protect it from this certain destruction and i believe it is mankind who is in charge of this task.

I do not believe the system in place is going to do anything but allow for the destruction of the land for many years to come, maybe forever. This type of mining is too destructive and should not be allowed. The coal mining jobs will be lost to big shovel and fast moving coal trucks and nobody is going to benefit but the few on top of this action. The human society will be the looser, fisherman, hunters, fresh water drinkers, coal miners, homeowners, wildlife lovers, wood producers etc.

I make these statements not for myself but for the human beings who have to live after this holocaust takes place, if we allow it to happen. We are very short sited if we do not see what perils lies ahead for us.

Sincerely,
Larry Dadisman

912 Greendale Dr.
Charleston, WV 25302

Left out information

Why wasn't the "No Mountain Top Mining Alternative" assessed as one of the final alternatives?

A "No Action Alternative" was assessed. This alternative is unacceptable to most people (except perhaps the coal industry) and probably won't be selected.

Banning MTR is certainly not impossible. Other horrible environmental practices have been banned in the past (such as use of DDT, ozone depleting compounds, building of hazardous waste landfills in WV, construction of nuclear power plants, etc.).

Sure, the coal industry may not be able to mine coal as cheaply or quickly. Our electric bills would probably go up. Fine. That might only serve to make alternative and cleaner energy sources closer to becoming reality, sooner.

But, consider the positive impacts of the "No Mountain Top Mining Alternative." I would have like to have read about the impacts of this alternative.

In my opinion, this EIS is flawed and unacceptable, because it did not list the "No Mountain Top Mining Alternative" as one of the final alternatives.

--Mel Tyree

Disenchantment with the political process

What is the social and cultural fallout when people stop believing in the democratic process that is the foundation of our nation? Will the EIS address this?

People in the coalfields have witnessed so much corruption that it is hard from them to continue participating in the political process. Why bother? This, of course, is what the coal companies and their most attendant politicians and so-called regulators would most like to see—a silent, complacent, demoralized and politically inactive population.

Coalfield residents have seen it over and over—the coal industry's reckless disregard for laws written to protect the people and the environment. When citizens have made headway, via lawsuits and/or organized citizen action, to get laws enforced, the rules and laws are changed, and rarely, if ever, are they changed in a way that benefits coalfield residents.

Although West Virginia ranks 49th in per capita income in the country and dead last in median household income, the state ranks at the top in per capita expenditures on various forms of corporate welfare. For instance, under the administration of former coal executive Governor Cecil Underwood, the coal industry escaped more than \$400 million in Workers' Compensation Fund debt.

Coal has been the dominant player in West Virginia's political scene for more than a century. Growing campaign contributions from coal sources fueled the 1999 state legislature's resolution supporting "all methods of coal mining," a resolution that was specifically directed at mountaintop removal mining. A tax law passed in 1999 has dramatically reduced coal property

taxes, while increasing the tax rate on individual property owners. In the 2000 and 2002 state legislative session, coal's legislators killed a bill that would have set stronger enforcement mechanisms for overloaded coal trucks. Also in 2002, the coal industry received a \$2.5 million break in the amount they are required to pay for their water pollution permits.

According to the West Virginia Peoples' Election Reform Coalition (PERC), Governor Bob Wise did not receive as many coal dollars during his election campaign as the bought-and-paid for Cecil Underwood. Nonetheless, 15 percent of all contributions to Wise's inaugural ball (\$105,000 in \$5,000 donations, enough to buy 21 tables at the ball) came from coal industry sources. Total coal industry contributions to Governor Wise for his 2000 election campaign and inaugural amounted to more than a quarter of a million dollars.

The governor raised over \$70,000 at a re-election fundraiser in March of 2002 while the legislature was debating increasing the weight limits for coal trucks. Most of those contributions came from coal companies, coal haulers and land holding companies. For instance, Wise received \$20,500 from employees and spouses of Riverton Coal and its parent company RAG Coal International. This is the largest single-day giving to Governor Wise that PERC has seen from any array of individuals associated with one corporation since it began monitoring campaign financing in 1996.

The coal industry got its coal truck weight limit increase.

This is just one recent example of the coal industry's dominance of the political process (as is the DEIS, with its absurd recommendations vis a vis the science contained in the document.) How will the EIS document coalfield residents' loss of faith in the political process upon which our government is based? What weight will be given to the impacts this erosion of faith in the system has on society and culture?

Externalized costs

While an EIS is not supposed to examine economic issues, this DEIS does, but in a very skewed manner. So, if you want to bring economic studies into play, how about a little balance? The EIS should examine ALL the externalized costs associated with mountaintop removal / valley coal mining. Taxpayers are left footing the bill for massive clean up costs associated with MTR-exacerbated flooding. Taxpayers pay for MTR-related tax credits given to the coal industry, such as the billion dollar super tax credits that were supposed to create jobs, but which actually helped coal companies purchase the massive draglines that replaced human workers in droves.

Taxpayers also pay out millions when citizens have to resort to the courts to get regulatory agencies to enforce mining laws. Long-term costs of the environmental degradation associated with MTR are unknown, but should be identified and quantified.

Unreported in the draft EIS are what the current and future costs to society are in terms of:

- MTR-exacerbated flooding;
- reclaiming abandoned mine lands;
- disrupted hydrological systems;
- drinking water replacement;
- lost hardwood forests' potential lumber value;
- coal waste impoundment disaster-avoidance and/or disaster clean up;

- lost value of life-essential ecosystem services;
- lost way of life (see below: “Lost culture / way of life”)
- altered microclimates and regional climate (as an example, the destruction of millions of trees reduces the transpiration of water, which affects both humidity and air temperature; also, the loss of hundreds of thousands of acres of forests canopy--shade--and the tops of the mountains themselves also affects weather patterns);
- declining political participation as government collusion with coal industry operators decreases public faith in the democratic system.

The long, and as yet, not-fully-identified list of externalized costs bring more negative social impacts. When real production costs are foisted off onto communities, governments and the environment, the true costs of coal are suppressed. MTR companies can sell MTR-coal for a price that does not reflect the true cost, since the company is not paying those costs. This sustains the market for MTR-coal, and decreases the competitiveness of other energy sources. This delays the inevitable rise of truly cleaner, alternative energy. Coalfield residents are thus denied a chance at the jobs available in truly cleaner alternative energy sources, as well as the environmental benefits associated with truly cleaner alternative energy sources.

By allowing coal companies to externalize costs associated with MTR and thus delaying the switch to cleaner forms of energy, government is allowing global society suffer greatly, perhaps catastrophically, as global warming increases. According to a Dec. 30, 2003 *GreenBiz.com* article “Global Warming Insurance Claims Grew to \$60 Billion in 2003”:

MUNICH, Germany, Dec. 30, 2003 - Munich Re, the world's biggest re-insurance company, has attributed a sharp increase in weather-related disasters around the world to global warming.

In its latest annual report, the company -- which insures insurance companies -- puts the combined cost of this year's global natural disasters at more than \$60 billion, about \$5 billion more than the year before. Insured losses increased to about \$15 billion, a jump of \$3.5 billion from the previous year. The number of natural catastrophes recorded was around 700, roughly same level as 2002.

The report also found that more than 50,000 people were killed in natural catastrophes worldwide, almost five times as many as in the previous year. The company attributed the jump to the heat wave in Europe and the earthquake in Iran, each of which claimed more than 20,000 lives.

(As an aside not directly related to DEIS comments, it is interesting to note that global-warming-related disasters killed far more people in 2003 than terrorists did, yet the US government is opposed to taking any meaningful action to curb global warming. This observation does prompt the DEIS-related question: Are our national priorities to sustain the systems that sustain life (and thus the economy) or to make the quickest buck possible and let future generations attempt to deal with the mess?)

In an Oct. 14 *Sacramento News & Review* article, “We're Melting,” Melinda Welsh writes:

Ultimately, there is little doubt that we are creating a future in which large portions of the Earth will be flooded routinely; huge storms regularly will cost thousands of lives and cause billions of dollars in damage; mass migrations will be likely; and famines and droughts will starve and kill large numbers of people, especially those living in the Third World.

The final should itemize and quantify all current and future MTR-related externalized costs, especially from the perspective of ecological economics, rather than the increasingly outmoded, traditional field of economics (which condones industries externalizing costs onto society as a whole with no regard for ecological reality).

From the *Stanford Report*, December 1, 2000:

How much is an ecosystem worth?

It's easy to put a price tag on timber harvested from forests or copper mined from the ground, but can we put an economic value on the less tangible services ecosystems provide, such as water purification and flood control?

A group of 30 scientists, lawyers, conservationists, economists and policymakers recently came together at Stanford to discuss novel ways to market "ecosystem services" with the ultimate goal of protecting the ecosystem itself.

...ecosystem services are the processes through which natural systems support human life by purifying air and water, detoxifying and decomposing waste, renewing soil fertility, regulating climate, preventing droughts and floods, controlling pests and pollinating plants.

Watersheds may be among the most marketable of all ecosystems, according to several panelists, because they provide essential services such as water purification and flood control.

In "The Value of the World's Ecosystem Services and Natural Capital," Robert Costanza et. al (<http://csf.colorado.edu/ISEE/ecovalue/>) write:

The services of ecological systems...are critical to the functioning of the Earth's life-support system. They contribute to human welfare, both directly and indirectly, and therefore represent part of the economic value of the planet. For the entire biosphere, the value (most of which is outside the market) is estimated to be in the range of US \$16-54 trillion per year, with an average of US\$33 trillion per year. Because of the nature of the uncertainties, this must be considered a minimum estimate.

Historically, the nature and value of Earth's life support systems have largely been ignored until their disruption or loss highlighted their importance. For example, deforestation has belatedly revealed the critical role forests serve in regulating the water cycle – in particular, in mitigating floods, droughts, the erosive forces of wind and rain, and silting of dams and irrigation canals. Today, escalating impacts of human activities on forests, wetlands, and other natural ecosystems imperil the delivery of such services.

Many of the human activities that modify or destroy natural ecosystems may cause deterioration of ecological services whose value, in the long term, dwarfs the short-term economic benefits society gains from those activities.

We believe that land use and development policies should strive to achieve a balance between sustaining vital ecosystem services and pursuing the worthy short-term goals of economic development.

Short-term profit for a handful of individuals comes at great long term cost to all of us and our children and their children. Can't the EIS at least give us a total accounting of the externalized costs associated with MTR? If not, why?

Flooding

I fear for my life and my family's life when it rains. I think of ways to run for the hills for my life, from the floods caused by strip mining. I plan to keep my family pictures close to me so that I can save them. –Patsy Carter (see above: "Comments from individuals.")

As a family we use to love to sit on my front porch and watch a storm come and go. Now it terrifies us to see a storm come. When the rains start everyone gets scared of what going to happen next? If it's raining no one in our house sleeps. My daughter at 9-years-old is constantly worried with the mining going on around us... She knows what affect MTR, valley fill and ponds are having on us. Yet the college-educated scientist is still looking for the reasons we are all getting flooded so horribly, so often. –Maria Pitzer (see above: "Comments from individuals.")

Several agencies (WVDEP, OSM, ACOE and USGS) have done the studies, which support both common sense and historical fact. Denuded landscapes cannot manage water the way intact ecosystems can. Deadly disasters related to the denuding of forests (and heavier storm events linked to global warming), which can be likened to the deforestation associated with MTR, recently have been garnering headlines: mudslides after the wildfires in California; landslides and floods in the Philippines and Thailand. Remember, too, in West Virginia our national forests were established to ease the flooding that ravaged the state after it was clearcut in the early 1900s. MTR is the ultimate clearcut. Simply put, MTR exacerbates flooding.

You've got the first hand accounts from people who have commented directly on the DEIS and from individuals' comments contained within this document. You've got the news stories. You've got the studies. And you've got your politically-motivated, ecologically-ridiculous recommendations. What you don't have is documentation of the social and cultural toll of MTR-exacerbated flooding.

Since 2001, 15 people have died in floods in southern West Virginia. (This figure does *not* include the two people who died in the widespread floods of mid-2003, which occurred both outside and inside MTR regions.) Coalfield residents *know* some of the recent flooding is directly attributable to the surface disturbances and valley fills upstream from their communities. The clean up and repair costs for the floods that victims see as clearly linked to MTR (and virtually unregulated logging) has topped hundreds of millions of dollars--an externalized cost which should be reported in the EIS.

Families living near MTR operations and/or coal sludge impoundments have told us (groups like Coal River Mountain Watch and the Ohio Valley Environmental Coalition) that *every* time there is a heavy rain happening or predicted, they worry excessively. It is no rural myth that some children and their parents will sleep—well, attempt sleep—in their clothes when a heavy rain is happening or predicted. Some children feign illness if the rain comes early on a school day—they don't want to be separated from their parents should the floods come. Some people keep their car trunks packed with precious possessions, such as family photographs, just in case they should have to flee for their lives as water rises. The constant fear and lack of a feeling of security must take a toll on people's health. The anger too, at the coal companies' denial for any blame, must affect health. Families may suffer and break apart under the strain. These are social and cultural effects of MTR that the EIS must examine.

In June 2003, a deluge poured off a mountaintop removal site above the 50-year-old home of Maria Pitzer. The operation started above her home a couple of years ago.

The Charleston *Gazette* reported:

Ten miles away, Maria Pitzer had problems of her own. It had barely begun to mist rain, and suddenly the creek in front of her house rose two feet.

Of course, the creek hadn't been itself since June. That's when a heavy rain washed off a strip mine on the hill above Pitzer's 50-year-old house and slashed a ravine through her yard, 12 feet deep and 60 feet wide in spots. The floodwaters ripped her dog from his collar, and would have swept her 9-year-old daughter from Pitzer's arms if she hadn't slung the child across her shoulders and waded to safety.

Since that day, every time that creek rises the tiniest bit, Pitzer panics for herself, her husband and her two children. This time, she suspected the mine had let off water, thinking the rain might overflow the pond. She called the state Division of Environmental Protection. What's going on? she asked. The inspector said he looked at the mine ponds. Everything seemed to be working OK, no breaks.

But Pitzer has to wonder: Is this what happens when everything's working OK?

"It'll be 12:30 at night, I'm laying in bed, and it'll sound like the creek's up," Pitzer said. "So I'll get a flashlight and go out, and sure enough, it will be." Rain or no rain.

"That makes it hard to sleep. You never know what it [the creek] is going to do. Nothing in my life is normal anymore."

Pitzer still displays her homemade sign alongside the rubble-filled ravine where her yard once was: "Stop MTR [mountaintop removal]."

But, Pitzer said, "Even if they would stop the mountaintop removal right now, we'd still be dealing with it tomorrow and the day after and the day after.

“Our future is basically trashed, and it seems like nobody gives a crap.”

The increased risk of flooding in MTR regions is taking a psychological—and thus physiological— toll on people, which should be documented in the EIS.

As in almost all MTR-related social and cultural impacts presented in this document, the increased likelihood of flooding for MTR regions is probably contributing to the devaluation of personal property. This also should be documented in the EIS.

Falling property values

Sylvester resident Mary Miller has an immaculately maintained large brick home, with hardwood floors. Her property used to be valued at \$144,000 (and would be worth much more in a larger city), but she says it was recently reassessed at a \$12,000 value. This home represents the life savings of Mary and her husband and was their retirement safety net--until coal dust from a near-by Massey Energy coal processing facility began coating the town. There may be other factors that have contributed to the home's devaluation, which in themselves may be linked to the encroachment of mountaintop removal (dwindling populations, school closings).

Throughout MTR regions, homes are losing value. Blasting damages properties and ruins water supplies. Potential buyers are scared away because of fears of future flooding, worries about potential coal sludge impoundment failures, coal trucks, coal dust, groundwater and surface water contamination, lost recreational areas and lost beauty and serenity. The EIS must assess property values in communities both before and after MTR operations begin. How can the EIS make an accounting of the social and cultural costs to families whose property is losing value? What does this loss of value mean for people's current financial status and that of future heirs? What does it mean for communities and their tax revenue? How much wealth and tax-base is being lost?

Lost culture / way of life

The life that we have always known is now non-existent. Hikes through our own land are now unsafe. We have so many slides and mining breaks. We are of Cherokee nationality and we have always been taught to live off the land. This heritage will no longer be passed down because it is being destroyed with each blast. Everyone that has a hand in allowing this mining practice to continue is allowing West Virginia and its heritage to fade away. We the people of West Virginia are going to pay the ultimate price. We have to live here after the coal is gone. The mine companies don't care to leave us in ruin and leave our people poor. Leaving for us would mean a complete change of lifestyles, something we are not willing to do... I know our rights to life, liberty and the pursuit of happiness are pretty much gone, thanks to MTR and its practices. --Maria Pitzer (see above: "Comments from individuals.")

Our children will NOT have a place and our mountain culture and heritage is being destroyed with each mountain. --Lisa Henderson (see above: "Comments from individuals.")

The Appalachian Mountain Culture is, of course, unique in the world. Mountaintop removal is destroying the landscape that created and supports that culture. THE DEIS

fails miserably to document and make recommendations to abate this loss. The agencies in charge of creating a valid scientific EIS on MTR must make every effort to exhaustively study and quantify the social and cultural impacts of mountaintop removal. At the very minimum, the social and cultural effects of MTR removal listed herein must be taken into account in the final EIS. The final EIS recommendations must accurately reflect these effects and must include recommendations for actions that will relieve and eliminate the negative social and cultural impacts of mountaintop removal / valley fill coal mining.

Cultural continuity is in jeopardy because of MTR. Where MTR operators have already completely bought out/driven away entire communities, there the local culture is dead. Where culture dies, so dies the knowledge of previous generations: how to cane a chair, how to build a fiddle, how to weave a basket, how to harvest ginseng, medicinal uses of plants...the list could go on and on.

Some cultural impacts associated with MTR:

- Destruction of communities;
- Displacement of families with ancestral ties to land and community;
- Loss of free access to cemeteries (all known family cemeteries should be identified and registered);
- Loss of the connection with ancestors and future generations;
- Loss of community history;
- Loss of gardens (some have been ruined by sludge spills, some people are forced to leave the land where they once gardened) and associated loss of income (have to purchase more food);
- Loss of hunting and fishing grounds, and associated loss of income (have to purchase more food);
- Loss of harvestable understory herbs (ginseng, black cohosh, ramps, etc.) and associated loss of income-supplements and medicinal remedies;
- Loss of independence (the loss of harvested forest products (the “second” paycheck) for the family to consume could increase the need to make more money);
- Loss of traditions that instill honor and pride and self-worth;
- Loss of biological diversity and uses of that biodiversity by locals;
- Loss of soil and seedbank essential to maintaining biodiversity used by locals;
- Loss of hiking trails, rock climbing areas;
- Loss of health related to lessened physical activity;
- Loss of streams for children to play in;
- Loss of sense of spiritual connection to the land, or sense of belonging;
- Loss of renewable timber harvest and orchards and associated loss of income;
- Loss of knowledge base of traditional skills developed over generations (herbal medicine knowledge and other learned skills);
- Heightened stresses upon individuals and communities;
- Loss of property value;
- Loss of peace of mind (worry and fear and anger over contamination of water, air; falling property values; flooding; coal trucks; future);
- Loss of sleep (worry, fear, anger);

- Loss of sense of awe that comes from gazing at night sky (MTR operations can be a source of light pollution);
- Loss of quiet, which is very important for some people in terms of both their health and spiritual wellness;
- Loss of beauty and landscape as source of inspiration for art, music, prose and poetry;
- Loss of faith in democratic process / political system;
- Rise in fear of intimidation (fear of organizing via door-to-door tactics; fear of expressing one's opinion openly);
- Infringement upon right of free speech (fear of expressing one's opinion openly due to intimidation);
- Rise in health impacts for individuals and entire communities, with the possibility that some are suffering from post-traumatic-stress syndrome (noise and worry of blasting, worry and fear and anger over contamination of water, air; falling property values; flooding; coal trucks; future);
- Dashed ideals (after endlessly dealing with non-caring regulators and bought-and-paid-for politicians, peoples' beliefs in the founding principles of the nation are eroded);
- Loss of ability to insure homes and other property for flooding or blasting damage as insurers opt out of providing that coverage.

Sludge impoundments / blackwater spills

Living near a coal waste impoundment not only depreciates the value of the property for the home owner, or puts the groundwater supply into question, or anxiety during heavy rain periods, thinking this may break, but it devaluates life itself --Walter Young (see above: "Comments from individuals.")

Fear, anxious, panicky, afraid – these are a few words I use to say how I feel about coal waste impoundments. When the TV or radio gives a flash flood warning you wonder if you are going to be alive the next minute or not. If it is going to be another Buffalo Creek or Martin County. You wonder what the coal companies are releasing from the coal impoundment in the water tables that you are drinking and why are they so secret about these coal impoundments. --Geneva Runyon (see above: "Comments from individuals.")

While not all coal sludge (or coal waste) impoundments are associated with MTR, the EIS should take note of which are and examine the social and cultural effects upon coalfield residents who live near these lakes of MTR coal waste.

As with the flooding issue, fear and worry are big factors affecting people and communities. Questions that people report asking themselves include: Should I keep my kids out of the streams (due to the frequency of blackwater spills and potential for the water/streambed to be contaminated with the chemicals that are in sludge impoundments)? Will the impoundment overflow if this rain keeps up? What chemicals are leaching out of the impoundment into the groundwater and so into my well water? Should I be buying our drinking water? Are there really tanker trucks secretly dumping who-knows-what into the impoundment up there (an oft-repeated coalfield rumor)? Where would we go if there was a failure like the one in Martin County, Ky.? Could we survive a failure like that?

Situations like the ones detailed in the three news articles below are repeated frequently in MTR regions. People's concerns for their health and safety—their very lives—are justified, yet the DEIS does not report nor quantify the toll on people's health and well-being.

Coal wastes spill into waterways; Pipe ruptures at Kentucky plant; fish killed

By Roger Alford, Associated Press, April 11, 2002

PIKEVILLE - Nearly 135,000 gallons of coal wastes spilled into streams in eastern Kentucky on Wednesday after a pipe ruptured at a Pike County coal processing plant, officials said.

A plume of black water 7 to 8 miles long was responsible for a large fish kill on Long Fork and Big Creek, and forced cities along the Tug Fork of the Big Sandy River to close water intakes during the night.

"The intakes will stay off until environmental officials tell us it's OK to turn them back on," said Bill Davis, emergency service director for Mingo County.

"This is bad, but it's nothing compared to the severity of the previous one."

The previous spill, which occurred Oct. 11, 2000, involved more than 300 million gallons of coal sludge from an impoundment owned by Martin County Coal, a subsidiary of Massey Energy.

The sludge clogged streams and turned more than 60 miles of the Tug Fork black.

Joe Schmidt, spokesman for the Kentucky Department of Environmental Protection, said the latest spill was the result of a pipeline break about 11:30 p.m. Tuesday at Sidney Coal Co., also a subsidiary of Massey Energy.

The pipe carried liquid waste, primarily dust and particles washed from processed coal before shipping to power plants. The waste is a gritty, tar-like substance that also contains chemicals used in the cleaning process.

Katherine Kinney, a spokeswoman for Massey, said the company shut down the processing plant as soon as the rupture was discovered.

"We are still investigating, but we don't know why it broke," she said.

Charles Parsley, superintendent of the Kermit, W.Va., water plant, said an employee saw sludge in the river Wednesday afternoon, about 12 hours after the spill.

The brunt of the bank-to-bank plume arrived at Kermit at nightfall after a 20-mile trip from Long Fork. Other towns downstream were being notified of the spill, but it was not immediately clear whether they'd need to turn off water intakes.

Louisa and Fort Gay, W.Va., would be the next cities affected.

"We're taking precautions, but this is not considered a big coal slurry spill," Mr. Schmidt said.

Biologists and conservation officers with the Kentucky Department of Fish and Wildlife Resources were monitoring the spill.

"In the Tug Fork, it probably won't kill any fish," said Kevin Frey, a state fisheries biologist. "In Big Creek, we expect a high percentage fish kill."

Ms. Kinney said the spill doesn't pose a public health danger.

Coal slurry spills into two W.Va. streams

By the Associated Press, Oct. 9, 2002

LOGAN, W.Va. - A ruptured plastic waste pipe at a Massey Energy Co. subsidiary's preparation plant sent about 100,000 gallons of coal slurry into two Logan County streams Tuesday.

State regulators ordered Bandmill Coal Co. to shut down the preparation plant until the spill is cleaned up, said Jeff McCormick, assistant director of the Division of Mining and Reclamation.

"We're going to keep them shut down until they clean up the creek," he said.

Officials at four municipal water treatment plants downstream of the preparation plant kept a wary eye on the slow-moving 6-mile-long spill, which fouled Rum Creek and the Guyandotte River.

"If the system can't handle it, we'll have to shut it down," said Elbert Smith, a worker at Logan's water treatment plant.

Coal slurry is a mixture of water, fine coal particles and other waste from washing coal to prepare it for market.

Bandmill officials notified the Department of Environmental Protection of the spill at 8 a.m. Tuesday. Agency inspectors were at the scene Tuesday afternoon.

"Massey Energy regrets that the leak occurred. We have been working to ensure our operations operate in an environmentally sound manner," said Jeff Gillenwater, a spokesman for Massey.

"Initial reports are that the spill is larger than that from the company's Independence Coal operation of last summer," Mr. McCormick said.

In June 2001, a spill at Independence Coal's Liberty Preparation Plant near Uneeda sent more than 30,000 gallons of polluted water into Pond Creek. Independence also is a subsidiary of Massey.

Feds to inspect coal-waste site

By the Associated Press, June 09, 2002

LOUISVILLE - A federal agency has agreed to inspect a Harlan County coal-waste impoundment that officials fear is overfilled and say could create a more disastrous spill than one in Martin County two years ago.

There are homes in the path of a projected slurry flood in the case of the Harlan Cumberland Coal Co. impoundment, as well as U.S. 119 and the Cumberland River, regulators said in court papers.

"There could be loss of life; there will clearly be tremendous property damage. Domestic water supplies will be disrupted," Kentucky officials said in pleadings filed in Harlan Circuit Court last month.

In October 2000, a Martin County Coal Co. waste impoundment near Inez collapsed, spilling 300 million gallons of black sludge through underground mine works. No one was killed or injured, but the sludge spread to neighboring property and spilled into nearby waterways.

Even though the state has determined the impoundment violates its permit by being deeper than allowed, regulators have been barred by the court from taking action.

As a result, the federal Office of Surface Mining has agreed to inspect the impoundment and to take "appropriate enforcement action" if necessary, the agency's Lexington field office director, William Kovacic, said in a letter Friday to Kentucky officials.

Environmentalists said OSM should have acted sooner - as soon as the state was enjoined by the court on May 20 from blocking further pumping into the 64-acre impoundment.

"This really calls into question at this point the level of commitment OSM has under this administration to implementing the law," said Tom FitzGerald, director of the Kentucky Resources Council, an environmental group that joined with Kentuckians for the Commonwealth in raising concerns about the safety of the impoundment.

Although the federal inspection is pending, OSM representatives already have visited the site with their counterparts from the state Department for Surface Mining Reclamation & Enforcement and the federal Mine Safety and Health Administration.

Mr. Kovacic wrote to Mr. FitzGerald last week that information currently available to OSM "does not establish an imminent danger" from the pond.

In an interview, Mr. Kovacic said, "We are on a very prudent, legally defensible course of action." As long as the state does not object during a five-day appeal period expected to start next week, the inspection will occur soon afterward, he said.

The government reports that have come out since the Martin County disaster have not eased peoples' fears. Instead, they have confirmed peoples' suspicions: Another disaster could happen at any time.

Report: Impoundments could fail; Federal oversight called for

By Nancy Zuckerbrod, the Associated Press, Oct. 13, 2001

WASHINGTON - The same sort of thick black sludge that covered Inez, Ky., a year ago could wreak havoc on other communities if the government doesn't take steps to prevent coal waste storage systems from failing, according to a report released Friday.

The federal government must have more oversight authority of the roughly 600 coal waste impoundments in the country, according to the National Research Council report.

After coal is washed, a mixture of coal dust, clay and dirt often is pumped into an impoundment and allowed to settle. In Appalachia, coal companies typically use an area's natural topography to form the storage basin for the waste.

The report said the failure of the basin area is a leading cause of impoundment accidents, but federal oversight of basins "has been less than rigorous." The researchers said federal agencies need to be given "clear authority to review basin design."

In Inez last year, Martin County Coal Corp. collected dirt and particles washed from freshly mined coal in a mountaintop sludge pond, but the waste escaped through a crack in the bottom of that impoundment. The 250 million gallons of sludge then flowed into an underground mine and rushed off the mountainside, covering residential property and killing fish in creeks.

The report said the government should set standards for mine surveying and mapping to ensure other impoundments are not established next to old mines, which can lead to structural problems at impoundments.

The researchers said in many instances old maps are inaccurate or missing. For example, a fire destroyed at least 30,000 mine maps at a state government building in Kentucky in 1948.

But Tom FitzGerald, executive director of the Kentucky Resources Council, said it is not enough to recommend that the government create new mapping standards. He said the council also should have recommended that coal companies be required to drill into the ground in areas where they want to construct impoundments to make sure there are no mines there.

"In all cases, you must suspect there may be problems with the accuracy of a map unless you can validate it," Mr. FitzGerald said.

Bruce Watzman, vice president for safety and health at the National Mining Association, said companies frequently use radar and seismic monitoring to check for underground mines.

"It's not as if the industry is fixed in time and not using any of these technologies," he said.

The report also recommended that the government come up with a coordinated plan for assessing the risk of impoundment failures, and it said more research into alternative waste disposal technologies is needed.

Mr. FitzGerald said he was disappointed that the researchers did not spend more time considering alternatives. "They should have undertaken that assessment themselves rather than calling for more study," he said. Alternatives to impoundments exist but coal companies steer away from them because they are more costly, he said.

Mr. Watzman disagreed, adding that there are technological and geological reasons coal companies often turn to impoundments.

"You can't say that there should be no more impoundments because that it isn't always viable," Mr. Watzman said.

But doing away with impoundments would make many coal country residents feel safer, said Nina McCoy, a biology teacher who lives a few miles downstream from the Inez impoundment.

"I do think they are time bombs," Ms. McCoy said. The waste "doesn't need to be kept in a water dam that is above people's houses."

Ms. McCoy said she was disappointed the research council didn't look into water quality issues related to slurry spills. The report did recommend that researchers conduct an analysis of the chemical makeup of slurry, so authorities know what kind of contaminants may be in the water supply.

States with impoundments include Kentucky, West Virginia, Tennessee, Pennsylvania, Virginia, Ohio, Alabama and Mississippi, according to the Mine Safety and Health Administration.

The most notorious coal waste impoundment collapse occurred in Buffalo Creek, W.Va., in 1972. That accident killed 125 people and injured more than 1,000, the council's report said.

Reps. Hal Rogers, R-Ky., and Nick Rahall, D-W.Va., pushed for the National Research Council study. Both said they would follow up to ensure the report's recommendations are implemented.

Implementation of the NRC recommendations, enforcement of existing mining laws...these are things citizens still await. We repeat: While not all coal sludge (or coal waste) impoundments are associated with MTR, the EIS should take note of which are and examine the social and cultural effects upon coalfield residents who live near these lakes of sludge.

Stress / Fear / Health

Are people living near MTR operations in fact suffering post-traumatic-stress syndrome? At the very least, they are suffering from unrelenting stresses of all sorts that take a real toll on personal, familial and community health. Some of these stresses have been detailed above: the noise, dust and damage from blasting; fear of traveling roads dominated by a long a parade of coal trucks; fears about health deterioration caused by dust, blasting noise, numerous stresses; worry and fear about the next disaster; fear about air and water and air pollution; aggravation and inconvenience of lost wells; the utter frustration and anger with most regulators and corrupt politicians...the list goes on. The EIS should examine the MTR-related toll on personal, familial and community health.

Conclusion

The preparers of the DEIS have not done their job. We repeat: The agencies in charge of creating a valid scientific EIS on MTR must make every effort to exhaustively study and quantify the social and cultural impacts of mountaintop removal. At the very minimum, the social and *current* cultural effects of MTR removal listed herein must be taken into account in the EIS. The EIS recommendations must accurately reflect these effects and must include recommendations for actions that will relieve and eliminate the negative social and cultural impacts of mountaintop removal / valley fill coal mining.