

Happy  
Thanksgiving!



## In This Issue ...

- Sec. Huffman testifies before U.S. Senate, Page 2
- ReFashion Show is set for Nov. 21, Page 3
- The online game checking website is up, Page 3
- Date set for DEP "Energy Tree" lighting, Page 4
- Easy (and cheap!) winterizing tips, Page 5
- Learn the laws of geology, Page 6
- New hires and upcoming retirements, Page 6

## Gov. Tomblin: West Virginia Will Submit Initial Clean Power Plan

by Jake Glance

Gov. Earl Ray Tomblin announced last month that West Virginia will submit an initial state implementation plan to comply with the federal Environmental Protection Agency's (EPA) Clean Power Plan (CPP). Initial plans, which can include extension requests, are due Sept. 6, 2016.

"As required by new legislation passed by the Legislature this year, the state Department of Environmental Protection has already initiated its feasibility study to determine what options may be available for West Virginia to meet these new standards," Tomblin said.

"Ultimately, any plan submitted by West Virginia will require the approval of the Legislature before being submitted to the EPA."

The DEP is accepting public comments and information, through Dec. 31, to be included in the study. The CPP was published in the federal register on Oct. 23, making it final and starting the clock on DEP's 180-day deadline to complete the study.

West Virginia Attorney General Patrick Morrisey, along with officials from 23 other states, is suing the EPA to block the regulations from being implemented.

see **POWER**, Page 6

## KRONOS Switch Delayed; Keep Using ERS for Time Sheets

by Jake Glance

The DEP's switch to the new KRONOS time keeping and biweekly pay system has been delayed.

In a decision on Nov. 2, the Enterprise Resource Planning Board (ERP) delayed the switch because of concerns over an "extra" paycheck that salaried employees would receive once every 11 years. The next year employees would receive an "extra" paycheck would be 2020.

The extra paycheck would cost the state approximately \$55 million - but there are concerns because the state cannot pay for services until after they are rendered.

Some legislators have also raised concerns over the current plan to pay state workers every other week since it divides the year into 26 14-day periods. That would leave the 365th day of the year as a leftover day for which some legislators say would mean state workers get paid twice.

The ERP is made up of Gov. Earl Ray Tomblin, Auditor Glen B. Gainer, and Treasurer John Perdue. They are charged with overseeing the state's transition to the Oasis system.

Melinda Campbell, chief of the DEP's Business and Technology Office, says DEP employees should continue to fill out their time cards and request leave in ERS as well as in KRONOS. There was no KRONOS time entry for the period ending Nov. 13.

DEP employees will be kept updated on the status of KRONOS via email.

## DEP's Annual Paint Drive Produces Over 400 Gallons for Habitat for Humanity's ReStore

Total collected at DEP is believed to be the most ever

by Jake Glance

As donations and community center manager for the Habitat for Humanity of Kanawha and Putnam County's ReStore, Courtney Crabtree is no stranger to organizing events to allow people to donate unwanted items.

But even she was impressed with the amount of paint that was brought to the collection point at the DEP's Kanawha City headquarters on Oct. 23.

There was so much paint that it took four pallets and a forklift to load it onto Habitat's box truck.

Courtney said it was the most paint ever received by the DEP during



DEP's Helen Ford and Allen Flowers stack paint cans onto a pallet during the annual paint drive Oct. 23. More than 400 gallon containers were donated, which is believed to be a record amount for a Habitat for Humanity event.

a collection event and might even be the largest amount collected at any single event in the history of the ReStore.

People donated 436 gallon con-

tainers of unused latex paint, wood stain, and polyurethane.

The donated items will find new life at the Habitat's ReStore in Charleston.

see **RESTORE**, Page 6

# Secretary Huffman Testifies Before U.S. Senate Panel

by Jake Glance

DEP Cabinet Secretary Randy Huffman testified before a U.S. Senate committee Oct. 27 regarding the federal Office of Surface Mining's proposed Stream Protection Rule.

The Energy and Natural Resources Committee includes both Sens. Joe Manchin (D-W.Va.) and Shelley Moore Capito (R-W.Va.).

Randy's brief testimony detailed why the DEP believes the Stream Protection Rule is an illegal, ill-conceived overreach that subverts federal statutory authority and state primacy jurisdiction. He also explained why the DEP further takes issue with the fact that West Virginia and nine



other state cooperating agencies were left out of the rulemaking process – a sentiment that was echoed by multiple other officials who testified at the hearing.

Also testifying at the hearing were representatives from the U.S. Secretary of the Interior, the Wyoming Department of Environmental Quality, Public Justice, and the National Mining Association.

The full text of Randy's remarks is below.



Berkeley County was named the Grand Prize winner of the Clean County Awards. The Berkeley County Solid Waste Authority will receive \$2,000 to put toward cleanups and other projects. Braxton County, the runner-up, will receive \$1,000. Above Clint Hogbin, chairman of the Berkeley County SWA, accepts the award from DEP's Terry Carrington.

## DEP Secretary Randy Huffman's Testimony:

Thank you for the opportunity to speak on behalf of West Virginia concerning the Office of Surface Mining's proposed Stream Protection Rule. As cabinet secretary for the West Virginia Department of Environmental Protection, the agency responsible for regulating coal mining in the Mountain State, I am very concerned about the impacts this rule would have on West Virginia and our nation.

West Virginia has had laws addressing the environmental effects of mining since the 1930s and has been a "primacy state" for implementation of the Surface Mining Control and Reclamation Act since 1981. This experience makes West Virginia uniquely qualified to speak about the proposed Stream Protection Rule.

OSM worked on this proposed rule and the accompanying Draft Environmental Impact Statement (EIS) and Draft Regulatory Impact Analysis (RIA) for over five years. These documents together make up more than 3,000 pages of very complex material – material that represents, based on our initial review, the most significant rewrite of Surface Mining Act regulations since they first went into effect.

The proposed Stream Protection Rule is an ill-conceived, unlawful overreach. It would effectively override a

long-standing act of Congress and therefore should not be adopted without a Congressional mandate. When the Surface Mining Act was enacted nearly four decades ago, Congress stated that one of the express purposes of the act was to assure that the coal supply essential to the nation's energy requirements and to its economic and social well-being would be provided. Congress also said there must be a balance between protection of the environment and agricultural productivity and the nation's need for coal as an energy source.

Yet, this proposed rule doesn't take that need into account. What OSM is proposing would impose costly new regulatory burdens without any established necessity for them. That balance that Congress intended to remain in place would be erased. In its place would be a law that is contrary to the very spirit of the Surface Mining Act.

One of the most obvious shortcomings of the rule is that it is full of unlawful conflicts with federal and state clean water laws. The Surface Mining Act makes it clear that nothing in the act should be allowed to supersede, amend, modify or repeal the Clean Water Act or any state laws adopted to implement it. The Surface Mining Act is meant to take a back seat to both federal and state laws when there are conflicts.

The Clean Water Act gives the states primary responsibility for development of water quality standards – including designated uses of the waters of the state and water quality criteria based on such uses. The U.S. EPA – not OSM – can promulgate a water quality standard for a state – and then only in limited circumstances.

There are multiple instances throughout this Stream Rule in which existing federal and state laws related to water quality standards would be usurped. The rule also contradicts the primacy authority of states. For instance, the proposal would insert the U.S. Fish and Wildlife Service into state-level permit decisions. It also unlawfully merges Clean Water Act and Surface Mining Act permit requirements – which, we believe, would inevitably lead to OSM seeking oversight of those merged permits.

Additionally, the permit process OSM seeks to establish with this rule violates the Surface Mining Act by eliminating the exclusive regulatory jurisdiction of the states. The Surface Mining Act provides for either state regulation of surface coal mining or federal regulation – not both.

Also, in developing this rule, OSM flouted the cooperating agency process. It enlisted the cooperation of 10 state regulatory agencies – including the West Virginia DEP – in drafting an

environmental impact statement (EIS). Yet shortly after bringing those states on board, it excluded them from the process, even though this rule will drastically affect how those states regulate mining.

Essentially, OSM conducted the NEPA process for the Stream Rule for more than four years, by itself, in secret. The federal agency was not willing to consider comments or challenges by state regulators who were ready, willing, and able to participate.

The Stream Protection Rule is an unnecessary, uncalled for political gesture. What prompted OSM to make these changes? There were no demands from Congress that OSM conform to Congressional intent, nor was there any outcry from state regulators demanding fixes for broken regulatory programs. There is nothing throughout the history of the Surface Mining Act to indicate a need for this radical rewrite of the regulations.

In conclusion, the proposed Stream Rule is illegal. It subverts federal statutory authority and state primacy jurisdiction – and it upsets the balance Congress intended to create between environmental protection and coal production.

Therefore, the West Virginia DEP wholeheartedly believes OSM should withdraw this rule and abandon this rulemaking effort.



# 2015 ReFashion Show Set for Nov. 21 at Charleston Town Center Mall

by Jake Glance

Sometimes the things we see in the trash are things we don't even want to touch, let alone make into clothing and actually wear.

But that's exactly what the goal of the 13th annual ReFashion show is.

The show will be held Nov. 21 at the Charleston Town Center Mall in Macy's Court. Registration begins at 11 a.m. and the runway show begins at 1 p.m.

"Outfits are made from reused or recycled material, anything from paper to plastic, anything you can recycle," said Paul Hayes, the president of the

Recycling Coalition of West Virginia who also works with the Solid Waste Management Board.

This is a green event, not just because it promotes reusing and recycling, but because prize money will be awarded to the best designers and the winners of each category.

The categories are "Newspaper Challenge," where designers have to use recycled newspapers in their design; the "Mall Shopper," where designers have to use recycled materials like bags or boxes from mall shops; the "Coca-Cola Challenge," in which designers can use boxes, bags, bottles, cans, or anything else that has the Coca-Cola logo on it; and a general theme, where creativity and flair among designers is encouraged and rewarded.

There are two age groups in each category: ages 13 and younger and ages 14 and older.

There will be a first, second, and third place overall in both age groups. First place overall in both age groups wins \$250, second place wins \$200, and third place wins \$150. Each category will also have a winner named from both age groups, with the category winners taking home \$50. A category winner can also take home one of the overall prizes.

Several dozen entries are expected

from all over the state. Paul says recent contestants have come from as far as Brooke and Mineral counties.

"It is amazing to see what people come up with and actually make something really nice out of something like bubble wrap or shopping bags," Paul said.

"Last year we had a designer make a vest out of the tape out of a cassette tape. We had a designer make sequins out of cut up pop cans. That's a lot of cutting."

The ReFashion show encourages creativity but also helps designers think more about reusing and recycling all types of materials. And it helps build confidence as well.

"These folks are so proud of what they're wearing, even though it is considered trash by some people. Wear it and walk with your head held high down a runway in front of hundreds of people.

It's not just recyclable plastic and paper products that can be used. Paul said one designer incorporated corn husks into a design.



Dresses and other fashions like this will be featured Nov. 21 at the Town Center Mall in Charleston. This dress is made from recycled newspaper, cut into strips or twisted into colorful strands.



This winning design from a past ReFashion show used more than 1,000 balloons collected from birthday parties and wedding receptions.

## DEP's Intranet Bulletin Board is a Bargain Hunter's Dream

A useful but under-used DEP employee perk is the Employee Bulletin Board. [The board is on the Intranet under Intranet Applications.](#)

Employees create their own user names and passwords, which will allow them to log in and out each time they visit the site. Not only are employees able to sell items, they can donate items to charities and advertise things for free.

It's a simple process. Instead of traditional bulletin boards where only certain employees will see advertisements, it's the ultimate alternative.

The Watershed Improvement Branch's Stephanie Ferrell, who currently has 10 items for sale on the bulletin board at this time, claims the bulletin board has proven to be quite the success story.

"I had several pieces of furniture to get rid of for free and so I advertised on the bulletin board and was able to get rid of the undesired pieces within the same week," Stephanie said.

Anyone unable to have a yard sale during the colder months may find that the Employee Bulletin Board is a perfect place to advertise those goods and services.

## Online Game Checking Now Available for WV Hunters

### System also allows hunters to call in, give ID number to check big game

Column by Gov. Earl Ray Tomblin

One of the most anticipated times of the year for West Virginians is big game hunting season. So many of our family members, friends and neighbors enjoy picking up a bow, rifle, musket or, beginning this year, a crossbow, and heading out into the woods and fields in search of white-tailed deer, black bear or wild turkey.

Leading up to hunting season, its important hunters in the Mountain State take the proper steps to pass the Division of Natural Resources' Hunter Education Course, buy the proper

license and stamps, and - new this year - get a personal DNR identification number to check in big kills with the new electronic game checking system.

It's easy to do! If you buy your license each year, your DNR ID number is printed right on your license. If you have a lifetime license, hunt on your own property or are otherwise excused from purchasing a license, you can get your DNR ID at any license agent, DNR district office or online. You only have to register once, and your number is valid for life. Once you have your code in hand, you're all set for the new checking system.

You no longer have to physically bring the animal to a game checking station, although you can if you want. Now you can check it in by calling 1-844-WVCHECK, using your ID number, or you can do it from your smartphone or computer at [www.wvhunt.com](http://www.wvhunt.com). It's easy and takes

only a few minutes.

When you check in your animal, you will be given a 13-digit confirmation number to be written on the back of a field tag an attached to the animal until it is processed for consumption.

Detailed information about the process can be found in the 2015-2016 Hunting and Trapping Regulations brochure available at all license agents, DNR offices and online at [www.wvdnr.gov](http://www.wvdnr.gov).

Not only is the system easier and more convenient for our state's hunters, but it also makes important information available more quickly to DNR staff, who use it to make better wildlife management decisions for the benefit of hunters and wildlife watchers alike.

I encourage all hunters to learn more about this new system and to be prepared to use it in the field this year.

Good luck, and happy hunting!

# Annual “Energy Tree” Lighting Set for Dec. 3 at DEP Headquarters

by Colleen O’Neil



Twinkling holiday lights can bring smiles to children and adults alike. The Department of Environmental Protection (DEP) wants to educate people that holiday lights can be both beautiful and energy efficient.

The Energy Tree Kickoff is an annual festive occasion where the DEP’s Division of Air Quality (DAQ) encourages people to learn through the power of touch. By 6 p.m. on Dec. 3, DAQ will have a 35-foot tree, illuminated by 800-plus Light Emitting Diode (LED) light bulbs, draped on the side of the DEP Charleston headquarters. DAQ will also set up a tradi-

tional tree with 100 incandescent light bulbs.

Hand-crank generators will be attached to both trees. By turning each crank, members of the public can learn the difference in the amount of energy required to light each tree.

“It’s really eye-opening when you realize, through first-hand experience, just how much more energy it takes to light the 100 incandescent bulbs versus what it takes to light the 800-plus LED bulbs,” said Stephanie Hammonds, DAQ outreach coordinator.

Mike Rowe, DAQ’s inventor extraordinaire, came up with the concept several years ago, said Stephanie.

“It goes along with what we’ve been trying to do with DAQ’s outreach displays – show people ways that they can save energy, which saves them money, and saves the environment,” she said. “LED lights use about 90 percent less electricity than traditional lights and can last up to 50,000 hours longer. Less electricity used equals less pollution.”

See **LIGHTS**, Page 6

# Town of Ceredo Recognized for MS4 Program

by Jake Glance

The town of Ceredo has earned a national award for its storm water management program and its commitment to installing green infrastructure.

Ceredo’s Municipal Separate Storm Sewer System (MS4) was categorized as “Bronze Level in Innovation” and “Silver Level in Program Management” by the Water Environment Federation. Ceredo was the only municipality in West Virginia to earn recognition.

Dustin Long, the stormwater manager for the town of Ceredo, said many residents have questioned new fees associated with the improvements but most residents are supportive once they learn about why the stormwater system is in place.

“Basically what I tell them is that anything that the rain washes off of their house or the street, where we have a separate stormwater system and separate sewer system, all of that is going straight into the Ohio River. That helps them to understand what we are trying to do,” Dustin said.

## What is MS4?

An MS4 is a conveyance or system of conveyances that is ...

- ⇒ Owned by a state, city, town, village or other public entity that discharges to waters of the U.S.;
- ⇒ Designed or used to collect or convey storm water (including storm drains, pipes, ditches, etc.);
- ⇒ Not a combined sewer; and
- ⇒ Not part of a Publicly Owned Treatment Works (sewage treatment plant).

Source: EPA.gov

“The goal right now is public awareness and getting better samples every time and showing less pollutants. And we really want to show people what we are trying to do rather than just put more on their utility bill. We are trying to build better infrastructure and protect our community.”

Ceredo is just one of hundreds of municipalities discharging stormwater into the Ohio River, which drains an area of 190,000 square miles from New York to Illinois to Alabama.



Earl Ray Tomblin

**Governor**

Randy Huffman

**Cabinet Secretary**

Kelley Gillenwater

**Communications Director**

Jake Glance

**Editor**

Public Information Office

601 57th Street SE

Charleston, WV 25304

[Jacob.P.Glance@wv.gov](mailto:Jacob.P.Glance@wv.gov)

*inDEPTH is published by the West Virginia Department of Environmental Protection, an affirmative action, equal opportunity employer.*

# Holiday Decorations Can Be Fire Hazards

by Jake Glance

According to the National Fire Protection Association (NFPA) and the U.S. Fire Administration (USFA), an estimated 250 home fires involving Christmas trees and another 170 involving decorative lighting occur each year.

Together, these fires result in around 21 deaths and 43 injuries each year.

The USFA offers these safety tips, which if followed, can help prevent tragedy.

**Take care of your tree.** If you have a live tree, keep it watered. If the needles are falling off, the tree is probably already dried out and is a fire hazard. Do not place your tree close to a heat source, including a fireplace or heat vent. The heat will dry out the tree, causing it to be more easily ignited by heat, flame or sparks. When disposing of your tree, never put branches or needles in a fireplace or

wood-burning stove. The best way to dispose of your tree is by taking it to a recycling center or having it hauled away by a community pick-up service.

**Inspect holiday lights each year.** Look for frayed wires, bare spots, gaps in the insulation, broken or cracked sockets, and excessive kinking or wear before putting them up. Use only lighting listed by an approved testing laboratory. Never leave holiday lights unattended!

**Do not overload electrical outlets.** Do not link more than three light strands, unless the directions indicate it is safe. Connect strings of lights to an extension cord before plugging the cord into the outlet. Make sure to periodically check the wires – they should not be warm to the touch.

**Use only nonflammable decorations.** All decorations should be non-flammable or flame-retardant and placed away from heat vents. If you are

using a metallic or artificial tree, make sure it is flame retardant.

**Don't block exits.** Ensure that holiday decorations do not block any exits. In the event of a fire, time is of the essence. A blocked entryway/exit puts you and your family at risk.

**Never put wrapping paper in the fireplace.** Wrapping paper in the fireplace can result in a very large fire, throwing off dangerous sparks and embers that may result in a chimney fire.

**Avoid using lit candles.** If you do use lit candles, make sure they are in stable holders and place them where they cannot be easily knocked down. Never leave the house with candles burning. Never put lit candles on a tree.

**Make sure you have working smoke detectors.** They should be tested monthly, kept clean and equipped with fresh batteries.



# Winterizing Your Home is Easier (and Cheaper) Than You Think

by Jake Glance

It's one of those things everyone has to think about this time of year - whether you're a homeowner or a renter: How to keep your dollars from flying out the window - literally - because of a living space that isn't winterized.

Some winterization methods, like installing new windows, are expensive and cost more than the money you'd save. But other ideas can be done cheaply, and save you a lot of money.

One easy way to winterize your home is to tape bubble wrap on your windows. While it may not look great, the tiny bubbles of air will serve as a buffer between the cold air outside and the warm air inside.

Another easy method - and one borrowed from everyone's grandparents - to save money on heating bills is to put a rolled up blanket or towel under a door. Adhesive weather stripping can also be installed on the door frame to provide a seal around the door that will prevent air flow. And don't overlook that keyhole in the door if you have an old apartment or house - you can put a piece of duct tape over it to prevent air flow.

Duct tape can also be used for what it is intended to be used for - taping ducts. The ducts that carry heated air around your house or apart-

ment often leak - and using duct tape to make sure they are sealed will save you money on heating costs.

Placing heavy furniture like couches, bookshelves, and entertainment centers against outside facing walls help to contain heat in rooms. This is also a good time to make sure your furniture isn't blocking your heating vents. Insulated curtains are also a cost-effective method to prevent heat from escaping through your windows.

If you have ceiling fans, run them so they turn clockwise. Since hot air rises, it goes up to your ceiling. Use the fan to push the warmer air back down.

Most landlords make it a routine to change air filters in furnaces every spring and summer and homeowners should do the same. Clean filters help your furnace run more efficiently.

If your house has windows that face the west, open the curtains in the morning to take advantage of the direct sunlight. Close the curtains again when it starts getting dark.

A more extreme measure is to use duct tape over the vents in rooms you don't use and keep the doors to those rooms shut in the winter.

Also, don't forget the coziness of a nice warm sweater or blanket!

# Flu Season is Here; Vaccinations Available Throughout Area

by Jake Glance

The 2015-16 flu season has arrived in West Virginia, and there's no telling how long it might last.

The best - and safest - bet is to get vaccinated as soon as possible. You can also practice some commonsense methods of protecting yourself.

If your child gets sick with a flu-like illness, the Centers for Disease Control and Prevention recommends that you keep him or her home for at least 24 hours after the fever is gone. If you're sick, wash your hands with soap and water often and try to limit contact with others. You should also avoid touching your eyes, nose and mouth because that can spread germs quickly.

And if you start to feel sick at work, go home.

You can use this [website from the federal Department of Health and Human Services](#) to find a vaccination location near you.

Flu has historically been a devastating illness. The 1918 Spanish Flu Pandemic killed as many as 100 million people - or about five percent of the world's population.

In 2009, a strain of the flu known as H1N1 - a variation of the same strain that caused the 1918 pandemic - killed as many as 395,000 people with thousands of cases in the U.S., China, Mexico, Brazil and Germany.

# DEP at 2015 Minority Business Expo



WVDEP was recently represented at the Second Annual Minority Business Expo held at the Charleston Civic Center. More than 70 businesses, organizations, and agencies participated in the Expo. Forum discussions on a range of topics from taxes and accounting to business licensing were offered to event participants. In the company of businesses such as Toyota Motor Manufacturing and Huntington

Banks, Cheryl Lewis of Abandoned Mine Lands and Reclamation, Melanie Simpson of the Office of Special Reclamation and Jamie Adkins of the Business and Technology Office offered helpful information and outreach concerning the valuable public services conducted by the DEP and how private businesses are an integral part of achieving the agency's goals and mission.

**Want to nominate a co-worker for Employee of the Month or a Rewards and Recognition Award?**

**It's easy! [Just click here!](#)**

## Worldwide Flu Pandemics

Name of Pandemic	Deaths
1899-90 Flu Pandemic	About 1 million
1918 Spanish Flu Pandemic	20 to 100 million
1957-58 Asian Flu	1 to 1.5 million
1968-69 Hong Kong Flu	750,000 to 1 million
1977-78 Russian Flu	No accurate count
2009 Flu Pandemic	105,000 to 395,000

## "Quotable"

"Here is your country. Cherish these natural wonders, cherish the natural resources, cherish the history and romance as a sacred heritage, for your children and your children's children. Do not let selfish men or greedy interests skin your country of its beauty, its riches, or its romance."



Theodore Roosevelt (1858-1919)

# Gettin' in depth with GEOLOGY

## RESTORE

con't from Page 1

The donated paint will be filtered, blended, and then repackaged for sale at the ReStore.

The donations mean not only will money be raised to help Habitat for Humanity build homes in the Kanawha Valley, but paint will be kept out of landfills and waterways.

"Last year, our October paint drives at all of our locations brought in approximately 10,000 pounds of paint and it was gone by April," Courtney said.

And it's a great way to get rid of garage and basement clutter. The U.S. Environmental Protection Agency (EPA) estimates that every homeowner in America has at least three gallons of unused paint.

"The paint department has become an integral part of the ReStore offerings, thanks in part to a REAP (DEP's Rehabilitation Environmental Action Plan) grant we received two years ago," Courtney said.

"Supplies of paint, like all donations, are greatly reduced in the winter, and paint drives like these help ensure we'll have enough to continue remixing latex paint until spring. Ultimately, this allows us to help more people achieve their dreams of home ownership by providing additional funding to Habitat for Humanity."

Habitat partner families purchase homes with a zero interest mortgage after completing a year-long program. This program requires 250 hours of "sweat equity," which involves volunteering to work on other homes as well as their own, and taking 16 weeks of home ownership classes.

If you missed the paint drive, you can still donate paint at the ReStore in Charleston from 9 a.m. to 6 p.m. Monday through Saturday.

This was the third year in a row DEP has held a ReStore paint collection event at its Kanawha City office.

Like all areas of science, geology has laws.

These laws help geologists figure out which rock formations are the oldest and how certain rock formations would look as though they were bent, like what is seen at [Sideling Hill in Maryland](#).

Can you match up the laws of geology with its correct (albeit very simplified) definition?

1. This law says that the rocks at the bottom are the oldest.

2. This law says that that layers of sediment are deposited flat because of

the pull of gravity.

3. This law says that layers of sediment originally extended in all directions; this helps determine that similar rock formations separated by valleys are of the same age.

4. This law says the rock formation that cuts into another is the younger of the two formations.

5. This law says that since fossilized plants and animals are found in rocks, the relative age of the rock can be determined (For example, a woolly mammoth bone won't be found fossilized next to a T. Rex bone.).

**A. The Law of Faunal Succession**

**B. The Law of Cross Cutting Relationships**

**C. The Law of Original Horizontality**

**D. The Law of Superposition**

**E. The Law of Lateral Continuity**

Answers at the bottom of this page!

## LIGHTS

con't from Page 4

This is the third year DAQ has sponsored the Energy Tree event.

The kickoff is family and kid friendly and includes refreshments.

All Kanawha County elementary schools were invited and many DEP employees bring their families.

"We want this to be an enjoyable and educational event," Stephanie said.

"The Charleston Area Robotics Team (CART), made up of high school and middle school students, will be there along with "Bernie the Burn Barrel." This robotic burn barrel, which travels around via remote control, reminds everyone to "Learn Before You Burn."

One of DAQ's retirees and Kanawha City's resident "Santa," Bob Otey, will also be in attendance. Kids can get their pictures taken with him and tell him their wish list.

Along with the Energy Tree, DAQ will also have several other outreach displays in the lobby, such as a solar race track, penny smasher, crank generator and LED light bar. It will be a fun way to start the holiday season for all ages.

The LED trees will be up every evening through Jan. 8, 2016, from 6 to 9 p.m. Anyone interested in seeing how much energy it takes to light them up is invited to stop by and take a turn on the hand cranks.

## POWER

con't from Page 1

On Oct. 27, U.S. Sens. Joe Manchin and Shelley Moore Capito - along with 47 other U.S. senators - introduced a resolution to block the EPA from implementing the CPP.

By 2030, the CPP aims to lower carbon emissions 32 percent below 2005 levels. The plan is facing backlash in coal-producing states like West Virginia and Kentucky because power

plants burn coal.

In order to comply with the CPP, states have to either submit their final state implementation plans or submit initial plans asking for a two-year extension by next September. Final, completed plans are due Sept. 6, 2018.

If West Virginia does not submit its own state implementation plan, the EPA says it would impose its own, possibly more stringent plan.

"While I believe there are significant questions regarding the legality of the Clean Power Plan, these new rules

have been put into place by the federal regulatory agency," Tomblin said.

"Until a final legal decision has been made, we cannot afford to ignore them. If we do not submit a plan, our state may be required to implement a plan designed by the EPA. If we can demonstrate that we put a lot of time and effort into developing a plan for West Virginia, we may have a better chance of lessening the harmful impacts these regulations could have on our miners, their families, and communities."



### New Retirement Announcements

Grant Connard	Division of Mining and Reclamation
Arnold Fortner	Division of Mining and Reclamation
Ellen Herndon	Division of Water and Waste Management
Susan Kershner	Division of Water and Waste Management
Ernest Mikles	Division of Land Restoration
Randall Moore	Division of Mining and Reclamation
Mike Park	Division of Land Restoration
Ralph Triplett	Office of Oil and Gas

### New Hires

Joshua Humphreys	Division of Land Restoration
Joetta Maples	Division of Mining and Reclamation
Doug Rafferty	Division of Land Restoration
Lindsay Teafatiller	Division of Water and Waste Management