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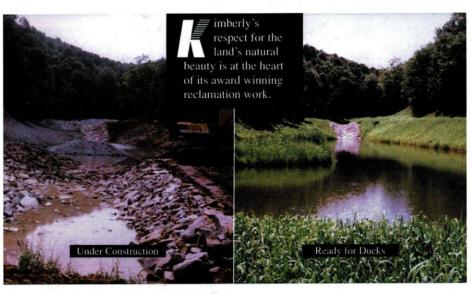
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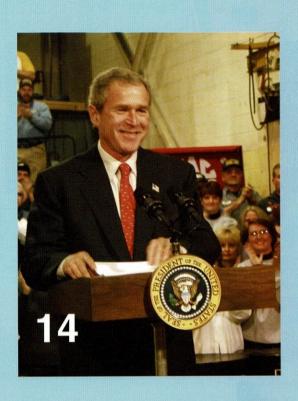
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Green Lands is published quarterly by West Virginia Coal Association with offices at NorthGate Business Park, P.O. Box 3923, Charleston, WV 25339 (304) 346-5318, or (304) 342-4153, FAX 346-5310 E-Mail: wvcoal@wvcoal.com, website: www.wvcoal.com



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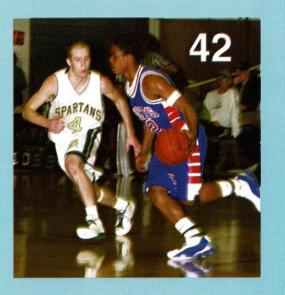
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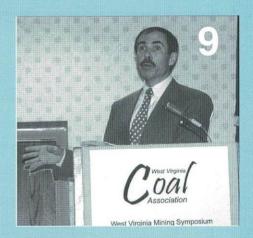
Total Maximum Daily Loads and Anti-degradation











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Mingo County's Twisted Gun Golf Course is scheduled for play this summer. Story on page 20. President Bush visits Cecil I. Walker Machinery Company in January. Story on page 14.

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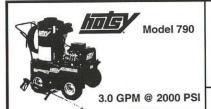
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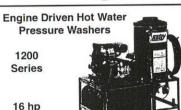
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This year the Symposium started off with concurrent workshops dealing with Health and Safety and Water

Quality, which were well attended.

Ken Woodring, chairman of the West Virginia Coal Association, welcomed the group on Thursday morning. In his comments, he emphasized the importance of reclamation. "We need to put the land back better than we found it," he said.

Woodring also noted that the coal industry is getting support, where sometimes it had been scarce.

"In a visit Senator Rockefeller made to the southern part of the state last fall, primarily to the Mingo County area," Woodring said, "he was very impressed with what he had seen. He even said, and I'll quote, 'Without mountaintop removal, I don't think that we could have industrial development in southern West Virginia.""

Woodring then introduced West Virginia Governor Bob Wise who made comments on numerous coal-related issues. He stated that the subject of coal trucks was not in his State of the State because "rather than rushing out and announcing a piece of legislation, we need to be doing some consensus building."

Wise also felt that there would be legislation passed on the trucking issue.

"I believe that this will be a combination of increasing weight limits, but also increased safety

West Virginia
Governor Bob Wise
Addresses Audience at
the
29th Annual
West Virginia
Mining Symposium

requirements," he said, "but you also have to be willing to accept greater enforcement. There is a case to be made for increased weight limits. If the truck is being driven safely, and the equipment is in good operation, then it is not the hazard that some say it is."

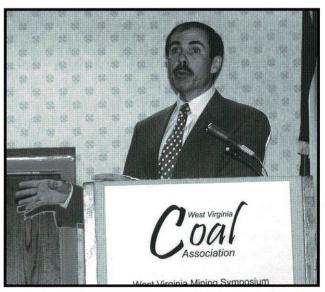
Touching on West Virginia's

energy package, noting the importance of exporting electricity to other states, the Governor talked about mine safety and getting more resources to improve mine safety.

"That is why I asked that the budget be increased by 25 percent or roughly \$1 million," he said, referring to his State of the State speech.

(See Wise on page 12)

West Virginia Governor Bob Wise spoke during the 29th Annual Mining Symposium held in Charleston on January 9-11. During his comments he noted that "coal is a reliable fuel."



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CO JECONIN MININ

Simmons Fork Surface Mine Captures Barton B. Lay Milestone of Safety Award

Among the 24 West Virginia coal operations honored for having the most outstanding safety programs in 2001, a surface mine was named the best of the best during the 29th Annual Mining Symposium in Charleston on January 9-11, 2002.

The top and most prestigious safety award, the "Barton B. Lay Milestones of Safety Award," was presented to Simmons Fork Mining, Inc., in Wyoming County, for its outstanding safety record at its Simmons Fork Surface Mine.

The annual "Barton B. Lay Milestones of Safety Award" is named for the former Director of the Department of Mines.

"We are very honored to receive such recognition," said Mark Weaver, president of Simmons Fork and parent company, Pioneer Fuel. "This is a great accomplishment for our employees."

Selection of the companies to receive the safety awards are based on the following criteria:

1) mine must be fatal free for the award period (Oct. 2000-Oct. 2001); 2) it's safety program; 3) cooperative efforts and; 4) its violation history; 5) and must be nominated by its local MHS&T inspector.

The "Mountaineer Guardian" awards were presented at a MHS&T.



Simmons Fork Mining Inc., in Wyoming County, was presented the most prestigious safety award, the "Barton B. Lay Milestones of Safety Award," during the 29th Annual Mining Symposium in January. Pictured are (I-r): Doug Conaway, director of West Virginia Office of Miners' Health, Safety & Training; Mark Weaver; Rick Wriston; Ronnie Hopkins; Eddie Miller; Ken Woodring, West Virginia Coal Association chairman; Chris Hamilton, West Virginia Coal Association senior vice president; Randy Hansford; and Chuck Burggraf.

special luncheon during the 29th West Virginia Mining Symposium. The West Virginia Coal Association and the West Virginia Office of Miners' Health, Safety & Training cosponsor the program.

"It is fitting that with management and labor working together, the coal industry can continue to strive to be within striking distance of the ultimate goal of zero fatalities," said Doug Conaway, director of MHS&T.

And Simmons Fork employees are hitting that ultimate goal by never having a fatality or a reportable accident since it began operation in June 1997.

"Our vision statement says that we want 'everyone to return home after every workday injury free.' And, I think our employees realize the importance of that vision," Weaver said. "Safety must be considered

(See Simmons Fork on page 53)

Mountaineer Guardian Awards

Awards Presented during the 29th Annual West Virginia Mining Symposium held in Charleston on January 9-11, 2002

COMPANY	COUNTY	FACILITY	INSPECTOR
Alex Energy, Inc.	Nicholas	No. 1 Surface	Mike Armentrout
Alex Energy, Inc.	Logan	North Surface	James Mathews
Cannelton Inc.	Kanawha	Lady Dunn Prep Plant	Robert L. Cozart
Consolidation Coal Co.	McDowell	Amonate Prep Plant	Milton Smallwood
Double H Mining Co., Inc.	Grant	Stoney River	Bill Tankersley
Eastern Associated Coal Co.	Monongalia	Federal No. 2	Albert Lecharia
Eastern Associated Coal Co.	Boone	Harris No. 1	Larry McKnight
Elk Run Coal Co., Inc.	Raleigh	Laurel Alma	Clark Gillian
Evergreen Mining Co.	Webster	Cowen	John J. Meadows
Fola Coal Co., Inc.	Clay	No. 1 Surface	Mike Armentrout
Griffith Construction	McDowell, Wyoming	(Gilbert Witt
Hobet Mining, Inc.	Boone	H-23 Prep Plant	Randall Bailey
J. F. Allen Co.	Randolph	J. F. Allen Quarry	John J. Meadows
Keystone Service Industries, Inc.	McDowell	Keystone Prep Plant	Steve Womack
Kingston Mining	Fayette	Glen Alum Mine	Jerry Pauley
M. & J. Coal Co.	Harrison	Flag Run No.1	Albert Lecharia
Naomi Trucking	Nicholas, Clay, Green	brier	Lloyd Collins,
			Terry Casto and
			Mike Armentrout
Patriot Mining	Monongalia	Patriot Metz Surface	John Lucas
Pen Coal Corp.	Wayne	No. 6	Richard Boggess
Postar Coal Co., Inc.	McDowell	Postar No. 1	Milton Smallwood
Premium Energy, Inc.	Mingo	No. 2 Surface	James E. Miller
Pritchard Mining Co.	Kanawha	Lens Creek No. 2 Surface	Terry L. Keen
Rockspring Development, Inc.	Wayne	Camp Creek Prep Plant	John Griffith
Simmons Fork Mining, Inc.	Wyoming	Simmons Fork Surface	James E. Miller

Wise from page 9

The topic of flooding in southern West Virginia was mentioned as well by the Governor as he thanked coal companies for assisting during the flood cleanup.

"I can't think of a better application of the positive uses of mountaintop mining that has taken place with the housing," he said. "We have housing now, both temporary and what will be permanent, on mountaintop sites in southern West Virginia.

"Let me tell you where I stood 25 years ago and how I formed my opinion of mountaintop mining. I was in Williamson following the floods where I spent a year doing flood relief efforts. One of the main areas we worked on was trying to find land for housing. Only about 4 percent of the land in Mingo County (suitable for housing) is out of the flood plain. We looked frantically for places to put housing and we couldn't find any. If somebody would have given us 50 acres of flat land out of a flood plain, that would have been a God send. That is why I have always said 'mountaintop mining has application in West Virginia."

When asked during a question and answer period about how to present a better image for coal, the Governor replied "I think the message still has to be "coal is a reliable fuel."



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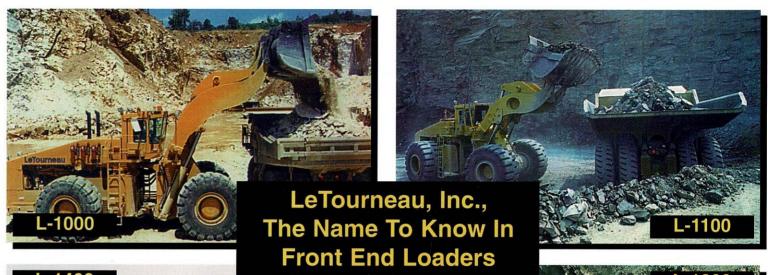
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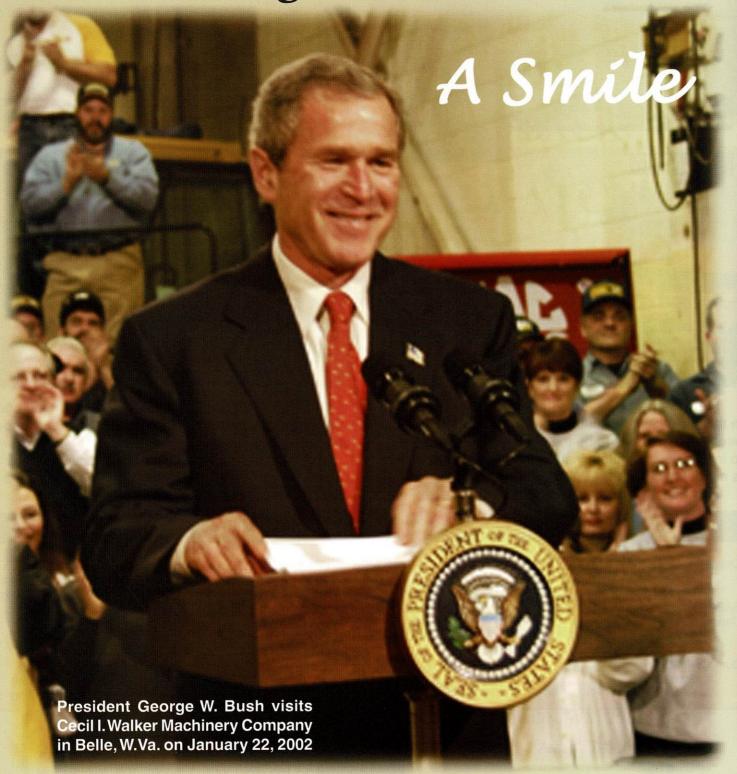
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High Lift	16 yd ³ (12.00 m ³)	20 yd ³ (15.29 m ³)	26 yd ³ (19.9 m ³)	31 yd ³ (23.7 m ³)		
Dump Heights						
Standard	18'-5" (5.61 m)	18'-10" (5.74 m)	21'-6" (6.55 m)	22'-0" (6.71 m)		
High Lift	19'-10" (6.04 m)	20'-0" (6.10 m)	23'-6" (7.16 m)	24'-0" (7.32 m)		



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Giving Coal and West Virginia



President George W. Bush Comes to West Virginia

A slight chill accompanied the sunny day in January. Cecil I. Walker Company Employees were thankful it was a little warmer then normal for that time of year, as they anxiously waited outside to pass through security.

Cameras dangled from wrists and excitement generated conversations. Anticipation of seeing the world's most powerful man was evident with questions such as "Have you ever seen the President?"

Ecstatic Walker employees greeted President Bush when he stopped with Congresswoman, Shelley Moore Capito (W.Va. - 2nd District), at the company's location in Belle, W.Va.

January 22, 2002 made the fourth time President George W. Bush traveled to West Virginia since May 2000.

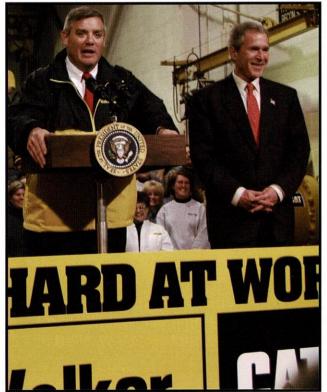
President Bush flew into Charleston's Yeager Airport and spoke to a crowd of about 3,000 at the Air National Guard Armory. He then drove to Walker Machinery and toured the facility, before giving a 40-minute speech to company employees and friends.

The President was interrupted 21 times by applause from the crowd of 400 as he talked about improving the economy, increasing jobs and producing coal in West Virginia and across the nation.

The loudest applause may have been when he said "We need to use coal and we've got a lot of it!"

The President also spoke about his energy

Steve Walker, president of Cecil I. Walker Machinery Company, introduces President George W. Bush during the President's stop at the company's operation in Belle, W.Va. on January 22nd.



policy and how important it is to the nation's national security as well as creating jobs.

"The job of the government is to create an environment where more people are willing to hire more workers," he said. "A better work force means America is more productive. I want the Walkers to have more money to reinvest in their business I want the Walkers to have more cash flow so they can upgrade the equipment the workers use here.

"This nation needs an energy policy," he said. "Jobs depend on affordable energy. If there is a price fight or disruption in supply, people may not have work. It is also in our nation's national security interests that we become less dependent on foreign sources of energy. We need more supply. We need to use coal and we've got a lot of it."

After speaking on his energy policy, the President concluded with a message of unity and brotherhood that will keep America together.

"I'm the President of everybody, not just a few. I'm the President of people whether they voted for me or not. I'm the President of union and nonunion," he said. "I'm the President of Republicans and Democrats and Independents.

"If you're interested in fighting evil, tell your children you love them every day this year. If you want to fight off evil, get involved in the school system and make it as good as it can be. Teach a child to read. If you want to fight evil, go to your church or synagogue or mosque and start a program that will love a neighbor. If you want to fight evil, go see a shut-in and say, what can I do to help. You see, the great character of America is not defined necessarily by our military actions, although that counts. The great character of America is defined by millions of acts of decency and kindness that take place every day all across our country. The evil ones struck, but out of this will come incredible good. The world will be more peaceful when we accomplish our mission.

"Thank you for giving me the chance to come, and thank you for giving me the chance to be your President."

After his speech, the President flew back to Washington, D.C.

Coal and Energy Security: The Solution for a Persistent Problem

When President George W. Bush visited the Mountain State for the fourth time Americans will never on January 22, 2002, he brought with him two basic messages: the continued vigilance against terrorist organizations in order to secure domestic liberty and the need to mine coal to assure the continued availability of energy to the

American people. These two themes, national security and available energy are, as the President realizes, connected to one another.

"This nation needs an energy policy," President George W. Bush told Cecil I. Walker Company employees. "And it's also in our nation's national security interests that we become less dependent on foreign sources of energy. And we're dependent. We're dependent on energy from some parts of the world where sometimes they like us and sometimes they don't and we need to do something about it."

Coal should be an important part of Bush's energy policy - after all, it makes up 95 percent of the nation's fossil fuel supply.

For years, our leaders and lawmakers have watched as the nation's need for energy increased substantially, while at the same time restrictive environmental policies hobbled the country's ability to produce it. This irresponsible conduct culminated in a situation that may very well portend the future of the nation- the California "energy crisis."

As you will recall, California was gripped by a shortage of electricity. All over the state, business, industrial and residential customers

went without power for hours at a time as the state and its electric utilities struggled desperately to experience an energy prevent the collapse of the state's entire energy grid. The impacts of the "shortcrisis, but we can have age" were spectacular, as California and its Silicon an energy supply crisis. Valley are the "seats" of the new, digital economy.

> suffered tremendously at the hands of this "energy crisis": Estimated loss of production—\$75-100 million. One large electricity-dependent digital company estimated that each hour of the electrical shutdown cost the company \$1 million in lost production.

This new economy

The California situation reveals two things: First, that the "new" economy (people sitting behind computers all day entering information and directing the Internet) is absolutely worthless without the "old" economy ("hard" producing industries such as coal mining). Second, for those of us who work in the energy sector, it gave credence to what we have known for a long time— Americans will never experience an energy crisis, but we can have an energy supply crisis.

The Bush Administration's energy policy notes that the "U.S. dependence on foreign oil has jumped to 56 percent – the highest percentage ever. In 1973, during the oil crisis, U.S. dependence on foreign oil was only at 36 percent."

The thought of a nation with 507 billion tons of coal reserves and the possibility of having an energy crisis is preposterous. What really occurred in California, and the situation that may attenuate as the demand for electricity continues

to increase, is an energy supply crisis- the country's energyproducing industries cannot feasibly operate in order to provide the nation with the needed energy. Just consider our situation in West Virginia. As news channels were broadcasting the latest stories from energy-starved California, mine operators were struggling to get a permit, or trying to make their operation comply with the AOC policy, or redesigning a proposed mine to conform with the 250-acre threshold. Its simply nonsense that while one side of the country needs electricity, the other is smothering in a thick mass of red tape, pointless environmental policy and litigation initiated by growth opponents that has only one real purpose, to end coal mining in Appalachia.

"Coal generates over 50 percent of America's electric supply and plays an important role in meeting the electric needs of the New Economy," stated Bush's Energy policy. "Nine out of every 10 tons of coal consumed in the U.S. is for electricity generation. The U.S. holds over 25 percent of the world's coal reserves and has almost 250 years worth of supply at current production rates."

So, how is energy linked to National Security and how do we "fix" the Nation's energy situation?

Reliance upon imported energy, in this case, oil, has

taken a great toll on the United States. Our continued dependence on foreign oil has racked-up our trade deficit, it has placed our military men and women in harm's way and it has cost taxpayers millions of dollars, as the movement of oil from the middle east was subsidized by military preparedness.

Consider these facts:

- Oil consumption has increased by 14 percent to its highest level in U.S. history;
- Domestic oil production has declined by 18 percent, reaching its lowest level since 1954;
- Imports of foreign oil have

increased by 34 percent to their highest level ever.

• The U.S. bill for foreign oil has more than doubled from 2000 – during the first six months of that year, the United States spent \$56 billion on foreign oil, up from \$26 billion in the first six months of 1999.

While we can't necessarily use coal in our gas tanks, we can strive to lessen our dependence on foreign resources, whether it be through renewed oil production domestically or revitalizing the nation's beleaguered coal industry.

(See Energy on page 53)

West Virginia Coal Should Be Sitting in the "Catbird Seat" with the Nation's Energy

While Washington has taken the "first steps" to establishing America' "Energy Security," the state must make changes as well. West Virginia Governor Bob Wise and the state's Division of Environmental Protection Cabinet Secretary Mike Callaghan have made progress, but much work remains.

Will West Virginia be a part of the Bush Administration's effort to become

energy self sufficient? The state needs to get a hold of its mining regulatory program and implement real, measurable changes. Better coordination of the various regulatory regimes and clear, consistent and concise policies and procedures are a must.

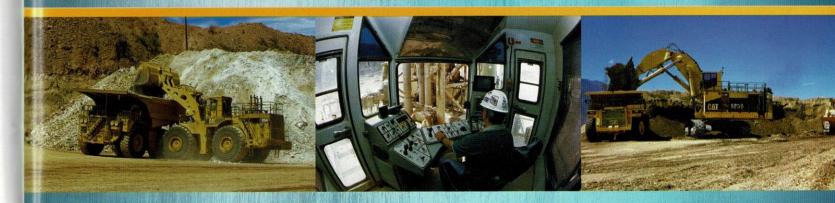
Not everything that needs changed falls to government.
The coal industry must

(See W. Va. Coal on page 45)

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Twisted Gun Hits a Hole-In-One

Mingo Logan, Premium Energy and Pocahontas Land presented Callaghan Award for Outstanding Reclamation

A project involving three companies and concern for community recreation, has finally paid off after six years of hard work.

During the 29th Annual West Virginia Mining Symposium, held in Charleston on January 9-11, Mingo Logan Coal Company, Premium Energy, Inc. and Pocahontas Land Corporation were recognized as the "best of the best" in reclamation for the year 2001.

A total of 15 West Virginia companies and contractors received excellence in reclamation awards during the ceremony.

However, the top award, the David C. Callaghan Award, was presented to Mingo Logan and Premium Energy, (contractor), who in conjunction with **Pocahontas Land Corporation** (landowner), created the Twisted Gun Golf Course in Mingo County.

"This operation demonstrates the highest standards in post-mining land use which we have come to expect from the West Virginia coal industry," said Ben Greene chairman of the West Virginia Coal Association.

The Callaghan Award is named after David Callaghan, former director of the State



Mingo Logan, Premium Energy and Pocahontas Land Corp., were presented the David C. Callaghan Award during the 29th Annual West Virginia Mining Symposium in Charleston in January. Pictured are (I-r): Wayne Hawley, Mingo Logan; Larry Damron, Mingo Logan; Danny Smith, Pocahontas Land; Mike Rowlands, Arch Coal; Jim Mullins, Mingo Logan; Kevin Nicewonder, Premium Energy; Steve Capelli, WVCA 1st Vice Chairman; David C. Callaghan; Kenny Nicewonder, Premium Energy; Don Nicewonder, Premium Energy; Mike Callaghan, Cabinet Secretary, West Virginia Department of Environmental Protection: Dave Fletcher, Premium Energy; Cliff Frye, Mingo Logan; and Tom Satterfield, DEP Inspector.

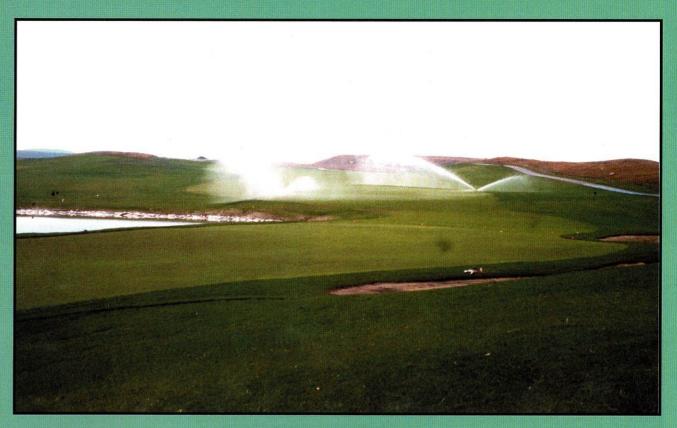
Department of Natural Resources and the State Division of Environmental Protection.

cooperation with the West Virginia Department of Environmental Protection, the Reclamation Awards are presented annually to companies that have outstanding achievements in mine development and construction, land reclamation, water quality enhancement and

community involvement. To be considered for this award, a company must be nominated by Sponsored by the WVCA in its local DEP inspector.

> An estimated 120 million cubic yards of overburden material have been moved during the life of this operation. That does not even include the additional yardage that was rehandled in order to construct

(See Twisted Gun on page 22)



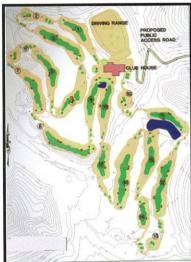
Twisted Gun Golf Course under construction in Mingo County.

In Mingo County, for the removal of 120 million cubic yards of material to create the Twisted Gun Golf Course. This cooperative effort, which includes Mingo Logan, Premium Energy and Pocahontas Land Corporation, began in 1995, covering 749 acres of permitted area. A multi-seam, multi-production operation with an approved contour variance, this site has now been transformed into a par 72, 7,010 yard, 18 hole championship golf course ready for play in the summer of 2002.

Twisted Gun from page 20

the rough contour of the golf course and the alternate material used in the shaping of the course.

A very unique feature in the golf course installation was the use of coal refuse for construction grade material. This material, generated by Mingo Logan's Black Bear Preparation Plant facility was readily



available and provided an excellent alternative material for the shaping and contouring of the fairways during the landscaping process. Much of the excess spoil generated from the mining operation contained stones too large for detailed contouring. The coal refuse material's graduation size and consistency also provided an excellent medium for installing the golf course's extensive irrigation system.

Golf course architects

Mark and Don Nicewonder are

(Top left) A drawing depicts the Twisted Gun Golf Course 18-hole layout and (Bottom) an aerial view of the Golf Course under construction, located in Mingo County. The course is scheduled to be open to the public in late summer of this year.



credited with the design. The course's upper level (the front 9 holes, plus the 18th hole) is constructed within a backfill area. Its lower level (holes 11 through 16) is built on a valley fill. The transition holes are the 10th, which goes to the lower level, and the 17th, which returns to the upper level.

West Virginia Governor
Bob Wise, during his address at
the Mining Symposium,
referred to the Twisted Gun
Golf Course as "one of the
premier demonstrations of how
you can use mountaintop
mining."

The three companies, out of concern for the recreational needs of the surrounding area, jointly agreed to pursue the development of a golf course as the mine's post-mining land use.

The course is designed to be a new public course that will offer recreational opportunity for the people in southern West Virginia. The par 72, 18-hole links-style golf course, encompasses approximately 330 acres and is a total of 6,010 yards from the white tees.

"This project illustrates the many benefits that can be derived from responsible mountaintop mining," said Jim Mullins, General Manager.

(See Twisted Gun on page 44)

2001 Reclamation Award Recipients

Awards Presented during the 29th Annual West Virginia Mining Symposium held in Charleston on January 9-11, 2002

COMPANY	COUNTY	INSPECTOR
American Bituminous Power Partners	Marion	Roger Henry
Arch of West Virginia - Wylo	Logan	Marvin Journell
Chicopee Coal Co., Inc.	Nicholas	Cam Ford
Coal-Mac, Inc.	Mingo	Tom Satterfield
Coastal Coal - WV, LLC	Greenbrier	Mark Foley
Eastern Arrow Corp., Inc.	Kanawha	Ron Sheets
Howard Concrete Pumping Co., Inc.	Monongalia	Dave Pybus
Kanawha River Terminals, Inc.	Wayne	Aaron Thompson
Lexie Coal Corp.	Braxton	Keith Evans
Mingo Logan Coal Co.	Mingo	Tom Satterfield
Patriot Mining Co., Inc.	Monongalia	Steve Ball
Pen Coal Corp.	Wayne	Aaron Thompson
Premium Energy, Inc.	Mingo	Tom Satterfield
Stanley Industries, Inc.	Tucker	Ed Deem
Three-C Mining, Inc.	Upshur	Joe Altieri

In Monongalia County, presented by Ducks Unlimited for outstanding accomplishments in the creation and preservation of wetlands wildlife habitat.



Pictured are (I-r): Steve Ball, DEP Inspector; Rusty Eaton, president, West Virginia Chapter, Ducks Unlimited; and Brownie Stuart.



West Virginia Wildlife Award

Arch of West Virginia

In Logan County, presented by the West Virginia Chapter of the National Wild Turkey Federation for outstanding accomplishments in the establishments and enhancement of overall wildlife habitat, with special emphasis on wild turkeys.

Pictured are (I-r): Marvin Journell, DEP Inspector; Mike Day; Jim Constant; Harold Davis, president, West Virginia Chapter, National Wild Turkey Federation; Danny Robison; James Plumley; and Ken Hodak.





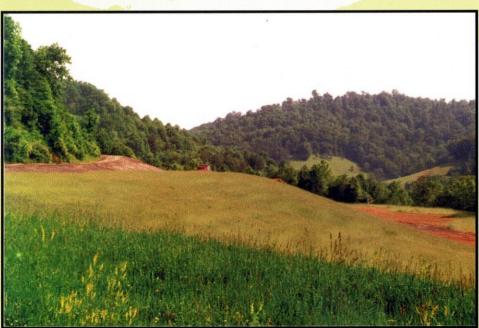
S

American Bituminous Power Partners



In Marion County, for utilizing alkaline ash to enhance the stabilization and reclamation of abandon refuse piles. As the refuse is removed and burned at the Grant Town power plant, fluidized bed alkaline ash is returned to the site for complete revegetation and water quality improvement.

Pictured are (I-r): Herb Thompson; Brad Christoper; Steve Capelli, WVCA First Vice Chairman; Roger Henry, DEP Inspector; and Mike Callaghan, Cabinet Secretary, Department of Environmental Protection.



Chicopee Coal Company



trolled placement of materials, while recovering the Coalburg coal seam with highwall mining technology. Bench control drainage and contemporaneous reclamation complements this rugged area.

In Nicholas County, for the

elimination of more than

10,000 feet of old, abandon

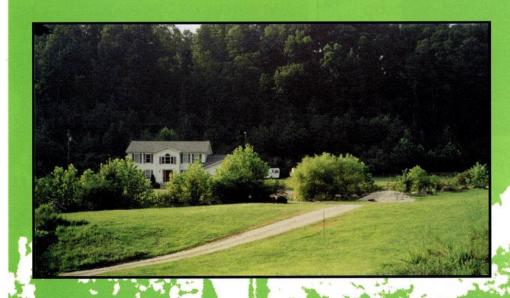
highwall utilizing con-

Pictured are (I-r):
Barry Mullens; Paul
Moran; Steve Capelli,
WVCA First Vice
Chairman; Cam
Ford, DEP Inspector;
and Mike Callaghan,
Cabinet Secretary,
Department of Environmental Protection.



Corporation

In Wayne County, for innovative use of the Bull Branch surface operation. The access road is now a private drive, the sediment control facility is now a fishing hole with the valley fill area being utilized by a modern contemporary two story residential dwelling. A truly beneficial post mining use.



Pictured are (I-r): Aaron Thompson, DEP Inspector; Monte Hieb; Steve Capelli, WVCA First Vice Chairman; Mike Callaghan, Cabinet Secretary, Department of Environmental Protection; and Robert Marsh.

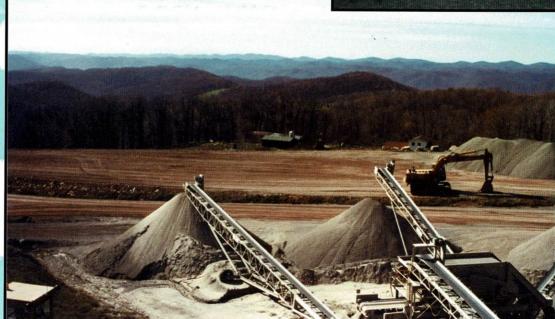


Stanley Industries, Inc.

In Tucker County, for total attention to detail in the operation of a limestone quarry. With special emphasis on access road layout, stockpile areas and contemporaneous revegetation, including a neat trout and lilly pond, this aesthetically pleasing area blends well with West Virginia's highlands.

Pictured are (I-r): Dave Stanley; Wayne Stanley; Junior Stanley; Linda Stanley; Steve Capelli, WVCA First Vice Chairman; Ed Deem, DEP Inspector; and Mike Callaghan, Cabinet Secretary, Department of Environmental Protection.





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Coal-Mac, Inc.

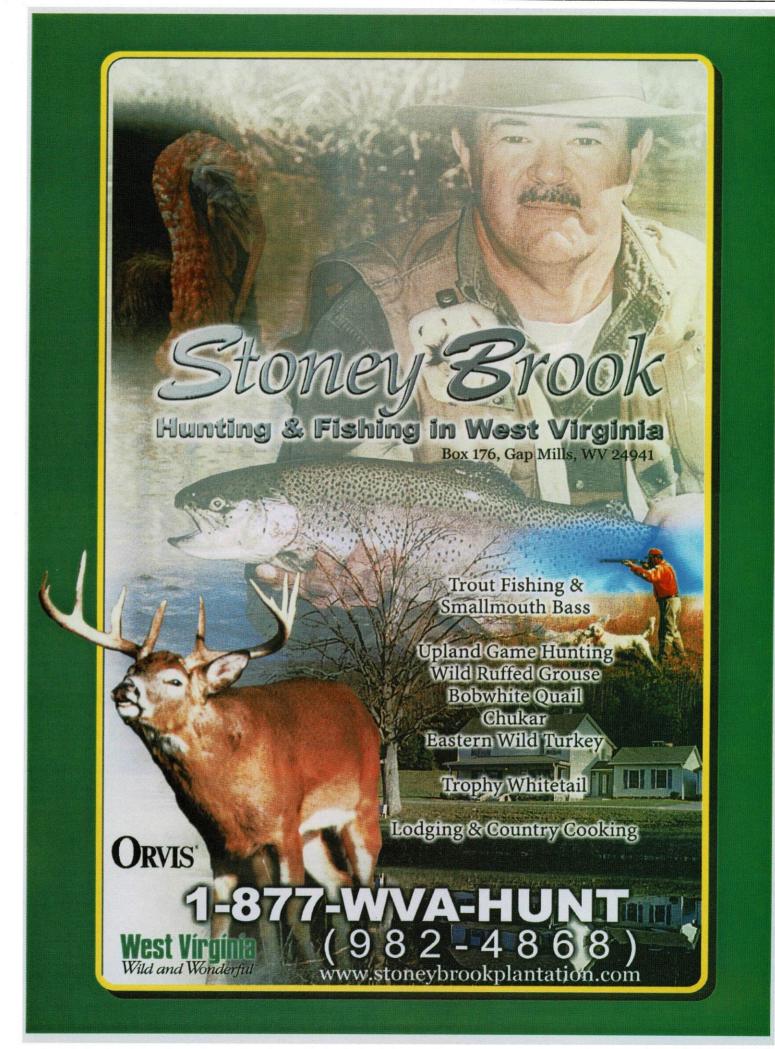


Pictured are (I-r): Steve Case; Rick Adams; Kenneth Nelson; Terry Potter; Mike Callaghan, Cabinet Secretary, Department of

Environmental Protection; Steve Capelli, WVCA First Vice Chairman; Cliff Frye; Thomas Satterfield DEP Inspector; and Gary Bennett.

On the boundaries of Mingo and Logan counties, this compact operation demonstrates the attention to detail in order to maximize coal recovery and minimize surface effects. With two valley fills, this operation blends with the surrounding topography in a most pleasing aesthetic way.





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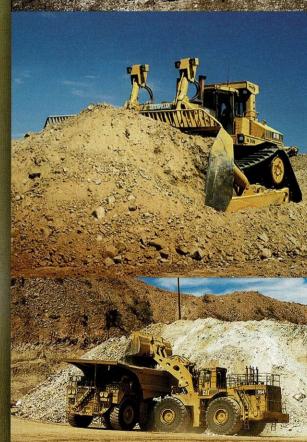


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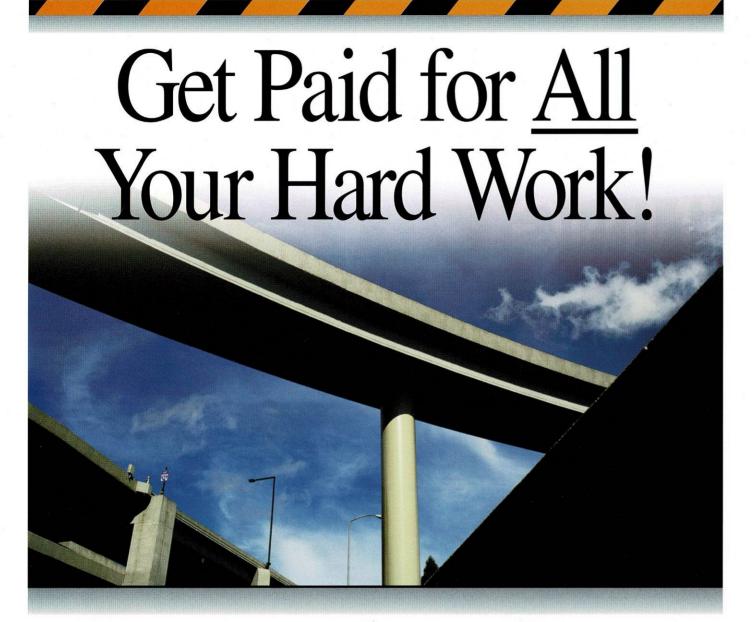
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Coastal Coal/ West Virgnia, LLC

In Greenbrier County, for the complete removal and total reclamation of the Clearco Preparation Plant and refuse area. Located on the environmentally sensitive North Fork of Big Clear Creek, after more than fifty years of activity, this total acreage has now been recycled back to nature.



Pictured are (I-r): Mark Foley, DEP Inspector; Steve Capelli, WVCA First Vice Chairman; Jim Copley; and Mike Callaghan, Cabinet Secretary, Department of Environmental Protection.

Three-C

In Upshur County, this multi-seam operation has taken great care in utilizing proper material handling to restore the original contour for return to hayland and pasture post-mining land use. Utilizing the remaining sediment control impoundments for water supply, a complete livestock operation will provide excellent long-term benefit to the landowner.



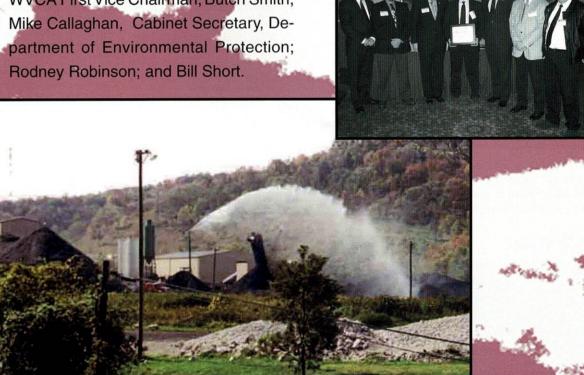
Pictured are (I-r): Joe Altieri, DEP Inspector; Steve Capelli, WVCA, First Vice Chairman; and Mike Callaghan, Cabinet Secretary, Department of Environmental Protection.



Kanawha River Terminals,

In Wayne County, for attention to detail in the operation of a screening plant and total synfuel manufacturing facility. Utilizing concrete pads, rainbird watering systems and total sediment control, all off-site effects have been minimized to the greatest extent possible.

Pictured are (I-r): Darren Whitlock; Aaron Thompson, DEP Inspector; Steve Capelli, WVCA First Vice Chairman; Butch Smith; partment of Environmental Protection;





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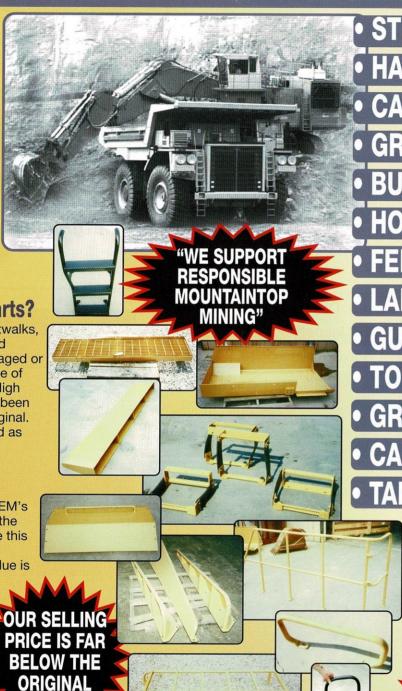
Items such as steps, handrails, catwalks. grills, bumpers, hoods, fenders and ladders, which frequently get damaged or destroyed during the normal course of operation and must be replaced. High quality parts, in many cases, have been enhanced to be better than the original. Parts that look good when installed as replacements on your equipment.

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Lexie

In Braxton County, for utilizing a toxic material-handling plan, constructing an alkaline pad, underdrains and with special attention to the restabilization of native tree species. These techniques have resulted in excellent post-mining water quality with the total area blending with the natural surroundings.



Pictured are (I-r): Jim Copley; Steve Capelli, WVCA First Vice Chairman; Mike Callaghan, Cabinet Secretary, Department of Environmental Protection; and Keith Evans, DEP Inspector.



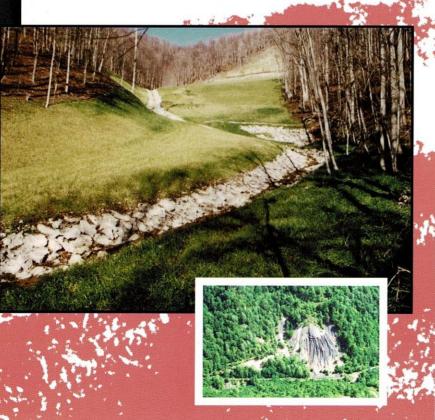
JAMES E. "PETE" PITSENBARGER AML AWARD - South

Johnson Knob Refuse

In Kanawha County, for attention to detail in removing and stabilizing four steep, eroding and unsightly refuse piles covering thirty-two acres. Potential impounding, several open mine portals and numerous hazards have been totally eliminated. Water quality benefits to highly visible Paint Creek were instantaneous.



Pictured are (I-r): Ron Sheets, DEP Inspector; Steve Capelli, WVCA First Vice Chairman; Ann Wardwell; Pete Pitsenbarger; Mike Callaghan, Cabinet Secretary, Department of Environmental Protection.



Howard Concrete Pumping Company, Inc.

JAMES E. "PETE" PITSENBARGER

AML AWARD - North

Mileground Subsidence

In Monongalia County, for the timely and under budget completion of a complex, twelve acre subsidence area adjoining the Morgantown Municipal Airport. Utilizing more than 250 drilled holes, thirty thousand cubic yards of concrete and grout were pumped into the old mine voids to totally stabilize this critical area.

Pictured are (I-r): Steve Capelli, WVCA First Vice Chairman; Pete Pitsenbarger; Lynn Crayne; Dave Pybus, DEP Inspector; and Mike Callaghan, Cabinet Secretary, Department of Environmental Protection.



Mountain State Coal Classic

Local and National Talent Drawn to Beckley

No doubt, the Mountain State Coal Classic is exciting to watch, 26,000 fans can't be wrong. That's how many people passed through the gates this year for the week-long, 40-game tournament.

Maybe they came to see local teams or maybe, just maybe, they came to see the then number one high school team in the nation, Oak Hill Academy from Mouth of Wilson, Virginia.

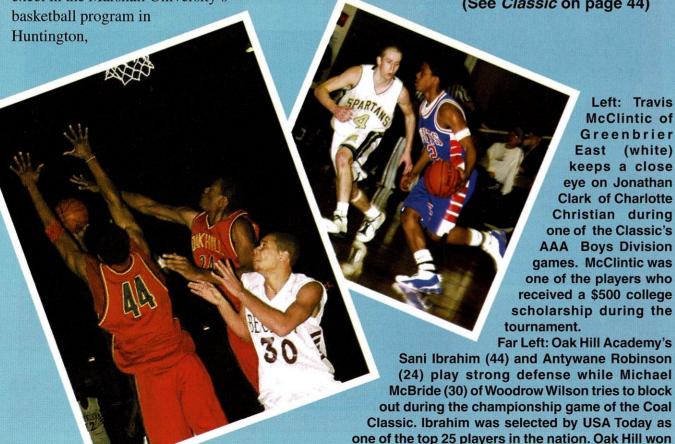
It's a chance to see some of the best basketball that not only West Virginia has to offer, but nationally as well. Tamar Slay, for example, a Woodrow Wilson stand out has moved on to excel in the Marshall University's

W.Va.

Some of this talent seen competing on the Raleigh County Armory court today, will eventually been seen in much greater arenas in the near future.

This is the third year powerhouse Oak Hill Academy has traveled to Beckley to play in the Classic. That says a lot about this tournament to any basketball fan. And, once again, they have taken home the Coal Classic crown by defeating Woodrow Wilson 74-45 in this year's championship finale in front of a sold out crowd on

(See Classic on page 44)



74-45.

Even After the Last Whistle Sounds, the Mountain State Coal Classic Lives On - Through Scholarships

As the cheers fade that once rang throughout the Raleigh County Armory in Beckley, as stories of the hard-fought games turn to memories, the Mountain State Coal Classic continues to benefit schools that participated in the tournament beyond the last whistle.

Every year, Classic officials present a \$500 college scholarship to one player and one cheerleader participating in the event. Since its inception 13 years ago, more than \$250,000 has been given to student athletes as a result of this tournament, as a result of the state's coal industry.

For years, Bluestone President and Coal Classic Organizer, Jim Justice, says "this is all for the kids." It is evident that Jim and the many people behind the scenes at Bluestone have worked many hours to make this event a success and they have turned it into a Classic.

Below are scholarships presented during the

AAA Boys Division

School Woodrow Wilson Wheeling Park Oak Hill Academy (Va.) Cape Corral (Fla.) Greenbrier East Charlotte Christian (N.C.) Charlotte Christian North Marion South Charleston

Player Shaver Green Justin Tarovisky Mark Hamrick Mike Clemence Travis McClintic Chris Clark Chris Crutchfield Lance Vernon

Cedric Hornbuckle

<u>Cheerleader</u> Ahsley Bartram

Celeste Crowson

Shealeana Keys

Julie Burgy

AA Boys Division School

Wyoming East Bluefield Ravenswood

<u>Player</u> Jordan Johnston Shea Hale Three Smalls Andy Wise

Cheerleader Dawn Clay Beth Ulbrich Ashley Taylor

A Boys Division School

Marsh Fork Oceana Fayetteville Mt. Hope

Player Brian Jarrell Matt Price **Reid Meadows** Jarod Pittman

Cheerleader **Brandy Pettrey** Cassie Lusk Helen Pratt Tarin Steplowski

Girls Division

Fort Myers (Fla.) Greenbrier East **Summers County** Woodrow Wilson Woodrow Wilson James Monroe Princeton **Russell County** Russell County Charleston Catholic <u>Player</u> Ireliam Guadalupe

Rebekah McDowell **Amy Bowling** Katy Talley Amanda Martin Megan Mann Robin Reed Natalie Dial Jennifer Hartman Lauren Cassis

Cheerleader

Megan Dorsey Kari Standard

Jennifer Sutphin Whitney Biggs

Tara Williams

Stephanie White

Coal Classic

from page 42

Saturday, January 26, 2002.

When Oak Hill Academy came to Beckley. the team was sporting a 51-game wining streak, with its last loss coming in February 2000. The program has four national high school championships under its belt (1993, 1994, 1999, 2001). The school has been nationally ranked in the Top 25 since 1979 and in the Top 10 since the 1998-99 season. DeSagana Diop who played for Oak Hill at the Classic last year was drafted by NBA's Cleveland Cavaliers.

Oak Hill managed to win 67 games straight before losing to Matern Dei (Santa Ana, Calif.) at the Nike Extravaganza in Long Beach in early February and has dropped its national rank to fourth.

This year, Oak Hill had two players ranked in the top 25 players by USA Today, Carmelo Anthony and Sani Ibrahim. Anthony has already signed to play at Syracuse University.

Congratulations to the people at Bluestone Coal, Jim Justice, Terry Miller, Pam Rhodes and the many others who work long, hard hours to produce such a first class tournament.

Twisted Gun

from page 22

"With this region having such steep terrain, this project would not have been economically feasible without the initial site preparation and construction activity undertaken during the mining process."

It is anticipated that the Twisted Gun Golf Course will be opened to the public in late summer 2002.

Coal Classic Championship **Box Scores Boys Class AAA** Oak Hill Academy 74 45

Woodrow Wilson

Boys Class AA

Ravenswood 53 **Wyoming East** 60

57

55

40

33

Boys Class A

Fayetteville Oceana

Girls Divsion

James Monroe **Greenbrier East**

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W.Va. Coal from page 18

continue to tell how important it is to the nation's (and state's) energy needs and economic viability. After all, West Virginia's:

- Name is still synonymous with coal in the minds of most Americans;
- Coal production last year was the energy equivalent of 1.3 million barrels of oil a day – the equal of U.S. imports from Mexico, our 4th ranked source;
- Coal reserves are still plentiful with 54 billion tons (Since 1863, only 13 billion tons of coal have been mined in the state);
- Coal industry averages 170 million tons mined annually, second in the nation;

During a speech at the West Virginia Mining Symposium in January, Tom Altmeyer, Senior Vice President Government Affairs for the National Mining Association, stated that if coal could be converted to electric power at today's efficiencies and stored, the West Virginia reserve would represent:

- About 10 times the range of the annual national requirement toward the end of the 1990s:
- Almost 60 times the nuclear output;
- And almost 75 times the natural gas production.

As the efficiencies of generation rise, it will represent more power.

"Coal is America's only response to disruptions such as the ongoing failure of hydropower, the periodic spikes in the price of natural gas and the dangers of needlessly rising dependence on imported oil," Altmeyer said. "In the mix of secure and reliable domestic fuel, coal is 95 percent of America's reserve, oil is 2 percent and gas is 3 percent.

"West Virginia coal is significant, equal to at least two times the nation's gas reserves and three times the oil reserves."

Coal, America's fuel of choice.

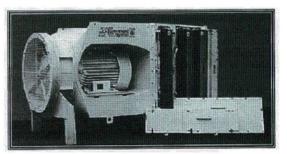


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After 30 years of working in the mining industry David Lauriski came to the crossroads and made a turn. On May 9, 2001 he was confirmed as the Assistant Secretary of Labor for Mine Safety and Health by Congress.

Prior to this, he was the General Manager of Energy West Mining Company, a company that is recognized as one of the largest underground coal producers in the United States

On January 10, 2001 the West Virginia Coal Industry invited him to speak during the 29th Annual Mining Symposium in Charleston, W.Va. After his comments, Green Lands was able to catch up with him ...

... One on One

"Two of our goals over the next four years for the mining industry are to reduce the number of fatalities by 15 percent per year and to reduce our non-fataldays-lost rate by 50 percent over this same four-year period."

GREEN LANDS: During your comments at the Symposium, you said this is unlike any other job that you've had. What did you mean by that?

LAURISKI: There are a number of differences, but certainly one of the them is the magnitude of the job itself. This is a huge opportunity that calls for a huge responsibility. Of course, there have been others during my career, but I will take this to a much different level, simply because of the influence this job and the agency has over people's lives.

The government process is unlike any position I've ever held. Yet both at the mining industry and with the government, there is a constant, the safety and health of our miners. The performance goal is exactly the same, only the methods we have available to effect change are sometimes different.

We all want to reduce injuries and illnesses to the lowest possible levels. I am talking about opportunities that we have. For me, everyday is like a new day because of the opportunities that I have to effect something in which I have a deep passion.

> GL: What does MSHA do? LAURISKI: We enforce and administer the Mine Health and Safety Act of 1977.

That law basically lays out the ground rules for what our offices are required to do and there is a

number of things: developing rules and regulations, enforcing those rules and regulations, education and training technical support, collecting data and information that can be used in accidents or injuries or illnesses that would further promote health and safety of this nation's miners. Our mission really is the protection of the health and safety of miners while working in the mines.

GL: As Assistant Secretary for MSHA, what are your goals for the organization?

LAURISKI: I am a firm believer that to achieve excellence there must be an identified, measurable target to work toward. We need to look at goals that put us at a level that betters any previous record of any previous year. With that in mind, we at MSHA have set some very specific targets.

Two of our goals over the next four years for the mining industry are to reduce the number of fatalities by 15 percent per year and to reduce our non-fatal-days-lost rate by 50 percent over this same fouryear period.

I talked with a great many people in the mining community about these goals, and all have agreed that these are worthwhile and doable objectives.

We have goals on the health side as well. Reducing the

percentage of respirable dust samples in coal and non-coal mines that exceed the applicable standards, by 5 percent each year. We also want to reduce the percentage of noise exposures above the action level that would trigger a citation by a like amount.

We already have indications that the first goal I mentioned was met in 2001 by the mining industry nationwide.

Fatal injuries at all mines in the United States declined to a new low of 72. That was 13 fewer than in calendar 2000, and the lowest figure since records have been kept, starting in the early 20th century.

We had a lot of discussion and everybody agreed that those were good targets and they were achievable targets and they were targets that were not going to be easy to achieve without getting a commitment for everyone in this business and in the mining community to achieve those goals.

These are not goals that MSHA can do by themselves. They are goals that people have to buy into. And they are goals that everyone in the industry has to work towards

I threw these out simply to challenge the mining community to reach a level of excellence

Lauriski takes a moment to speak with West Virginia Governor Bob Wise during the 29th Annual Mining Symposium in Charleston, W.Va.



that has never been reached before.

GL: In your short tenure with MSHA, what is the biggest hurdle you have had to cross so far?

LAURISKI: I'm not sure that there has been a big hurdle. Perhaps the accident in Alabama could be considered a hurdle. It is disappointing that those things could still occur in this industry. One hurdle would be making sure that we are able to provide the needed information to our stakeholders and to get a mind set with MSHA's own employees that we need to move in a different direction. If we do the same things we've been doing for 25 years, will that still make a difference?

So, I guess the biggest hurdle is adapting to change. And that's a hurdle that any organization faces everyday. People generally have a reluctantcy to change.

GL: You say that you have been in the mining industry for 30 years, prior to coming to this position. What changes have you seen in the mining industry during that time?

LAURISKI: We are most definitely moving in the right direction. I think one of the biggest changes that I have seen during my career has been the understanding of the value that good health and safety performance has on a company's business plan, that it is an integral element of any business plan. When you achieve good health and safety performance you also achieve positive results in cost and productivity.

I also think that the miners themselves recognize the value that safety plays in their everyday lives. I think part of that is driven by history and part of that is driven by family. We have become a family oriented society and I hope that made a difference that we think different today than we did in 1979. It's is an evolving practice with technology and mining techniques being a huge part of that.

GL: Comparing safety issues, how does the coal mining industry compare to other industries in the United States?

LAURISKI: If you compare only the fatality rate, we don't fare favorably. If you look at the overall rate, which includes fatals, we are at the top of the list. We are one of the safest industries in the country. It's a huge change from when I started in the business. It is a big change from the late 70s and early 80s when mining was recognized as the most dangerous occupation and a dangerous business in the United States. But today it is quite different, it is on the other end of the scale and that is a real credit to the mining community.

GL: How does the West Virginia coal industry compare to the other coal states in safety?

LAURISKI: West Virginia is very active and proactive in their approaches. Statistically, last year West Virginia didn't fare very well. They ranked second in the nation in coal mine fatalities with 13, which is up from previous years and up from the all time low from four or five years ago. So there are some challenges here, but there are some real opportunities that we can move forward

Lauriski has a lighter moment with West Virginia Division of Environmental Protection Cabinet Secretary Mike Callaghan during the 29th Annual West Virginia Mining Symposium in Charleston.



in working cooperatively with this state on helping them to achieve all time record lows as well.

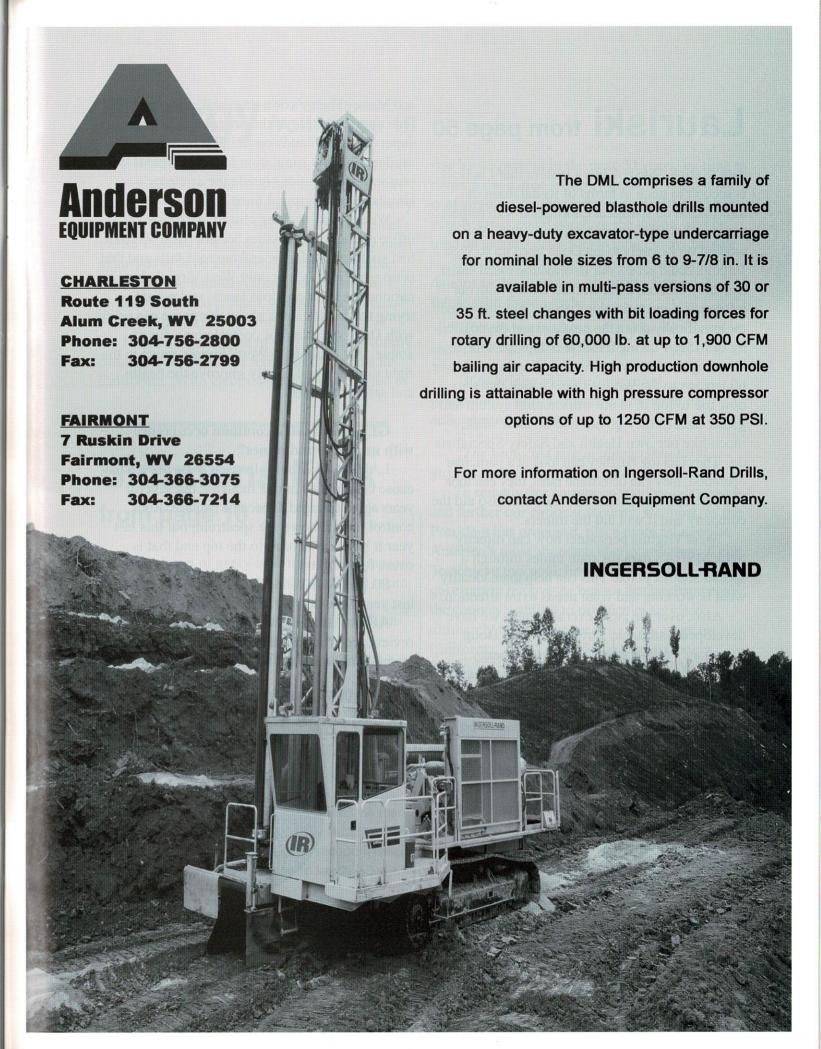
GL: How is MSHA working with West Virginia to improve coal mine safety?

LAURISKI: Not long after I got to MSHA, I received a call from Doug Conaway, the director of the West Virginia Office of Miners' Health, Safety and Training, and he wanted to come and visit us in Washington, D.C., which he did. Doug wanted to explore what we could do collectively what we could do as a partnership to improve health and safety in West Virginia. We talked about things that he would like to see and what he would need to help him with his staff to be effective in what they were trying to approach.

One of the first things we talked about was

(See Lauriski on page 52)





Lauriski from page 50

data sharing. MSHA has a system that I believe is second to none in terms of its database of information on statistical information with respect to accidents, injuries and general safety. So we worked very closely to get Doug lined up so West Virginia could access our information much easier than they ever have. He worked closely with our information and technology people. He also asked me specifically about the potential and the possibility of MSHA taking its surplus laptops and donating them to West Virginia. We donated over 60 laptops to the West Virginia office that they now use to log in to our information system and gather data as they go out and do their work, much like our own Health and Safety Specialists do. They can log on, they can look at a particular operation, they can determine rates, they can look at a particular problem. This data can also aid the company and it will aid the miners.

West Virginia personnel now can directly track MSHA's data for state mines through a special internet portal. This can help them identify what is working and what needs extra attention.

Also, over the past several months we have developed a strategic partnership with Doug Conaway's office and with Massey Energy. MSHA, West Virginia and Massey, last year, jointly created a new training program for supervisors. More than 100 Massey supervisors, section foremen and mine managers have already taken part in the new training program at the National Mine Health and Safety Academy in Beckley. We expect that the total participation will be more than 800. When we finish the program over 800 supervisors from West Virginia, Kentucky and Virginia will have gone through the program.

The curriculum includes topics such as general mining methods, MSHA and West Virginia mine safety regulations, hazard and task training, pre-shift and on-shift responsibilities,

and Massey Energy's own structured safety program. One unique feature of the program is that the supervisors get hands-on training in the academy's mine simulation lab. Participants will perform examinations inside the academy's simulated underground mine.

We are also working closely with Doug's office on roof control issues because West Virginia had six fatalities last year from roof falls and that is up significantly, not only West Virginia but nationwide from previous years, and we are trying to identify some of the things we can work with Doug on, like roof control plans, for example, that could help West Virginia move in the right direction and simply improve the health and safety of miners.

GL: Is roof fall a common occurrence with underground mines?

LAURISKI: Roof falls used to be the leading cause of fatalities in this industry, but several years ago it changed. It became haulage. Roof control moved down the spectrum, but this last year it has moved back to the top and that is cause for concern.

Six of the coal mine fatalities in West Virginia last year were due to falls of the roof or rib.

As roof control plans come up for regular review, we are encouraging mine operators to strengthen their plans and make them easily

(See Lauriski on page 54)



Energy from page 18

And, foreign resources doesn't just mean oil. For years the United States has been importing millions of tons of foreign coal for electricity production and tons of coke for use in our steel mills. Post 9/11, it is clear that this country must again strive to be as self-sufficient as possible, extracting the natural resources necessary to produce a finished product, whether it be automobiles, CD players or electricity.

Further, in the wake of 9/11, America simply cannot afford to have a repeat of the events in California. With electricity demand expected to

future with these words: "If...electricity demand is to be met...coal must play a significant role."

rise by 43 percent in the next 20 years, its time to

revamp the nation's energy grid and build more

coal-fired generating capacity. Another energy

supply crisis could paralyze the nation, and be

used by terrorist detractors to inflict more damage.

dations to the President on energy framed the

This is why the Vice President's recommen-

"If policies...sharply lower coal generation...this creates concern about the adequacy of natural gas...."

"The projected rise in domestic natural gas...may not... meet projected demand..."

To remedy our current energy predicament, and further our national security, we must, as the President has proposed, place more reliance on America's most abundant energy resource: Coal. To achieve this goal, however, requires that the government remove the burden that has hampered the country's ability to produce energy and ultimately created the electricity shortage in California. The United States can no longer allow environmental concerns to serve as the "de facto" energy policy of the country. In other words, the focused, outspoken concerns of a handful of environmental extremists can no longer be pandered to as the remainder of the nation suffers. The President and his administration are on the right track in this area, and have taken real, measurable steps to ensure that coal mining continues in West Virginia such as re-issuance of the Corps Nationwide Permit 21 and pending revisions to the fill and waste definitions of the Clean Water Act and "Clear Skies Initiative."

For the sake of our national security, let us not waver in support of the President, and the President's support of coal.

Simmons Fork

from page 10

an integral part of every activity in this company. No job is so urgent that the time cannot be taken to perform the job in a safe manner."

Previously, mining operations won the Mountaineer Guardian by reaching tonnage goals, based on employment levels, without having a fatality.

According to WVCA President Bill Raney, the awards program was revamped in 1998.

"The safety program established by the State and carried out by the industry has progressed to the point where we felt it was time to significantly raise the standards for this award," Raney said. "There were many deserving operations, as there have been in previous years, but we think we've selected the most outstanding cross section whose safety records have set the standard for the state's entire industry."

Located near Oceana, Simmons Fork has 47 employees and mines close to 1 million tons annually.

Lauriski from page 52

understandable to everyone, including individual miners so that they can more easily serve as working plans for everyone at the mine. Our technical support staffs are also helping to evaluate how we can improve a mine's roof control plan.

With our technical support group, we are all collectively trying to understand what happened and why it happened. We need to start looking at things beyond technology and engineering and look at behavior of people and why people do things and why is that the way they do them, good or bad. And when we get that understanding, we'll have the basis for putting things in place that will make a difference.

GL: What exactly is the function of the MSHA Academy?

LAURISKI: The Academy is unlike any other in the world. It was built 25 years ago, to serve the needs of the mining industry, particularly the coal industry that was growing very rapidly at the time of the energy boom of the 1970s. It is designed to provide effective health and safety training for new miners or for experienced miners, as well as for an expanding and growing MSHA administration. We have served over 400,000 students from all over the world. It is one of only seven academies in the U.S. with this one being dedicated for mining.

GL: Thank you for your time Mr. Lauriski.

LAURISKI: I enjoyed it. Thank you for inviting me to the Mining Symposium.



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Coalmanac 2002

March

Tug Valley Mining Institute Monthly Meeting, Contact Wayne Hawley, (304) 664-4051. (TVMI meets on the third Thursday of the month.)

April

- Coal Refuse Disposal Impoundment Seminar, Holiday Inn North, Lexington, KY. Contact Carol Moore (865) 584-0344.
- West Virginia Mine Drainage Task Force Symposium, Ramada Inn, Morgantown, WV. Contact Patty Bruce, (304) 346-5318.
- 18 Joint Meeting with Tug Valley Mining Institute and the Kanawha Valley Mining Institute, Logan County Club, Logan WV. Keynote Speaker, Bill Raney, president West Virginia Coal Association. Contact Wayne Hawley, (304) 664-4051. (TVMI meets on the third Thursday of the month.)

May

- West Virginia Coal Association and West Virginia Coal Mining Institute Joint Meeting, Marriott, Charleston, WV. Includes the West Virginia Coal Hall of Fame Induction. Contact Patty Bruce, (304) 346-5318.
- 13-17 CEDAR of Southern West Virginia, Inc. Regional Coal Fair, Larry Joe Harless Community Center, Gilbert, WV. Contact Debbie Mudd, 304/664-4006 or Georgene Robertson, 304/ 235-7522, Ext. 14.

Readership Survey Green Lands Winter 2002

Let Us Know What You Think

What is your opinion of the overall quality of this issue of Green Lands?

O excellent

O good

O fair

O poor

How much of this issue of Green Lands did you read?

O cover to cover O about half

O more than half

O less than half

O just looked at the photos

O only read the technical article

How much of Green Lands do you normally read?

O cover to cover

O more than half O less than half

O about half O just look at the photos

O only read the technical article

O this is the first time I have seen Green Lands.

What is the frequency you would like to see Green Lands published?

OEvery month

O Six times a year

O N/A

O Quarterly (the current frequency) O N/A

Have you ever visited www.wvcoal.com?

O more than 10

O yes O no

01-3

How many times?

Did you find the web site informative?

O very much

O some

O N/A

O very little

Pate the Following

04-10

Hate the Following	Liked		D	Disliked		Did not Read	
 W.Va. Governor Bob Wise Addresses 							
Audience West Virginia Mining Symposium	5	4	3	2	1	N/A	
 Simmons Fork Surface Mine Captures 							
Barton B. Lay Milestone of Safety Award	5	4	3	2	1	N/A	
 Twisted Gun Hits the Bull's-eye 	5	4	3	2	1	N/A	
 Giving Coal and West Virginia a Smile 	5	4	3	2	1	N/A	
 Coal and Energy Security: 							
The Solution for a Persistent Problem	5	4	3	2	1	N/A	
 Reclamation Award Recipients 	5	4	3	2	1	N/A	
 West Virginia Coal Should Sitting in the 							
"Catbird Seat" with the Nation's Energy	5	4	3	2	1	N/A	
 "One on One" with David Lauriski 	5	4	3	2	1	N/A	
 Mountain State Coal Classic Attracts 							
Local and National Talent	5	4	3	2	1	N/A	
 Total Maximum Daily Loads and Anti-degradation 	5	4	3	2	1	N/A	

Please provide any additional comments

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Jim LeFew **West Virginia Coal Association** P.O. Box 3923 Charleston, WV 25339

Kate's Mountain Company Pride

Editor's note: Green Lands incorrectly stated the winner of the Company Pride -Associate Division from the WVCA Annual Meeting. Below are the correct placements of the winners.

Associate Division

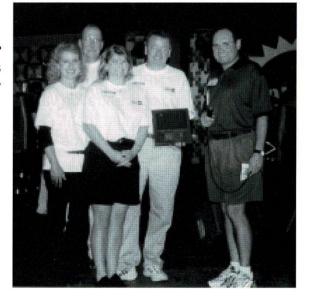


1st Place **Rish Equipment Company**

Rish maintained their perennial strong showing to capture 1st Place in the Company Pride Award.

Runner Up Cecil I. Walker Machinery Co.

The company's new slogan "Coal Keeps the Lights On," helped Walker Machinery take the Runner Up spot.



.WVCoal.com

Total Maximum Daily Loads and Anti-degradation

Jeff Skousen, West Virginia University

Background

The Clean Water Act of 1972, administered by the U.S. Environmental Protection Agency (EPA), established a program in section 402 to regulate the discharge of pollutants into the nation's rivers, streams, and lakes. This program, the National Pollutant Discharge Elimination System (NPDES), is exactly what its name implies: a system to eliminate pollutants from being discharged into waters of the U.S. Any organization, company, or person (entity) discharging water into a receiving body of water in the U.S. must apply for and receive an NPDES permit.

Almost all NPDES permits contain standards or limits to the amount of pollutant that can be discharged by assigning an upper level concentration of the pollutant in the discharge water. The effluent limits for mining NPDES permits can be assigned in three ways: 1) technology-based, 2) water quality-based, and 3) best professional judgment.

Many coal entities were given technologybased limits in their NPDES permits, and these limits gave numeric concentration values that the discharged water must meet. For technology-based limits, the discharge water must have:

- 1) a pH between 6 and 9,
- 2) an average monthly iron concentration of less than 3.0 mg/L, and a maximum daily concentration of 6 mg/L,
- 3) an average monthly manganese concentration of less than 2 mg/L, and a maxi-

mum daily concentration of 4 mg/L, and 4) an average monthly total suspended solids concentration of loss than 35 mg/L

ids concentration of less than 35 mg/L, and a maximum daily concentration of 70 mg/L.

For example, if the average monthly concentration of analyzed water samples is found to exceed 3.0 mg/L of iron, then the operator of the facility is in violation of the NPDES permit and the violator is subject to penalty.

Some entities that apply for NPDES permits to discharge water may not be given technology-based limits but may be given stricter water quality-based limits. Each state is authorized by the Clean Water Act to assign streams, rivers, and lakes into water use categories. For each water use category, the state must establish numeric criteria or narrative statements known as "water quality standards" to protect the designated water use category.

Under the water quality standards, streams and rivers may be assigned into one of five water use categories and further into subcategories:

Category A – Public Water Supply
Category B - Propagation and Maintenance of
Fish and Other Aquatic Life

B1- Warmwater Fishery

B2 - Trout Waters

B4 - Wetlands

Category C - Water Contact Recreation

Category D - Agriculture and Wildlife Use

D1 - Irrigation

D2 - Livestock Watering

D3 - Wildlife

Category E - Industrial Water Supply, Water Transport, Cooling and Power

E1 - Water Transport

E2 - Cooling Water

E3 - Power Production

E4 - Industrial

For each of these categories and some subcategories, specific water quality criteria dictate the effluent concentrations that can be discharged into these designated streams to protect the numeric criteria. Category A streams (public drinking water supplies) have concentration limits on many variables such as ammonia, arsenic, copper, chromium, iron, lead, manganese, nickel, selenium, zinc, and fecal coliforms (and others that are not listed here). Category B1 streams have limits on similar variables as Category A streams, but sometimes the effluent limits are slightly different, which could allow a slightly higher or lower amount of pollutant to be discharged into a stream assigned to that water use category. Therefore, each water use category has a set of specific numerical criteria or narrative statements to protect the uses of that stream. A water qualitybased NPDES Permit will set the effluent limits to ensure that the discharges will not violate the stream's numeric criteria for that use.

For instance, the numeric criteria for iron for a warm water fishery is 1.5 mg/L. Therefore, effluent limits would have to be set at discharge outlets so that the iron limitation does not exceed 1.5 mg/L in the stream. In this example, a water quality-based limit (based on the water quality standard for the receiving stream's designated water use) is given when the technology-based limit cannot keep the iron in the stream less than 1.5 mg/L.

A listing of streams and rivers in the state along with their designated stream use and

numerical criteria may be found in the Water Quality Standard Regulations, which are promulgated by the West Virginia Environmental Quality Board. Copies can be obtained from the West Virginia Secretary of State's Office or you can visit the Secretary of State's web site (http://129.71.220.230/csr). Click on search, search for rules, then type in water.

A third way of assigning effluent limits for an NPDES permit is by Best Professional Judgment (BPJ). In order to establish a BPJ effluent limit, an economic evaluation of treatment technologies must be done. The treatment technology deemed economically achievable could be used, and the effluent discharged from such a treatment technology could be the applicable BPJ effluent limit in the NPDES permit. This type of effluent limit assignment is seldom used, but is used for NPDES remining permits.

Total Maximum Daily Load (TMDL)

The Clean Water Act of 1972, in section 303(d), required each state to develop a list of impaired streams, rivers, and lakes. These impaired waters do not currently meet the water quality standards that the state has set for them based on their designated water use category, even after point sources of pollution have been controlled and pollution control technologies have been installed under the NPDES program. Therefore, these impaired streams must have further reductions in pollutant loads in order to meet the water quality standards for streams in that category. In other words, the technology-based limits initially assigned to the point discharges and the accumulation of pollutants from other non-point discharges still do not protect the stream quality for its designated use. A Total Maximum Daily Load (TMDL) determines a maximum amount of pollutant which is allowed in an impaired stream and can be viewed as a pollution reduction plan to help the stream attain the desired water quality standards.

In West Virginia, the list of impaired streams is called the 303(d) list, and this list is updated every two years. The 1998 303(d) list is currently in effect and a revised list will be released in April 2002. The requirement to develop a 2000 list was suspended by EPA. There are about 700 streams in West Virginia on the 1998 303(d) list. If a stream is impaired and therefore does not meet the water quality numerical criteria for its designated water use category. then a TMDL will be developed and assigned for pollutants that exceed the numerical criteria. Since there are so many streams on the 303(d) list, the law requires that states establish a schedule to ensure that TMDLs are completed in a timely manner.

A TMDL is a load limit or a maximum amount of pollutant that a waterbody can receive and still meet water quality standards. It allocates pollutant loads among point and non-point pollution sources and includes a margin of safety to address uncertainty. The general philosophy of the WVDEP TMDL program is to identify the primary sources of pollution in impaired streams and to target reductions to those pollution sources. For streams impaired by mining, the philosophy is to develop a TMDL that reduces pollutant loads from non-point sources first (abandoned mine lands and bond forfeiture sources), then to reduce the pollutant amounts from permitted point sources. The amount of pollutant in a TMDL is given in load Anti-degradation units such as pounds per day or pounds per year. This TMDL pollutant amount is then converted into a concentration-based waste load allocation for implementation in NPDES permits.

sources with current technology-based limits will be given lower effluent limit concentrations (more stringent) under TMDL. For example, some renewed NPDES permits will probably

receive an iron waste load allocation effluent limit of some value between 0.5 and 3.2 mg/L, whereas before the effluent limit concentration was 3.0 mg/L under technology-based limits. For manganese, the limit may be changed from 2.0 mg/L to some value between 1.0 and 2.0 mg/L. Aluminum is not currently regulated under technology-based limits, but under the new TMDL waste load allocation, an aluminum effluent limit concentration will be assigned and will probably be some value between 0.75 and 4.3 mg/L. Other parameters may also be assigned based on the water use category of the stream.

In summary, the Clean Water Act established the NPDES program to regulate discharges into waters of the U.S. The Act also required each state to designate their streams into water use categories and then for each state to establish water quality standards to maintain those intended uses. The NPDES permits set effluent limits at concentrations of pollutant that could be in the discharge water in order to protect the uses of that waterbody. The TMDL program helps the NPDES program to further reduce the pollution in streams that do not meet water quality standards by assigning a pollutant load to the stream. Both non-point and point sources are evaluated to determine their input and cumulative impact on the total pollutant load.

In addition to the NPDES program and TMDL development, another water quality improvement program is being implemented to further execute the mandate in the Clean Water Act "to eliminate the discharge of pollutants into It is probable that some permitted point waters of the U.S." As another level of review and protection in the NPDES program, the Clean Water Act also mandated that each state develop an anti-degradation policy to further protect stream, river, lake, and wetland water

quality.

Over the past two years in West Virginia, much effort and disagreement has gone into the establishment of an anti-degradation implementation rule. West Virginia has had an anti-degradation policy since the early 1980's, but no guidelines were available to implement the policy.

Through months of negotiations and compromises, a group of lawmakers, environmentalists, industry representatives, landowners, and state government personnel worked to develop an implementation rule for anti-degradation. The 2001 West Virginia Legislature approved a process to ensure that the state's high quality waters were given special protection and that all other waters in the state would be protected to maintain their designated or, could be approved. at a minimum, their existing uses.

The anti-degradation rule gives four levels of protection for West Virginia waters: Tiers 1. 2, 2.5, and 3. Tier 3 protection is the highest level of protection and it is applied to "Outstanding National Resource Waters." Such waters are those within West Virginia wilderness areas, which include Dolly Sods, Laurel Fork, Otter Creek, and Cranberry. Tier 3 protected waters cannot be degraded.

Tier 2.5 protection will be given to waters of special concern. A presumptive list of Tier 2.5 protected waters in West Virginia includes 444 streams covering over 2,000 miles. Tier 2.5 waters are designated as naturally-reproducing trout streams and other streams that WVDEP has determined to be reference streams with a high biological and aquatic life score. No significant degradation of a Tier 2.5 protected stream will be allowed. Significant degradation is defined as reducing the assimilative capacity of the receiving water by more that 10 percent. New or expanded NPDES permits that discharge into a Tier 2.5 protected stream may be given more stringent water

quality-based effluent limits so that no significant degradation of the stream will occur. Public comment will be allowed for those streams that are being considered for the Tier 2.5 protection list.

Tier 2 protection is the default or standard level of protection. These are high quality waters that meet or have better water quality than the water quality standards established for that stream. The intended uses of these waters must be protected and degradation can be allowed up to the numeric criteria for that water use category. However, any significant degradation (>10% of remaining assimilative capacity) of a Tier 2 protected water must undergo an alternatives analysis and socio-economic review before the degradation activity

Tier 1 protection requires that existing uses of the water shall be maintained and protected. This level of protection will be applied at a minimum to all West Virginia waters. Two streams in the state, namely the main stems of the Monongahela and Lower Kanawha Rivers, have been designated as only Tier 1 protected waters for all pollutants. However, this protection level may also be assigned later on a pollutant by pollutant basis to other streams that do not currently meet water quality standards. Discharges into Tier 1 protected waters will have water quality-based effluent limits for the pollutants that exceed water quality standards.

New or expanded activities (discharges) will have to undergo an anti-degradation review. The question that will be asked for any new or expanded activity that will discharge water into a stream is "will the proposed activity significantly degrade the water segment." If the answer is yes, then an anti-degradation review must be performed. Existing facilities will have their current effluent limits reviewed when the NPDES permit is renewed, and the effluent limits in the renewed permit may be altered if the

original limits are not protective of the stream's References use.

Future

Implementation of TMDLs and the guidance for anti-degradation implementation are being formulated currently. Public meetings, brochures, and Internet information will be made available from WVDEP to help interested and affected parties understand the process.

The next Green Lands article will address the information that is necessary for TMDL development and some examples of effluent limits for point discharges in streams which were assigned TMDLs. In conjunction with WVDEP needed for baseline water quality assessments and the review procedures that will allow the establishment of anti-degradation effluent limits. A comparison of effluent limits before and after TMDL implementation and anti-degradation application will also be shown.

Acknowledgments

The author thanks Pat Campbell, Larry Emerson, Ron Hamric, Louis McDonald, Dave Montali, Ken Politan, and John Sencindiver for reviewing the material and making helpful suggestions.

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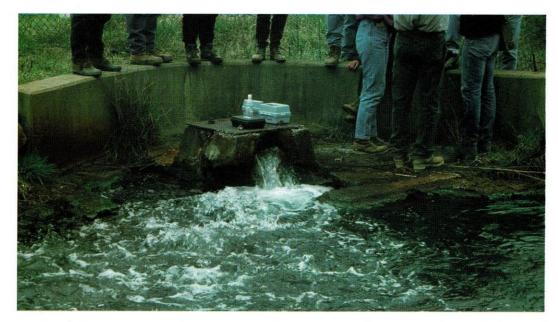
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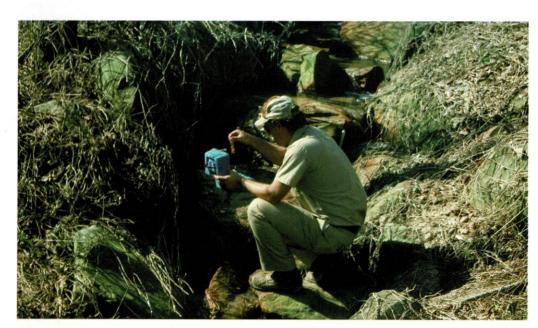
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Acid water from an abandoned underground mine is being discharged from this point source into a major stream. For streams like this one that cannot meet the water quality standards, TMDLs will be developed in order to reduce the pollutant load in the stream. A large acid mine drainage chemical plant is being designed to treat the water and reduce the pollutant load to the stream.



Water samples are routinely taken at water discharge points and analyzed by entities holding NPDES permits. The entity must submit a report each month providing data on water quality for specified effluent limits at the discharge point. Inspectors of the West Virginia Department of Environmental Protection check the quality of water at discharge points to determine whether effluent limits are being met when they visit mine sites.

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