

New Web site on its way

DEP site debuts Jan. 4; Goal is a more user friendly experience

By Colleen O'Neill

"It's time for an overhaul." That line of Jim Carrey's in the movie "The Mask" describes what is happening to the Department of Environmental Protection's Web site. Beginning Jan. 4, the DEP Web site will sport a sleeker, more professional face.

Much like a fashion makeover, the new look for the site was

crafted with the current features in mind, but it has improvements.

"The Events section of the new content management system will have more information about an event, including possible links to Web sites with more information and maps to the activity," said Ken Stevens, program analyst and Web master for the DEP.

"Currently, content is presented under offices and sections, which means one has to be familiar with the organization of the agency to find answers," said Rick Doneghy, an information

systems manager for the DEP's Information Technology Office. He has direct involvement with Stevens and the Web site.

"Ken Stevens has been adamant about having a 'How Do I' category on the front page to make it much easier for the public to find answers," Doneghy said. "In addition to content being provided by office and/or section, content will be provided by function. The new content management system, thus, will make the WVDEP Web site functional as

See WEB, Page 15



Gov. Joe Manchin III, right and DEP Cabinet Secretary Randy Huffman present a recycling grant to representatives from the city of Wheeling.

Governor visits DEP for recycling grants ceremony

Gov. Joe Manchin III awarded grants worth over \$1.5 million to 42 recipients through the West Virginia Department of Environmental Protection's REAP Recycling Assistance Grants program.

The governor presented the 2010 grants during a ceremony on Dec. 14 at the DEP's

Charleston headquarters.

Grants were awarded to state solid waste authorities, county commissions, municipalities, instrumentalities, private industries and non-profit organizations.

Funding for the recycling

See GRANTS, Page 2

Christmas trees can be recycled

By Anne White

West Virginians can dispose of their Christmas trees this season by donating them to be recycled.

On Jan. 2, the West Virginia Department of Environmental



Protection's Rehabilitation Environmental Action Program (REAP) and the Department of Natural Resources (DNR) will have a Christmas

tree drop-off at the Capitol Market in downtown Charleston.

From 10 a.m. to 5 p.m., anyone can bring their used live tree to the Capitol Market and donate it to the program.

The program not only keeps people from dumping their trees after the holiday season, but it

See TREE, Page 12

GRANTS

Continued from Page 1

assistance program is generated through the \$1 assessment fee per ton of solid waste disposed of at in-state landfills and is provided by WV Code 22-15A-19(h) (1).

Following are the grant recipients:

- Brooke County Commission (\$15,874)** — To purchase new garage doors and lights for the recycling facility.
- Brooke County Solid Waste Authority (\$81,893)** — To assist with personnel, purchase a truck with hoist system and provide support for the ongoing program.
- KHM Enterprises (\$28,875)** — To assist with personnel and purchase a fork lift and recycling containers for the current recycling program.
- Calhoun County Solid Waste Authority (\$31,788)** — To assist with personnel and provide support for the ongoing program.
- Greenbrier County Solid Waste Authority (45,935)** — To purchase a can sorter/densifier and roll off recycling container to assist in the current recycling operation.
- Hancock County Solid Waste Authority (\$63,530)** — To purchase roll off containers, vertical balers, fork lift, platform scales and provide support for the ongoing program.
- Clarksburg Mission (\$27,700)** — To purchase a vertical baler and box truck for the ongoing program.
- Apple Valley Waste (\$30,000)** — To purchase a packer truck for recyclables.
- Corporation of Shepherdstown (\$34,870)** — To purchase a dump truck for yard composting and recyclables and to provide support to the ongoing program.
- Town of Chesapeake (\$7,675)** — To purchase recycling bags, stands and educational material for the ongoing program.
- Habitat for Humanity of Kanawha/Putnam Counties (\$36,690)** — To purchase a truck for hauling reusable material.
- Kanawha County Solid Waste Authority (\$65,280)** — To purchase a fork lift, can densifier and fuel for the countywide program.
- Knight-Horst Shredding (\$37,500)** — To purchase a shredding truck for paper recycling.
- Evans Recycling (\$31,700)** — To purchase a skid loader for the current operation.
- Stonewall Resort (\$15,000)** — To purchase compartmentalized recycling bins to assist in the ongoing program.
- Fairmont State University (\$9,838)** — To purchase recycling bins and provide support for the campus-wide program.
- North Central WV Recycling Cooperative (\$25,000)** — To assist with personnel for the ongoing program.
- Union Mission of Fairmont (\$21,916)** — To purchase a fork lift truck for the current operation.
- Mason County Solid Waste Authority (44,090)** — To purchase recycling trailers and provide support for the countywide program.
- BeBe Enterprises (\$71,354)** — To purchase a skid loader and truck for the recycling operation.
- Mercer County Solid Waste Authority (\$62,160)** — To purchase a baler, a paper shredder and to expand the recycling program.
- Monongalia County Solid Waste Authority (\$70,000)** — To purchase compartmentalized hook lift containers for the county-wide program.
- Town of Star City (\$34,950)** — To purchase a recycling truck and non-residential recycling containers for the citywide program.

See GRANTS, Page 6

Coming year could be full of changes

By Randy Huffman

Someone once said “if you don’t create change, change will create you.”

As we begin 2010 at the Department of Environmental Protection, that notion hits home as much as ever.



Message from the cabinet secretary


With uncertainties swirling around the coal industry and new federal regulation of carbon dioxide emissions being discussed, it’s difficult to envision the year ahead without major changes affecting the way we operate as an agency.

But we’re also in a position to influence, or even create, some of those changes in a manner beneficial to both the environment and economy of our state. To accomplish those goals, however, we must take the lead on issues — get out in front to the degree that we can.

Sitting back, waiting for change and then reacting isn’t usually an effective strategy for any regulatory agency, particularly ours’.

Environmental protection at every level is an evolving process. There’s always going to be some new component that requires change. That’s our opportunity to become engaged in and even shape those changes.

See CHANGES, Page 16



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A number of inspectors from the DEP's Teays Valley office take a break during a site visit. From left are Newt Harman, Eric Philyaw, Tim Andrews, Alan Kee, Marlan Zwoil (Parkersburg), Jeremy Hopson, supervisor Cindy Musser, John Hendley and Jason Chambers.

Teays Valley crew on the go

EE's Compliance Monitoring, regional office have full plate

■ **Editor's note:** This is the third in a series of stories on DEP offices located around West Virginia.

By Tom Aluise

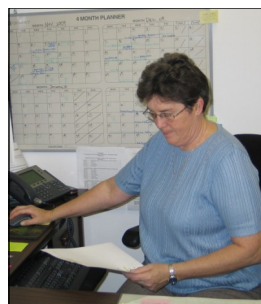
Shoehorned into the Putnam Village shopping center, the size of the Department of Environmental Protection's cramped Teays Valley office belies its importance to West Virginia.



For starters, it's the hub for Environmental Enforcement's Water and Waste Compliance Monitoring, a group of five inspectors under the direction of Inspector Supervisor Debbie Keener. Four of the inspectors work out of the Teays Valley office



The DEP's Teays Valley office is easy to miss for strangers to the Putnam Village shopping complex. Right, Debbie Keener, inspector supervisor for EE's Water and Waste Compliance Monitoring, has four inspectors working out of the Teays Valley facility.



and are responsible for covering the entire state. A fifth sludge inspector is stationed at the DEP's Kanawha City headquarters. "What we mostly do is monitor compliance for municipal and industrial facilities covered by (WV) NPDES

(National Pollutant Discharge Elimination System) permits," Keener said. "We're all over the state."

The Compliance Monitoring group shares its location's limited space with EE's Southwest Re-

See CREW, Page 7

Report presented on state water use

By Tom Aluise

Marcellus Shale natural gas drillers now have a Web-based reporting form for water use.

"Hopefully it will be up and running by the end of January," said Mike Stratton, of the DEP's Division of Water and Waste Management.

Implementation of the reporting form was among the highlights of the DWWM Water Use Section's annual report to the Joint Legislative Oversight Commission



Stratton

on State Water Resources. The November report details progress being made instituting the state Water Resources Protection and Management Act, which was passed in 2004 by the West Virginia Legislature and calls for the maintenance of a registry for large-quantity water users.

The Act was amended in 2008 to include a Water Management Plan. It's due for completion in 2013.

Hydraulic fracturing methods currently being used to extract natural gas from the lucrative Marcellus formation in West Virginia require millions of gallons of water.

Questions surround where drilling companies are getting their water and how they're disposing of the water, or "frac fluid," after it's used.

The Web-based reporting form will require: company information; withdrawal locations; withdrawal amounts; holding pond locations; amount used for fracturing in each well; where used water is disposed; amount of disposal; and amount of recy-

See WATER, Page 13



A REAP volunteer tackles trash in the Coal River near Tornado during a Department of Environmental Protection cleanup.

A look back in pictures

Happenings around DEP in 2009



Chris Gatens leads a nature tour in Wood County.



The DEP won an eighth straight Corporate Cup championship.



DEP staffers enjoy the annual picnic.



Area grade school kids take part in Earth Day activities at Coonskin Park.

More photos on next page

A look back in pictures . . . continued



REAP's Greg Rote had these girls' full attention during the DEP's annual Children's Water Festival.



A seasonal flu shot clinic brought out plenty of DEP employees.



Sherry Wilkins spruces up the DEP's rain garden.



Miss West Virginia Jessi Pierson visits the DEP.



Todd Shrewsbury takes part in blood drive.



Kanawha River sweep.



The annual Junior Conservation Camp gives kids from all over the state a chance to make many new friends.

Toyota, Dow join partnership

By Tom Aluise

Toyota's Buffalo plant and Dow's South Charleston operations took additional steps toward becoming more environmentally friendly when they joined the Sustainability Partnership, offered by the U.S. Environmental Protection Agency's Mid-Atlantic region.

The EPA created the Sustainability Partnership for organizations that use large amounts of energy, water and natural resources and want to "go green." The overall goal of the program is to minimize the use of energy, resources and waste generation in the Mid-Atlantic States.

EPA Regional Administrator Shawn Garvin joined Department of Environmental Protection Cabinet Secretary Randy Huffman for signing ceremonies at both Toyota and Dow on Dec. 4.

"The Sustainability Partnership is an effort to educate organizations about energy, water and waste conservation and other sustainability con-



Tetsuji "Ted" Okuda, president of Toyota Motor's Buffalo facility, signs a Sustainability Partnership with the U.S. EPA. DEP Cabinet Secretary Randy Huffman looks on.



EPA Regional Administrator Shawn Garvin, left, presents a Sustainability Partnership certificate to Jim Guidarini, vice president of Dow's South Charleston operations.

cepts and principles that will help them improve their triple bottom line — environment, econ-

omy, and society," said Greg Adolfson, DEP sustainability officer.

But the EPA program

is about more than just creating partnerships, Adolfson said.

"It is about building relationships," he said. "Those relationships foster commitment to improve the environment, local economies and communities throughout West Virginia.

"Toyota and Dow, through sharing ideas and mentoring, have taken the lead in West Virginia to support other organizations that want to participate," Adolfson added. "With effective communication, coordination and collaboration, the Sustainability Partnership promotes a holistic or comprehensive approach to bring about cultural change."

Toyota and Dow both have been making strides on the environmental front for several years.

In 2000, Toyota's Buffalo plant began implementing an environmental management system (EMS) and today is a zero landfill contributor. It recycles or reuses materials that

See PARTNERSHIP, Page 10

GRANTS

Continued from Page 2

City of Westover (\$7,049)

— To assist with personnel and provide support for the ongoing program.

West Virginia University Research Corporation (\$39,654)

— To purchase compartmental recycling trailers and recycling bins for the Mountaineers Recycling Program.

Monroe County Solid Waste Authority (\$25,975)

— To assist with personnel and provide support for the countywide program.

City of Wheeling (\$45,000)

— To purchase a truck for the city-wide recycling program.

Pleasants County Solid Waste Authority (\$72,825)

— To assist with personnel and to purchase a box truck and provide support to the ongoing program.

City of St. Marys (\$25,580)

— To assist with personnel and vehicle insurance for the ongoing program.

Pocahontas County Solid Waste Authority (\$59,250)

— To purchase a baler and provide support to the countywide program.

City of Kingwood (11,175)

— To purchase compartmentalized recycling bins and construction of bays for the current program.

Preston Tire and Recycling (\$75,000)

— To purchase a shear shredder, various equipment shredding parts and welders for the current operation.

Beckley Garbage (\$30,000)

— To assist in the purchase of a packer truck for cardboard recycling.

Raleigh County Solid Waste Authority (\$55,000)

— To assist in the purchase of a tub grinder for the ongoing program.

Roane County Solid Waste Authority (\$35,016)

— To assist with personnel and provide support to the ongoing program.

Russell Moore Recycling (25,000)

— To assist in the purchase of a pole building for the existing operation.

RRHAMCO, Inc. (\$25,000)

— To assist with the purchase of a new scale system for the existing facility.

Sunrise Sanitation (\$29,990)

— To purchase recycling bin units for the current operation.

Smalley Sanitation (\$30,022)

— To purchase a lift gate and material loader for the recycling operation.

Wetzel County Solid Waste Authority (\$34,025)

— To purchase a new recycling truck for the countywide program.

Afterlife Electronics (\$15,500)

— To purchase van trailers and provide support to the current operation.

Wood County Habitat for Humanity (\$15,319)

— To purchase a fork lift and pallet jack.

CREW

Continued from Page 3

gional Office, which is under the guidance of Inspector Supervisor Cindy Musser, a DEP veteran of 30 years.

Seven of Musser's nine inspectors are based in Teays Valley and two in a satellite office in Parkersburg. They're responsible for a variety of regulatory duties in 15 West Virginia counties, from inspecting landfills and dams, to responding to fish kills and spills in the state's waters.

Musser's staff also performs inspections at WV/NPDES-permitted operations and assists facilities with compliance.

"We help facilities who are having trouble meeting their regulatory requirements," Musser said.



KEENER'S GROUP

carries out 60 to 70 detailed inspections a year at WV/NPDES-permitted facilities, such as municipal wastewater treatment plants and industrial operations like Dow and DuPont.

The inspections are highly involved and usually take two days to set up gear, collect samples, examine the facility's records and equipment and discuss any problems with the operator.

"We always want to make sure they're familiar with the NPDES permit and that they're operating their facility based on what the permit allows them to discharge," Keener said.

"We don't tell them how to operate their plant. Our job is to make sure they're operating it properly and to give them some direction."

The most important thing, Keener said, is that the end product is clean water.

"We're making sure they're in compliance with what the permit says they have to do to get to that end product," she said.

Although Compliance



Newt Harman is one of four EE Compliance Monitoring inspectors who cover the entire state out of the Teays Valley office. Harman is a 28-year veteran with the DEP.

Monitoring inspectors have the authority to issue Notices of Violation, they'll work diligently to help a facility correct its problems or to avoid potential issues down the road. Often, just the threat of penalties will spark a Public Service District to help a local sewage treatment plant, Keener said.

"If a wastewater treatment plant is not operating properly, then your city is in trouble," she said. "Some of our older treatment plants can't handle the load of wastewater coming in and when our inspectors tell them they have a problem and they will be issued violations, it can assist them in getting some help."

"They understand they have a need to upgrade their facilities and if they don't, they may suffer some penalties."

Keener's inspectors also sample water from groundwater monitoring wells at municipal and industrial landfills and, from April through October, inspect facilities from the state's rivers. Her group covers the Ohio River from Huntington to Chester in the Northern Panhandle.

"Whatever we can get a boat on we'll do it," Keener said.

From boats, inspectors examine compliance for structures like com-



The DEP's Teays Valley home isn't particularly roomy but all of its 14 occupants are seldom there at one time.

bined sewer outfalls and collect samples for fecal coliform counts.

Because of a slow-down in the economy, Keener said her staff has been doing more pre-closure inspections, during which Compliance Monitoring will go through a facility scheduled to shut down, note what is likely to be left behind and detail the potential adverse impacts it might have to ground water or waters of the state.

"It might be drums of oil, equipment not properly drained or cleaned and paints," said Keener.

Often other divisions within the DEP will sometime assist during pre-closure inspections.



COMPLIANCE MONITORING inspectors

working out of the Teays Valley office are Tim Andrew, Eric Philyaw, Newt Harman and Alan Kee. Sludge inspector Mark Bolling is headquartered in Kanawha City.

"Our inspectors are treated well," Keener said. "They seldom, if ever, encounter any problems."

Harman, who's been with the DEP for 28 years, is the veteran of the bunch.

"Alan and myself train a lot of the other inspectors," Harman said. "And it's just not new guys in our group. Some of the district offices will send new inspectors to work here with us. I particularly like the training much more than writing reports."

Harman said today there are a lot fewer in-

See CREW, Page 8

CREW

Continued from Page 7

spectors and a lot more responsibility.

“Both on our side and on the regional guys’ side,” Harman said. “I work with them whenever possible.

“Certainly, the enforcement end of it has changed too. When I started, we would write the reports and it was up to someone else to do the enforcement.”

Another change is the size of the permits.

“They have gotten more complicated,” Harman said. “They were four or five pages when I started. Now, some of them run 50 pages.”

Unlike Harman, Keener has been at the DEP for only five years, coming over from the State Parks system where she worked 20 years as a superintendent.

“I’m having a ball,” she said. “You couldn’t ask for a better group of people to work with.”



EE’S SOUTHWEST

Regional office inspectors wear many different hats.

Compared to their office mates from Compliance Monitoring, their inspections of public and private WV/NPDES-permitted facilities do not normally include sampling.

But Musser’s staff also has to deal with landfill and transfer station inspections; fish kills; storm water regulations at construction sites; dams; trash dumps; and hazardous waste spills, just to name a few of its responsibilities.



Inspector Supervisor Cindy Musser goes over some documents with inspector John King at the Teays Valley office. Musser’s EE staff handles hundreds of complaints every year.

“I want landfills inspected once a month,” Musser said. “Landfills can get out of hand quickly if you don’t stay on top of them.”

Then, there’s the matter of complaints from the public. The regional office hears grumbings about everything from muddy water from a nearby construction site to trash in a neighbor’s yard.

“We spend a lot of time on complaints,” Musser said. “We get hundreds of complaints in a year. It’s hard for the public to understand that we don’t regulate clutter.”

Musser said her office also participates in county-wide cleanups.

In addition, EE has a major project in the works that involves inspecting all WV/NPDES-permitted facilities over the next five years that are discharging treated wastewater into streams, including those on the state’s impaired list.

“We initiate all of our own enforcement,” Musser said. “It starts and ends here.”



IN A perfect world, Musser would have an army of experienced in-

spectors to tackle the challenging task of covering her office’s designated 15-county region. Right now, she is one inspector short of the slotted seven for the Teays Valley office.

“Our biggest issue right now is turnover,” Musser said. “We have a lot of people who are retiring and have a lot of young guys coming in. We have six inspectors with less than five years of experience. In this job, it takes about five years before you’re feeling comfortable with everything you do.”

Musser’s staff includes inspector specialist Tom Ferguson, plus inspectors Jason Chambers, John Hendley, Kevin Saunders, Jeremy Hopson and Richard Hackney. Marlan Zwooll and John King work out of the Parkersburg office.

“You multi-task all the time,” said Ferguson, who’s been in environmental enforcement for 19 years after starting as a solid waste inspector for DNR. “You might wear one hat one minute and another the rest of the week. But you get good support here. This is a good crew down here. We work together

pretty well.”

Ferguson said inspectors from both the regional office and Compliance Monitoring are quick to help out one another.

“We assist them sometime on their compliance sampling inspections,” Ferguson said. “They’ll contact us to see if we want to tag along.”



THE DEP has been at its Teays Valley location for just over 10 years. Tina Larue is the office assistant and is the first to greet visitors at the door.

Located near the middle section of the shopping center, the DEP office is easy to miss if you don’t catch the green DEP lettering on the front window. The office is long but narrow, with cubicles lined up against the left wall.

“I think everybody likes it here,” Keener said. “Everybody comes and goes so much you don’t have to worry about security issues too much. It’s a very comfortable and laid back atmosphere.”

“I like it here,” Harman said. “Certainly, it’s less regimented because you’re in a small building where you know everyone.”

“You don’t have to be quite as formal.”

There’s also the issue of rush-hour traffic on Interstate 64, something most of the inspectors in Teays Valley don’t have to deal with.

In the morning, if they’re driving west toward the office, the flow of traffic is to the east toward Charleston — and vice versa at quitting time.

New parameters in permit for water disposal

The West Virginia Department of Environmental Protection has renewed the General Water Pollution Control Permit GP-WV-1-07 with new parameters. The permit grants the right

to land apply waters associated with coalbed methane wells.

The purpose of the General Permit is to establish a simple, efficient and economic method for the disposal and

regulation of water produced from coalbed methane production that is fully protective of the environment.

The new parameters and conditions introduced in the permit re-

newal, as well as the extension of time from two to five years (Jan. 1, 2010 to Dec. 31, 2014), are based on the review and analysis of the infor-

See PERMIT, Page 13

Greening up Marshall

■ **Editor's note:** This story first appeared in the Huntington Herald-Dispatch and is being reprinted with permission.

By Bill Rosenberger

HUNTINGTON — Marshall University officials in the Physical Plant Department aren't necessarily concerned with how much money they are saving by being more energy efficient.

Director Mark Cutlip said with utility rate increases happening nearly every year, cutting costs is rather difficult.

"It's more than saving money," Cutlip said. "It's conservation. If we save money, that's great. But we are looking at reducing consumption."

That's been working fairly well for the department during the past few years. But now it is getting even more attention since the student green fee was implemented this semester, and Margie Phillips was made the university's sustainability manager.

The green fee, \$5 per student per semester, generates about \$100,000 annually. Ten percent funds Phillips' salary, while the rest is used for sustainability projects on campus.

Phillips served as the university's energy analyst for more than 12 years but moved into the new role when the sustainability department was created this semester.

During her tenure, she played a behind-the-scenes role to help the university run more efficiently. She and Cutlip have made many decisions that have produced energy savings.

In the past year, urinals in Smith Hall, along with many public toilets were replaced with more flush efficient models. And a lot of the traditional water faucets also

DEP grants are helping school in its mission to reduce, reuse



Marshall officials don't like to make monetary projections, but the university is on pace to save about \$600,000 this fiscal year because of its path toward greater energy efficiency.

"It's more than saving money. It's conservation. If we save money, that's great. But we are looking at reducing consumption."

— Mark Cutlip

Marshall Physical Plant Department director on the school's move toward being more energy efficient



have been replaced with motion sensor faucets. The difference has been significant.

More than 17 million gallons of water were saved from the 2008 fiscal year compared to the 2009 fiscal year. The number dropped from about 84 million gallons to just under 67 million gallons.

Electricity usage also decreased during that time frame, from about 73.5 million kilowatt hours to 71.3 million kilowatt hours.

Phillips said there wasn't much difference in natural gas costs, which make up 35 percent of Marshall University's utilities. But she said for large buildings, natural gas produces a better cost benefit than electric, which comprises about 11 percent in utility costs. Water is

the highest at 54 percent.

Lighting improvements

Department officials said the Marshall family should be even more impressed next year when utility numbers are compiled. A good portion of the 2008-2009 savings came from the completion of an efficient lighting project in Smith Hall.

Cutlip said it took about seven years to replace all the light fixtures, floor by floor.

This year, new light sensors have been added to classrooms in Smith and Harris halls to eliminate the amount of electricity used when lights are left on.

Phillips said EPA estimates a 20 percent to 30 percent savings in rooms with motion sensors. To date, they said 65 of more than 260 class-

rooms on campus have been equipped.

Outside, students may have noticed workers on ladders changing bulbs in the black decorative lampposts. About 138 now have new LED bulbs, said Tony Crislip, assistant director of the physical plant.

The bulbs, he said, require less wattage, provide better lighting and have a life expectancy of five to six years.

Crislip said it was a financial investment of about \$65,000. But it will be recouped rather quickly because the old bulbs only lasted an average of one year.

The university also changed its vendor requirements this year. It might not be noticed in financial savings, but it does have a large environmental impact.

See MARSHALL, Page 10

PARTNERSHIP

Continued from Page 6

otherwise would end up in landfills.

Dow's South Charleston operations have been working for years to reduce energy, water use and waste generation.

For example, Dow reused 49,939 tons of concrete/masonry during a three-year demolition project. The company also is exploring collaborative opportunities with the EPA and DEP to help schools remove hazardous materials and waste.

Huffman said Toyota and Dow have come a long way in the area of

corporate sustainability.

"Toyota and Dow have learned to recognize the complementary relationships among the environment, economy and communities in West Virginia, and further realize that this Sustainability Partnership goes far beyond stakeholder involvement," he said. "It requires working within their facilities and with communities to tackle specific environmental issues."

George Vickers, an environmental engineering specialist with Toyota's Buffalo plant, said joining the Sustainability Partnership opened much-needed

channels of communication with the EPA.

"We've worked really hard for a very long time trying to establish a relationship with the DEP based on trust and working together," Vickers said.

"That's been a little lacking on the federal side.

"One of the big bonuses for us was opening a dialogue on the federal side."

Joe Amos, regulatory affairs leader for Dow's West Virginia operations, said the Sustainability Partnership was a "natural fit" for his company.

"I think this partnership is designed to help us identify areas of in-

terest for us, the EPA and the local community, which is really the focus for us," Amos said.

"One of the key aspects of this is we believe we can also provide some mentorship to other outfits, especially in our industry sector," Amos added.

The EPA's Garvin said Toyota and Dow are now models for other companies in the region who want to reduce energy, pollution and waste.

"Energy consumption in the Mid-Atlantic states exceeds 9,100 trillion BTUs and more than 54 million tons of waste is generated annually," Garvin said.

MARSHALL

Continued from Page 9

Safer cleaning products

Dale Osburn, another Physical Plant assistant director, said they went to all-green cleaning products, effective this past August.

"Any waste from products is removed by the contractor who got the bid," Osburn said.

Cutlip added that anything Marshall won't be consuming is taken by the contractor, which must produce an invoice showing it was recycled.

"We're not going to buy our way out of anything," Cutlip said, referring to some universities that purchase energy credits. "We're just making changes."

During winter break, floors will be waxed with a zinc-free product, thermostats will be kept lower, and most buildings will go into shutdown mode to conserve energy. The latter has been in place for at least a decade, they said.

Smith Hall, which they said was in need of the most upgrades, is in the process of getting new air handler systems. Cutlip said replacing those systems will equate to a \$20,000 savings in operational costs for the building.

They've also in the past few years installed reflective roofing on Smith Hall, the Communications Building and Morrow Library. That, according to EPA estimates, can save up to 30 percent in energy costs.

Cutlip said he doesn't like to make monetary projections because so many uncertainties can affect it. But the university is on pace to save about \$600,000 this fiscal year because of the all changes, he said.

More work ahead

It's hard to think of Marshall being any greener, but that's what Phillips is trying to do in her new role as sustainability manager. Part of her job is to be more public and help focus on projects that can create a more sustainable campus, from purchasing decisions to landscaping and cleaning products to lighting fixtures.

She also leads the Greening Marshall Committee.

"Now I'm looking at more sustainability," Phillips said. "Anything to do with green and being more environmentally conscious."

There's evidence, both seen and unseen, all around campus of that happening.

A Department of Envi-

ronmental Protection grant received in August helped purchase several attractive recycling stations that are located throughout campus, including the Memorial Student Center and outside Drinko Library.

The money also paid for a new recycling compactor, located between the Science Building and Harris Hall. On Nov. 19, it compacted its first load of materials, sending more than 17,000 pounds of paper and plastic off for recycling. Cutlip said that amount was collected over just a seven-week period.

"That went to a recycling plant rather than a landfill," Cutlip said.

Getting students involved

Students on the Greening Marshall Committee also are impressed. But they said this is just the beginning.

"It shows the amount of products we're wasting," said senior Heather Sprouse, vice president of the Marshall student Sierra Club. "It's only the tip of the iceberg."

Sprouse said many buildings don't have recycling receptacles, and the message of being more environmentally aware is still spreading.

"We have a whole set of freshman and sopho-

more students going through leadership training," Sprouse said. "Our generation is totally stepping up."

One way to keep students and employees interested and aware might come in January. Phillips said the Greening Marshall Committee might enter the university into the national collegiate competition called RecycleMania, a friendly competition and benchmarking tool for college and university recycling programs to promote waste reduction activities to their campus communities.

Over a 10-week period, from Jan. 17 through March 27, schools report recycling and trash data, which is then ranked according to who collects the largest amount of recyclables per capita, the largest amount of total recyclables, the least amount of trash per capita or have the highest recycling rate. With each week's reports and rankings, participating schools watch how their results fluctuate against other schools and use this to rally their campus communities to reduce and recycle more.

According to Recycle-

See MARSHALL, Page 11

Group focuses on CCS

State eyeing carbon capture and storage

By Tom Aluise

With Congress on the verge of approving significant reductions in carbon emissions, West Virginia continues to position itself to best answer the challenges of potential climate change legislation.

A major step was taken during the West Virginia Legislature's 2009 regular session with the passage of Gov. Joe Manchin's carbon dioxide capture and sequestration bill. Within the bill, a Carbon Dioxide Sequestration Working Group was established to study issues pertaining to carbon capture and storage (CCS) and to develop a long-term strategy for the regulation of the CCS process in West Virginia.

The 18-person panel, which has met three times, includes a wide range of scientists, engineers, environmental attorneys, public utility experts, citizen group advocates and industry representatives.

The Department of Environmental Protection does not have an official representative on the working group but has been closely involved during its meetings.

DEP Associate General Counsel Kristin Boggs represented Cabinet Secretary Randy



The Carbon Dioxide Sequestration Working Group met for the third time in December at DEP headquarters. The group evolved from a bill passed during the 2009 legislative session.

Huffman at the group's first three gatherings. Bill Timmermeyer, from the Division of Water and Waste Management, along with Jeff Knepper, a DEP geologist who drafted the permit for American Electric Power's CCS pilot project at its Mason County Mountaineer facility, also are involved with the CCS group.

The AEP project recently got a boost when the U.S. Department of Energy announced it was pouring over \$300 million into the operation.

"Jeff answers technical questions on how the

permitting process works — he's the voice of the DEP," Boggs said.

Boggs said the CCS working group has been charged by the Legislature with assisting Secretary Huffman in developing and promulgating legislative rules they determine are necessary to facilitate the CCS process in West Virginia.

"Once that process begins, I will become more involved," she said.

The governor's bill created a new Article 11A within Chapter 22 of the West Virginia Code that instructs the CCS working group to study scientific, techni-

cal, legal and regulatory issues related to CCS and "issues regarding ownership and other rights and interests in subsurface space (pore space) that can be used as storage space for carbon dioxide and other associated constituents."

Article 11A also allows for the working group to "conduct or initiate studies, scientific or other investigations, research, experiments and demonstrations" in conjunction with the state's universities and colleges.

A preliminary report is due to the Legislature by

See **CCS**, Page 13

MARSHALL

Continued from Page 10

Mania.org, most colleges and universities are like small cities that consume large amounts of resources and generate a lot of waste.

Phillips said more is on the horizon, as the Greening Marshall Committee makes recommendations on how to

use the green fee collections.

Sprouse, who is among the students, staff and faculty on the committee, said the group is in the early stages of creating a vision for the future.

Some ideas that have circulated is getting more bike racks to encourage students to pedal, rather than drive,

to campus. Phillips said they could use the green fee account to purchase rain barrels to collect water for the lawn.

She said there is no estimate of how much water the maintenance staff uses to water the grass, but she thinks the savings could be dramatic.

There also are some long-term projects that

would take a few years to save up for. Upgrading other buildings on campus, composting equipment and solar panels are among them, Phillips and Sprouse said.

In the meantime, Phillips is researching more grants that might allow Marshall to speed up some of those more costly projects.

DEP December retirements



Karen Light
 Division of Water and Waste Management
Date of hire: Dec. 12, 2000
Last day: Dec. 31, 2009

Light says: “I came to DEP by way of the West Virginia Tax De-

partment and a short stint at DNR. The difference in employees was amazing. The poor Tax employees had been beaten down so often that any hope or joy was squashed before it spread.

“Water still had passionate employees, on a mission. I even got a T-shirt and a mug. If Tax employees had gotten T-shirts they would have been complete with a bull’s-eye on the back. I was now home.

“I’ve enjoyed my work experience at DEP. My supervisor, Pat Campbell, is a workaholic, as are all his managers. It’s easy to work hard when everyone around you is working. I’ve mowed down many an unsuspecting co-worker racing to do something.

“Pat has also allowed me to be involved in outreach programs where I could influence fertile little minds, a scary thought for most parents. Days, weeks, years have flown by. And now it’s time to go. Somehow you just know.”

On the future: “My plans don’t include any exotic trips. For God’s sake, I was a secretary. The best my husband and I can afford is a week at the Outer Banks in the winter.

“I won’t be entertaining heads of state at my lavish home on the hill. I don’t think I have a full set of Corelle for four. Serving bowls are matching Cool Whip containers. I can’t afford to rent the party tent for a day.

“But I have my dogs, a house to paint, wood to stack, motors to take apart, plastic bags to crochet and some food hoarding to continue. I should stay busy.

“I leave with a quote from a DEP employee: ‘Anyone who likes Karen Light is an idiot.’ So, goodbye to the idiots, wherever they are.”



Minter Foster
 Environmental Enforcement
Date of hire: Sept. 16, 1988
Last day: Dec. 31, 2009

Foster says: “Since I made my decision to retire in October, I have been thinking about my 31

years of work in the public sector, the majority of which have been with DNR and DEP.

“I started out working in the state park system as the assistant superintendent at Coopers Rock State Forest. In September 1988, I began work as a water resource inspector with Water Resources. We soon became Environmental Enforcement and shortly after that left the DNR to join the newly formed DEP.

“Working as an environmental inspector and environmental inspector specialist has been a great adventure. You learn something new every day. Every day is different and can sometimes be exciting.

“It has been a pleasure to have worked with a great group of people in DEP but especially the people in the Fairmont office.

“Though I will not miss the work, I will miss working with these people on a daily basis. I have also met many great people out in the public who, though we may have disagreed about the rules and regulations, and meeting permit compliance, we have had a good working relationship and have gained the respect of each other in how we do our respective jobs.”

On the future: “As I head off into retirement, I will be exploring areas to write new chapters in my life. I am also looking forward to spending time with my mom in Rochester, N.Y.”

Gary Meade
 Division of Mining and Reclamation
Date of hire: Aug. 1, 1970
Last day: Dec. 31, 2009

Dwight Given
 Division of Mining and Reclamation
Date of hire: Sept. 11, 1972
Last day: Dec. 31, 2009

TREE

Continued from Page 1

also keeps trees out of landfills.

The trees are used to create fish habitats at the bottom of lakes and streams throughout West Virginia.

Each year, existing rotting habitats are replaced by newly recycled trees, and new habitats are also created.

Extra trees not needed for lake and stream habitats are ground to make mulch used throughout the state.

“This is a worthwhile project that not only diverts waste from our landfills but also provides a wonderful habitat for fish in our West Virginia lakes.”

— Sandy Rogers

Christmas Tree recycling project coordinator

Project Coordinator Sandy Rogers sees real benefits in the project.

“This is a worthwhile project that not only diverts waste from our landfills but also provides a wonderful habitat for fish in our West Virginia lakes,” said Rogers.

Started in 2006, the program is in its fifth year, and sees increases in tree donating each year.

“It appears that West Virginia citizens enjoy participating in this event because we are seeing a yearly increase in the number of trees

that are being brought in after Christmas,” said Rogers.

This year the project hopes to receive around 500 trees.

There are benefits for donators as well.

Those who donate a tree receive a gift made out of recycled materials that varies from year to year.

Also, donors’ names are entered into drawings for larger prizes, such as ski trips. For more information contact Rogers at (304) 926-0499, ext. 1004.



Paying tribute

Three plaques are now up on the DEP's Memorial Wall, which is located on the south end of the main, third-floor hallway. The plaques honor DEP employees who have died since October 2004, when the agency moved to its current location. The first three plaques are in memory of Ken Politan, Eric Dannaway and Stanley Moskal. A plaque honoring Tim Richard (right), who died Dec. 11, will go up after the year ends. Richard, a 16-year DEP veteran, worked in the DMR's Philippi office.



WATER

Continued from Page 3

bled fluids (if any).

"Sort of in conjunction with that, we've developed a guidance document for when you can withdrawal water from West Virginia streams," Stratton said. "That was important because it offers a degree of protection for those streams."

There are no laws in West Virginia regulating water withdrawal from streams.

The Web-based guidance document consists of an interactive map that allows large-quantity water users to click on a section of the state and learn whether streams and rivers in that area have adequate flow for withdrawal. The map's information is supplied by U.S. Geological Survey gauges.

Stratton said Pennsylvania has had problems with Marcellus drillers withdrawing too much water from streams. DEP Cabinet Secretary Randy Huffman wanted to make sure that didn't happen in West Virginia.

"Industry said 'give us

See WATER, Page 14

CCS

Continued from Page 11

July 1, 2010. The working group's final report is due July 1, 2011.

According to Article 11A, the final report will, among other things, "recommend methods to encourage development of sequestration technologies; evaluate the economic and environmental feasibility of large, long-term sequestration operations; propose legislation to clarify issues regarding pore space ownership; recommend methods to facilitate

widespread use of sequestration technology throughout the state; identify geologic sequestration monitoring sites capable of assessing the short- and long-term effects of CCS; assess the feasibility of geologic sequestration within the state, noting characteristics of areas where carbon dioxide may be stored; and discuss the costs, benefits, risks and rewards of large-scale CCS projects."

Boggs said the group is progressing on schedule.

"I think they're making great strides toward

having the preliminary report to the governor. They're definitely working hard with that deadline in mind," she said.

"No one appears at all overwhelmed or panicked by the magnitude of the task or the aggressive schedule that has been set by the governor," Boggs added. "They just rolled up their sleeves and jumped right into it. It might be a daunting task but the group doesn't appear to be intimidated by it."

In order to facilitate its charge and better manage its workload,

the group has divided itself into three subcommittees: Legal Issues, CCS Feasibility, and Geology & Technology.

"These subcommittees have met several times since the initial working group meeting in September and are making great strides in addressing the issues presented to them by the governor in his groundbreaking legislation," Boggs said.

The full group will meet again on Wednesday, Feb. 3, 2010 at 9:30 a.m. at the DEP's headquarters in Kanawha City.

PERMIT

Continued from Page 8

mation received from the operators in compliance with the permit conditions. The administrator of the General Permit is the Office of Oil and Gas.

This General Permit strengthens the concept

of environmental impact prevention.

It includes provisions for performing background sampling and sampling in control areas in order to establish a baseline for evaluating the impact of land applied water on the environment. It also incorporates new parameters to

the regular sampling process and considers more exhaustive monitoring methods for groundwater.

Coalbed methane wells are wells drilled into coal seams to release trapped methane. Water is pumped from the coal seams in order to lower the water pres-

sure, thereby releasing the methane.

A copy of the General Permit and its related documents can be obtained from the WVDEP's webpage: www.wvdep.org, or by writing: WVDEP Office of Oil and Gas, 601 57th St., S.E., Charleston, WV., 25304-2345.



Division of Air Quality employee Joel Maddy, right, explains air monitoring equipment to a visiting Girl Scout troop.

Scouts show interest in DEP

Some curious Girls Scouts paid a visit to the Department of Environmental Protection on Dec. 16.

The troop, which consisted of sixth- and seventh-graders from Charleston's Horace Mann Middle School, had been studying air and the environment. The girls decided a trip to the DEP's Division of Air Quality would be a great way to learn more.

The troop's interest in the DAQ was sparked by its Idle Free Zone program, which encourages school bus drivers and motorists to turn off their engines while they're waiting in school zones. Idle Free Zones improve air quality for



Left, the DAQ's Stephanie Hammonds meets with visiting Girl Scouts from Horace Mann Middle School. Right, the DAQ's Mike Rowe fields questions from the Girl Scouts about a doll house which highlights energy efficient options for homeowners.



students, lower fuel costs and reduce wear and tear on bus engines. "They had seen the Idle Free Zone signs and wanted to learn more, so they tracked me down," said Renu Chakrabarty,

the DAQ's air toxics coordinator. "They had a lot of questions about the various air quality programs in place to reduce air pollution, what careers were available, and what air moni-

toring was all about."

Chakrabarty and her colleagues provided the Scouts with several hands-on demonstrations to help them learn

See SCOUTS, Page 15

WATER

Continued from Page 13

some guidance' and that's what led to this water withdrawal guide," Stratton said.

Legislators can use the Water Use Section's report in a variety of ways.

It can serve as a framework to craft new water-use laws, especially in

dealing with Marcellus Shale drilling.

"There had been some draft legislation to that effect," Stratton said.

"But that was before they had an understanding of what we're trying to do here."

Also included in the Water Use Section's annual report is information about ground water

monitoring wells and a large quantity water user certification, which was conducted in 2009 for the first time since 2005.

In addition to natural gas drillers, examples of large quantity water users include public water suppliers, mining companies and power plants.

"We went out to determine whether water use

had changed by the people who had registered with us before," Stratton said.

A total of 432 facilities responded to the certification, four more than in 2005.

The complete Water Use Section report can be accessed by going to the WVDEP Web site and clicking on "water use."

NEW ADDITIONS

Recent DEP hires:

- Christopher Kyle, ITO, Dec. 1
- Rebecca Wiseman, Administration, Dec. 1
- Michael Wade, DWWM, Dec. 1
- Melissa Boreman, DMR, Dec. 1
- Michelle Brenner, DWWM, Dec. 16

SCOUTS

Continued from Page 14

how everyday choices on using less energy can reduce air pollution.

The DAQ's Stephanie Hammonds demonstrated the effects of controlled and uncontrolled air pollution from the industrial boiler simulator. She also explained how the events in Donora, Pa., back in 1948, led to the creation of national air pollution control laws.

The DAQ's Joel Maddy gave the Scouts a tour of the air monitoring equipment lab and demonstrated how some of the particulate matter sampling equipment works, while Mike Rowe explained the energy efficient doll house.

Another DAQ employee, Laura Crowder, led the Scouts through the crank generator demo, where they could physically see how much extra energy is required to light an incandescent bulb, compared to a compact fluorescent bulb and the new LED bulbs.

"I talked to them about what the Idle Free Zone signs were meant to convey to all drivers," Chakrabarty said. "I also led them through the demo of how easy a properly inflated tire turns, compared to an improperly inflated tire — again with the reminder that this translates to less energy and air pollution."

Chakrabarty said the Scouts' enthusiasm and interest made her feel good about her job.

"It was a good reminder that what we do for a living and in our lives is important, and can make a difference," she said.

Calendar winners named

Rebecca Holmes, of Pocahontas County, will have her photo displayed on the cover of the 2010 Roadsides in Bloom calendar.

Here is the list of this year's 12 other winners in the Operation Wildflower photo contest: January — Ronald L. Manning, Culloden; February — Lutrisha Little, Craigsville; March — Roger Kennedy, Grandview; April — Randy Timm, Webster Springs; May — Lois Pigott, Wallace; June — Mike Smith, Waverly; July — Lisa Linn Arroniz, Kearneysville; August — June Bright, Webster Springs; September — Larry Sponaule, Cedarville; October — Stefanie Kruger, Peninsula, Ohio; November — Ann Walker, Hillsboro; December — Rindy Clayton, Mt. Lookout.

WEB

Continued from Page 1

well as eye-catching."

The look of the Web site will foster a feeling of organization and be more user friendly.

"The new site has a clean, modern look," Stevens said. "It is based on the 'How Do I' concept, not on 'what office might have what I think I'm looking for.' With this concept, a person should be able to find the information they are looking for with very few clicks of their mouse.

"The front page will be more flexible. It will take a user to more than just news. Also, the menus won't be overwhelming. We're stuck now with one level of structure for our menus, whereas with the new system we'll no longer have this constraint."

"The new Web site definitely looks cleaner and less overwhelming," said Doneghy. "The technology underlying the new system provides a great deal of power and flexibility for constructing Web sites.

"Instead of having to operate in a strait jacket with no possibilities for improving the aesthetics or functionality of our Web site, we'll now be able to incorporate our ideas for improvements."

The current Web site is run by an old system that is hard to repair because it's almost impossible to find replacement parts.

"We decided to re-create the Web site for several reasons, but the main reason was because our content management system was no longer adequate," said Jerry Forren, chief of ITO.

"The system was very old and difficult to use," Forren said.

"As we load more and more information onto our site, the need for a new content management system became a huge concern. The old Web site was not hard to use for the public, but it was more of a pain for the agency to keep up to date and current."

In addition to it being more attractive and user friendly, the new Web site requires only an Internet connection to update a page. With this flexibility, changes can be made from the comfort of home. Administrators, though, must have security clearance.

"With the new system, designated individuals from each section within the agency will be able to add and change content in accordance with their security," said Doneghy.

The new Web site will be maintained by West Virginia Interactive, the same company that designed and maintains the state site.

"We worked with West Virginia Interactive on the site and they have been great to work with," Forren said.

"The new site has the same look and feel as the West Virginia state portal. We felt it was important that the public have the same experience with our site, as they do with the state site."

West Virginia Interactive has a full team of Web experts and technicians to help maintain the system.

"Therefore, when problems arise, we'll be able to direct them to the West Virginia Interactive staff," Doneghy said. "This will greatly relieve Ken from having to continually research and correct problems.

"He will still be involved as a gateway," Doneghy said. "Problems or questions will still go to him, and if it's with the hardware or software, he'll call West Virginia Interactive."

CHANGES

Continued from Page 2

We probably haven't spent as much time doing that this past year as we should have, but we're beginning to recognize its importance and moving in that direction.

Really, we have no choice.

The bottom line is there's a new administration in Washington. It is what it is. Any fight that we wage in hopes of things going back to the way they were in December 2008 is fruitless.

We can either continue in a struggle that we'll never win, or meet our challenges head on and adapt to change.

West Virginia is the second largest coal-producing state in the nation and has a robust oil and natural gas industry. Understandably, we are a carbon-intensive state with a carbon-intensive econ-

omy. We're also facing probably the most anti-carbon sentiment across the country, and even the world, than ever before. The stakes are high.

Politics are being played with carbon dioxide and other so-called greenhouse gases in terms of their impact on climate change.

Our position is not to argue the science, or get involved in the politics of global warming.

Rather, we must understand that, at some point, perception becomes reality and decisions are made based on what the world's perceptions are.

As a carbon-based state, we need a seat at that decision-making table and we must plan accordingly.

The same holds true as the U.S. Environmental Protection Agency continues to delay dozens of pending

coal mine permits across Appalachia for further review of potential environmental impacts. It's another opportunity for us, as a regulatory agency, to get out in front of change.

Rather than wait for the EPA to sit in a room in Philadelphia and make decisions that affect the people who live in the coalfields, the people who make investments in coal and the workers who mine the coal, let's tell the EPA what we're going to do. We know enough now about the issues and what's legitimate, so let's make real changes based on sound science and good decisions.

That's not to say we're at odds with the EPA.

We are on the same team, with the same interests in mind. And I would not argue for a minute that the issues being raised by the EPA are not legitimate from

an environmental standpoint. But we have, as a carbon-intensive state, a different view and different interests than the EPA does in its role of overseeing the Clean Water Act on the national level.

Coal, of course, has been clouded by uncertainty before. And each time, the sky-is-falling mentality has pervaded the state. Yet, each time we've emerged with a more stable and better mining industry, both for the environment and for the economy.

I can sit here and paint a bleak picture again. But my guess is the entrepreneurial spirit of the mining industry will adapt, as it always has. In short, when the coal orders come, the mining experts will figure out a way to get to it, within the framework of the rules, whatever those rules are.

Guidelines set for Consol water

By Kathy Cosco

The West Virginia Department of Environmental Protection issued an order earlier this month to Consolidation Coal Company (Consol) that establishes guidelines for the company to resume pumping water from its underground mining operations that straddle the border between West Virginia and Pennsylvania.

The order is a short-term order that would allow pumping under controlled conditions from the effective date of the order until it expires on April 30, 2010.

It allows Consol to resume pumping to bring the mine pool to a level that creates possible storage capacity that can be used as a water management tool during low flow, high temperature months and to ensure the safety of the approxi-

mately 400 miners working underground at its Blacksville No. 2 mine.

Consol voluntarily ceased pumping water from the mine works into Dunkard Creek in cooperation with the multi-state investigation of the cause of a major fish kill that spanned more than 40 miles of the stream.

Based on information concerning the conditions favorable to the growth of golden algae, the probability for an algae bloom increases when the water temperature rises above 50 degrees. Therefore, when the water temperature is 50 degrees or higher, the in-stream limit that must be met by Consol is 860 milligrams per liter, which is the acute water quality standard for chloride in West Virginia.

For temperatures between 40 and 50 de-

grees Fahrenheit the limits would decrease as the temperature increases. In the meantime, when the water temperature is below 40 degrees Fahrenheit, and the probability for an algae bloom is low, the company must meet an in-stream limit of 1,400 mg/l.

"What we have learned from golden algae experts from around the country is that this alga is less likely to bloom, and produce toxins in cooler water temperatures," said Scott Mandirola, acting director of the Division of Water and Waste Management. "So while the risk is low during the cold and wet season, we believe it is safe for the company to pump down the mine pool as much as possible. Once the temperatures begin to rise, more stringent limits will go into effect."

The order calls for chloride and conductivity monitoring to be conducted at Blacksville No. 2's discharge point and downstream in the West Virginia Fork of Dunkard Creek.

Although the order is considered a short-term one, it also addresses long-term issues. Under the order, Consol must complete and submit a proposal for the construction of treatment plants for its operations in northern and north-western West Virginia. The draft proposal is due to the WVDEP by April 15, 2010, and the project must be completed by May 31, 2013. The first treatment plant to be completed would remove problematic discharges from Dunkard Creek. Additionally, all other outlets that are the subject of WVDEP Order 133C would be addressed in the proposal.