REC UPDATE

Monthly environmental news for DoD facilities in EPA Regions 1, 2 & 3

GENERAL INTEREST

Navy Releases Arctic Environmental Assessment

The Navy has released its first biennial *Arctic Environmental Assessment and Outlook Report*. This report provides an assessment of the state of the Arctic environment, including oceanography, hydrography meteorology, fisheries, ice-extent, and climatic trends. Among the report's findings: sea ice areal extent is decreasing; sea ice thickness is decreasing; Arctic atmospheric temperatures increased eight times the global average in the last 20 years; precipitation in the Arctic is increasing; permafrost models suggest half of the area covered by permafrost could be thawed by 2050; fish are moving pole-ward due to increasing water temperatures; and that Arctic ice cap melting has a triple effect in warming the Arctic. The report discusses implications of these trends on shipping, minerals exploration, and land-based infrastructure.

Guidance for Federal Agencies on Sustainable Practices for Designed Landscapes

The Council on Environmental Quality (CEQ) released guidance on 31 OCT 11 that describes strategies to achieve sustainable Federal landscape practices. This guidance is to be used by Federal agencies for landscape practices when constructing new, or rehabilitating existing, owned or leased facilities, or when landscaping improvements are otherwise planned. For more information, go to: http://www.whitehouse.gov/sites/default/files/microsites/ceq/recommendations_on_sustainable_landscaping_practices.pdf?CFID=6558043&CFTOKEN=65187576.

Navy Celebrates American Indian and Alaska Native Heritage Month

Ens. Amber Lynn Daniel - Chief of Naval Personnel Public Affairs

The Navy joins the nation in celebrating American Indian and Alaska Heritage Month, which will be observed through 30 NOV 11. This month celebrates the cultures, histories, and traditions of the indigenous peoples of North America, including parts of Alaska and the state of Hawaii, and recognizes the significant contributions these first Americans made to the establishment and growth of the United States. According to the U.S. Department of Interior's Bureau of Indian Affairs, there are 565 federally recognized American tribes and Alaska natives in the United States, composed of nearly 4.5 million American Indians and Alaska Natives, or 1.5 percent of the nation's population.

Today over 15,000 sailors and 1,280 civilians of Native American and Alaska Native heritage serve in the Navy. According to Dr. Regina Akers, Director of the Diversity Project at the Naval History and Heritage Command, the legacy of service of American Indians and Alaska Natives can be traced back to our nation's founding. "When one thinks of military heroes, American Indians and Alaska Natives may not come to mind," said Akers. "Yet, these members have made significant contributions to the growth and development of the United States and to its national defense since the 18th century. Since 1776, when George Washington began enlisting them for his fledgling Army, Navy, and Marines, American Indians have contributed their fighting spirit and warrior ethos to help U.S. forces defend America's national interests."

Native American seamen served on continental and state vessels during the War of Independence and many Native American tribes served alongside U.S. troops in the War of 1812. During the Civil War, as many as 20,000 Native Americans contributed to both Union and Confederate forces as auxiliary troops. This legacy of service continued during the 20th century. Despite being ineligible for the draft in 1917, as many as 15,000 American Indians enlisted during World War I, and more than 44,000 American Indians, comprising nearly 13 percent of the Native American population at the time, fought in World War II, including 1,910 sailors, several dozen Women Accepted for Volunteer Emergency Services (WAVES), and 874 marines. Among them were the

Navaho Code Talkers, who took part in every assault the U.S. Marines conducted in the Pacific from 1942 to 1945 and transmitted messages by telephone and radio in their native language, a code that the Japanese never broke; and Rear Adm. Joseph J. Clark, the first Native American graduate of the U.S. Naval Academy in 1917 and the first Native American to attain the rank of admiral.

American Indians and Alaska Natives continued to serve after World War II. Between 10,000 and 15,000 American Indians and Alaska Natives fought in the Korean War and during the Cold War, including Shirly M. Arviso, a Navaho of Bitter War Clan and a naval communications officer, who supervised the decryption of classified messages from 1953 to 1963. Later in the decade, 41,500 American Indians, more than 90 percent of them volunteers, fought in the Vietnam War.

The 20th century also saw several American Indian and Alaska Native firsts for women. In 1981, Sara Hinds became the first female Native American midshipman to graduate from the U.S. Naval Academy. In 1998, Misty Dawn Warren enlisted in the Navy and is believed to be the first American Indian woman to be designated as a naval test parachutist. Also during the 20th century, three sailors of American Indian heritage received the Medal of Honor, including Navy Cmdr. Ernest E. Evans, who was awarded the medal posthumously for his actions during the Battle of Samar while commanding USS Johnston (DD-557) on 25 OCT 44.

For more information about American Indians and Alaska Natives in the Navy, visit: http://www.history.navy.mil/special%20highlights/NativeAmerican/NativeAmerican-index.htm.

A presentation is also available from the Defense Equal Opportunity Management Institute and can be found at: http://www.deomi.org/SpecialObservance/.

US Navy Expands Algae Biofuel Testing at Sea and in the Air

Tina Casey – Talking Points Memo

The algae biofuel industry is still in its infancy but the US Navy is already planning ahead for a robust future. Earlier this year, the Navy successfully tested a 50-50 algae aviation biofuel blend on a Seahawk helicopter in flight, and now an algae biodiesel blend has passed muster during tests on a 135-foot landing vessel. The ship, a conventional Landing Craft Utility (LCU) 1600-class, went through its paces earlier this month using a marine fuel blend composed of one-half algae biodiesel and one-half NATO standard multi-purpose naval fuel, called F-76. The LCU is commonly used to transport troops and supplies over relatively short distances, from a ship or seagoing base to shore. Though a relatively small vessel, the LCU can reach speeds up to 12 knots while carrying up to 400 combat-equipped Marines. The equivalent cargo in supplies is about 180 tons. As with the Seahawk helicopter algae biofuel demonstration, the LCU tests show that an algae biofuel blend can be used as a drop-in replacement for conventional fuel, without the need for any modifications to the engine, fuel tanks or exhaust system.

The LCU is among at least three new vessels undergoing biofuel tests this fall. The Navy also plans on testing biofuel on a decommissioned destroyer in November, and on a Landing Craft - Air Cushioned (LCAC) vessel in December. The LCAC is a type of hovercraft, designed to cross shorelines that are inaccessible to conventional landing craft. Last year, the Navy also successfully tested an algae biofuel blend on a Navy Riverine Command Boat, designed for use in inland waterways.

All of this activity has its roots in a 2010 Memorandum of Understanding between the Department of the Navy and the U.S. Department of Agriculture to promote the development of the domestic biofuel industry. When the Memorandum of Understanding was announced, Secretary of the Navy Ray Mabus made it clear that the biofuel industry would be called upon to play a critical role in future national defense, stating “In order to secure the strategic energy future of the United States, create a more nimble and effective fighting force and protect our planet from destabilizing climate changes, I have committed the Navy and Marine Corps to meet aggressive energy targets that go far beyond previous measures.”

One of the immediate goals is to create a seagoing "Green Strike Group" ready for demonstration by 2012. Perhaps disappointing some biofuel fans, the Green Strike Group will rely heavily on nuclear vessels and diesel-electric hybrids as well as biofuel-blend ships, but the reality is that commercial biofuel production will need years of development before it can support either the military or civilian market. The inclusion of nuclear energy in a "green" initiative is also consistent with the Navy's energy goals, which are not so much pro-biofuel as they are pro-anything-but-petroluem.

As described succinctly by the Navy:

> The United States Navy and Marine Corps rely far too much on petroleum, a dependency that degrades the strategic position of our country and the tactical performance of our forces. The global supply of oil is finite, it is becoming increasingly difficult to find and exploit, and over time cost continues to rise.

After the Green Strike Group is tested, the next step for the Navy is to sail a "Great Green Fleet." Projected by 2016, the fleet will include both marine vessels and aircraft, such as the Seahawk helicopter and Super Hornet fighter jet, which has been tested on a 50-50 biofuel blend based on the weedy plant camelina.

New Senate Oceans Caucus

A new bipartisan Senate Oceans Caucus was launched on 13 Sep 11, a bipartisan group of 18 US Senators led by Senator Sheldon Whitehouse D-RI and co-chaired by Senator Murkowski D-MD which seeks to increase awareness and find common ground in responding to issues facing the oceans and coasts. This caucus will work together on a bipartisan basis to help make Ocean policy that provides a national platform for protection. Mid Atlantic Senators that have joined the caucus include: Senators Mark Begich, D-RI., Richard Blumenthal, D-CT; Scott Brown, R-MA; Ben Cardin, D-MD; Tom Carper, D-DE; Chris Coons, D-DE.; John Kerry, D-MA; and Olympia Snowe, R-ME. For more information, go to: http://cardin.senate.gov/newsroom/press/release/cardin-joins-bipartisan-group-of-senators-to-announce-formation-of-new-senate-oceans-caucus-.

2011 Federal Agency Strategic Sustainability Performance Plans

On 31 OCT 11, federal agencies released their annual sustainability plans. These plans prioritize agency actions for achieving environmental, economic, and energy goals detailed in EO 13514. For more information, go to: http://www.fedcenter.gov/Announcements/index.cfm?id=19739.

US Navy's Incredible Railgun Fires 1,000th Bullet

Fox News

Navy scientists with the Office of Naval Research (ONR) hit a new milestone, successfully firing their electromagnetic railgun for the 1,000th time as the state-of-the-art weapon edges closer to real world deployment. A theoretical dream for decades, the railgun is unlike any other weapon used in warfare. And though still in testing, it's quite real, as the U.S. Navy proved in a record-setting test on 31 OCT 11 in Dahlgren, VA Rather than relying on a explosion to fire a projectile, it uses an electromagnetic current to accelerate a non-explosive bullet to several times the speed of sound. The conductive projectile zips along a set of electrically charged parallel rails and emerges from the barrel at speeds up to Mach 7. The result: a weapon that can hit a target 100 miles or more away within minutes. "This test demonstrates continued advances in armature development, rail design, and barrel materials used in high power railgun launch," said Dr. Robert Meger, head of the Naval Research Labs' Charged Particle Physics branch. "After firing up to 15 shots per week on the laboratory's experimental railgun, researchers at NRL perform detailed testing and analysis of the rails and armatures, providing S&T expertise to the Navy program that is directly applicable to tests at large-scale power levels," he said.

An electromagnetic railgun offers a velocity previously unattainable in a conventional weapon, speeds that are incredibly powerful on their own. In fact, since the projectile doesn't have any explosives itself, it relies upon that kinetic energy to do damage.

For the past few years, Navy researchers have been conducing tests to increase rail strength and finalize the armature composition in order to achieve higher velocities. In the four years since the first shot was fired at the U.S. Naval Research Laboratory Materials Testing Facility, researchers have enhanced the railgun's energy by a factor of three -- from about 0.5 megajoules to currently 1.5 megajoules. To get a better idea of the weapon's power, "a one-ton vehicle moving at 100 mph has approximately one megajoule of kinetic energy, the U.S. Navy explained.

Despite the Halloween milestone, the future of the railgun remains in doubt. The Senate Armed Services Committee voted in April to eliminate funding for two of the Navy's most futuristic (and by the same token least concrete) weapons: the free electron laser, essentially a super-powered death ray, and the railgun. The Navy appears optimistic despite the tech's cloudy future. "A railgun weapons system must be able to launch hundreds of projectiles and withstand extreme pressures, currents, and temperatures," said NRL Commanding Officer, Capt. Paul Stewart. The firing of the thousandth shot "demonstrates Navy researchers are steadily progressing toward the goal of developing a more effective and efficient future ship combat system," he said.

Fuel Cells Recommended by US DoD for Defense Facilities

Two leading North American clean energy associations, the Fuel Cell and Hydrogen Energy Association (FCHEA) of the United States, and the Canadian Hydrogen and Fuel Cell Association (CHFCA), applauded the release of a DoD study, "Beyond Demonstration: A White Paper on the Role of Fuel Cells in the Department of Defense's Energy Strategy", which supports deployment of fuel cell-based power solutions. The DoD assessment recommends that the DoD proactively evaluate and acquire fuel cell systems for distributed power generation, backup power, material handling equipment, ground support equipment and unmanned vehicles.

"The U.S. Department of Defense is demonstrating innovation and leadership by recommending the adoption of fuel cell technology for a variety of operational, cost and environmental reasons," said Morry Markowitz, Executive Director of FCHEA. "Acquiring fuel cell systems will improve U.S. defense energy usage, protecting and creating jobs in the fuel cell industry."

"The US Department of Defense study confirms that fuel cell technology has moved beyond the demonstration phase, providing a range of operational and financial benefits that are already being enjoyed by a growing list of corporate, government and institutional end-users," remarked Eric Denhoff, President and CEO, CHFCA.

Fuel cell-based products are experiencing significant market adoption in a variety of sectors, including the application areas specifically identified by the Department of Defense:

- Distributed Power Generation - Large multi-megawatt fuel cell systems are being installed at commercial, government and institutional sites to provide primary power (and in some cases heat) for buildings and production facilities. These systems run on natural gas, hydrogen, biogas and other sources. Early adopting end-users include Google, Whole Foods, eBay, Toyota, FirstEnergy, and Walmart.
- Backup Power - Fuel cell backup power solutions are demonstrating their reliability in mission-critical applications such as wireless telecommunication networks and computer data centers. Recently announced adopters include Wind Mobile, Verizon, AT&T Wireless, T-Mobile, Sprint, and Motorola.
- Non-Tactical Material Handling / Ground Support Equipment - Global brands such as Walmart, Whole Foods, FedEx, Sysco, Coca-Cola and BMW are using fuel cell-powered forklift truck solutions - including pallet jacks, reach trucks, and large counterbalanced trucks - to dramatically improve productivity in warehouse operations, thereby driving attractive financial results, including payback in under 1-year and return-on- investment in excess of 20%.
- Unmanned Vehicles - Fuel cells are providing clear operational benefits, including weight reduction and mission duration improvements for unmanned vehicles. A number of companies are advancing unmanned vehicles for the military including Boeing who is developing unmanned aerial vehicles powered by fuel cells for the Navy capable of running for 30 days. Another fuel cell manufacturer, Adaptive Materials, has demonstrated a successful unmanned ground vehicle which operated for 12 hours, traveling 40 miles with all cameras and computers activated.

The U.S. Department of Defense is the largest consumer of energy in the country, accounting for approximately 80% of the federal government's energy consumption and spending $4 billion for facilities energy in 2009. Electricity accounted for 64% of the energy consumption at DoD installations in 2009, equating to approximately five times the amount of electricity consumed by the state of Vermont. Legislative mandates, Executive Orders, and DoD policies have established aggressive targets for energy use and emissions reductions. The DoD assessment can be downloaded at: www.dlafuelcells.org.

30% Cut in US Oil Imports Would Avert Future Catastrophe, Study Warns

Sandra Erwin – National Defense

A group of retired U.S. military officers unveiled a new study that is seeking to reenergize the debate over the nation's billion-dollar-a-day foreign-oil habit. Unless the United States curtails its consumption of petroleum, these military greybeards caution, any future crisis that disrupts oil supplies could hamstring the nation's economy and cause global instability. "We have seen oil shocks before … but at today's level of U.S. consumption, a sustained disruption would be devastating – crippling our very freedom of movement," said retired Army Gen. Paul Kern, chairman of the military advisory board of CNA Corp., a government-funded think thank.

In a report released 1 NOV 11, a group of 13 generals and admirals are calling for "immediate, swift and aggressive action" over the next decade to reduce U.S. oil consumption by 30 percent. Of nearly 88 million barrels of oil consumed worldwide every day, the United States eats up the biggest share, with 20 million barrels. Slightly more than half of the petroleum the United States consumes comes from foreign countries: two-thirds from the Middle East, and the rest from Canada and Mexico. "You could wake up tomorrow morning and hear that the Iranians sense an attack on their nuclear power plants and preemptively take steps to shut off the flow of oil in the Gulf," retired Marine Corps Gen. James T. Conway says in a CNA news release. "The U.S. would likely view this as a threat to our economy, and we would take action. And there we are, drawn into it."

Even a small interruption of daily oil supply can have huge ripple effects, the study contends. Even though just 2 percent of U.S. oil supplies come from Libya, the military campaign there this summer prompted the U.S. Department of Energy to release 30 million barrels of oil from the Strategic Petroleum Reserve.

A larger crisis could disrupt the entire fabric of the U.S. economy, the CNA analysis concludes. If America reduces its current rate of oil consumption by 30 percent and diversifies its fuel sources, the study says, the U.S. economy would be relatively insulated from such upheaval, even in the event of a complete shutdown of a strategic chokepoint like the Strait of Hormuz, the international passageway for 33 percent of the world's seaborne oil shipments. The report, titled "Ensuring America's Freedom of Movement: A National Security Imperative to Reduce U.S. Oil Dependence," was sponsored by the San Francisco-based Energy Foundation, a partnership of major donors interested in solving the world's energy problems. CNA analyzed the potential economic impact of a future oil disruption. Under a worst-case scenario 30-day closure of the Strait of Hormuz, the analysis finds that the U.S. would lose nearly $75 billion in GDP. By cutting current levels of U.S. oil dependence by 30 percent, the impact would be nearly zero.

Echoing the Obama administration's pitch that green energy stimulates the economy, the CNA advisory board's vice chair, retired Navy Adm. Lee Gunn, says that given today's high employment, the timing is right to diversify the nation's energy sources. "Currently, our collective national conscience is focused on jobs, and rightly so," he says. "But rather than divert us from the task, moving away from oil could contribute to restoring our economic strength."

The military also could benefit significantly from a 30 percent reduction in U.S. oil consumption, says the report. Achieving such a reduction would spawn diversified power sources other than oil of which the Defense Department could take advantage. Less oil use equals less oil we are required to import and greater flexibility for military presence in dangerous parts of the world. This flexibility could translate into putting fewer American troops in harm's way and keeping more dollars at home.

The report calls on national leaders to take the following steps to reduce U.S. oil demand by 30 percent in 10 years:

- Increase efficiency in the form of more stringent fuel economy standards for cars and trucks.
- Diversify supply, promote the use of a mix of transportation fuels and drive wider public acceptance of these alternatives. Increased domestic production of oil might be useful short-term as long as overall oil consumption is reduced at the same time. Simply replacing foreign with domestic oil without driving down consumption does not reduce national security and economic risks.
- Increase alternative fuels. The study says that a major challenge to the expansion of the use of biofuels in the United States is the lack of sufficient regional collection and production centers and distribution systems.
- Develop a national, cogent, dedicated and sustained energy roadmap that rises above partisan politics.

The retired officers acknowledge that the divisive political environment that currently engulfs Washington is a significant hurdle to achieving these ambitious goals, but they still are optimistic that some elected officials will rise above the partisanship. "Security must trump ideology," says Conway in the news release. "You've got people stuck in their positions on the left and the right," he adds. "The nation is at risk because of intransigency."

Just because national elections are only a year away doesn't mean action should be put off, says retired Navy Adm. John B. Nathman, a member of the CNA advisory board. "There's never a wrong time for facts to be put on the table," Nathman says in an interview. "We should approach this as a national problem, not as a political problem." Dependence on oil has been a highly charged issue since the Nixon administration, he notes. And not much seems to change until there is an oil shock. After each crisis, the nation sinks back into a "trance" mode and fails to take remedial action, says Nathman. "When we get the next shock we are going to pay a big price," he says.

But Nathman recognizes that no matter how many studies are published and endorsed by flag officers, the vision laid out in the CNA study will be mostly a "fairy tale" unless Congress embraces a "cohesive national view and a roadmap, as well as legislation." According to Department of Energy projections, if there is no sizeable drop in oil consumption, by 2035, the United States still will have to import more than 40 percent of its supply. "We [will] write another report like this in 2035 and say the same thing," says Nathman. "What we're suggesting is nothing that nobody has thought of before. But we need to elevate the visibility and the understanding of this problem for the American public," he says. "We're not going to get out of this overnight. But we're still going to be in the shock-and-trance cycle 20 or 30 years from now unless we start acting."

CNA's military advisors first drew attention to the nation's "energy security" problems in 2007. The group was among the first to identify climate change as a national-security issue because of the projected damage of severe weather events. Building on the 2007 report, in 2009, the panel found that the nation's "approach to energy and our approach to climate change have profound impacts on each other – and both have impacts on our national security." Later, in 2010, the panel published a report that established clear links between the nation's energy posture, the economy, and national security.

Gitmo Is Becoming a Test Bed for Green Energy

Tina Casey – Talking Points Memo

Naval Station Guantanamo Bay, better known as Gitmo, the site of one of America's most notorious military prisons, is installing its first major solar energy array. The new photovoltaic system may not do much to clean up Gitmo's image or improve conditions for those incarcerated there, but it will generate enough clean energy to help reduce the use of diesel fuel. Currently, diesel generators supply almost all of the electricity for Gitmo. Electricity generated by the new football field-sized solar installation will power an expanded gym at Gitmo's Cooper Field Sports complex. The solar installation is a new twist for Gitmo but solar power has become

ubiquitous at other U.S. defense facilities, including another well-known Navy base. Joint Base Pearl Harbor-Hickam installed five large-scale rooftop solar arrays last year.

The push for solar is part of a military-wide transition out of petroleum fuels and into biofuels and other forms of alternative energy, especially those that can harvest energy on site including wind and geothermal. The switchover is particularly important for remote bases like Gitmo, which has no land-based fuel or water supply. As Gitmo Resource Efficiency Manager Tim Wagoner explained in a press statement regarding the new solar installation, "The use of alternative energy sources is extremely important for the base to provide energy security to it. Currently, with the diesel generators, we are completely dependent on the fuel that is delivered to the station."

The continued pursuit of petroleum alternatives is particularly critical to Gitmo's long-term sustainability, given the base's rapid expansion after the terror attacks of September 2001. That expansion caused energy demand to skyrocket, with the unfortunate result that at least one ambitious alternative energy initiative, the base's signature wind turbines, has fallen far short of its goal. The turbines were conceived with the prediction that they could provide up to a quarter of the base's peak needs, but that was before the expansion. The four 275-foot turbines went into operation in 2005 as planned and are still proudly featured on Gitmo's online newsletter, but according to a recent report by The New York Times, they now supply only about 3 percent of the demand. The base is now in the position of playing catch-up with its alternative energy ambitions and the new solar array is part of that effort. Other recent measures include a waste oil-to-energy system installed last year. The new system creates a blend of used oil and fresh diesel that is suitable for use in diesel-fueled vehicles and generators, enabling the base to recycle used oil, rather than shipping it off for disposal under a hazardous waste classification.

This year Gitmo also installed two new generators that are more efficient than the old ones, retrofitted its street lighting with high-efficiency LED lights, and installed new perimeter lights along one side of the base. The lights are powered by solar batteries that charge during the day. The single largest consumer of electricity on the base is the reverse osmosis equipment used to desalinate seawater. As this equipment is the base's sole supply of potable water, dating back to Castro's cutoff of the land-based supply in 1964, water conservation has historically been an important part of energy logistics at the base. This year's efforts included the installation of low flow showerheads, which are estimated to save more than 8 million gallons of water per year. This also translates to a fuel savings.

Energy Efficient Military Bulldozers Undergo Testing in Southern California

By Darrell E. Waller – Navy Newsstand

Navy and Army engineers are conducting tests on a new diesel electric bulldozer at Naval Base Ventura County, CA to compare fuel consumption and performance with older, less energy efficient legacy military bulldozers. The testing will create an accurate, comparative baseline evaluation of legacy equipment, identifying limitations of potential improvements to bulldozer operations while gauging the productivity impact of the new diesel electric propulsion and automatic blade control systems. Testing will also measure the possible energy savings it may deliver if selected for use by Amphibious and Expeditionary Forces worldwide.

"The Department of Defense is reviewing their budget to achieve significant cost savings across the board," said Naval Facilities Engineering Service Center Commanding Officer, Capt. Brant D. Pickrell. "The Navy is doing their part by looking at ways to cut costs without affecting the mission. Saving energy-related costs are a huge component of that effort and we believe this technology will help us reach the Navy Task Force Energy-Expeditionary Goals of reducing deployed fuel consumption and increasing fuel efficiency by 15 percent by the year 2020 in support of the SECNAV's energy vision" said Pickrell.

The project is the result of a partnering effort by the U.S. Army's Tank Automotive Research, Development, and Engineering Center (TARDEC) and their training facility at the Naval Base Ventura County offers a consistent climate favorable to the testing. Personnel from the NAVFAC Engineering Service Center (NAVFAC ESC), the

First Naval Construction Division (1NCD), the 31st Seabee Readiness Group (SRG), and private industry are supporting the evaluation effort.

The 31st SRG of the 1NCD contributed experienced equipment operators to support the tests and gained knowledge and experience with the new diesel electric technology in reducing energy consumption of heavy construction equipment. 1NCD oversees about 16,000 Navy Seabees, who provide a wide range of military construction and humanitarian assistance worldwide.

The diesel electric bulldozer, as tested, is equipped with a digital guidance system for automatic dozer blade control, allowing operators to achieve better grading accuracy without the use of survey stakes. The diesel electric bulldozer does not have a power storage battery pack, transmission, or torque converter. It uses a diesel generator to produce power for two electric motors, which in turn, drive the two tracks.

Participation in this comparison test enables the Navy to assess new, promising technologies to reduce the fuel consumption of expeditionary construction equipment used by the Seabees in deployment and training. Navy and Army engineers believe the test results from the diesel electric dozer will ultimately show a notable reduction in fuel consumption and lower overall operating costs.

Pentagon Weighing Base Closures, Military Benefits in Face of Budget Cuts

Defense Secretary Leon Panetta, in an effort to find $450 billion to cut from the Pentagon's budget, is considering wide-ranging measures that could include base closures, hikes in the cost of military health insurance, and possible cuts in retirement pay, *The New York Times* reported Sunday. Panetta's comments about budget reductions come nearly three weeks before the so-called congressional super committee reaches a key deadline. The Pentagon stands to see $600 billion in automatic cuts if the committee does not come up with an alternative plan. "There will be some huge political challenges," Panetta told the *Times* in an interview. "When you reduce defense spending, there's likely to be base closures, possible reduction in air wings," he said. The days of a counterinsurgency-focused force might be coming to a close.

The *Times* reported that Panetta "did not envision maintaining a ground force large enough to conduct a long, bloody war and then stability operations in North Korea or Iran, as the United States did in Afghanistan and Iraq." Among the proposals he was considering, Panetta told the *Times* that the Pentagon was considering raising fees for the military's health insurance program. Military retirees and families, who are guaranteed the military benefit for life, pay only $460 a year in fees, the *Times* said. He also told the *Times* he would consider supporting the creation of a "binding commission" that would review military retirement pay. He did not give details of potential pay reductions.

Fuel Cells May Become 'Technology of Choice' to Power US Military Drones

Jeremy Hsu - MSNBC

Almost two years ago, an experimental U.S. Navy drone flew nonstop for 26 hours during a record-shattering flight for fuel-cell-powered drones. That flight and other demonstrations since have encouraged a new report to envision fuel cells as the DoD's "technology of choice" for powering aerial drones, ground robots, and even U.S. military bases within five years.

Fuel cells have proven to be a cleaner and more energy-efficient power source when compared to the combustion engines used by Humvees, tanks, jet fighters, and base generators. They could someday serve as wearable power sources for soldiers in Afghanistan or as primary power aboard U.S. Navy ships; however, the recent report sponsored by the Department of Defense advised the U.S. military to focus on acquiring fuel cells for the most immediate uses. That doesn't mean fuel cells can singlehandedly satiate the U.S. military's hunger for clean energy solutions. But they could join the spread of energy solutions that may free U.S. troops from dependence on oil and the supply chain of fuel convoys.

One huge opportunity comes from the growing robot swarms of flying, rolling, and swimming drones that could use fuel cells to operate longer during missions, boost fuel efficiency, and reduce noise and heat signatures. Hybrid versions of ground robots have outperformed their battery-only peers. Fuel cells have also shown promise in boosting the range of both aerial and underwater drones.

Another opportunity exists with military bases using fuel cells to supply all or part of their electric power, heating, and cooling needs. Such distributed power generation could either serve as backup power or completely free military installations from dependency on the power grid. Army, Navy, and Marine bases already have fuel cell systems provided by companies such as UTC Power and Fuel Cell Energy. Even military warehouses and supply chains give fuel cells a chance to shine. Fleets of fuel-cell-powered forklifts have already proven more productive, cleaner and quieter to run than their battery-powered counterparts in civilian warehouses.

The report holds off on fully endorsing fuel cells as the best technology for any U.S. military need, given that fuel cells currently represent a more expensive choice with less operational history. But it does suggest that the DoD require consideration of fuel cells for battlefield robots and military bases. The report released by LMI Government Consulting on 25 OCT 11 was sponsored by the Defense Logistics Agency Research and Development.

FlexEnergy and DoD Partner on Clean Energy Methane Gas System with Near-Zero Emissions

FlexEnergy Inc. and Fort Benning celebrated the installation and operation of the first Flex Powerstation system on 8 NOV 11. The Powerstation, the only turbine to offer both pollution control and energy generation, converts previously wasted landfill gas into 250 kW of renewable electricity, which is enough energy to power 250 homes. The clean energy produced has near-zero emissions and will reduce both the Army's carbon footprint and its bottom line. The Powerstation can utilize all sources of methane gas, even low-quality gas from closed landfills. The Fort Benning installation is running on previously unusable methane gas and produces a cost-effective source of renewable power. Richard Kidd, Deputy Assistant Secretary of the Army (Energy & Sustainability), remarked, "We are converting what was once a waste stream, a pollutant, a contaminant, and a liability, in to what will be a resource going forward."

The Fort Benning Powerstation Project is funded by the DoD Environmental Security Technology Certification Program (ESTCP), which seeks innovative and cost-effective technologies to address high-priority environmental and energy requirements for the DoD. "We have a lot of very old landfills, and the energy content of the waste is very, very low," explained Dr. Dorothy Robyn, Deputy Under Secretary of Defense for Installations and Environment, at the GovEnergy 2011 conference. "This is a technology that will allow us to produce electricity from low-Btu content waste," Robyn said.

Wind Farms Disrupting Radar, Scientists Say

Maxim Lott – Fox News

This one's really off the radar. Wind farms, along with solar power and other alternative energy sources, are supposed to produce the energy of tomorrow. Evidence indicates that their countless whirring fan blades produce something else: "blank spots" that distort radar readings. Now government agencies that depend on radar -- such as the Department of Defense (DoD) and the National Weather Service -- are spending millions in a scramble to preserve their detection capabilities. A four-star Air Force general recently spelled out the problem to Dave Beloite, the director of the Department of Defense's Energy Siting Clearinghouse. "Look there's a radar here -- one of our network of Homeland surveillance radars -- and [if you build this wind farm] you essentially are going to put my eyes out in the Northwestern corner of the United States," Beloite related during a web conference in April. Spinning wind turbines make it hard to detect incoming planes. To avoid that problem, military officials have blocked wind farm construction near their radars -- and in some cases later allowed them after politicians protested.

Shepherd's Flat, a wind farm under construction in Oregon, was initially held up by a government notice that the farm would "seriously impair the ability of the (DoD) to detect, monitor and safely conduct air operations." Then Oregon's senators got involved. "The DoD's earlier decision threatened to drop a bomb on job creation in Central Oregon," democratic Senator Ron Wyden noted in a press release. Beloite told Fox News that the project was given the green light by the military only after scientists at MIT's Lincoln Laboratory assured the DoD "that there were algorithms and processors they could design for not too much money that would mitigate the problem."

Beloite said that the MIT technology has proven successful in the last few months. "[The problem] has been addressed and I have a letter from the deputy director of operations from U.S. NORAD that says 'step one of the two-step fix worked so well that we recommend we don't spend any more money on step two.'" The fix the MIT scientists came up with tells the radar not to pay attention to signals in a very small area. "You just tell the radar processor, 'you're going to have clutter here. Don't display it.' You create a tiny blank spot [in the radar map] directly above the turbine," Beloite said.

The fix for military radar doesn't work so well for weather forecasters, however. "It's a lot easier to filter out interference for aviation," Ed Ciardi, a meteorologist at the National Weather Service Radar Operations Center in Norman, OK. "The real problem is when rain and the wind turbines are mixed together [on the radar map.] And it's all confusing… sometimes [forecasters] throw up their hands and say, 'who knows?'" When the situation is unclear, Ciardi said, "Meteorologists will play it safe and maybe extend a warning." Ciardi said there have been occasional false alarms due to wind farm interference, but the Weather Service hasn't failed to issue any storm warnings yet. "We're more worried about the future ... we've seen quite a few proposals for wind farms around our radars. And we have been ... trying to convince them to stay a good distance away," he said. One strategy is to ask wind farm owners to turn off the propellers during storms. Another is to convince them to install devices that measure wind speeds and rainfall, so that there would no longer be much need for radar there. "It all comes down to money and who's going to pay for it," he noted. Meanwhile, top radar scientists are working on developing a fix that works for weather radar. "It is slow progress, and they say it's extremely difficult -- that they need more money and more time. The solution, I would say, is probably five years down the road," Ciardi said.

New GIS Tool Maps Military Assets in Order to Facilitate Future Renewable Energy Development

By eNews Park Forest (IL)

The Natural Resources Defense Council (NRDC) has released a mapping tool created in partnership with the DoD that allows renewable energy developers to identify sites less likely to interfere with DoD's mission readiness activities and environmentally sensitive areas. "The Renewable Energy and Defense Geospatial Database is the result of a groundbreaking collaboration between the NRDC and the Office of the Deputy Assistant Secretary of Defense for Readiness," said Frank DiGiovanni, Director, Training Readiness and Strategy, Office of the Deputy Assistant Secretary of Defense (Readiness), Department of Defense. "This innovative multidisciplinary approach provides a powerful capability for the renewable energy industry to identify potential impacts on mission readiness activities."

Intended as a proactive planning tool, NRDC's Renewable Energy and Defense Database – or READ-Database – is a Geographic Information Systems (GIS) database that captures essential DoD activities, including DoD bases; testing and training range locations; low-altitude high-speed military flight training routes and special use airspace; and an extensive inventory of weather and air surveillance radars all within the United States. The READ-Database will help ensure that the siting of renewable energy avoids conflict with these activities. "Research and planning is key to any successful venture. This tool provides both," said Kit Kennedy, NRDC's Clean Energy Counsel. "Working with the DoD, we can now provide a resource that takes both environmental and military considerations into account for all renewable energy developers in search of a project site." The resource, which is available online through NRDC's website, provides GIS data that is largely missing from the current renewable energy siting process, particularly in the West where opportunity for development of utility-scale wind, solar and geothermal is abundant and DoD has a geographically extensive presence.

NRDC partnered with DoD in the development of the READ-Database, in order to foster better planning of projects by all involved and accelerate the advancement of renewable energy throughout the United States. The READ-Database also aims to improve energy security, create jobs, and protect the environment. "The READ-Database represents the state of the art in public-private partnering for renewable energy siting," said David Belote, Executive Director, DoD Siting Clearinghouse, Office of the Deputy Under Secretary of Defense (Installations and Environment), Department of Defense. "NRDC has created a one-stop shop for developers to prescreen potential project locations for environmental impacts as well as conflicts with military testing, training, and homeland defense operations. The READ-Database promises to facilitate project planning, protect critical military capabilities, and promote an energy-secure future."

The full dataset is available through a registration process on the NRDC website, but a Google Earth-formatted sample for Wyoming is provided on the project's webpage. It shows how the READ-Database's three layers offer combined information to give renewable energy developers and other stakeholders a more complete picture of the DoD mission. Geospatial data and analysis are essential when considering sites for renewable energy development. DoD has established the DoD Siting Clearinghouse, which provides a comprehensive, expedited process for renewable energy developers seeking information on whether a potential site could impact DoD operations. NRDC's release of the READ-Database is timed with the 20 OCT 11 issuance of DoD's interim final rule for the DoD Siting Clearinghouse and the Mission Compatibility Evaluation Process. This rule describes and governs how the DoD Siting Clearinghouse will evaluate whether renewable energy project proposals have the potential to adversely impact domestic Defense Department operations. To date, the DoD Siting Clearinghouse has evaluated over two hundred projects and approved at least 90% as having no impact on the DoD mission. The READ-Database provides open-source information pertinent to this DoD Siting Clearinghouse review process. The defense-related information used by NRDC to develop this on-line tool was compiled from open sources and from unclassified geospatial data provided by DoD. This information may not be current and does not necessarily reflect the official policy of the Department of Defense or the U.S. Government, and should be used for preliminary planning purposes only. If use of this tool indicates an intersection of your planned project and a DoD equity, you should contact the DoD Siting Clearinghouse at DoDSitingClearinghouse@osd.mil. DoD encourages all renewable energy developers to contact the Siting Clearinghouse as early as possible in the siting process.

Navy's First Hybrid Drive Warship Goes into Action

Jeanette Steele – San Diego Union Tribune

The Navy took a baby step toward ending America's military dependence on oil as the USS Makin Island departed on its maiden deployment, bound to prove that the Navy's first hybrid-drive warship – half electric, half gas – can cut it in real-life scenarios. The ship's crew is already convinced – and so is the Navy brass. The Navy has decided to put the same power plant in the next big amphibious vessel it builds, the America (LHA-6), the first of a new ship class. It will also retrofit up to 35 Arleigh Burke-class destroyers with a hybrid drive, starting as early as 2016 to support the launch of what the Secretary of the Navy is calling the "great green fleet." These are the first steps toward a more electric Navy. Ship-building officials see the hybrid-drive Makin Island, and the destroyers to come, as what paves the way to all-electric warships. "This is a stepping stone," said Timothy McCoy, director of the Navy's electric ships office in Washington, D.C. "The all-electric ship is such a massive change to the design, you can't backfit it onto an existing ship. It would be cost prohibitive." Since 2009, the Navy – the Pentagon's second-biggest consumer of fossil fuel – has marched toward reducing its reliance on oil.

The Navy next year will test a hybrid electric-gas power system in a destroyer. Betting on a successful test, the service is already asking manufacturers to submit proposals to build up to 35 hybrid engines for destroyers. The Navy has also ordered the first all-electric Lewis and Clark-class T-AKE cargo ship and it is being built in San Diego by General Dynamics NASSCO. Additionally, all three ships in the curtailed DDG-1000 class of destroyers will be all electric. The first is now under construction in Bath, Maine.

On the Makin Island, the crew has had two years to test out their first-of-its-kind ship, sometimes called the Prius of the Navy. The result: About 70 percent of the time, they can use the electric motors, saving on gas. The upside, aside from the gas savings, is a cleaner, software-driven engine room – compared with the old steam system of powering the ship – with less mechanical equipment to break and fewer Sailors needed to tend it, according to crew members. The downside is a long logistical "tail," which means it takes awhile to get parts. Also, there aren't too many piers across the world where the Makin Island will be able to plug in, because of the high voltage of its system compared with other warships. The ship is software dependent so, as one crew member put it, you have to worry about what you can't see that might go wrong in the bits and bytes of data. Still, the Makin Island's chief of engineering, Cmdr. Brian Rottner, said he has become a believer. "I wasn't before. I was a born-and-bred gas turbine guy. Then I went to steam ships," said Rottner, 50, who started as an enlisted Sailor before earning his officer's bars. "Then when I saw the hybrid ... once we got it perfected, there are no (breakdowns). It doesn't leak oil. It's just a start and stop," he said. "Yeah, the hybrid is the way to go."

Turn Off The Lights! Fed's $7B Power Bill in the Cross Hairs

Andy Medici – Federal Times

The government has just three years left to cut energy at its facilities by nearly one-third. And with power costs rising and Congress slashing budgets, energy conservation efforts are all the more pressing. Energy spending government-wide increased 7 percent from more than $18.6 billion in fiscal 2009 to $20.0 billion in fiscal 2010, mainly because of price increases for petroleum-based fuels, according to the Energy Department. Agencies are seeking savings from that spending so energy costs for buildings, vehicles and equipment can be cut and funds can be repurposed to pay for unfunded green-government mandates. More specifically, they see reducing the $7 billion spent to light, heat, and cool their buildings as one way to be successful.

Agencies must reduce energy use in their facilities by 30 percent from a 2005 baseline by 2015 — a requirement of the 2007 Energy Independence and Security Act. Annual sustainability reports, released 31 OCT 11, show agencies are taking a range of steps to lower power costs — from low-cost investment in energy-efficient products to awarding of Energy Savings Performance Contracts (ESPC) — where a company pays the upfront investment for building renovations and retrofits in exchange for payments from energy savings over time. Naval Air Station Kingsville, TX is trying an all-hands-on-deck approach to reining in the annual $3.1 million electricity and gas bill its 40-plus buildings generate. In addition to installing energy-efficient lighting and motion sensors to detect when lights and heat can be turned off, it has trained 31 building energy managers to conduct weekly or monthly building inspections to identify where energy is being wasted and how money can be saved. Norma Barrera, Kingsville's energy manager, said the Navy incorporates suggestions from the inspections into energy-efficiency programs, such as providing weather stripping to exterior doors in their buildings and vestibules. Other agencies such as the Justice Department are turning to contractors for help in reducing their building energy costs. Justice's sustainability report says ESPCs are helping the department meet its energy and sustainability mandates. The projects have allowed the agency to replace lights, heating and cooling equipment, install advanced meters, and launch renewable energy projects. The agency said ESPCs helped it reduce its energy footprint some 38 percent since 2003.

The value of ESPCs at the General Services Administration grew more than sevenfold — from $29 million in fiscal 2009 to at least $213 million in fiscal 2011 — to reduce energy costs in buildings GSA owns or leases for federal agencies. GSA is soliciting ESPCs for 30 federal buildings to the company that offers the most energy savings per dollar. "ESPCs provide the federal government with decades of lower utility bills without an upfront investment. The approach just makes good sense, especially when budgets are tight," GSA administrator Martha Johnson said in a statement.

But ESPCs are not a free program. Agencies' dollar savings from energy reductions are used to pay the contractors, and the total amount agencies pay the contractor is larger than the initial cost of the project. Once the contract expires, agencies begin to save.

Federal Green Challenge Web Academy Webinar Series

The Federal Green Challenge Web Academy is a webinar series that provides tools and ideas to help agencies or facilities reduce the Federal Government's environmental impact. You are invited to join upcoming webinars to learn how your agency can get involved in the Federal Green Challenge: http://www.epa.gov/fgc. The Federal Green Challenge focuses on green building operations (waste, energy, water), as well as fleets and procurement. The next webinar will be held 29 NOV 11 from 1100-1200 Pacific Standard Time. Advance registration is being accepted at http://www.epa.gov/fgc/web-academy.html.

FEDERAL NEWS

Notice: With regard to any regulation or legislation, installation staff is requested to contact their respective component REC with information on mission or installation impacts, questions, or comments.

AIR

New Source Performance Standards (NSPS) Review (Draft)

The purpose of this advanced notice of proposed rulemaking (ANPRM) is to request public comment on a proposed approach the EPA has developed to carry out the statutorily required periodic evaluation of the NSPS program. Comments must be received on or before 23 NOV 11. POC is Ms. Janice Godfrey, Policy and Strategies Group, Office of Air Quality Planning and Standards (D205-02), EPA, Research Triangle Park, North Carolina 27711; tel: (919) 541-3391; fax: (919) 541-4991; e-mail: godfrey.janice@epa.gov (Federal Register; 24 October 2011 [Proposed Rules], pages 65653-65661).

WATER

NPDES Pesticide General Permit for Application of Pesticides to Waters of the U.S. (Final)

The NPDES general permit for point source discharges from the application of pesticides to waters of the United States, also referred to as the Pesticide General Permit (PGP) has been finalized. All ten EPA Regions are issuing the final NPDES PGP, which will be available in those areas where EPA is the NPDES permitting authority. In EPA Regions 1, 2, and 3, the EPA is the permitting authority in the following areas:

- EPA Region 1
  - Massachusetts, including Indian Country lands within Massachusetts
  - Indian Country lands within Connecticut
  - New Hampshire
  - Indian Country lands within Rhode Island
  - Federal Facilities within Vermont
- EPA Region 2
  - Indian Country lands within New York
  - Puerto Rico
- EPA Region 3
  - The District of Columbia
  - Federal Facilities within Delaware

The final general permit regulates discharges to Waters of the US from the application of (1) biological pesticides, and (2) chemical pesticides that leave a residue for the following four use classes:

- Mosquito and Other Flying Insect Pest Control--to control public health/nuisance and other flying insect pests that develop or are present during a portion of their life cycle in or above standing or flowing water. Public health/nuisance and other flying insect pests in this use category include mosquitoes and black flies.
- Weed and Algae Pest Control--to control weeds, algae, and pathogens that are pests in water and at water's edge, including ditches and/or canals.

- Animal Pest Control--to control animal pests in water and at water's edge. Animal pests in this use category include fish, lampreys, insects, mollusks, and pathogens.
- Forest Canopy Pest Control--application of a pesticide to a forest canopy to control the population of a pest species (e.g., insect or pathogen) where, to target the pests effectively, a portion of the pesticide unavoidably will be applied over and deposited to water.

This action was effective 31 OCT 11. The POC is Jack Faulk, EPA Headquarters, Office of Water, Office of Wastewater Management at tel: (202) 564-0768 or email: faulk.jack@epa.gov. For more information, go to: http://www.fedcenter.gov/Articles/index.cfm?id=19778.

The Federal Register listing can be found at: Federal Register; 7 November 2011 [Notices], page 68750 - 68756.

CHESAPEAKE BAY

Chesapeake Bay Advocates Concerned about Pennsylvania Funds in New Federal Farm Bill

As a new national farm bill is considered in Congress, there is concern that Pennsylvania farms and municipalities could lose vital funding. The bill is reworked every five years, usually with hearings and public input, but this year, it's being rolled into the budget duties being taken on by the so-called "Super Committee."

Doug Siglin, federal affairs director with the Chesapeake Bay Foundation, says the new process could jeopardize farm bill funding for vital conservation programs, including the Chesapeake Bay Watershed Initiative, which helps control runoff and other pollution that starts upstream and ends up in the Bay. "We're concerned that program might get dropped and that Pennsylvanians might not even get the opportunity to say very much to their representatives about how important that program is to them." He says most farms, and cities and towns for that matter, need all the federal help they can get when it comes to Bay pollution reduction. "Municipalities, townships are going to have to upgrade their wastewater treatment plants and their urban runoff, and farmers are going to have to get their fertilizer under control, and they're being asked to lay out capital to do all those things."

It appears Pennsylvania does have some factors in its favor. Republican Senator Pat Toomey sits on the Super Committee, and there are three other Capitol Hill lawmakers from Pennsylvania who are close to the issue. "That's Senator Bob Casey and then Tim Holden and Glen Thompson. Presumably, they're going to be looking out for Pennsylvania's interests and going to be pushing the Super Committee to include things that are in Pennsylvania's interests."

Siglin says that even as it stands now the CBWI doesn't have enough funding on hand to help farmers who want to manage their runoff. He says ending the program would cripple efforts to improve water quality in Chesapeake Bay. For more information, go to: http://cbf.org/page.aspx?pid=2668.

Chesapeake Bay Foundation Expresses Concern about Bill to Do Away with Stream Buffer Requirements

The Chesapeake Bay Foundation (CBF) has expressed concern about legislation that is planned to be introduced which would eliminate the requirement in Chapter 102 of the Pennsylvania Department of Environmental Protection's (DEP's) regulations for riparian forested buffers at construction projects within High Quality and Exceptional Value watersheds. CBF says the Chapter 102 regulation was established to protect Pennsylvania's most pristine and ecologically sensitive streams. The DEP classifies these streams as high quality ("HQ") and exceptional value ("EV") based on specific water quality criteria.

Northampton County is home to two streams that fall into the HQ or EV categories: Bushkill Creek, a high-quality waterway and Catasauqua Creek, an exceptional value waterway.

According to CBF, scientific studies have shown that buffers greater than 100 feet or more prevent pollution from entering streams, reduce pollution already in streams, prevent flooding, protect human health and welfare, and improve property values. Thus, the 150-foot riparian buffer requirement is an important part of the puzzle in preventing stream degradation in these waterways. CBF says that a requirement for a riparian buffer is essential to water quality and flood control in areas where EV/HQ streams are located. The complete CBF letter can be found at:
https://docs.google.com/viewer?a=v&pid=explorer&chrome=true&srcid=0B4Y3VQLxjkxOYTNiYjhmMTAtNTM4MS00MDkzLTk2OWItMTM3MTc3ODA3MDA1&hl=en_US.

REGION 1

CONNECTICUT

Note: The Connecticut General Assembly convened on 5 JAN 11 and adjourned on 8 JUN 11.

Proposed Rules

No new environmental regulations of significant importance to the DoD were identified during this reporting period.

Connecticut Draft Permit for Pesticide Discharges to Water

The CT Department of Energy and Enviromental Protection (DEEP) has advertised a draft general NPDES permit for the discharge of pesticides (PGP) to waters of the State. DEEP is issuing the PGP to allow applicators to comply with a 7 JAN 09 Court of Appeals (Sixth District) decision that these discharges be authorized nationwide by NPDES permits beginning 31 OCT 11. DEEP expects to issue the PGP before 1 JAN 12 with compliance expected from all pesticide applicators by the 2012 application season. Connecticut has a long established Pesticide Permitting Program that already requires individual pesticide application permits for the application of aquatic pesticides and the aerial spraying of pesticides. DEEP expects the vast majority of aquatic and aerial pesticide applications will be regulated directly by the existing Pesticide Programs permit and, as proposed, would automatically result in coverage under the new NPDES PGP. However, other applications of pesticides to State waters that don't require permitting under the state's existing pesticide laws - application of biopesticides, applications of pesticides conducted by water utilities, and all applications conducted by state or federal agencies - will now require coverage under the PGP. Certain pesticide applications will require submittal of a Notice of Intent (NOI), approval of registration, and development of a Pesticide Discharge Management Plan (PDMP) prior to the actual application. These would include pesticide applications exceeding annual application thresholds and those conducted by State and Federal agencies (regardless of application area). The PGP would not authorize pesticide applications to CT Outstanding Natural Resource Waters or waters impaired for the pesticide being used. An individual NPDES permit would be required for these applications. Comments on the draft PGP are due by COB 15 DEC 11. Installations with operational concerns related to this proposed PGP should provide comments to their service Regional Environmental Coordinator by 5 DEC 11. Additional information can be found at: http://www.ct.gov/dep/cwp/view.asp?a=2586&Q=490672&depNav_GID=1511.

Installation water program and pesticide management staff should be coordinating to insure integrated pest management, recordkeeping, and reporting (adverse incident) requirements of the PGP will be met. Be aware Navy legal staff has advised that EPA and State PGP cannot hold federal agencies to a higher standard than the rest of the regulated public. This is a requirement of the CWA. Installations shall consult with their legal staff regarding the PGP NOI and associated PDMP requirements.

MAINE

Note: The Maine General Assembly convened on 1 DEC 10 and adjourned on 15 JUN 11.

Proposed Rules

No new environmental regulations of significant importance to the DoD were identified during this reporting period.

Maine DEP Appoints New Policy Director and New Bureau Directors

The Maine Department of Environmental Protection has a new Policy Director and two of its acting Bureau Directors have earned permanent positions on its senior leadership team.

Heather Parent, most recently a shareholding attorney in Eaton Peabody's Environmental and Land Practice Group, has been named Policy Director, following the transfer of former director Jim Dusch into a newly-created post as DEP's Southern Maine Regional Office Director. As Policy Director, Parent will develop and implement thoughtful and practical policy, procedures and rules that offer environmental protections while not obstructing prosperity and serve as the department's liaison to the State Attorney General's Office. She will also oversee the agency's enforcement efforts, working to ensure DEP's enforcement is timely, fair, and firm and does not allow for violations to provide for a competitive advantage against those businesses and individuals who are undertaking environmental stewardship.

Melanie Loyzim, acting director of the Bureau of Air Quality since June, and Mike Mullen, acting director of the Bureau of Land & Water Quality since July, were sworn-in as permanent directors of their respective bureaus. Loyzim, of Manchester, holds a B.S. in Environmental Management and Policy from the University of Maine and a Master of Public Administration degree from the University of Colorado.

She worked at a private Colorado environmental services firm and in that state's Department of Public Health and Environment on air quality policy and regulation development before joining the Maine DEP in 2006, where she has served as the manager of the Air Toxics and Emissions Inventory Program, leading a team focused on measuring emissions across the state and coordinating outreach and compliance assistance for thousands of Maine sources that emit air toxics and other pollutants.

Mullen, of Winthrop, has been with the bureau since 1983, most serving recently as the Enforcement and Compliance Director in the Division of Land Resource Regulation in which he directed complaint response and resolution, and provided regulatory and technical assistance to the public for activities regulated due to their size or proximity to protected natural resources.

Maine Department of Environmental Protection Policy Director Heather Parent can be reached at (207) 287-8662 or heather.parent@maine.gov. Air Quality Bureau Director Melanie Loyzim can be reached at (207) 287-6104 or melanie.loyzim@maine.gov. Land & Water Quality Bureau Director Mike Mullen can be reached at (207) 446-1611 or mike.mullen@maine.gov.

For more information about the department, visit http://www.maine.gov/dep.

MASSACHUSETTS

Note: The Massachusetts General Court meets throughout the year.

Proposed Legislation

No new environmental legislation of significant importance to the DoD was identified during this reporting period.

Proposed Rules

No new environmental regulations of significant importance to the DoD were identified during this reporting period.

Decades Later, Cleanup Continues at Naval Air Station

Emily Sweeney - Globe Staff

Cleaning up an old military base doesn't happen overnight. Even before South Weymouth Naval Air Station closed in 1997, the Navy began addressing the environmental hazards at the air base, which includes land in Abington, Rockland, and Weymouth. Today, even as the vast property that was once home to World War II blimps gets redeveloped into a new community called SouthField, the work continues.

Approximately $50 million has been spent on site investigations, studies, and remediation efforts, according to David A. Barney, who is overseeing the cleanup for the Navy. Another $25 million to $30 million is needed to finish the job. But the end may be in sight. A list of potentially contaminated sites that once numbered 100 is down to single digits, said Barney. "We want to get it done right the first time,'' said Barney, in a recent telephone interview. "We want to make sure when we turn the property over, it's in good condition for subsequent reuse.''

"The vast majority of environmental concerns have been addressed,'' said EPA spokesman Bryan Olson, who is in charge of military base cleanups in New England. The handful of sites that remain includes an old hangar known as Building 82, and Building 81, which was the site of a small office building and garage. (Chlorinated solvents were detected in soil and ground-water samples at both locations a decade ago.) Another part of the base is known as the "solvent release area.'' It was located near the pistol range and a hobby shop, where military personnel worked on vehicles. Field studies are under way at those three sites, and remedies will be selected by next year, according to the EPA.

The former South Weymouth Naval Air Station is still a designated Superfund site, and it remains on the National Priorities List - the EPA's list of the most hazardous sites in the country. The Navy is in charge of the environmental remediation efforts, the Department of Defense is funding the cleanup, and the EPA acts as the lead regulatory agency. The Restoration Advisory Board continues to hold meetings and discuss cleanup efforts at the former air base. Barney said environmental monitoring at the site will continue for "at least 30 years.'' And the Navy isn't the only entity watching the base, he said. "We work extensively with regulatory agencies,'' said Barney. "We try to take every opportunity to involve the community in discussion. We're really working as a team. I see the light at the end of the tunnel.''

Newly Promulgated Emergency Regulations

Damage from the 29-30 OCT 11 snowstorm occurred in many municipalities in the Commonwealth. In particular, extensive damage occurred to utility poles, electrical and telecommunication lines from fallen trees and tree limbs. To provide local officials flexibility to protect the public health, welfare, and safety where storm damage occurred, the Massachusetts Department of Environmental Protection (MassDEP) has promulgated emergency regulations to allow for expeditious cleanup of storm debris and repair, when the damage occurred in wetland resource areas and waterways. Procedures under these emergency regulations have been varied from the normal provisions specified in the above referenced regulations to facilitate storm cleanup and property repairs, while ensuring that resource areas are adequately protected.
These rules apply to all municipalities located within the Commonwealth, allow the work described in the Storm Emergency Regulations, and are effective through 30 JAN 12. Please note that these regulations do not allow work that is subject to an enforcement action commenced under the Wetlands Protection Act prior to 29 OCT 11. The regulations can be found on the MassDEP website at:
http://www.mass.gov/dep/service/regulations/newregs.htm#emerg.

Regulatory Reform Initiatives Document Available for Public Comment

In April 2011, MassDEP launched a Regulatory Reform Initiative. The agency has been soliciting input from a broad range of stakeholders on possible changes to how it conducts its programs in order to reduce staff time spent while maintaining its high standards for protection of the environment and public health. The resulting Draft Action Plan for Regulatory Reform at MassDEP is now available for public comment at: http://www.mass.gov/dep/about/priorities/regreform.htm. Comments will be accepted through 5 DEC 11. Please remember that individuals can make individual comments but any comments regarding DoD should be routed through your REC representative.

MassDEP Unveils New Tools to Streamline Air Quality Permitting Process

In an effort to improve efficiency and reduce timelines for decisions that are critical to the development of projects, MassDEP is committed to issuing air quality permits at the “speed of business” while maintaining the highest protective standards for the environment.

Industry representatives have identified air permitting as one of the more time- and resource-intensive aspects of obtaining the state approvals needed to move forward with economic development and expansion projects. Their concerns center on both overall permitting timelines and the costs associated with analyzing what is called the "Best Available Control Technology" (BACT) that is required by state and federal regulations for certain projects with air emissions.

Over the last several years, MassDEP has worked closely with stakeholders to design and implement many regulatory reforms that accelerate agency review of air quality permit applications and simplify the process for applicants. MassDEP has recently completed some major improvements to the permit approval process. These new enhancements include: revised, user-friendly application forms; the formation of the MassDEP Air Permitting Forum which consists of applicants, consultants, environmental advocates, and others who provide the Agency with input and recommendations; “plan approval” overview and applicability tables; and a library of BACT analyses for specific industries and equipment that new applicants use off-the-shelf for similar projects without needing to perform their own project-specific analyses.

For more information about MassDEP’s Air Permit Streamlining Initiative and the new tools available, go to: www.mass.gov/dep/public/committee/aboutapf.htm.

NEW HAMPSHIRE

Note: The NH General Court convened on 5 JAN 11 and adjourned on 1 JUL 11.

Proposed Rules

No new environmental regulations of significant importance to the DoD were identified during this reporting period.

Reduce Salt Applications and Become a Green SnowPro Certified

Eric Williams – NH Watershed Assistance Administrator

Road salt applicators can now get green credentials and possibly make more green, too. A new certification program in New Hampshire addresses a gap in professional accreditation and a growing environmental problem at the same time.

Since 1941, when New Hampshire was the first state to use road salt for regular highway maintenance, background chloride levels have increased 100 times in some watersheds. Almost 200,000 tons of salt are now applied in the state each winter and consequently more than 40 water bodies in the state are polluted from chloride. The chloride problem is more challenging than other water quality concerns due to the complete solubility of the chloride ion. Once salt is dissolved in water, it cannot be removed by any practical means and remains in solution until it flows out of the watershed. This occurs relatively quickly in surface waters (rivers and streams) but when salt-laden runoff from roads and parking lots enters the groundwater, it can take a long time to leave the system since groundwater moves much more slowly than surface water.

Since there is no feasible way to remove the salt, then the only option to deal with the problem is to use less. Salt alternatives, such as calcium magnesium acetate, are part of the solution, but since sodium chloride is so much cheaper, a focus on salt reduction is needed.

Long considered to be a highway problem, recent studies in the southern I-93 corridor have shown that up to 50 percent of the total salt load is coming from private parking lots and driveways. So in addition to state and municipal highway crews, salt reduction is needed from the diverse array of private salt applicators that number in the thousands.

Since salt applicators' primary goal is maintaining safety, the New Hampshire approach to salt reduction is to improve efficiency in salt use. Applying salt when it is not needed adds unnecessary pollution to local water bodies and wastes money.

To improve communications with private applicators and increase training opportunities, the University of New Hampshire Technology Transfer Center (UNH T2) created the Green SnowPro certification program. The voluntary program allows salt applicators to become green certified by participating in training and passing a test. Training topics include: how salt works, anti-icing with liquids, pre-wetting, spreader calibration, material storage, housekeeping, and salt accounting. UNH T2 developed a web-based salt accounting system so that applicators can track usage storm by storm or annually.

The first two training sessions were at maximum capacity and resulted in over 100 applicators earning Green SnowPro certification.

This response is attributed to several factors. Green certification can be an asset in marketing winter maintenance

services to clients concerned about environmental impact. Applicators learn techniques that maintain level of service while using less salt, saving time and money. Increased professionalism is better business and can reduce risk exposure.
For more information about Green SnowPro certification, go to www.t2.unh.edu.

RHODE ISLAND

Note: The RI General Assembly convened on 4 JAN 11 and adjourned on 1 JUL 11.

Proposed Rules

No new environmental regulations of significant importance to the DoD were identified during this reporting period.

VERMONT

Note: The Vermont General Assembly convened on 5 JAN 11 and adjourned on 31 MAY 11.

Proposed Rules

No new environmental regulations of significant importance to the DoD were identified during this reporting period.

REGION 2

NEW JERSEY

The New Jersey Legislature meets throughout the year.

Proposed Legislation

No new environmental legislation of significant importance to the DoD was identified during this reporting period.

Proposed Rules

No new environmental regulations of significant importance to the DoD were identified during this reporting period.

Work Begins to Remove Dioxin-Laden Sediment from the Lower Passaic River

The EPA announced the start of construction needed to remove contaminated sediment from the lower Passaic River. The sediment in this area of the river is highly contaminated with dioxin, which can cause serious health effects, including cancer. Vertical steel walls will be installed in the river to enclose the area, making it possible to remove the sediment without spreading contamination during dredging. "The cleanup of this section of the Passaic River will remove the most highly contaminated sediment, which is a continuing source of contamination flowing downstream," said Judith A. Enck, EPA Regional Administrator.

Under a June 2008 agreement between EPA and Occidental Chemical Corporation and Tierra Solutions, Inc., the companies will remove 200,000 cubic yards of contaminated sediment from the badly contaminated area directly in front of the Diamond Alkali site. The EPA and the U.S. Army Corps of Engineers will oversee the work.

The cleanup of the lower Passaic River has been divided into two phases. The first phase involves the removal of about 40,000 cubic yards of the most highly contaminated sediment. It will be piped to a processing facility that is currently under construction a quarter mile downstream from the Diamond Alkali site at 117 Blanchard Street. There, the contaminated sediment will be dewatered, treated, and then transported by rail to a licensed disposal facility. Air and water monitoring at the work locations will ensure safe operations.
In the planned second phase of the project, 160,000 cubic yards of sediment, much of it with lower levels of contamination than the first 40,000 cubic yards, will be removed from the same area of the Passaic River.

For more information about this project, go to: http://www.passaicremovalaction.com/home.htm.

NJ DEP Teams Up With Researchers on Barnegat Bay Studies

The NJ Department of Environmental Protection (DEP) is teaming up with several of the region's leading research institutions to perform scientific studies that will help the department make critical decisions on how to restore and enhance ecologically stressed Barnegat Bay, Commissioner Bob Martin announced. Taken together, the series of ten studies coupled with other work the DEP is undertaking will result in the most comprehensive scientific analysis ever for the bay. The studies will be performed by the Rutgers University Institute of Marine

and Coastal Sciences, the New Jersey Sea Grant Consortium, Montclair State University, Rider University, Monmouth University, and the Academy of Natural Sciences in Philadelphia, in cooperation with the DEP.

Barnegat Bay is long and very shallow and has limited inlets to allow flushing of degraded water to the ocean. The bay is becoming eutrophic, meaning that nutrients are causing frequent algae blooms that can cause low dissolved oxygen conditions and block sunlight, affecting the estuary's overall ecological balance.

The Governor's 10-point Comprehensive Barnegat Bay Restoration Plan calls for a variety of strategies to reduce nutrient pollution to the bay, including the nation's toughest statewide fertilizer law, low-cost funding for local governments to improve stormwater control projects, acquisition and protection of land in the watershed to filter pollutants and provide buffers, and development of a Special Area Management Plan to improve coordination among planning jurisdictions. The plan also calls for the closure of the Oyster Creek nuclear power plant in Lacey Township by the end of 2019, a decade ahead of the expiration of its federal license.

For more information on the studies, visit: http://www.state.nj.us/dep/barnegatbay/plan-research.htm.
For more on the 10-point restoration plan, visit: http://www.nj.gov/dep/barnegatbay/.

NEW YORK

The New York State Legislature meets throughout the year.

Proposed Legislation

No new environmental legislation of significant importance to the DoD was identified during this reporting period.

Proposed Rules

No new environmental regulations of significant importance to the DoD were identified during this reporting period.

"Trees for Tribs" Stream Planting Program Launches in Hard Hit Flood Area

The Department of Environmental Conservation (DEC) and the USDA's Natural Resources Conservation Service (NRCS) held the first tree planting event of the Lake Champlain basin "Trees for Tribs" program. Volunteers and local groups planted trees along the Ausable River, a tributary leading to Lake Champlain. The land was damaged by Hurricane Irene and the trees will help restore and protect it from further erosion and flooding.

Trees and other natural vegetation along waterways-called riparian forests- help to stabilize stream banks and other vulnerable areas. They also can reduce up to 69 percent of total nitrogen, 60 percent of total phosphorous, and 71 percent of total sediment washed off farms into waterways. Restoration of riparian forests is a low-cost way to improve water quality and provide much-needed shade, habitat and food for trout and other fish. The state-run Saratoga Tree Nursery provided native trees and shrubs for the project. Since the plants are native species, they are best adapted to the region's climate and soil conditions.

For more information on the Lake Champlain basin "Trees for Tribs" program, visit the Lake Champlain Trees for Tribs web page or call the Division of Lands and Forests at 518-402-9405.

REGION 3

DISTRICT OF COLUMBIA

Note: The Council of the District of Columbia meets twice per month throughout the year.

Proposed Legislation

No new environmental legislation of significant importance to the DoD was identified during this reporting period.

Proposed Rules

No new environmental regulations of significant importance to the DoD were identified during this reporting period.

DELAWARE

Note: The Delaware General Assembly convened on 5 JAN 11 and adjourned on 30 JUN 11.

Proposed Rules

No new environmental regulations of significant importance to the DoD were identified during this reporting period.

MARYLAND

Note: The Maryland General Assembly convened on 12 JAN 11 and adjourned on 11 APR 11.

Proposed Rules

No new environmental regulations of significant importance to the DoD were identified during this reporting period.

PENNSYLVANIA

Note: The Pennsylvania General Assembly meets throughout the year.

Proposed Legislation

No new environmental legislation of significant importance to the DoD was identified during this reporting period.

Proposed Rules

No new environmental regulations of significant importance to the DoD were identified during this reporting period.

PA NRCS Releases Conservation Planning, Regulatory Compliance Guidance

The Pennsylvania Office of the U.S. Natural Resources Conservation Service has developed an outstanding compilation of conservation guidance that is a crossroad between all that is conservation planning assistance – and that which is regulatory in Pennsylvania for working lands. The significance of this document is that it provides professional conservationists with easy access across the regulations (state and federal) – and the planning and assistance options that are available across the state and federal spectrum. As of summer 2011 – it is up-to-date with the current regulations – including the Chapter 102 Erosion and Sedimentation requirements for agriculture.

Natural Resources and Conservation Service is proud to announce the release of the "Conservation Planning and Regulatory Compliance Handbook." The book has been organized into typical planning and land use topic areas to assist you in making sense of the State's new regulation changes. Blank tabs have been provided in the handbook for your convenience to insert materials you may have already collected and frequently use. When support staff members develop guidance for other planning and regulatory topics, new tabs will be provided to add to the handbook. While official policies and guidance are maintained in the online directives and field office technical guide systems, this handbook is intended to help you find quick reference to the items you most frequently use. A copy of the handbook is available online. For assistance with technical content, contact Noel Soto, NRCS Soil Conservationist, by calling 717-237-2173 or send email to: noel.soto@pa.usda.gov.

New Delaware Riverkeeper Brochure Recommends Native Plants, Buffers

The Delaware Riverkeeper Network has just released "20 Ways to Protect Streams & Streamside Properties," a new brochure that profiles 36 native plants to consider planting. The new brochure also highlights simple actions individuals can take, like planting native plants, to protect streams. Native plants, especially native trees and shrubs are important to the watershed because they shield the ground from heavy rains and slow runoff from the land. The brochure encourages the planting of these natives using full color photos showing the selected species

at their best bloom, color and growth. The images of the recommended plants included in the brochure are displayed at a minimum size of 1.5" x 3.25". The new brochure can serve as a resource for gardeners and land managers and can also be displayed as poster. The brochure is printed on heavyweight stock and coated for durability to be long-lasting and look good hanging on your wall. A limited number of print copies of the brochure are available, but it can also be downloaded from the Delaware Riverkeeper Network's website.

PAG-13 MS4 NPDES General Permit Update

On 17 SEP 11, the Pennsylvania Department of Environmental Protection (PADEP) reissued the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s) for another 5 years, effective 16 MAR 2013. The current PAG-13 permit was also extended to expire at midnight on 15 MAR 2013. Facilities needing to renew existing PAG-13 permits must complete and submit acceptable Notices of Intent (NOI) to PADEP by 14 SEP 2012 (a minimum of 180 days prior to the expiration date of the current PAG-13).

A summary of the revisions to PAG-13 are as follows: the title of the protocol was changed to the stormwater management program; field inspection of outfalls was modified; inspection of outfalls for renewal permittees was changed to once within the permit term for areas where there were no reports of problems and no outfalls with dry weather flows; a requirement for preparation of an MS4 Total Maximum Daily Load (TMDL) Plan was added for permittees with regulated small MS4s that discharge to impaired waters with an applicable Waste Load Allocation in an approved TMDL; and preparation of a Chesapeake Bay Pollutant Reduction Plan was added for permittees with regulated small MS4s that are located in and discharge to receiving watersheds that drain to the Chesapeake Bay (required 12 months from approval of GP coverage). The Department also increased the filing fee for PAG-13 from $100 to $500.

Eligibility requirements for using PAG-13 are described in the permit documents. An important limitation on eligibility is that PAG-13 is not available for discharges into water bodies classified as Exceptional Value or High Quality under 25 Pa. Code Chapter 93 (relating to water quality standards). An "individual permit" will be required for discharges to those categories of water bodies. For more information, go to: http://www.portal.state.pa.us/portal/server.pt/community/stormwater_management/10628/announcements/554332

VIRGINIA

The Virginia Legislature convened on 12 JAN 11 and adjourned on 26 FEB 11.

Proposed Rules

No new environmental regulations of significant importance to the DoD were identified during this reporting period.

Virginia to Establish Wind Turbine Testing and Certification Facility

Governor Bob McDonnell announced that Virginia has landed a collaborative project to establish a facility for the testing and certification of large offshore and land-based electricity-producing wind turbines. The project, called Poseidon Atlantic, will be the first such facility in the United States and will help fill a growing need globally for facilities that test and certify wind turbines. The initial phase of the project is to be developed on Virginia's Eastern Shore in Northampton County.

The Poseidon Atlantic project is a private-sector initiative developed by the companies Real NewEnergy, Fugro and Ecofys, with the support of the Commonwealth, the Virginia Port Authority (VPA), and the Netherlands government. The proposed facility is intended for full-service testing and certification of existing-and-next generation land-based and offshore wind turbine generators. The growth of the offshore wind sector and all of its associated jobs over the long-term could result in major and sustained new job and new industry creation potential over an extended number of years in Hampton Roads and the Eastern Shore.

Real NewEnergy is a renewable energy technology firm formed to introduce and leverage Dutch renewable energy experience and capabilities in the U.S. Ecofys is the leading sustainable energy consulting firm in the Netherlands and currently operates the largest wind turbine test-and-certification facility in Europe. The Norfolk office of Dutch-based Fugro will provide engineering services associated with site location and development of the proposed test center. Fugro has been a key partner in the development of more than 100 installed and proposed European offshore wind projects, and has been a key supporter for the development of an offshore wind industry in the U.S.

US Navy Will Study Area Runway

The U.S. Navy has decided to include NASA Wallops Flight Facility as an alternative in its Environmental Assessment (EA) that is examining potential environmental effects of Naval Station Norfolk Chambers Field-based E-2 and C-2 aircraft conducting Field Carrier Landing Practice at Emporia-Greensville Regional Airport. In August 2011, the director of the Wallops Flight Facility, with the support of the NASA Administrator, sent a letter to U.S. Fleet Forces Command requesting the Navy consider NASA Wallops as a potential Navy E-2/C-2 FCLP location. The Navy issued a Request for Proposals in February of 2011 that included a detailed list of airfield and aircraft specifications, as well as operational requirements. Because Wallops is a federal government owned facility, it cannot participate in the RFP/competitive process. The Navy is required to include all potential FCLP candidate sites in its EA. With the inclusion of Wallops Flight Facility, it is now expected that FCLP operating capability can be achieved by the summer of 2013, contingent upon the results of the environmental review and the follow-on airfield design/build schedule. The Navy has not identified a preferred site at this time.

Navy to Use Emergency Funds on Joint Base Power Grid

Bill Bartel – The Virginian Pilot

The Navy plans to use $30 million in emergency funds to replace or repair the overburdened electrical grid at Joint Expeditionary Base Little Creek-Fort Story. The power system has not been upgraded over the last 10 years despite a doubling of personnel to about 20,000 and it is so overloaded that the facility has endured power outages. The Navy was considering temporarily moving ships to Norfolk Naval Station, according to Hampton Roads' congressional delegation.

In a 9 NOV 11 letter to U.S. Rep. Scott Rigell and five other federal legislators, Navy Secretary Ray Mabus wrote that the base is important to Virginia and to the Navy's "maritime strategy." The four congressmen and two senators had sent a joint letter to Mabus last month suggesting the use of emergency funds. "As your letter recommended, we are pursuing the use of emergency military construction authority to correct the safety and mission support issues related to the electrical distribution system," Mabus wrote. A proposal in the 2013 fiscal year budget calls for spending $30 million to correct the problems, but the money has to be approved by Congress and the system upgrades wouldn't be completed until 2014. Rigell said the emergency money will allow for repairs to begin much sooner.

Battle between Virginia's Offshore Wind and Oil Drilling

The Obama administration's proposal to exclude Virginia from offshore drilling exploration has angered many top politicians in the commonwealth who view drilling as a potential source of jobs. But the decision has reinvigorated environmentalists' arguments that there's more to gain from wind power. So how do the two

actually compare? Virginia Gov. Bob McDonnell points to $250 million annually in revenue sharing payments from potential offshore oil and gas leases. "And more than 1,900 jobs could be created," says Jeff Caldwell, McDonnell's press secretary.

As for offshore wind, the environmental group Oceana says there could be tens of thousands of jobs created by offshore wind farms in Virginia. "We could be talking about as many as 17,000 jobs in operations and maintenance," says Oceana's Jackie Savitz. "And in terms of construction, we're talking about another 30,000 jobs." So for wind power, there could be many more jobs, but maybe less state revenue. Savitz says those jobs would materialize only if the supply chain for wind farms is based in Virginia — as opposed to another state or another country. "It's really a matter of who gets there first," says McDonnell and former Gov. Tim Kaine. Both have called for a combination of oil and renewable, including wind, but Savitz says there's a problem with that. "When you try to do both, they end up competing with each other," she says. "They need some of the same parts, same ships. It drives costs up." Not so, argues Tim Ryan, president of wind developer Apex Wind in Charlottesville, Va. "Hampton Roads is a tremendous resource in terms of shipyards, dock areas, manufacturing capabilities," Ryan says. "There are plenty of opportunities to do offshore wind and offshore oil and gas." The real barrier to wind isn't drilling, Ryan adds. Instead, it's expiring federal incentives and a lack of state incentives in Virginia. And, of course there is more to compare than money and jobs, add the environmentalists. While oil pollutes, wind does not, they say.

WEST VIRGINIA

The West Virginia Legislature convened 12 JAN 11 and adjourned mid-MAR 11.

Proposed Rules

No new environmental regulations of significant importance to the DoD were identified during this reporting period.

REGION 4

NORTH CAROLINA

Note: The NC General Assembly convened on 26 JAN 11 and adjourns on 5 AUG 11.

Proposed Rules

No new environmental regulations of significant importance to the DoD were identified during this reporting period.

PROFESSIONAL DEVELOPMENT

Conferences

Utility Energy Service Contracts (UESC) Workshop (Classroom) (Multiple Offerings)
This FEMP workshop is provided for Federal procurement teams, providing an overview of the contracting options and services available from serving utility companies to engineer, finance, and install cost-effective energy and water savings projects. Participants will be walked through the typical project process spanning the audit phase to commissioning the equipment. For more information, go to: http://www.fedcenter.gov/_kd/go.cfm?destination=ShowItem&item_id=19437.

Partners in Environmental Technology Symposium & Workshop, 29 NOV – 1 DEC 11, Washington, DC
The workshop is a nationally recognized conference focusing on DoD priority environmental issues. Attendees span the military services, academic and research institutions, private sector technology and environmental firms, and federal/state/local regulatory and policy-making organizations. This year's event will offer an opening Plenary Session (where the SERDP and ESTCP Projects of the Year will be announced), 15 technical sessions and four short courses, more than 450 technical poster presentations, and exhibitors from funding and partnering organizations. For more information, go to: http://symposium2011.serdp-estcp.org/.

CTLCV 12th Annual Environmental Summit, 6 DEC 11, Hartford, CT
The CT League of Conservative Voters (CTLCV) is holding its Annual Summit, with the keynote address by Governor Malloy, engaging debate, a discussion of current trends in environmental issues, legislative insights, and plenty of networking opportunity. The Summit will be held on 6 DEC 11 from 1400 to 1800 in the 11th floor auditorium in the Capital Community College, 950 Main Street in ghartford, CT. For more information, go to: ctlcv@ctlcv.org.

27th International Conference on Solid Waste Technology and Management Conference, 11-14 MAR 12, Philadelphia, PA
Topics of interest include: landfill topics, scrap tires, waste collection, medical waste, composting and biological treatment, use of waste materials in construction, and carbon emissions reduction. For more information, go to: http://www2.widener.edu/~sxw0004/call.html?CFID=6566039&CFTOKEN=72183882.

Sustainable Water Management Conference, 18-21 MAR 12, Portland, OR
The 2012 Sustainable Water Management Conference will be a true sustainability conference focused on water resources integration. This conference seeks to combine technical presentations with in-depth discussions on legal, regulatory, and legislative matters facing water utilities today. It will address a wide range of topics concerning sustainable water management, including managing water resources and the environment, water conservation, sustainable utilities and infrastructure, urban planning and design, and community sustainability. For more information, go to: http://www.awwa.org/Conferences/SpecConf.cfm?ItemNumber=56511&showLogin=N.

9th Annual Environmental Monitoring and Data Quality Workshop, 26-29 MAR 12, San Diego, CA
The 9th annual DoD Environmental Monitoring & Data Quality (EMDQ) Workshop includes technical training sessions, technical presentations, a plenary session featuring distinguished speakers, a Q&A forum, component meetings, a poster session / meet & greet, an update on the DoD ELAP, and networking opportunities with members of the environmental community. This workshop is open to all interested environmental professionals involved with DoD sites or projects including representatives from the DoD services, other federal agencies, state,

local, and tribal governments, academia, and the private sector. For more information, go to: http://www.regonline.com/builder/site/Default.aspx?EventID=1014424.

Global Conference on Oceans, Climate, and Security, 21-23 MAY 12, Boston, MA

A new focus is emerging on how climate change impacts ocean systems and the oceans' subsequent vital role in exacerbating or mitigating these impacts. Thus, understanding the inter-connectedness between oceans, climate and security is increasingly crucial to our collective future. Ocean acidification and polar ice reduction/sea level rise each pose critical threats to human populations, natural systems and global security. Some threats are direct such as drought impacts on global food security, and damage to civilian and military infrastructure caused by increasing frequency and intensity of storms and sea-level rise. Other threats are significant but less direct such as a decrease in agricultural productivity, forced migration of coastal populations, and destabilizations of economies due to the ocean's reduced capacity to regulate climate and provide for human needs. For more information and to register for this conference, go to: http://gcocs.org/.

6th International Conference on Environmental Science and Technology, 25-29 JUN 12, Houston, TX

The intent of the conference is to provide a multidisciplinary platform for environmental scientists, engineers, management professionals and government regulators to discuss the latest developments in environmental research and applications. Topics of interest include, but are not limited to: Water Pollution and Water Quality Control; Air Pollution and Air Quality Control; Ecoassessment and Restoration, Wetlands, Global Change; Renewable Energy and Development; and Society and the Environment. For more information, go to: http://www.aasci.org/conference/env/2012/EST2012.pdf?CFID=6566146&CFTOKEN=70134364.

12th International Symposium for Environmental Geotechnology, Energy, and Global Sustainable Development, 27-29 JUN 12, Los Angeles, CA

The objective of the symposium is to apply technical and social science knowledge from a diversity of disciplines to address critical issues in sustainable development. For more information, go to: http://www.isegnet.org/2012/.

TRAINING

Only the CECOS courses offered within Regions 1-3 and North Carolina are listed here (with the exception of Natural Resources and Cultural Resources courses). For further information on the courses below, course offerings in other regions, and/or to register, visit the CECOS training website at: https://www.netc.navy.mil/centers/csfe/cecos/Default.aspx.

CECOS Classroom Courses

Beginning Date	End Date	Course	Location
12 DEC 11	16 DEC 11	CEC Captain's Leadership Seminar	Washington, DC
10 JAN 12	12 JAN 12	Health & Environ Risk Communication Workshop	Norfolk, VA
14 FEB 12	16 FEB 12	Navy Environmental Restoration Program	Norfolk, VA
28 FEB 12	2 MAR 12	Natural Resources Compliance	Key West, FL
6 MAR 12	6 MAR 12	RCRA Hazardous Waste Review	SUBASE Groton, CT
6 MAR 12	8 MAR 12	Adv. Historic Preservation Law & Section 106 Comp	Mayport, FL
12 MAR 12	16 MAR 12	ENV Sampling Design & Data Quality Assurance	Norfolk, VA
19 MAR 12	23 MAR 12	Hazardous Waste Facility Operations	Norfolk, VA
6 MAR 12	6 MAR 12	HAZWOPER for Uncontrolled Hazardous Waste Site Workers - Refresher	Washington, DC
7 MAR 12	7 MAR 12	HAZWOPER for Uncontrolled Hazardous Waste Site Workers - Refresher	Washington, DC
8 MAR 12	8 MAR 12	HAZWOPER for Uncontrolled Hazardous Waste Site Workers - Refresher	Norfolk, VA
9 MAR 12	9 MAR 12	HAZWOPER for Uncontrolled Hazardous Waste Site Workers - Refresher	Norfolk, VA

Beginning Date	End Date	Course	Location
10 APR 12	12 APR 12	Introduction to Cultural Resource Management Laws & Regulations	New Orleans, LA

CECOS Online Courses/Web Conferences

Beginning Date	End Date	Course	Location
Various		Advancing an Effective EMS	On-Line
Various		EPCRA and Toxic Release Inventory (TRI) Reporting	On-Line
Various		HAZWOPER for Uncontrolled Hazardous Waste Site Workers - Refresher	On-Line

NPDES Permit Writer's Training on the Web

EPA has created a web-based training series based on its popular National Pollutant Discharge Elimination System (NPDES) Permit Writer's Course. This will allow students, staff, stakeholders, and the public to access NPDES permit program training content online. The Course is a five-day training session covering the key elements of NPDES permit development and is taught by experienced instructors. These recorded presentations enable one to review the material on demand in a self-paced environment to become familiar and comfortable with the concepts of the NPDES permit program. The NPDES web-based training series can be found at http://www.epa.gov/npdes/training under "Self-Paced Web Training."

CECOS

EMS General Awareness: Computer Based Training (CBT) Module Available 24/7 at www.cecosweb.com under Training by Subject>EMS. A certificate is issued to all registered users upon completion. This module is designed to provide an awareness level overview of EMS to satisfy the requirement that ALL personnel have basic EMS knowledge. It is also to be taken as a quick refresher for anyone that takes the Advancing an Effective EMS and/or Integrated EMS/Compliance trainings.

NAVOSH & Environmental Training Center

For further information on the courses and/or to register, visit NAVOSH & Environmental Training Center website at: http://www.safetycenter.navy.mil/training/default.htm.

EPA Watershed Assessment Tools Training, Various Times & Locations

More information is available at: http://www.epa.gov/waterscience/basins/training.htm.

USDA Forest Service Continuing Education Program, Various Times & Locations

More information is available at: http://www.fs.fed.us/biology/education/.

EPA Online EMS Training Course

The course is available at: http://www.epa.gov/osw/inforesources/ems/ems-101/.

MEET THE REC

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