



# REC UPDATE

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



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## GENERAL INTEREST

### **October is Energy Awareness Month**

October is Energy Awareness Month. There are many ways you can help the Navy save energy and money all year round. Here are the Top 10 ways you can help:

1. Turn computers and computer monitors off at night and during the day when they aren't being used for extended periods of time. Make it easy to shut monitors and computer peripheral equipment off by plugging everything into a power strip with an on/off switch.
2. Get into the habit of turning off lights when you leave a room.
3. Use natural daylight and reduce or eliminate artificial lighting when possible.
4. When weather permits, open windows to take the place of air conditioning. Turn off window air conditioners when leaving a room for several hours.
5. Use task lighting when you need lighting in one small area and then reduce background or ambient light levels.
6. If you specify or order energy-using equipment, follow the law. Federal purchasers are required to order equipment that meets ENERGY STAR or Federal Energy Management Program guidelines for energy efficiency.
7. Keep air compressors and other shop equipment off when not in use.
8. Report lights left on when they are not needed to your base energy team. Automatic controls or a different type of lighting system may fix the problem. If you can't find a light switch, report it.
9. Always keep doors and windows closed when the heat or air conditioning is on.
10. Make sure sleep mode features are enabled on all office equipment.

### **National Disability Employment Awareness Month**

In October, Americans observe National Disability Employment Awareness Month by paying tribute to the accomplishments of the men and women with disabilities whose work helps keep the nation's economy strong and by reaffirming their commitment to ensure equal opportunity for all citizens. The official theme for October's 2012 National Disability Employment Awareness Month announced by the U.S. Department of Labor's Office of Disability Employment Policy is "A Strong Workforce is an Inclusive Workforce: What Can You Do?"

### **United States and Canada Sign Amended Great Lakes Water Quality Agreement**

The U.S. Environmental Protection Agency (EPA) and the Canadian Minister of the Environment signed the newly amended Great Lakes Water Quality Agreement at a formal ceremony in Washington, DC. First signed in 1972 and last amended in 1987, the Great Lakes Water Quality Agreement is a model of bi-national cooperation to protect the health of the world's largest freshwater system and the health of the surrounding communities.

The revised agreement will facilitate United States and Canadian action on threats to Great Lakes water quality and includes strengthened measures to anticipate and prevent ecological harm. New provisions address aquatic invasive species, habitat degradation and the effects of climate change, and support continued work on existing threats to people's health and the environment in the Great Lakes Basin such as harmful algae, toxic chemicals, and discharges from vessels.

The overall purpose of the Agreement is "to restore and maintain the chemical, physical and biological integrity of the waters" of the Great Lakes and the portion of the St. Lawrence River that includes the Canada-United States border. Both governments sought extensive input from stakeholders before and throughout the negotiations to amend the Agreement. Additionally, the amended Agreement expands opportunities for public participation on Great Lakes issues.

The amended agreement sets out a shared vision for a healthy and prosperous Great Lakes region, in which the waters of the Great Lakes enhance the livelihoods of present and future generations of Americans and Canadians.

To view the text of the agreement: [http://www.binational.net/home\\_e.html](http://www.binational.net/home_e.html).

## **DoD Spending on Renewable Energy to Rapidly Increase**

### **By Solar Industry**

The various branches of the U.S. Department of Defense (DOD) combine to form the single largest consumer of energy in the world, surpassing the consumption totals of more than 100 nations.

Driven by a combination of legislation, national and international policy, strategic imperatives, and operational requirements, clean technologies are moving into the mainstream of DOD spending, and the DOD is now one of the most important drivers of clean energy markets in the U.S., according to a new report from Pike Research, a part of Navigant's energy practice. The report projects that U.S. military spending on renewable energy programs, including conservation measures, will increase steadily over the next 12 years, reaching almost \$1.8 billion in 2025. "Changes in energy policy have provided countless opportunities throughout all operations of the DOD, with examples of renewable energy projects that include targets of 1 gigawatt of renewable energy installed capacity each for the Army, Navy and Air Force by 2025, a target of 25 percent of all energy produced or procured from renewable energy sources by 2025, and development of the Navy's Great Green Fleet Strike Group powered by biofuel, nuclear power, synthetic fuels and hybrid propulsion systems," says research analyst Dexter Gauntlett. "Most of these initiatives have gained considerable momentum, and many of the targets will be achieved," Gauntlett continues.

Renewable energy technologies can be divided into three main applications: power generation and energy efficiency at U.S. bases; transportation; and soldier power. Cleantech military applications in general face the same opportunities and obstacles as the civilian U.S. market, Pike Research says.

Although significant cost and reliability hurdles remain, technology cost reductions and the use of power purchase agreements and enhanced used lease as contracting vehicles will enable mature technologies such as solar PV, biomass, wind and geothermal power to be rapidly and cost-effectively deployed at scale during the next 12 years, according to the report.

## **Navy Hopes to Turn Seawater into Jet Fuel**

### **By MarineLog**

The Navy is looking at the possibility of turning seawater into jet fuel at a production cost in the range of \$3 to \$6 per gallon. According to the U.S. Naval Research Laboratory, its scientists are developing a process to extract carbon dioxide (CO<sub>2</sub>) and produce hydrogen gas (H<sub>2</sub>) from seawater, subsequently catalytically converting the CO<sub>2</sub> and H<sub>2</sub> into jet fuel by a gas-to-liquids process. "The potential payoff is the ability to produce JP-5 fuel stock at sea reducing the logistics tail on fuel delivery with no environmental burden and increasing the Navy's energy security and independence," says research chemist Dr. Heather Willauer.

NRL has successfully developed and demonstrated technologies for the recovery of CO<sub>2</sub> and the production of H<sub>2</sub> from seawater using an electrochemical acidification cell, and the conversion of CO<sub>2</sub> and H<sub>2</sub> to hydrocarbons (organic compounds consisting of hydrogen and carbon) that can be used to produce jet fuel. "The reduction and hydrogenation of CO<sub>2</sub> to form hydrocarbons is accomplished using a catalyst that is similar to those used for Fischer-Tropsch reduction and hydrogenation of carbon monoxide," adds Dr. Willauer. "By modifying the surface composition of iron catalysts in fixed-bed reactors, NRL has successfully improved CO<sub>2</sub> conversion efficiencies up to 60 percent."

CO<sub>2</sub> is an abundant carbon (C) resource in the air and in seawater, with the concentration in the ocean about 140 times greater than that in air. Two to three percent of the CO<sub>2</sub> in seawater is dissolved CO<sub>2</sub> gas in the form of

carbonic acid, one percent is carbonate, and the remaining 96 to 97 percent is bound in bicarbonate. If processes are developed to take advantage of the higher weight per volume concentration of CO<sub>2</sub> in seawater, coupled with more efficient catalysts for the heterogeneous catalysis of CO<sub>2</sub> and H<sub>2</sub>, a viable sea-based synthetic fuel process can be envisioned. "With such a process, the Navy could avoid the uncertainties inherent in procuring fuel from foreign sources and/or maintaining long supply lines," Dr. Willauer said.

NRL has made significant advances developing carbon capture technologies in the laboratory. In the summer of 2009, a standard commercially available chlorine dioxide cell and an electro-deionization cell were modified to function as electrochemical acidification cells. Using the novel cells, both dissolved and bound CO<sub>2</sub> were recovered from seawater by re-equilibrating carbonate and bicarbonate to CO<sub>2</sub> gas at a seawater pH below 6. In addition to CO<sub>2</sub>, the cells produced H<sub>2</sub> at the cathode as a by-product. These completed studies assessed the effects of the acidification cell configuration, seawater composition, flow rate, and current on seawater pH levels. The data were used to determine the feasibility of this approach for efficiently extracting large quantities of CO<sub>2</sub> from seawater.

From these feasibility studies, NRL successfully scaled-up and integrated the carbon capture technology into an independent skid to process larger volumes of seawater and evaluate the overall system design and efficiencies. The major component of the carbon capture skid is a three-chambered electrochemical acidification cell. This cell uses small quantities of electricity to exchange hydrogen ions produced at the anode with sodium ions in the seawater stream. As a result, the seawater is acidified. At the cathode, water is reduced to H<sub>2</sub> gas and sodium hydroxide (NaOH) is formed. This basic solution may be re-combined with the acidified seawater to return the seawater to its original pH with no additional chemicals. Current and continuing research using this carbon capture skid demonstrates the continuous efficient production of H<sub>2</sub> and the recovery of up to 92 percent of CO<sub>2</sub> from seawater.

Located at NRL's Center for Corrosion Science Engineering facility, Key West, FL (NRLKW), the carbon capture skid has been tested using seawater from the Gulf of Mexico to simulate conditions that will be encountered in an actual open ocean process for capturing CO<sub>2</sub> from seawater and producing H<sub>2</sub> gas. NRL is currently working on process optimization and scale-up. Once these are completed, initial studies predict that jet fuel from seawater would cost in the range of \$3 to \$6 per gallon to produce.

NRL has developed a two-step process in the laboratory to convert the CO<sub>2</sub> and H<sub>2</sub> gathered from the seawater to liquid hydrocarbons. In the first step, an iron-based catalyst has been developed that can achieve CO<sub>2</sub> conversion levels up to 60 percent and decrease unwanted methane production from 97 percent to 25 percent in favor of longer-chain unsaturated hydrocarbons (olefins). In the second step, these olefins can be oligomerized (a chemical process that converts monomers, molecules of low molecular weight, to a compound of higher molecular weight by a finite degree of polymerization) into a liquid containing hydrocarbon molecules in the carbon C<sub>9</sub>-C<sub>16</sub> range, suitable for conversion to jet fuel by a nickel-supported catalyst reaction.

## **City Works to Ensure Navy Stays in Corpus Christi**

### **By KiiiTV3 (TX)**

Corpus Christi city leaders are working to make sure that the Navy doesn't decide to pull up stakes anytime soon. At stake are the 10,000 jobs that are supported by Naval Air Station Corpus Christi. So a big meeting is coming up, to help ensure that the Navy sticks around. The Navy wants to make sure that its training flights cause as little disruption to our lives as possible. It's a bone of contention in communities across the country, where residents complain about the noise and dangers of the flights.

Navy trainers fly low overhead as the pilots practice touch and go's at Cabaniss Field. Navy pilots have been training here in Corpus Christi since May of 1941. Everyone from George H. Bush to Bob Barker has trained here; but nowadays, the Navy is also concerned about reducing potential conflicts between its military installations and the surrounding areas.

On 3 OCT 12, the City Planning Commission will hosted a Joint Land Use Study workshop. Basically, it is a way to make sure that new growth in the city will be aligned with the mission of the Navy and its needs. In other words, making sure that, for instance, we don't build single-family residences next to Cabaniss Field in the future. "This is not going to stop development," Councilman Mark Scott said. "This is just going to provide more compatible development to protect the Navy while at the same time letting the landowner develop. It will allow retail, restaurants, stuff like that. We're just trying to eliminate single-family resident developments in those T-6 flight patterns."

Right now, the Navy pilots train on the T-44 out at Cabaniss Field. The T-34 is another trainer but it's on its way out. NAS-CC has already received two T-6 trainers and will continue to get two or three more of those planes each month for the next two years. The T-6 will fly out of Corpus Christi and do touch and go's at a field in Goliad.

## **Wind Could Supply World's Total Energy Needs by 2030, Researchers Say**

### **By Offshore Wind**

Adapting a sophisticated climate model, researchers show that there is plenty of wind available to supply half to several times the world's total energy needs within the next two decades. In 2030, if all energy is converted to clean energy, humans will consume about 11.5 terawatts of power every year, all sources combined. If there is to be a clean-energy economy based on renewable energy, wind power will no doubt have to help meet much of that demand.

In a new study, researchers at Stanford University's School of Engineering and the University of Delaware developed the most sophisticated weather model available to show that not only is there plenty of wind over land and near to shore to provide half the world's power, but there is enough to exceed *total* demand by several times if need be, even after accounting for reductions in wind speed caused by turbines. The findings were published in the *Proceedings of the National Academy of Sciences* (PNAS) by Mark Z. Jacobson, a professor of civil and environmental engineering at Stanford and Cristina Archer, an associate professor of geography and physical ocean science and engineering at the University of Delaware.

In their study, Jacobson and Archer adapted the three-dimensional, atmosphere-ocean-land computer model known as GATOR-GCMOM to calculate the theoretical maximum wind power potential on the planet taking into account wind reduction by turbines. Their model assumed wind turbines could be installed anywhere and everywhere, without regard to societal, environmental, climatic or economic considerations.

Among the most promising things the researchers learned is that there is a lot of potential in the wind—hundreds of terawatts. At some point, however, the return on building new turbines plateaus, reaching a level in which no additional energy can be extracted even with the installation of more turbines. "Each turbine reduces the amount of energy available for others," Archer said. The reduction, however, becomes significant only when large numbers of turbines are installed, many more than would ever be needed. "And that's the point that was very important for us to find," Archer said.

The researchers have dubbed this point the saturation wind power potential. The saturation potential, they say, is more than 250 terawatts if we could place an army of 100-meter-tall wind turbines across the entire land and water of planet Earth. Alternatively, if we place them only on land (minus Antarctica) and along the coastal ocean there is still some 80 terawatts available—about seven times the total power demand of all civilization.

"We're not saying, 'Put turbines everywhere,' but we have shown that there is no fundamental barrier to obtaining half or even several times the world's all-purpose power from wind by 2030. The potential is there, if we can build enough turbines," said Jacobson.

Knowing that the potential exists, the researchers turned their attention to how many turbines would be needed to meet half the world's power demand—about 5.75 terawatts—in a 2030 clean-energy economy. To get there, they explored various scenarios of what they call the fixed wind power potential—the maximum power that can be

extracted using a specific number of wind turbines. Archer and Jacobson showed that four million 5-megawatt turbines operating at a height of 100 meters could supply as much 7.5 terawatts of power—well more than half the world’s all-purpose power demand—without significant negative effect on the climate. “We have a long way to go. Today, we have installed a little over one percent of the wind power needed,” said Jacobson.

For more information, go to: [http://www.offshorewind.biz/2012/09/11/usa-wind-could-supply-worlds-total-energy-needs-by-2030-researchers-say/?utm\\_source=Offshore+Wind.biz&utm\\_medium=email&utm\\_campaign=fa06ed3fd5-RSS\\_EMAIL\\_CAMPAIGN](http://www.offshorewind.biz/2012/09/11/usa-wind-could-supply-worlds-total-energy-needs-by-2030-researchers-say/?utm_source=Offshore+Wind.biz&utm_medium=email&utm_campaign=fa06ed3fd5-RSS_EMAIL_CAMPAIGN).

### **GSA to Cut Fees on Agencies’ Use of its Contracts**

The General Services Administration said it will reduce fees it charges other agencies to use some of its services contracts, potentially saving agencies millions of dollars a year. For more information, go to: <http://goo.gl/lXIqF>.

### **New “Frankenstein” Switchgrass is Good New for the Navy Too**

**By Tina Csaey – CleanTechnica**

Despite aggressive pushback from anti-biofuel leadership in Congress, it looks like the US Navy is well on the way to getting its biofuel after all. A new biofuel research project pairing the U.S. Department of Agriculture with the University of California, Berkeley has yielded a new cobbled-together variety of switchgrass that contains up to 250 percent more starch than other varieties. That could effectively slam the door on the Navy’s critics by leading to a biofuel production process that is cost-competitive with petroleum.

CleanTechnica has been following the U.S. Navy’s transition to biofuels and other forms of alternative energy, including solar power and wave energy. Last spring, Republican leaders in Congress attempted to monkey wrench the Navy’s biofuel initiatives by passing legislation that would prohibit the Navy from buying any alternative fuel that is more expensive than conventional fuels.

The Obama Administration swiftly responded with a one-two punch, one being \$62 million in Navy-supported funding for new research projects to help bring down the cost of biofuel. The initiative is authorized under the 1950’s-era Defense Production Act, so it is not affected by Congress’s recent actions. The other is a new \$210 million public-private partnership to build three new biorefineries. That skirts other recent legislation that had been intended to prevent the Navy from building its own biorefineries.

The new research from USDA and UC–Berkeley predates all of this maneuvering, but it could provide the knockout punch. The project involves patching a gene from corn called corngrass into switchgrass, to create a kind of Frankenstein’s monster of a grass that is incapable of aging. As described by writer Ann Perry at USDA, the new switchgrass stays in an early stage of life in which it never goes dormant, and it never produces seeds or flowers.

Without the need to expend energy on flowers and seeds, the grass keeps up to 250 percent more starch in its stem than other varieties, yielding more sugar for fermentation into biofuels. As an extra bonus, the leaves of the new switchgrass contain clues that might lead to more efficient methods for breaking down grasses and other woody non-food plants into biofuels. The leaves are much softer than those in unmodified switchgrass and they contain a different kind of lignin (lignin is the substance that stiffens cell walls in woody plants). According to Perry, an analysis of the new lignin could provide new information on how to release the sugars from plant cells.

The focus on non-food crops is a priority under the President’s national biofuel initiative, which joined the departments of Energy, Agriculture, and the Navy in a memorandum of understanding to support the development of a national biofuel industry. National security and biofuel refining are just two sectors that win out from the new initiative. Farmers across the U.S. also stand to gain, through the development of hardy, drought-resistant crops that can be grown with less need for irrigation, fertilizers, pesticides or herbicides.

### **AMMTIAC Releases Guide to Minimize the Use of Hexavalent Chromium in Military Systems**

On 27 SEP 12, the Advanced Materials, Manufacturing and Testing Information Analysis Center's (AMMTIAC) Journal released a report titled, "Analysis of Alternatives to Hexavalent Chromium: A Program Management Guide to Minimize the Use of CrVI in Military Systems." Hexavalent chromium (CrVI) has been widely used across the military for decades to alloy metals, treat metal surfaces, and as a constituent in primers for coating systems. New military policy memoranda have called for minimizing CrVI use as a consequence of stricter US and European regulations on human exposure and environmental contamination. Recent federal requirements prohibits the delivery of items containing more than 0.1 % by weight CrVI in any homogenous material under DoD contracts unless there is no acceptable alternative [75 FR 18041, 8 APR 10] and [76 FR 25569, 5 MAY 11]. The DoD policy memoranda ([2009 Young Memorandum](#)) are not a ban against using CrVI, however, a waiver is now required for any new use of CrVI in the DoD. Alternative materials have been developed for some applications, with many more potential compounds still in development. For more information, go to: [http://ammtiac.alionscience.com/pdf/AWJV1N2\\_ART01.pdf](http://ammtiac.alionscience.com/pdf/AWJV1N2_ART01.pdf).

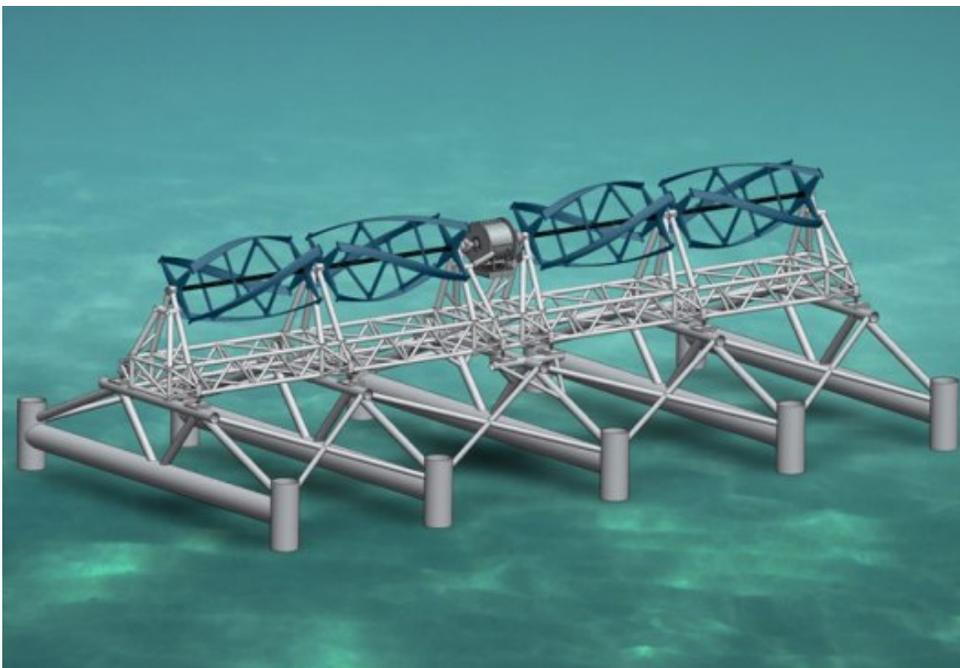
### **DoD Energy Handbook on Alternative and Renewable Energy**

In September 2012, AMMTIAC released a DOD Energy Handbook on Alternative and Renewable Energy Options for DoD Facilities and Bases. This 423-page handbook covers extensive traditional and renewable DoD energy options while arming facility energy managers with resources to make the best decisions related to energy usage. Download your free copy at <http://ammtiac.alionscience.com/ammt/survey.do?55>.

### **US Gets First Electricity from offshore Renewable Energy Projects**

Bangor Hydro Electric Company verified on 13 SEP 12 that electricity is being delivered to their power grid from Ocean Renewable Power Company's (ORPC's) Cobscook Bay Tidal Energy Project.

This is the first power from any ocean energy project (including offshore wind, wave, and tidal) to be delivered to an electric utility grid in the United States. It is also the only ocean energy project, other than one using a dam, to deliver power to a utility grid anywhere in North, Central, and South America. This achievement is being hailed around the globe.



### **Final Rule on Fire Suppression Agent Substitutes for Halon**

The EPA issued a final rule that adds new fire suppression agent substitutes for Halon 1301 and Halon 1211 to the Significant New Alternatives Policy (SNAP) list of acceptable substitutes [[77 FR 58035](#), 19 SEP 12]. SNAP substitutes are determined on the basis of ozone depletion potential, global warming potential, toxicity, flammability, and exposure potential as described in the final SNAP rule [59 FR 13044]. A list of the acceptable substitutes is available at <http://www.epa.gov/ozone/snap/lists/index.html>. Substitutes for Halon 1301 include Powdered Aerosol (PA) F and PA G. The new substitute for Halon 1211 is C7 Fluoroketone and is subject to narrowed use limits. This final rule provides users that need specialized fire protection applications with more alternatives than the use of halons. This rule becomes effective on 18 DEC 12, contingent on no adverse comment or hearing request. In a separate yet related matter, the Defense Logistics Agency (DLA) manages the DoD halon bank in order to maintain a reserve of Halon 1202, Halon 1211, and Halon 1301 to support "mission critical" requirements when commercial sources are not available. DLA has a policy to rely primarily on DoD turn-ins of recovered halons for future use. See the EPA halon question and answer sheet at: <http://www.epa.gov/ozone/snap/fire/qa.html>.

### **Sorghum's Potential as a Bioenergy Crop**

By David A. Gabel – Environmental News Network

Biofuels are mostly produced from grains such as corn. In recent years, various types of wild grasses and other crops have been looked at to produce biofuels, but have yet to break through in a big way. A new study by the United States Department of Agriculture has uncovered a potential breakthrough candidate for biofuel expansion. It is sorghum, a grassy plant grown primarily in the southeastern United States as a source of sugar for syrup and molasses. Its sturdiness and resistance to drought make it ideal for the production of bioenergy.

Sorghum has a lot of advantages in that it is adaptable to a wide range of growing conditions and needs low nitrogen fertilizer requirements. According to USDA researchers, it also has a high biomass content (plant material). The soluble sugar that it produces can be converted into biofuel, and then the residual fibers leftover from the juice extraction can be burned to generate electricity.

This USDA study is part of a larger effort to meet the government mandate to produce 36 billion gallons of biofuel by 2022. It is estimated that 15 billion of those gallons will be from grain ethanol and the remaining 21 billion will be from other sources including sorghum, sugarcane, switchgrass, and other grasses. Other crops for biofuels include oilseed crops like rapeseed and soybean.

In the southeast, sorghum and sugarcane are believed to be the top candidates for several reasons. They grow naturally in the southeastern climate and they make excellent complementary crops that can extend the biofuel production season using the same equipment. In an era of changing climate, it is important to keep a wide range of options for use in biofuel production. It is conceivable that summers like the one recently experienced in the United States will become more commonplace. The drought across the Midwestern states caused serious damage to major grain crops like corn, which is widely used for biofuels.

Increasing biofuel production to other parts of the country like the southeast using various crops such as sorghum can protect the biofuel and grain market going into the future. In case one region underperforms in its production, the other may be able to pick up the slack.

The USDA research on Sorghum's potential as a biofuel has been published in the journal *Agricultural Research*.

### **Nuclear Power: Is It Time for a Disruptive Technology?**

By Llewellyn King – White House Chronicle

The company that revolutionized war in the air with Predator drones wants to do the same thing for nuclear

power. It wants to soar away from today's reactor designs, rooted in the 1950s and the beliefs of Adm. Hyman G. Rickover, father of the nuclear Navy and by extension the nuclear industry.

Rickover's legacy is the light water reactor, the technology in more than 400 reactors making electricity around the world. But to the scientists at General Atomics (GA) in San Diego, Calif., the light water reactor is yesterday's machine, like the land-line telephone, the radial aircraft engine, mechanical calculators, and the silent movie.

GA, where the Predator was born along with a number of other "disruptive" technologies, believes it is time to shed the past and build new reactors that answer the concerns that have swirled around light water for decades. Call it the new, improved, front-wheel-drive reactor. GA's entry into the nuclear stakes — which are hot again because of Department of Energy interest in small modular reactors (SMRs) — is the Energy Multiplier Module (EM2) as in "e-m-squared."

It is derived from more than 50 years of the company's R&D on modular high-temperature reactors. If EM2 works as its enthusiastic designers believe it will, then nuclear power generation will be changed in the way that the Predator has changed warfare.

To the EM2 team, the old days of boiling water at relatively low temperatures to create steam to turn a turbine is first-generation technology: It is the technology of the 19th century with nuclear replacing coal in steam generation starting in the 1950s. The EM2 uses helium to cool the reactor and directly drive the turbine with gas heated to 856 degrees Centigrade — more than twice the light water temperature. The helium will turn an enclosed turbine at an incredible 6,000 to 12,000 revolutions per minute for 30 years before the reactor has to be shut down. By contrast, conventional reactors have to be shut down and refueled every 18 months.

The company believes that the time is at hand for a new reactor with better physics leading to competitive economics, waste remediation, and long life cycle. GA believes that it has the scientific insight to manufacture the unique fuel for the EM2, a so-called fast reactor, and to clad it in silicon carbide.

The EM2 is designed to produce 240 megawatts of electricity but a smaller 71-MWe version will come first. The cost of EM2 electricity is expected to be about half that from today's water reactors. Most light water reactors are in the 1200-MWe range.

The GA plan is that the EM2 will be as revolutionary as some of its other high-tech products including the rail gun (an electromagnetic weapon); magnetic-levitating cargo pallets at docks; an electromagnetic launch system for aircraft on the USS Gerald R. Ford; and, of course, the Predator.

Because of the high operating temperatures of the EM2, it will be able to discharge waste heat easily and will not have to be located near abundant water, like rivers, bays, and oceans. It will use uranium as a starter fuel, enriched to 12 percent of fissile uranium 235 to get a neutron flux going, but after that it will burn nuclear waste or depleted uranium. It will effectively eliminate the nuclear waste issue and multiply the power gained from uranium fuel by a factor of 262 times over today's water-cooled reactors.

The essence of a fast reactor is the high energy of the neutrons, ergo their ability to react with the fissile material left in nuclear waste and depleted uranium. Being a fast reactor, EM2 will both burn up nuclear waste and generate enough radioactive "seed" during its operational cycle to refuel another reactor.

The largest problem facing EM2, and other new reactors, is the lack of enthusiasm in the utility customer base. Natural gas is cheap and utilities would rather use that than go to a new nuclear regime of any kind, let alone a machine that is revolutionary through and through.

So to raise the money — in this case about \$4 billion — to build a demonstration reactor, GA is looking outside the utility customer base and the United States. It is talking to sovereign wealth funds and sometimes directly to foreign governments that want to secure the disruptive technologies of the future.

### **Navy Birthday Celebration Kicks Off at Pentagon**

Defense officials and service members gathered on 9 OCT 12 to kickoff the Navy's 237th birthday week in Washington, DC. Held in the Pentagon auditorium, the ceremony featured a cake cutting and traditional bell ringing, as well as remarks from Pentagon leaders including Deputy Secretary of Defense Dr. Ashton Carter, who told the crowd what has kept the US Navy the best in the world for so many years. "Two hundred thirty seven years ago, John Adams and members of the Continental Congress recognized that a nation that aspired to greatness, even back then, required a great Navy," said Carter. "It's not the strategy, it's not the ships and the planes that really define our Navy... it's you. It's the men and women who choose to serve. It's in you that the naval tradition lives... and for that, you have our nation's gratitude."

### **OPM: Feds Should 'Rarely' Need Time off to Vote**

Federal employees who want to take off a few hours from work to vote in November will be permitted to do so only in a limited number of circumstances. A memo from Office of Personnel Management Director John Berry to chief human capital officers advises agencies on the government's long-standing policies governing excused absences for voting. Berry told agencies that such absences "should rarely be needed" since most polling places now are open for extended periods of time, with some offering early voting options. For more information, go to: <http://www.govexec.com/management/2012/10/opm-feds-should-rarely-need-time-vote/58662/?oref=river>.

### **Navy Evaluating Second Electromagnetic Railgun Prototype**

#### **By Office of Naval Research Public Affairs**

The Office of Naval Research's (ONR) Electromagnetic (EM) Railgun Program is evaluating the second of two industry railgun prototype launchers at a facility in Dahlgren, VA.

The EM Railgun launcher is a long-range naval weapon that fires projectiles using electricity instead of traditional gun propellants such as explosive chemicals. Magnetic fields created by high electrical currents accelerate a sliding metal conductor, or armature, between two rails to launch projectiles at 4,500-5,600 mph.

The Navy is pursuing development of the launcher system through two industry teams -- General Atomics and BAE Systems -- to reduce risk in the program and to foster innovation in next-generation shipboard weapons. "It's exciting to see how two different teams are both delivering very relevant but unique launcher solutions," said Roger Ellis, EM Railgun program manager.

General Atomics has delivered its prototype launcher to Naval Surface Warfare Center (NSWC) Dahlgren Division, where engineers have engaged in a series of tests similar to the evaluations conducted on the prototype demonstrator made by BAE Systems that arrived 30 JAN 12. "We're evaluating and learning from both prototype designs, and we'll be folding what we learn from the evaluations into the next phase of the program," said Ellis.

Both General Atomics and BAE Systems are commencing work on concept designs for a next-generation prototype EM Railgun capable of increased firing rates. This includes continued development of automatic projectile loading systems and thermal management systems for the barrel. Officials plan to evaluate the concept designs at the end of the year. For more information, go to: [http://www.navy.mil/submit/display.asp?story\\_id=70058](http://www.navy.mil/submit/display.asp?story_id=70058).

### **NAVFAC Mid-Atlantic Recycles Ship Mattresses**

#### **By Tom Kreidel – Naval Facilities Engineering Command Public Affairs**

On 15 OCT 12, sailors from USS Abraham Lincoln loaded more than 600 mattresses onto trailers as part of a program run by Naval Facilities Engineering Command Mid-Atlantic's Integrated Solid Waste Program that will see more than 13,000 shipboard mattresses recycled in a first-of-its-kind program.

The program will save each carrier more than \$12,000 compared to if they had thrown away the mattresses, making the program both the greener and cheaper method. "This saves 91,000 cubic feet of space in the landfill, the equivalent of the space taken up by six full McDonald's restaurants," said Gregory Jeanguenat, Naval Station Norfolk Integrated Solid Waste and Recycling Site manager.

Jeanguenat said he began to research the possibility of recycling shipboard mattresses after reading an article about a similar Army initiative earlier this year. NAVFAC Mid-Atlantic and the Defense Logistics Agency (DLA) awarded the contract to Nine Lives Mattress Recycling. This follows an earlier pilot program with Spring Back Mattress Recycling. For more information, go to:

[http://www.navy.mil/submit/display.asp?story\\_id=70159](http://www.navy.mil/submit/display.asp?story_id=70159).

### **The Navy's Last Coal-Fired Power Plant Set for Demolition**

#### **By Naval Facilities Engineering Command Washington Public Affairs**

The Navy's last coal-fired power plant is set to be demolished after Naval Facilities Engineering Command Washington awarded a \$68 million contract on 28 SEP 12 to build a more efficient facility. A combination natural gas turbine and heat recovery steam generator will replace the Goddard Power Plant Complex at Naval Support Facility Indian Head, Md. in 2014. The new system will cut energy use by 50 percent, water consumption by 75 percent and steam requirements by 80 percent, resulting in approximately \$7.5 million savings each year. Additionally, more than 50 billion pounds of carbon emissions will be reduced each year. For more information, go to: [http://www.navy.mil/submit/display.asp?story\\_id=69962](http://www.navy.mil/submit/display.asp?story_id=69962).

### **EPA Announces New Electronic Filing System for Environmental Reviews**

Traditionally, Environmental Impact Statements (EISs) have been submitted to EPA in hard copy format. Now e-NEPA eliminates the need to mail or deliver copies of EISs to EPA headquarters, thereby reducing printing, shipping, and delivery costs. The National Environmental Policy Act (NEPA) requires federal agencies to integrate environmental considerations into their decision-making processes by identifying the environmental impacts and considering reasonable alternatives to their proposed actions. To meet NEPA requirements, federal agencies prepare detailed analyses known as EISs. EPA reviews, provides comments, and maintains a national filing system for EISs. Beginning on 1 OCT 12, all agencies are required to use the e-NEPA filing system. For more information about e-NEPA, go to: <http://www.epa.gov/compliance/nepa/submiteis/index.html>. For more information about how to file an EIS electronically, go to: <http://www.epa.gov/compliance/nepa/submiteis/guide-to-e-nepa-electronic-submittal-of-eis.pdf>.

### **USS Enterprise Reactor Compartment Disposal Likely at Hanford**

The Departments of Defense (DoD) and Energy (DoE) have largely cleared the way for the Hanford site to dispose of reactor parts from the Navy's oldest operating aircraft carrier.

Concurring with DoD, the DoE has issued a finding of No Significant Impact, stating that there are no environmental issues that would preclude component disposal in a trench holding parts from 114 other nuclear Navy vessels, the Tri-City Herald reported. The administrative actions are among the last steps before the disposal plan is granted final approval.

Commissioned in 1961, the USS Enterprise is powered by eight, 26 megawatt Westinghouse A2W pressurized water reactors that utilize highly enriched uranium. The carrier is serving its final mission supporting the war in Afghanistan and is scheduled to be retired in December 2012.

In about five years, following fuel removal at Newport News Shipbuilding, it would be towed to a shipyard in Bremerton, WA, the Herald reported. There, the reactor compartments would be removed, enclosed, and shipped by barge via the Columbia River to Hanford's Trench 94 for interment. That process is expected to take six to eight years.

## **A Greener Mess Hall – Pilot Program Brings Plant-based Dining Ware to Military Bases**

**By Andy Medici – Federal Times**

Service members and civilians at two military installations will see their meals get a little greener under a new pilot program by the DLA. But it won't be the food.

Beginning in November, the agency will temporarily replace all of the flatware, plates, bowls, and trays at Joint Base Lewis-McChord and Naval Air Station Whidbey Island in Washington State with items that are 100 percent plant-based and compostable. The dining ware is made from corn- and wheat-based resin and will have the same look and feel as traditional dining ware. It will be just as sturdy but it will be light brown in color according to DLA. Visitors will be notified with signs posted at the entrances to dining facilities and the pilot will run anywhere from six to nine weeks -- until supplies run out.

The new dining ware is the newest effort by the Defense Department to make sure 95 percent of its product purchases and services are environmentally friendly. The new program is also driven in part by a 2009 executive order calling for agencies to recycle 50 percent of their nonhazardous waste by 2015.

The dining ware includes cups in a variety of sizes for hot and cold drinks, drink lids, straws, soup bowls, salad bowls, compartmentalized food trays, forks, knives, and spoons. Stacey Hajdak, spokeswoman for DLA, said the pilot program could not have happened without the support of the services. "Before we do anything, we have to make sure we have buy-in from our customers," Hajdak said.

If the program is a success, DLA will begin to roll out compostable utensils throughout DoD, said John Woloszyn, who procures green products for the department. Current flatware is either all plastic or made of half plastic and half plant-based materials, according to Woloszyn. DLA teamed up with contractor Concurrent Technologies Corp. to make sure the flatware and tableware are comparable in both quality and cost to what the two installations used previously. "The hope is that people won't notice the difference," Woloszyn said.

Installations will be able to use composting programs already in place to dispose of the utensils without sending them to a landfill. "All in all, it's going to be beneficial and cost effective," Woloszyn said. While some installations use plant-based flatware or plates, there is no facility that uses 100 percent plant-based material for all of its dining ware, he said.

Visitors to the dining facilities will be asked to respond to a brief survey rating their experience which the services will use to decide whether to make the program permanent. Participating vendors include Bunzl Distribution, NatureWorks LLC, LC Industries, Bridge-Gate Alliance Group, Huhtamaki Inc., Dopaco Inc., Pactiv LLC, Solo Cup Co., and Packaging Dynamics.

## **Precise Underwater Navigation with Sonar is Aim of Navy Research Contract to Penn State**

**By John Keller – Military & Aerospace Electronics**

Researchers at Penn State University are designing a sonar-based underwater navigation system for the US Navy that will enable submarines and unmanned underwater vehicles (UUVs) to maintain position underwater safely by following known ocean-floor terrain features. This technology, called bathymetric navigation with sonar, matches sonar images of terrain below the undersea vehicle to known terrain maps of the ocean bottom. This approach is similar to how an airplane pilot navigates under visual flight rules (VFR) matching what he sees below the aircraft to aviation maps.

The Office of Naval Research (ONR) in Arlington, VA awarded a \$1.2 million contract to the Applied Research Laboratory at Penn State for the Broadband Navigation Sonar System Program to develop a bathymetric underwater navigation device which could be applicable to submarines, UUVs, and other subsurface vessels. The contract is part of an ONR solicitation originally issued in 2010 entitled Navigation and Timekeeping Technology which seeks to develop affordable and reliable precision navigation and timing systems for situations in which the Global Positioning System (GPS) satellite navigation network is not available -- such as when operating

underwater. The lack of precise navigation and timekeeping technologies as alternatives to GPS may jeopardize the success of military operations, ONR researchers point out.

The ONR Navigation and Timekeeping Technology Program seeks to develop new navigation technologies that will provide more accurate, reliable, maintainable, and affordable systems for naval aircraft, surface warships, submarines, UUVs, and fixed-site installations in the absence of GPS signals. The non-GPS Navigation Technology component of the Navigation and Timekeeping Technology Program -- for which the Penn State Applied Research Laboratory won this contract -- will develop a small, portable quantum physics-based gravimeter/accelerometer for underwater navigation application; a bathymetric underwater navigation device by sonar and light detection and ranging (lidar); and precise navigation in littoral sub-surface and surface navigation using various sensors such as sonar, radar, and lidar.

The Penn State Applied Research Lab is an expert in technologies for acoustics, guidance and control systems, thermal energy systems, hydrodynamics, hydroacoustics, propulsion, materials and manufacturing, navigation and GPS, communications, and information. The lab develops gyroscopes, accelerometers, gravimeters, gradiometers, speed sensors, inertial navigators, geophysical navigation, radio and satellite navigation systems, celestial navigation systems, and integrated navigation systems. The lab's navigation expertise extends to inertial navigators; gyrocompasses; GPS; passive navigators; gravity and terrain estimation systems; magnetic navigation systems; bathymetric navigation systems.

Bathymetry is the study of underwater depth of lake or ocean floors. Bathymetric charts support safety of surface or sub-surface navigation, and usually show seafloor relief or terrain as contour lines and selected depths for surface and underwater navigation. Bathymetric maps also use a digital terrain model and artificial illumination techniques to show ocean depths and subsurface topography.

## 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 England Had More Smog Days during the Past Summer but Long-Term Trend of Cleaner Air Continues**

As the 2012 summer ozone season comes to an end, the EPA confirmed that New Englanders experienced a modest increase in the number of poor air quality days this year, compared to 2011.

Based on preliminary data collected between April and September, there were 29 days when ozone monitors in New England recorded concentrations above the air quality health standard. By contrast, in 2011 there were a total of 16 unhealthy ozone days. However, over the longer term air quality in New England continues to improve.

The number of unhealthy ozone days in each state this summer were as follows: 27 days in Connecticut (compared to 14 in 2011); 17 days in Massachusetts (10 in 2011); 12 days in Rhode Island (6 in 2011); 4 days in Maine (3 in 2011); 4 days in New Hampshire (2 in 2011); and 0 days in Vermont (1 in 2011). Ground-level ozone is considered unhealthy for sensitive groups when average concentrations exceed 0.075 parts per million over an 8-hour period.

The increase in the number of days with unhealthy air this summer was directly related to the increase in the number of hot days this summer. Intense sunshine and hot weather influence the formation of ozone; many areas of New England had more days exceeding 90 degrees this summer than during last summer. Although the 2012 ozone season is ending, pollution from small particles in the air is a year-round concern.

Although warm temperatures this summer led to an increase in unhealthy days, over the long-term, New England has experienced a decreasing number of unhealthy ozone days. For example, in 1983, New England had 113 unhealthy days, compared with 29 this summer, a 74 percent decline.

Ground-level ozone (smog) is formed when volatile organic compounds (VOC) and oxides of nitrogen (NOx) chemically react in the presence of sunlight. Cars, motorcycles, trucks, and buses give off the majority of the pollution that makes ozone. Fossil fuel burning at electric generating stations, also produce significant amounts of smog-making pollution. Gas stations, print shops, household products like paints and cleaners, and gasoline-powered lawn and garden equipment also contribute to smog formation.

More information and Useful Resources:

- Free daily air quality forecasts ([www.epa.gov/ne/aqi](http://www.epa.gov/ne/aqi))
- National air quality smart phone apps: (<http://www.airnow.gov/>)
- New England air quality summaries (1983 – 2012): ([www.epa.gov/ne/airquality/standard.html](http://www.epa.gov/ne/airquality/standard.html))
- Preliminary detailed information on 2012 air quality information in New England ([www.epa.gov/region1/airquality/o3exceed-12.html](http://www.epa.gov/region1/airquality/o3exceed-12.html)).

## WATER

### **Guidance for the Implementation and Follow-up of Identified Energy and Water Efficiency Measures in Covered Facilities**

This DOE document, dated September 2012, provides specific guidance to agencies on the implementation and follow-up of energy and water efficiency measures identified and undertaken per Section 432 of the Energy Independence and Security Act of 2007 (EISA) (42 U.S.C. 8253(f)(4) and (5)). This guidance also provides context for how these activities fit into the comprehensive approach to facility energy and water management outlined by the statute and incorporates by reference previous DOE guidance released for Section 432 of EISA and other related documents. For more information, go to:

[http://www1.eere.energy.gov/femp/pdfs/eisa\\_project\\_guidance.pdf?CFID=2213578&CFTOKEN=24026257](http://www1.eere.energy.gov/femp/pdfs/eisa_project_guidance.pdf?CFID=2213578&CFTOKEN=24026257).

### **Updated EPA Guidance for Water Reuse**

The EPA has released an updated 2012 version of their Guidelines for Water Reuse. The 642 page guidelines serve as a reference on water reuse practices. The Guidelines are available at:

[http://www.waterruseguidelines.org/index.php?option=com\\_content&view=article&id=8&Itemid=23](http://www.waterruseguidelines.org/index.php?option=com_content&view=article&id=8&Itemid=23).

## CHESAPEAKE BAY

### **Chesapeake Bay Program Offers Two New Stormwater Videos**

The Chesapeake Bay Program is now promoting two new videos on stormwater management and solutions.

- [Bay 101: Stormwater Runoff](#) is an introduction of stormwater and the water quality problems it can cause.
- [Redirecting Rainwater From Downspouts](#) is a “how-to” video on how homeowners can take steps to control stormwater runoff from their properties.

## HAZARDOUS MATERIALS

### **Electronics Manufacturers and Retailers Join EPA Challenge for Safer Management of Used Electronics**

The EPA launched its Sustainable Materials Management (SMM) Electronics Challenge, an initiative to make protective electronics refurbishing and recycling practices the industry standard. EPA Deputy Assistant Administrator for Solid Waste and Emergency Response Lisa Feldt, joined by leaders from Best Buy, LG Electronics, Panasonic, Samsung, Sharp, Sprint, and Staples, made the announcement at Vintage Tech Recyclers, a certified electronics recycling facility in Romeoville, Illinois on 20 SEP 12.

“Already, the United States generates almost 2.5 million tons of electronic waste per year – and that number will only grow. Used electronics have materials in them that can be recovered and recycled, reducing the economic costs and environmental impacts of securing and processing new materials for new products,” said USEPA Administrator Lisa. P. Jackson. “The SMM Electronics Challenge will help us ensure that we are doing all we can to repurpose or safely dispose of the cell phones, computers, and other devices we use every day – all while helping to build a robust market for electronics recycling in the United States.”

As the volume of used electronics continues to grow in the U.S. and the world, so has the importance of safely managing and recycling used electronics. Electronics are made of valuable resources such as precious metals, copper, plastic and glass – all of which require energy to mine and manufacture. Recycling or reusing these electronics conserves these materials and prevents greenhouse gas emissions and other pollution.

By participating in the SMM Electronics Challenge, leaders in the electronics industry are committing to send 100 percent of the used electronics that they collect to third-party certified refurbishers and recyclers and committing to increase the amount of used electronics they collect. Through this challenge, EPA is providing a transparent and measurable way for electronic companies to commit to safe and environmentally protective practices for the refurbishment and recycling of used electronics while publically showing progress toward recycling goals.

In order to be certified, recyclers must demonstrate to an accredited, independent auditor that they meet specific standards to safely recycle and manage used electronics. Third-party recyclers, including Vintage Tech Recyclers, are expanding to meet growing demand for this accreditation. Vintage Tech Recyclers attributes 80 percent of new jobs added in the last two years to their third-party certification.

For more information on the EPA and industry collaboration, go to: <http://www.epa.gov/smm>.

For more information on the National Strategy, go to:  
<http://www.epa.gov/wastes/consERVE/materials/ecycling/taskforce/docs/strategy.pdf>.

For more information on certified recycling, go to:  
<http://www.epa.gov/osw/consERVE/materials/ecycling/certification.htm>.

### **Hazardous Waste Electronics Manifest Bill Signed**

On 5 OCT 12, Legislation [S. 710](#), the “Hazardous Waste Electronic Manifest Establishment Act,” providing the EPA with the statutory authority needed to collect user fees and establish an electronic system for tracking hazardous waste shipments was signed into law by President Obama. The law will modernize the EPA’s 25-year-old paper system used to track hazardous waste disposal shipments under the Resource Conservation & Recovery Act (RCRA). Benefits of the e-Manifest system include:

- Cost savings for both manifest users and the agencies that collect manifests and process their data, and
- Making information on hazardous chemicals available to states and emergency responders in real time.

Legislation S. 710 was amended to require the EPA to harmonize its electronic tracking system with the Department of Transportation. The law specifies that the e-manifest system and the authorizing regulations developed by the EPA must be effective in all states and effective on the same date.

# REGION 1



## CONNECTICUT

**Note: The Connecticut General Assembly convened on 8 FEB 12 and adjourned on 9 MAY 12.**

### Proposed Legislation

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

### Proposed Rules

[Draft Proposal for a General Permit to Authorize In Situ Chemical Oxidation](#) - Department of Energy and Environmental Protection has made the preliminary draft general permit available to solicit the regulated community's input on whether the permit, as structured, will meet the community's need for a flexible but easily implementable mechanism to authorize in situ chemical oxidation to remediate polluted groundwater and soil, replacing the current reliance on Temporary Authorizations. The remediation division is seeking informal input prior to formally proposing the general permit for adoption to ensure the general permit, when proposed, is responsive to the regulated community. Additional opportunity for comment will be possible during the formal permit adoption process. Comments offered in response to this draft may be considered for revisions to the general permit to be formally proposed, but no specific response to comments will be prepared. Interested persons are encouraged to review and comment on the revised draft general permit during the formal public notice period.

Notice of Connecticut Solid Waste System Permitting, Disposal and Billing Procedures - The Resources Recovery Authority has given notice that it intends to adopt Solid Waste System Permitting, Disposal and Billing Procedures at its October 25, 2012 Board Meeting commencing at 9:30 a.m. at its Headquarters located at 100 Constitution Plaza, Hartford, CT 06103. Interested persons may present their views at that time. The purpose of these Procedures is to establish delivery standards and disposal procedures for waste haulers using the CRRA's municipal solid waste disposal and recycling facilities (Facilities), for delivery of Acceptable Solid Waste and Acceptable Recyclables, as those terms are defined in the Procedures, on and after November 16, 2012. They include, among other things, permitting and insurance requirements for waste haulers delivering to the Facilities; operating and disposal information; billing and payment procedures; a description of possible sanctions for non-compliance with the Procedures; and an appeal process.

Notice of Connecticut Solid Waste System Permitting, Disposal and Billing Procedures (amending and superseding the Mid-Connecticut Project Permitting, Disposal and Billing Procedures in their entirety) - The purpose of these Procedures is to establish updated delivery standards and disposal procedures for waste haulers using the CRRA's municipal solid waste disposal and recycling facilities (Facilities), for delivery of Acceptable Solid Waste and Acceptable Recyclables, as those terms are defined in the Procedures. They include, among other things, permitting and insurance requirements for waste haulers delivering to the Facilities; operating and disposal information; billing and payment procedures; a description of possible sanctions for non-compliance with the Procedures; and an appeal process. These Procedures will amend and supersede the Mid-Connecticut Project Permitting, Disposal and Billing Procedures in their entirety.



## MAINE

**Note: The Maine General Assembly convened on 4 JAN 12 and adjourned on 18 APR 12.**

### **Proposed Legislation**

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

### **Proposed Rules**

#### **Land Use Districts and Standards: Proposed Ch. 10 Rule Amendments to the Planned Development (D-PD) Subdistrict, Section 10.21,G of the Commission's Land Use Districts and Standards as a Result of LD 1798**

- The Department of Agriculture, Conservation and Forestry, Maine Land Use Planning Commission has proposed rule changes to the D-PD Subdistrict rules in §10.21,G, sub-§§3 – Permitted Uses; 6 – Procedure; 7 – Pre-application Conference; 8 – Preliminary Development Plan; 9 – Application Fee; and 10 – Final Development Plan to accommodate new projects requiring rezoning to a D-PD subdistrict, and to optimize coordination with MDEP's Site Law permit review.

### **Regulations**

**Special Provisions** - Recent surveillance by the Maine CDC indicates an escalating public health threat from mosquito borne viruses in Maine for the late summer and fall of 2012. Under Maine's Arboviral Illness Surveillance, Prevention and Response Plan, 2012 Season, the Maine CDC may be recommending wide-area mosquito control programs in targeted areas of the state. These programs would be very difficult to conduct under current state law, since it requires authorization from individual landowners. The proposed amendment relaxes the need for individual property owner authorization when the Maine CDC recommends mosquito spraying due to viral disease threats. This Emergency Regulation became effective on 13 SEP 12 and expires on 12 DEC 12.

### **Upcoming Deadline for Certification of Contractors Disturbing Soil in Shoreland Areas**

With a deadline by which contractors working in the shoreland zone must be state certified fast approaching, the Maine Department of Environmental Protection is reminding contractors of the need to get certified and the process by which certification is achieved.

Under legislation passed in 2008, as of 1 JAN 13, a person certified by the DEP in erosion control best practices must be on-site of any activity that disturbs more than one cubic yard of soil –including earth moving, logging, or landscaping operations– in the shoreland zone until work is complete and the site stabilized. The shoreland zone is an area defined as within 250 feet of rivers, wetlands, lakes and the ocean and 75 feet of certain streams.

For companies with several sites being operated simultaneously, this means multiple employees –one for each job site– would need to be certified. Certification is obtained by attending a daylong course offered by DEP and having a construction site evaluation by staff from one of Maine's non-regulatory soil and water conservation districts. The training schedule for the upcoming fall 2012 season can be found at:

<http://maine.gov/dep/training/npstrc-schedule.html>.

Other benefits to those who obtain certification include being exempt from the 14-day waiting period for stream crossing projects under DEP's Permit-by-Rule program; being able to advertise –including for free on DEP's website – as a certified contractor; free publications from DEP's resource library; and receiving discounts at

several suppliers of erosion control products in the state. For a complete schedule of contractor certification courses as well as other nonpoint source pollution prevention trainings offered by DEP, visit <http://www.maine.gov/dep/training>



## MASSACHUSETTS

**Note: The Massachusetts General Court meets throughout the year.**

### **Proposed Legislation**

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

### **Proposed Rules**

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



## NEW HAMPSHIRE

**Note: The NH General Court convened on 4 JAN 12 and adjourned on 27 JUN 12.**

### **Legislation**

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

### **Regulations**

**Pesticide Procedural Rules; Certification of Registration Requirements; and Continued Status** - The Pesticide Control Board has readopted rules relating to pesticides. Chapter Pes 200 contains procedural rules including declaratory rulings and the process of appeals. Chapter 300 sets for the certificate of registration procedures, for example, exam requirements, for obtaining private and commercial pesticide applicator certification; and also pesticide dealer certification. Chapter 300 also identifies the categories and levels of certification. Chapter 400 covers the maintenance of a certificate of registration, that is, the continuing status of pesticide applicators to maintain registration, such as certificate renewals and recertification; and the process of revocation, denial and modification. This regulation passed and became effective on 3 OCT 12.

**Procedural Rules for DES Air Resources Division** - The Department of Environmental Services has adopted revisions to the rules that provide uniform procedures for air-related variance and waiver requests and public notices of hearings and public comment periods relative to the State Implementation Plan (SIP) and other matters. The rules supplement procedures established by RSA 541-A and Env-C 200. The rules are readopted with amendments at this time because they are scheduled to expire on July 28, 2012.

Revisions are adopted to (1) clarify procedures for filing a petition for a variance; (2) include explicit requirements for variance petitions to be signed; (3) require the notice published by DES to be in a newspaper of general daily circulation in the area in which the source is located and on the DES web site (instead of just in newspaper of general daily statewide circulation); (4) require the notice published by DES to include the location of the source for which the variance is being requested; (5) increase the amount of time DES has to issue a decision on a variance petition from 15 days to 15 working days to ensure adequate time for review; (6) clarify the requirements for notices of State Implementation Plan (SIP) hearings; (7) clarify the requirements applicable to waiver requests and the criteria that must be met to obtain a waiver; (8) state explicitly that any person who receives a waiver must comply with any/all conditions specified in the waiver; and (9) revise existing language for clarity and consistency with other DES rules. This regulation passed and became effective on 25 SEP 12.



## **RHODE ISLAND**

**Note: The RI General Assembly convened on 3 JAN 12 and adjourned on 13 JUN 12.**

### **Legislation**

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

### **Regulations**

**Rules and Regulations Governing Nuisance Wildlife Control Specialist** - The Department of Environmental Management has adopted rulemaking relative to the RI Nuisance Wildlife Control Specialist Regulations. This regulation passed and becomes effective on 11/11/12.

### **Deepwater Wind Submits Final Application for Block Island Wind Farm**

Deepwater Wind announced that it has submitted its final state and federal permit applications for the Block Island Wind Farm. The voluminous collection of data represents the most comprehensive study of the environmental impacts of an offshore wind farm in the U.S.

Deepwater Wind filed its permit applications with the U.S. Army Corps of Engineers, the U.S. Department of the Interior's Bureau of Ocean Energy Management (BOEM), and the Rhode Island Coastal Resources Management Council (RI CRMC), the three public agencies with primary jurisdiction over the development of the Block Island Wind Farm and its associated underwater transmission system. "We're excited to share our findings," said Deepwater Wind CEO William M. Moore. "The filing of our permit applications represents a significant milestone toward development of the groundbreaking Block Island Wind Farm."

Deepwater Wind invested more than \$7 million – all private dollars – in the effort, which involved dozens of experts such as biologists and ecologists with expertise in avian, marine mammal and fish species and their habitats; terrestrial and marine archaeologists; electrical, civil, structural, acoustic and marine engineers; architects; wetlands scientists; statisticians; and many others. Based on this intensive, three-year data collection effort, Deepwater Wind believes that there are no environmental impediments to building and operating the wind farm and transmission cable in the designated locations.

The exhaustive effort involved data collection from airplanes, ocean-going survey vessels, and remote-operated vehicles on the sea floor. Deepwater Wind also operated a high-tech avian radar system on Block Island near the historic Southeast Light for three years and conducted field investigations on Block Island and the mainland. These efforts built on the work of the Ocean Special Area Management Plan, the groundbreaking data collection and planning effort led by the Rhode Island Coastal Resources Management Council.

The Army Corps, BOEM and the CRMC will review the applications. The public will have the opportunity to provide comment to the reviewing agencies in the coming weeks. Deepwater Wind expects this final stage of the permitting process to be resolved by early 2013.

Deepwater Wind's Block Island Wind Farm, a 30-megawatt demonstration-scale offshore wind farm, will be connected to both Block Island and mainland Rhode Island via the bi-directional Block Island Transmission System (BITS). The five-turbine wind farm, located in state waters about three miles off the Block Island coast, is on target to be the nation's first offshore energy project. For more information, go to:

[http://www.offshorewind.biz/2012/10/03/usa-deepwater-wind-submits-final-application-for-block-island-wind-farm/?utm\\_source=Offshore+Wind.biz&utm\\_medium=email&utm\\_campaign=fc0c695221-RSS\\_EMAIL\\_CAMPAIGN](http://www.offshorewind.biz/2012/10/03/usa-deepwater-wind-submits-final-application-for-block-island-wind-farm/?utm_source=Offshore+Wind.biz&utm_medium=email&utm_campaign=fc0c695221-RSS_EMAIL_CAMPAIGN).



## VERMONT

**Note: The Vermont General Assembly convened on 3 JAN 12 and adjourned on 5 MAY 12.**

### **Proposed Legislation**

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

### **Proposed Rules**

**Vermont Hazardous Waste Management Regulations** - The Agency of Natural Resources has proposed rulemaking regarding the Vermont Hazardous Waste Management Regulations. The rule provides a regulatory framework for managing hazardous waste by identifying wastes subject to regulation as hazardous and establishing management standards for businesses that generate, transport, treat, store or dispose of them. In general, the rule is being revised to incorporate new federal regulations, clarify existing requirements, and make minor corrections. Some specific changes include: adoption of the federal Academic Labs rule to replace the expiring University Labs XL rule, addition of new standards for facilities that aggregate and temporarily store waste fuels received from off-site for subsequent reclamation/reuse; substitution of current emergency response procedures for small quantity generators with simplified federal standards; addition of legitimacy criteria for

recycling; clarification that intact circuit boards may be managed under an existing exemption for shredded circuit boards; and clarification that specification used oil fuel is subject to limited regulation.

## REGION 2



### NEW JERSEY

The New Jersey Legislature meets throughout the year.

#### Proposed Legislation

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

#### Proposed Rules

[Offshore Wind Renewable Energy](#) - The Board of Public Utilities has proposed the re adoption of its Offshore Wind Renewable Energy rules at N.J.A.C. 14:8-6. These rules provide an application process and a framework under which the Board will consider and, if appropriate, approve applications for qualified offshore renewable facilities and Offshore Renewable Energy Certificates (ORECs). Major components of the rules proposed for re adoption include application requirements, the ability for the Board to designate the application windows, the ability for the Board to impose appropriate conditions upon any OREC grant, and offshore wind renewable portfolio standards (RPS) requirements.

#### [Proposed Revision of the State of New Jersey, State Implementation Plan \(SIP\) for the Attainment and Maintenance of the Fine Particulate Matter \(PM 2.5\) National Ambient Air Quality Standards, Redesignation Request and Maintenance Plan](#)

- The Department is proposing a revision to the SIP to request that the USEPA redesignate both of the multi-state fine particulate matter (PM 2.5) nonattainment areas associated with New Jersey to attainment in accordance with the Clean Air Act. This SIP revision presents the data and information that the USEPA requires in order to redesignate the areas to attainment.

#### Regulations

[Public Access to Tidal Waters and Their Shorelines](#) - The Department of Environmental Protection has adopted amendments to the public access rules at N.J.A.C. 7:7, Coastal Permit Program rules, and N.J.A.C. 7:7E, Coastal Zone Management rules. The amendments establish public access requirements for new development based upon the type of development, for example, residential versus marina development. The rules also establish the ability of towns to develop Municipal Public Access Plans. This regulation passed and becomes effective on 5 NOV 12.

#### **New Jersey Proposes Fee for Plastic Carryout Bags**

New Jersey is proposing a statute (NJ SB 675) that imposes a \$.10 fee on each plastic carryout bag provided to a customer at the point of a sale until 2015, at which point such plastic bags will be prohibited at point-of sale purchases. In 2015, consumers must be provided the opportunity to purchase a reusable bag, or shall be provided a compostable plastic bag or recyclable paper bag. There is no sovereign immunity waiver in any existing environmental statute subjecting the federal government to a state statute prohibiting the retailer from providing a "single-use bag" at the point of sale - the RCRA sovereign immunity waiver doesn't apply to products but rather to hazardous and solid waste. In this instance, the plastic bag is a product because it is sold as a point of sale purchase, therefore RCRA does not apply. Each plastic bag reduction statute must be evaluated independently as

there is no "one size fits all" answer to this complicated question. Please forward all plastic bag reduction statutes to your legal department for review.

### **New Jersey Proposes Offshore Wind Sales Tax Exemption Bill**

A new bill that goes in favor of offshore wind development in the U.S. was put before the Senate Environment and Energy Committee and received bipartisan support, the NJ Spotlight news site informs. The bill, sponsored by Senator Jim Whelan, proposes sales-tax exemption, eliminating sales taxes on materials and equipment for manufacturing wind energy components. This move would contribute to the plans to make New Jersey an offshore wind industry hub.

However, the Governor is opposing the bill, claiming that it would cost the state around \$7 million in revenue. Senator Whelan argues that opinion: "How do you lose \$7 million when we're not manufacturing anything right now?" Senator Jennifer Beck backs his standpoint by saying that the state could generate a lot more in income tax revenue.

For more information, go to: [http://www.offshorewind.biz/2012/09/24/usa-new-jersey-proposes-offshore-wind-sales-tax-exemption-bill/?utm\\_source=Offshore+Wind.biz&utm\\_medium=email&utm\\_campaign=6d08657342-RSS\\_EMAIL\\_CAMPAIGN](http://www.offshorewind.biz/2012/09/24/usa-new-jersey-proposes-offshore-wind-sales-tax-exemption-bill/?utm_source=Offshore+Wind.biz&utm_medium=email&utm_campaign=6d08657342-RSS_EMAIL_CAMPAIGN).

### **State Officials Visit New Jersey's First Aquaculture Development Zone**

Officials from the NJ Department of Environmental Protection (DEP) Division of Fish and Wildlife joined New Jersey Secretary of Agriculture Douglas H. Fisher to recognize the state's first Aquaculture Development Zone (ADZ). A key recommendation of the Department of Agriculture and Aquaculture Advisory Council's Aquaculture Development Plan is to establish production in four established zones. The first zone focuses on Delaware Bay oyster production. For additional information, go to: <http://www.state.nj.us/agriculture/pdf/aquacultureplanupdate.pdf>.

### **DEP, USGS Introduce First in Series of Interactive Flood Warning Maps for Passaic River Basin**

The first in a series of online, interactive flood- preparation maps designed to assist emergency management personnel and keep residents in the Passaic River Basin informed about flooding events in real time has been launched, according to Department of Environmental Protection Commissioner Bob Martin.

The Saddle River Flood Inundation Map, covering a nearly three-mile stretch of the river in Lodi, is the first map prioritized for the Passaic River Basin in response to recommendations made by the Passaic River Basin Advisory Commission. The map was developed in partnership between the DEP and US Geological Survey. Seventeen additional interactive maps covering critical areas of the basin will be produced in the coming months as part of a cooperative effort among the DEP, USGS, and the Army Corps of Engineers.

Flood inundation mapping is one of the recommendations in the Passaic River Basin Advisory Commission's 15-point plan for short-term and long-term measures to help mitigate the impact of flooding in the basin. The Commission was formed in 2011 in response to a series of damaging floods in the basin, which covers significant portions of Bergen, Morris, and Passaic counties. Key recommendations of the plan called for better information to help in preparation and response to flooding emergencies. "These online maps, intuitive and easy for anyone to use, provide real-time information to residents about conditions during significant rainfalls and will assist local, state and federal officials in making critical decisions to protect the public in the event of flooding," Commissioner Martin said. "This new flood preparedness tool highlights how our agencies and local officials are working together towards creating more resilient communities, providing better flood preparedness and responses to flooding," added USGS Associate Director for Water Bill Werkheiser.

Inundation maps are being produced for Lodi, Ridgewood, and Upper Saddle River along the Saddle River; for Little Falls, Pine Brook, Chatham, Millington, and Clifton along the Passaic River; for Pompton Lakes, Mahwah, and Oakland along the Wanaque River; for two locations in Wanaque along the Wanaque River; for Pompton

Plains along the Pompton River; for Riverdale and the Macopin Intake Dam along the Pequannock River; for Little Falls along the Peckman River; and for Ho-Ho-Kus Brook in Ho-Ho-Kus.

The Saddle River map can be accessed at:

<http://wim.usgs.gov/FIMI/FloodInundationMapper.html?siteno=01391500#>. A click on the map shows the stream flows and water depths for the stretch of the river that extends from the Interstate 80 bridge in Rochelle Park to the Felician College campus in Lodi.

Monitoring tools include current stream gauges, which provide real-time data via satellites to USGS and the National Weather Service (NWS). Using the NWS Advanced Hydrologic Prediction Service (AHPS) forecast, the Flood Inundation Map illustrates where floodwaters are expected to travel. With this information, emergency management officials and residents can evaluate potential threat of floodwaters to property and infrastructure.

Through the website, users may sign up to receive email notifications in real time of critical thresholds reached in the river via the USGS WaterAlert.



## NEW YORK

**The New York State Legislature meets throughout the year.**

### **Proposed Legislation**

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

### **Proposed Rules**

**Conforming the Requirement for Best Available Retrofit Technology to Recent Statutory Changes and Court Decisions** - The Department of Environmental Conservation has proposed rulemaking to make Part 248 consistent with the amendments to New York Environmental Conservation Law section 19-0323 and recent Court decisions. This rulemaking concerns the requirement for best available retrofit technology for any diesel powered heavy duty vehicle (HDV) that is owned by, operated by or on behalf of, or leased by a state agency and state and regional public authority.

**Section 326.2(b)(4)(ii) Is Amended to Allow the Use of Fluridone Pellets in Waters Less Than Two Feet Deep** - The Department of Environmental Conservation has proposed rules to allow the use of fluridone pellets in waters less than two feet deep to control hydrilla, an invasive plant.

### **Regulations**

**Environmental Assessment Forms** - The Department of Environmental Conservation has adopted rule making to provide model forms that may be used to conduct environmental assessments under the State Environmental Quality Review Act. The environmental assessment forms (“EAF”) are model forms promulgated by the Department of Environmental Conservation (“DEC”) and appended to the State Environmental Quality Review Act (“SEQR”) regulations as required by the SEQR (see ECL § 8-0113). The EAFs are used by agencies and boards involved in the SEQR process to assess the environmental significance of actions they may be

undertaking, funding or approving. The “Full EAF” has not been substantially revised since 1978 while its sister form, the “Short EAF,” was last substantially revised in 1987. In the years since the EAFs were first created, DEC and other SEQR practitioners have gathered a great deal of experience with environmental analyses under SEQR. DEC has brought this experience to bear by preparing modern Full and Short EAFs. The forms, which replace the existing ones set out at 6 NYCRR 617.20, appendices A, B, and C, now include consideration of emerging environmental issues such as climate change. The revised EAFs have been changed to better address planning, policy and local legislative actions, which can have greater impacts on the environment than individual physical changes. This regulation passed and becomes effective on 1 APR 13.

### **Freshwater Wetlands Adjacent Areas – Draft General Permit**

New York State Department of Environmental Conservation (NYS DEC) proposes to issue a General Permit GP-0-12-003, “Freshwater Wetlands Adjacent Areas – Draft General Permit,” for activities within previously disturbed areas of NYS DEC-regulated Freshwater Wetland Adjacent Areas, greater than 50 feet from the wetland boundary, not to exceed .25 acre of disturbance. The permit would cover: demolition and removal of existing appurtenant structures; construction of driveways or parking areas limited to 3000 square feet; additions to existing structures; installation of garages, decks, porches, sheds, pools, utility lines and other appurtenant structures; In-kind and in-place replacement of existing appurtenant structures, roads, and associated utilities. For more information, go to: <http://www.dec.ny.gov/permits/84304.html>.

## REGION 3



## DISTRICT OF COLUMBIA

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

### Legislation

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

### Proposed Rules

**Change in Fees at Transfer Stations** - The Department of Public Works has proposed and adopted on an emergency basis amendments to chapter 7 (Solid Waste Control) of title 21 (Water and Sanitation) of the District of Columbia Municipal Regulations (DCMR), by amending the fees for the disposal of solid waste at the District's waste-handling facilities. This emergency action is based on an increase in the cost that the District pays to haul solid waste delivered to its solid waste transfer facilities and is taken to ensure that the District fee recoups the actual cost of providing solid waste handling services.

### **Draft Stormwater Management Guidebook**

DDOE's Proposed Rulemaking on Stormwater Management and Soil Erosion and Sediment Control and the Draft Stormwater Management Guidebook is available. This information will also be posted at <http://ddoe.dc.gov/proposedstormwaterrule>, and that webpage will be updated as details are added to this schedule. The Proposed Rule and Draft Guidebook are also available at that webpage.

DDOE will host general training sessions, focused sessions on individual topics as requested, and public hearings. All of these are open to the public. However, DDOE requests an RSVP to [SW.Guidebook@dc.gov](mailto:SW.Guidebook@dc.gov) or by calling Rebecca Stack at 202-727-5160. DDOE may cap the number of participants in the interest of maintaining a constructive opportunity for participation. DDOE will hold additional sessions on the same topic if necessary.

DDOE will host two public hearings to receive oral and written comments on the Proposed Rulemaking and the Draft Guidebook. DDOE will accept written comments through November 8, 2012. Instructions on submitting written comments are detailed at the end of the Proposed Rulemaking.

- Hearing 1: 2:00pm - 4:00pm on Thursday, 18 OCT 12. Location to be determined.
- Hearing 2: 6:00pm - 8:00pm on Monday, 5 NOV 12. Location to be determined.

DDOE encourages stakeholder participation in these training sessions and hearings, and looks forward to receiving constructive comments on the proposed Stormwater Rule and Draft Guidebook.

As a side note, DDOE has also uploaded a presentation that presents a simple and visual explanation of how stormwater impacts District waterbodies and why the District needs stormwater retention. This is available at <http://ddoe.dc.gov/proposedstormwaterrule> under "Resources."

### **Navy Agrees to Fixes to Public Water Supply at DC Military Base**

The EPA has signed a Safe Drinking Water Act administrative consent order with the U.S. Navy and the Washington Suburban Sanitary Commission (WSSC) to take corrective action protecting the public water supply at Joint Base Anacostia-Bolling, a combined Navy-Air Force facility in Washington, DC.

The order requires the Navy and WSSC to submit and implement a plan to correct significant deficiencies identified in 2008 and 2011 surveys of the base's public water supply. These deficiencies include management issues and the flooding of three vaults containing meters due to possible leaking pipes or high ground water. Also, the water system capacity was expanded without notifying EPA as required by Safe Drinking Water Act regulations.

The Navy and WSSC, owners of the public water system serving the Bolling side of the base, are required to comply with the Safe Drinking Water Act and its implementing regulations. WSSC also operates the system as a contract operator. Under the order, the Navy and WSSC must notify customers about the violations and must submit quarterly progress reports to EPA.

EPA's drinking water regulations require public water suppliers to regularly monitor for drinking water contaminants and sufficiently maintain water infrastructure to minimize risk of contamination. As part of the effort to ensure safe and reliable drinking water for the Base's personnel and visitors, EPA and its contractors conduct onsite reviews, called sanitary surveys, of the water system's facilities, equipment, operation, maintenance, and compliance with federal requirements.



## **DELAWARE**

**Note: The Delaware General Assembly convened on 10 JAN 12 and adjourned on 30 JUN 12.**

### **Legislation**

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

### **Proposed Rules**

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



## **MARYLAND**

**Note: The Maryland General Assembly convened on 11 JAN 12 and adjourned on 9 APR 12.**

### **Legislation**

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

### **Proposed Rules**

**[Notice of Tentative Determination - General Permit for Discharges from Stormwater Associated with Industrial Activities](#)** - The Department of the Environment has proposed to reissue the state/NPDES (National Pollution Discharge Elimination System) General Permit for Discharges from Stormwater Associated with Industrial Activities with significant revisions to the previously issued permit (No. 02SW). General Discharge Permit No. 12SW (NPDES No. MDR00) applies to stormwater discharges from various federal discharge categories of industrial facilities in the state of Maryland.

### **Regulations**

**[Criteria for Local Critical Area Program Development](#)** - Critical Area Commission for the Chesapeake and Atlantic Coastal Bays has adopted rules to modify and streamline the Critical Area regulations in order to reduce unnecessary, duplicative, or outdated regulations to promote economic growth and job creation. This review was pursuant to Executive Order .01.01.2011.20. This regulation passed and becomes effective on 29 OCT 12.

**[Nitrogen-Removal Technology for On-Site Sewage Disposal Systems](#)** - The Department of the Environment has proposed a rulemaking action to require nitrogen-removal technology for on-site sewage disposal systems (OSDS) serving new construction in the Chesapeake Bay watershed and the Atlantic Coastal Bays watershed and to require nitrogen-removal technology for OSDS serving new construction in the watershed of any nitrogen-impaired water body. This action also provides for operation and maintenance of nitrogen-removal OSDS. In addition, this action requires nitrogen removal for any replacement system on property located in either the Chesapeake Bay critical area or the Atlantic Coastal Bays critical area pursuant to the requirements in Environment Article, §9-1108, Annotated Code of Maryland. Nitrogen has been identified as a contaminant to both groundwater and surface water. Reducing the nitrogen discharged by OSDS has been identified as an action necessary as part of Maryland's Watershed Implementation Plan in order to meet water quality standards. The Department has determined that requiring nitrogen-removal technology for OSDS is necessary to protect the waters of the State from contamination. This regulation passed and becomes effective on 31 JAN 13.

### **Maryland Air National Guard Settles Hazardous Waste Violation**

In a Consent Agreement with the EPA, the Maryland Air National Guard (MDANG), 175th Wing, has agreed to pay a \$75,000 penalty to settle alleged violations of hazardous waste regulations at its facility at 2701 Eastern Blvd., Baltimore, MD. The EPA cited MDANG for violating the Resource Conservation and Recovery Act (RCRA), the federal law governing the treatment, storage, and disposal of hazardous waste. The consent agreement resolves alleged violations discovered in an April 2011 inspection of the facility. For more information, go to:

<http://yosemite.epa.gov/opa/admpress.nsf/d0cf6618525a9efb85257359003fb69d/d0e836342e4230a185257a9b005f8445!OpenDocument>.



## PENNSYLVANIA

**Note: The Pennsylvania General Assembly meets throughout the year.**

### Legislation

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

### Proposed Rules

**Wildlife Classification; Birds** - The Game Commission has proposed rulemaking to amend § 133.21 (relating to classification of birds) to reflect the current status of breeding populations of threatened and endangered wild birds within this Commonwealth and also to update scientific nomenclature.

### Regulations

**Notice of Federal Amendments to Radioactive Material Regulations** - The Department of Environmental Protection has adopted federal amendments to radioactive material regulations. The Commonwealth is a United States Nuclear Regulatory Commission (NRC) Agreement State and has incorporated by reference many NRC regulations. The NRC has amended its regulations to make the requirements for distributors of byproduct material clearer, less prescriptive, and more risk-informed. The NRC also redefined categories of devices to be used under exemptions, adding explicit provisions regarding the sealed source and device registration process and added flexibility to the licensing of users of sealed sources and devices. This action is primarily intended to make licensing processes more efficient and effective. These changes will affect manufacturers and distributors of sources and devices containing byproduct material and future users of some products currently used under a general or specific license. This regulation passed and became effective on 13 OCT 12.

### **House Bill would make DEP Secretary Elected Position**

State Rep. White introduced two bills-- [House Bill 2606](#) and [House Bill 2607](#)-- which seek to amend the Pennsylvania Constitution to change the Department of Environmental Protection's appointed secretary position to a commissioner post elected by Pennsylvanians. Rep. White said the legislation would end the governor's appointment of the position and put the role of a DEP commissioner closer in line with that of the state treasurer, attorney general, or auditor general. He also said it would create more transparency for a department that has been continually scrutinized for its clear political agenda.

### **Largest On-Site Wastewater Reuse System Approved in Pennsylvania**

Living Machine Systems L3C announced its technology is actively treating and recycling all wastewater at the new Evergreen Elementary School in Wayne County. It is the largest on-site wastewater reuse system permitted in the state of Pennsylvania.

Designed to replace two smaller, aging schools, the new Evergreen Elementary school site was not served by sewer. School officials wanted to find an on-site wastewater treatment system that could not only treat wastewater, but could also recycle all wastewater into a high-quality (tertiary standard) resource for irrigating athletic fields and flushing toilets.

The installed system is an ecological wastewater treatment and reuse technology that turns both blackwater and graywater into high quality, reusable water for non-potable (non-drinking) uses. Blackwater indicates that the

source may be toilet wastewater, while graywater sources are found in the kitchen, bathrooms/washrooms, the laundry, sinks, and showers.

Recognized as the most energy efficient system to meet high quality reuse standards, Living Machine technology applies the principles of tidal wetland ecology and enhances performance through a patented process, utilizing the latest technology and engineering.

“With no sewer connection and an interest in looking at a more ecologically sound approach to on-site wastewater treatment and reuse, we suggested evaluating Living Machine technology,” said Gary Cavill, P.E. Civil Engineer at Greenman-Pedersen, Inc., the engineering firm for the school project. “After looking at our options, a Living Machine system delivered high-quality water for full reuse in a modest and energy efficient size, with the added bonus of being easy to operate and a centerpiece for science education.”

All school wastewater (about 7,000 gallons per day) flows into a series of wetland cells (watertight containment basins) that are filled with special gravel that promotes the development of micro-ecosystems.

As water moves through the system, the cells are alternately filled and drained to create multiple tidal cycles each day, accelerating what is found in nature, and resulting in high-quality reusable water. Even though the Living Machine system can be placed outside in temperate climates, most of the components are located in a greenhouse, allowing for easy, year-round access for educational purposes.

“We applaud Western Wayne School District for selecting a water solution that avoids building new water pipelines and allows them to create new sources of water for the school,” said Will Kirksey, Global Development Officer at Living Machine Systems.

By treating and recycling wastewater using this technology, a building, campus, or community can minimize nutrient discharges into the watershed and become more water independent to weather droughts or other water restrictions. For more information, go to:

<http://www.paenvironmentdigest.com/newsletter/default.asp?NewsletterArticleID=23333&SubjectID>.

### **StormwaterPA Offers Two Video Studies on Effective Stormwater Management Strategies**

The [StormwaterPA](#) website is offering two new video case studies on effective stormwater management strategies:

- **Porous Paving:** Another piece of the City of Brotherly Love's stormwater management puzzle has been put into place, this time on the 800 block of Percy Street in South Philadelphia's Bella Vista neighborhood. The city's first porous "green street" replaces traditional impervious asphalt and reduces the amount of polluted runoff entering city sewers by allowing stormwater to infiltrate the surface and be stored in a stone bed until it can be absorbed by the soil. The project was a collaboration between the Philadelphia Water Department and the Philadelphia Streets Department and has the added benefit of keeping homeowners basements dry where in the past, flooding often occurred. To view the case study, go to: <http://www.stormwaterpa.org/percy-street-goes-green.html>.
- **Meadow Mowing:** Many open spaces, including municipal parks, are covered by groomed lawn. Most people think these mown areas are "green and tidy." But, in reality, they often act like parking lots. The underlying soil is so compacted that rain runs off almost as though the grass was paved. Letting mown areas become natural meadows returns them to functional parts of the water system. These meadows prevent flooding, create habitat, and are beautiful to behold. To view this case study, go to: <http://www.stormwaterpa.org/mowing-to-meadows.html>.



## VIRGINIA

**The Virginia Legislature convened on 12 JAN 12 and adjourned on 10 MAR 12.**

### **Proposed Legislation**

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

### **Proposed Rules**

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

### **Regulations**

**General Virginia Pollutant Discharge Elimination System (VPDES) Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed in Virginia** - The Department of Environmental Quality has adopted a General Virginia Pollutant Discharge Elimination System (VPDES) Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed in Virginia. The general permit governs facilities holding individual VPDES permits that discharge or propose to discharge total nitrogen or total phosphorus to the Chesapeake Bay or its tributaries. The facilities are authorized to discharge to surface waters and exchange credits for total nitrogen and/ or total phosphorus. The amendments conform the general permit to statutory changes enacted by the 2012 General Assembly. This regulation passed and becomes effective on 21 NOV 12.

**Amending the General Virginia Pollutant Discharge Elimination System (VPDES) Permit for Noncontact Cooling Water Discharges** - The Department of Environmental Quality, State Water Control Board, has adopted amendments pertaining to the General Virginia Pollutant Discharge Elimination System (VPDES) Permit for Noncontact Cooling Water Discharges of 50,000 Gallons per Day or less which has existed since 1998. This regulation amendment will reissue the existing general permit which expires on March 1, 2013. This general permit establishes effluent limitations and monitoring requirements for point source discharges of 50,000 gallons per day or less of non-contact cooling water and cooling equipment blow down to surface waters. The effluent limits in the general permit are set to protect the quality of the waters receiving the discharges. The general permit regulation is being reissued in order to continue making it available as a permitting option for this type of discharger. The changes to the regulation were made to make this general permit similar to other general permits issued recently and in response to Technical Advisory Committee suggestions and staff requests to clarify and update permit limits and conditions. This regulation passed and becomes effective on 2 MAR13.

**Chesapeake Bay Preservation Area Designation and Management Regulations** - The Department of Conservation and Recreation has adopted amendments to conform the Chesapeake Bay Preservation Area Designation and Management Regulations (4VAC50-90) to changes in Virginia statutory law in response to the Erosion and Sediment Control, Stormwater Management, and Chesapeake Bay Preservation Acts, integration of programs bill [Chapters 785 and 819 of the 2012 Virginia Acts of Assembly; (HB1065 - Delegate Sherwood and SB407 - Senator Hanger)]. The legislation integrated elements of the Erosion and Sediment Control Act, the Stormwater Management Act, and the Chesapeake Bay Preservation Act (where appropriate; no Bay Act program expansion) so that those regulatory programs could be implemented in a consolidated and consistent manner, resulting in greater efficiencies (one-stop shopping) for those being regulated. The bill also abolished the Chesapeake Bay Local Assistance Board and transferred its powers and responsibilities to the Virginia Soil and Water Conservation Board. Accordingly, this consolidation legislation has resulted in necessary amendments to each of the referenced Act's attendant regulations. This regulation passed and becomes effective on 21 NOV 12.

**Erosion and Sediment Control Certification Regulations** - The Department of Conservation and Recreation has adopted amendments to conform the Erosion and Sediment Control Certification Regulations (4VAC50-50) to changes in Virginia statutory law in response to the Erosion and Sediment Control, Stormwater Management, and Chesapeake Bay Preservation Acts, integration of programs bill [Chapters 785 and 819 of the 2012 Virginia Acts of Assembly; (HB1065 - Delegate Sherwood and SB407 - Senator Hanger)]. The legislation integrated elements of the Erosion and Sediment Control Act, the Stormwater Management Act, and the Chesapeake Bay Preservation Act (where appropriate; no Bay Act program expansion) so that those regulatory programs could be implemented in a consolidated and consistent manner, resulting in greater efficiencies (one-stop shopping) for those being regulated. The bill also abolished the Chesapeake Bay Local Assistance Board and transferred its powers and responsibilities to the Virginia Soil and Water Conservation Board. Accordingly, this consolidation legislation has resulted in necessary amendments to each of the referenced Act's attendant regulations. Amendments were also made to address style, form, or corrections of technical errors. This regulation passed and becomes effective on 21 NOV 12.

**Erosion and Sediment Control Regulations** - The Department of Conservation and Recreation has adopted amendments to conform the Erosion and Sediment Control Regulations (4VAC50-30) to changes in Virginia statutory law in response to the Erosion and Sediment Control, Stormwater Management, and Chesapeake Bay Preservation Acts, integration of programs bill [Chapters 785 and 819 of the 2012 Virginia Acts of Assembly; (HB1065 - Delegate Sherwood and SB407 - Senator Hanger)]. The legislation integrated elements of the Erosion and Sediment Control Act, the Stormwater Management Act, and the Chesapeake Bay Preservation Act (where appropriate; no Bay Act program expansion) so that those regulatory programs could be implemented in a consolidated and consistent manner, resulting in greater efficiencies (one-stop shopping) for those being regulated. The bill also abolished the Chesapeake Bay Local Assistance Board and transferred its powers and responsibilities to the Virginia Soil and Water Conservation Board. Accordingly, this consolidation legislation has resulted in necessary amendments to each of the referenced Act's attendant regulations. This regulation passed and becomes effective on 21 NOV 12.

**Ozone Classification and Implementation** - The Department of Environmental Quality has adopted amendments to regulations entitled "Regulations for the Control and Abatement of Air Pollution," specifically, 9VAC5-20-204 (Nonattainment Areas) of 9VAC5-20 (General Provisions), and 9VAC5-30-55 (Ozone, 8-hour, 0.08 ppm) of 9VAC5-30 (Ambient Air Quality Standards). The Northern Virginia ozone nonattainment area was originally classified as moderate for the 1997 8-hour (0.08 parts per million) ozone standard. The 8-hour ozone standard was revised to 0.075 parts per million in 2008, and on May 21, 2012, the U.S. Environmental Protection Agency (EPA) accordingly established air quality designations for this standard (77 FR 30088). As part of this designation process, Northern Virginia has been classified as marginal for the 2008 standard. In addition, on May 21, 2012, EPA provided for the revocation of the 1997 standard for transportation conformity purposes (77 FR 30160). The list of nonattainment areas in 9VAC5-20-204 and the 1997 standards for ozone specified in 9VAC5-30-55 must now be amended in order to reflect these new federal requirements. This regulation passed and becomes effective on 21 NOV 12.

### **According to the Navy, Noise from Training Aircraft Not Significant**

#### **By Don Koralewski – Independent Messenger (VA)**

The Navy has released a 1,116 page draft environmental assessment conducted in consideration of possible use of the Emporia-Greensville Regional Airport for Field Carrier Practice Landing.

The regional airport is one of two under consideration for the Navy aircraft carrier based landing practices. The other airfield is at Wallops Island, VA. That field is a NASA facility on Virginia's eastern shore. That field was also part of the assessment.

The use of the airfield is for two types of fixed wing aircraft: the C-2 Greyhounds and E-2 Hawkeye squadrons operating from Naval Station Norfolk Chambers Field. The C-2 Greyhound is an aircraft carrier-capable transport and supply aircraft. The E-2 Hawkeye is an all-weather, aircraft carrier-capable tactical airborne early warning (AEW) aircraft. Both aircraft are turbo-props and are quieter than jet aircraft.

The proposed use of a regional airport for touch and go flight operations is strictly for these two aircraft types and not for jet aircraft. The Navy is concurrently seeking a site for an outlying landing field for use of Navy attack aircraft flying out of Naval Air Station Oceana — that search (which has identified three sites in Southampton and Sussex County) is currently on hold while the Navy conducts an environmental impact statement for the next generation of attack aircraft scheduled to join the fleet and possibly be based at Oceana.

According to the Navy's assessment, noise would not be a major impact in the Emporia-Greenville area. The report states: The increase in land area falling under the Day-Night Average Sound Level (DNL) due to the proposed Navy E-2/C-2 operations would equate to approximately 42 and 46 acres within the greater than 65 dB DNL noise zones. In both cases, this would impact approximately three individuals in Greenville County.

The 70 dB DNL noise contours would be wholly contained within the Emporia- Greenville airport property.

### **Virginia Prepares for Offshore Wind Development**

The Virginia Department of Mines, Minerals, and Energy is proposing two initiatives on the state's path to offshore wind development. A survey of the seabed is proposed to assess its suitability for installing the wind turbine foundations and another initiative proposes building platforms along the edges of the commercial lease area, according to the San Francisco Chronicle. The wind development area, which covers 133 square miles and is located 27 miles off Virginia Beach, is of interest for eight companies that want to build offshore wind farms.

### **Virginia Waterworks and Wastewater Works Operator Requirements**

The Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals has proposed fast-track regulation amendments that change the definitions of "direct supervisor" and "direct supervision," allowing licensees to supervise the work of unlicensed individuals who are not seeking licensure. Also, the requirements for applicants for an individual sewage system installer license have been modified to reflect current industry procedures consistent with the Virginia Department of Health. The experience requirement for the individual sewage system installer license has also been changed to allow an individual's installation experience to fulfill the requirement for licensure as long as the applicant's firm is properly licensed as a Virginia contractor with the specialty of sewage disposal systems at the time he applies for the installer license.



## **WEST VIRGINIA**

**The West Virginia Legislature convened on 11 JAN 12 and adjourned on 13 MAR 12.**

### **Legislation**

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

### **Proposed Rules**

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

**WVDEP Public Meeting on Water Quality Standards**

The West Virginia Department of Environmental Protection's Water Quality Standards Program will conduct a public meeting to discuss comments received during the recent solicitation of public input on potential revisions to the state's water quality standards, which will be under review as part of the 2014 Triennial Review process. The meeting will be conducted in the WVDEP's Coopers Rock Room.

**Date/Time:**

Starts: 11/08/2012 1:30 PM

Ends: 11/08/2012 3:30 PM

For more information on the water quality standards, go to: [State Water Quality Standards](#).

## REGION 4



### NORTH CAROLINA

**Note: The NC General Assembly convened on 4 JAN 12 and adjourned on 3 JUL 12.**

#### Legislation

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

#### Proposed Rules

[Division of Air Quality Conducts Review of State Air Toxics Rules](#) - The Department of Environment and Natural Resources, Division of Air Quality encouraged the public to review and comment on North Carolina's rules for controlling toxic air pollutants at a public meeting held on 25 SEP 12 in Raleigh. The General Assembly mandated the review of the state air toxics rules in legislation adopted during its 2012 session (Session Law 2012-91). The law requires the state Division of Air Quality, or DAQ, to review the state air toxics rules and determine whether changes could be made to reduce unnecessary regulatory burden and increase efficient use of DAQ resources while maintaining protection of public health.

[Draft Airport Chapter 13 of the BMP Manual](#) - The Department of Environment and Natural Resources has invited public comment on draft Chapter 13: Airports of the NCDENR Stormwater BMP Manual. This chapter was developed based on S.L. 2011-394.

#### Regulations

[Protecting Military Installations by Ensuring the Compatibility of State Actions with Military Needs](#) - The Office of the Governor has issued an Executive Order that is designed to protect military installations by ensuring the compatibility of state actions with military needs. The Executive Order was issued and became effective on 17 SEP 12.

#### **More Mercury Found at Camp Lejeune Water Plant**

##### **By The Associated Press**

After eight pounds of elemental mercury were found at the Hadnot Point Water Treatment Plant on 15 SEP 12, a New Bern-based contractor hired to clean up and investigate the plant found another four pounds. Because mercury is so heavy, the total 12 pounds is equal to about 1.5 pints.

A possible source is water pressure meters containing elemental mercury that were removed from the plant in the 1980s and replaced with digital meters. Base spokesman Nat Fahy said the contractor, Shamrock Environmental Corp., began using cameras in non-accessible areas of the piping and reservoir to determine if mercury has settled in other places. Meanwhile, areas that normally get their water from Hadnot Point will instead be serviced by the Holcomb Boulevard Plant.

Elemental mercury is found in items such as thermometers and fluorescent bulbs. The Environmental Protection Agency says it's generally not found in elevated levels in drinking water. Any impact on human health is remote since this form of mercury doesn't dissolve in water, Fahy said.

Camp Lejeune has a history of toxins in drinking water. Health officials estimate as many as 1 million people may have been exposed to tainted groundwater at the base over several decades. In August, President Barack Obama signed a bill into law providing health benefits to Marines and family members exposed to contaminated drinking water at Camp Lejeune from 1957 to 1987.

Documents show Marines leaders were slow to respond when tests in the early 1980s showed higher than normal levels of contaminants in groundwater at the base, likely caused by leaking fuel tanks and an off-base dry cleaner.

### **NC Post-TMDL Permitting Wastewater Strategy Updated**

The Department of Environment and Natural Resources has updated its strategy for wastewater and mercury. The Draft NC Mercury TMDL was developed to meet requirements of Section 303(d) of the Federal Water Pollution Control Act. It is subject to approval by EPA. The updated document can be found at:

[http://portal.ncdenr.org/c/document\\_library/get\\_file?uuid=7a028056-e746-47e9-8dc9-0a3e6e03c920&groupId=38364](http://portal.ncdenr.org/c/document_library/get_file?uuid=7a028056-e746-47e9-8dc9-0a3e6e03c920&groupId=38364). .

# 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](http://www.fedcenter.gov/kd/go.cfm?destination=ShowItem&item_id=19437).

### **Climate Resilience Evaluation and Awareness Tool (CREAT) 101 (Web-based, On Demand)**

This training provides an overview of climate change impacts and the methodology and functionality of CREAT. The CREAT software provides drinking water, wastewater, and storm water utilities with practical tools, training, and technical assistance to confront climate change through climate related risk assessment. For more information, go to: <http://water.epa.gov/infrastructure/watersecurity/climate/creat.cfm>. For the on-line training classes, go to: <http://water.epa.gov/infrastructure/watersecurity/climate/>.

### **Waters of the United States' Under the Clean Water act (Web Based, On Demand)**

These slides were presented in December 2011 as a part of EPA's Watershed Academy. To access the presentation, go to: [http://water.epa.gov/learn/training/standardsacademy/upload/module\\_waters.pdf](http://water.epa.gov/learn/training/standardsacademy/upload/module_waters.pdf).

### **Emergency Environmental Spill Response Training (Web Based, On Demand)**

Produced by NOAA's Office of Response and Restoration, this is an online training module for individuals looking to strengthen their knowledge of spills and their effect on the environment. The scenario describes and oil spill and directs you to the references and data that you can use to determine what natural resources are at risk. For more information, go to: <http://ohshub.com/free-online-training-emergency-environmental-spill-response/>.

### **Overview of the National Pollutant Discharge Elimination System (NPDES) Program (Web Based, On Demand)**

These slides were presented in December 2011 as a part of EPA's Watershed Academy. To access the presentation, go to: [http://water.epa.gov/learn/training/standardsacademy/upload/module\\_npdes.pdf](http://water.epa.gov/learn/training/standardsacademy/upload/module_npdes.pdf).

### **30-Meter Height High-Resolution Wind map for Small and Distributed Projects (Web Based, On Demand)**

This webinar, originally presented 18 July 2012, provided an introduction to the new 30-meter high-resolution wind maps developed for the small and distributed wind markets. Included in the discussion was the methodology behind the wind maps, how these maps leverage the learning that occurred in the development of the utility-scale wind maps, and the appropriate use of the maps. For more information, go to:

[http://www.windpoweringamerica.gov/filter\\_detail.asp?itemid=3550](http://www.windpoweringamerica.gov/filter_detail.asp?itemid=3550).

### **Renewable Energy on Contaminated Land: Tools for Local Governments (Web Based, On Demand)**

This webinar provides an overview of tools available to local governments to help them get renewable energy projects built on contaminated land in their community. Included in the webinar are discussions about some of the recent tools developed by EPA, including two decision trees that were created to screen potentially contaminated and underutilized sites for solar and wind potential and a draft best practice guide for siting solar on landfills. Also presenting will be representatives from DOE, the National Association of Local Government Environmental Professionals (NALGEP), and the Clean Coalitions describing available best practices guidance

and other tools. For more information, go to:

[http://www.fedcenter.gov/kd/go.cfm?destination=ShowItem&item\\_id=22123](http://www.fedcenter.gov/kd/go.cfm?destination=ShowItem&item_id=22123).

### **Reducing Water Consumption at Federal Facilities, 27 OCT 12 (Web-based)**

The focus of this webinar is the reduction of water consumption at Federal facilities. This webinar is sponsored by the Federal Green Challenge. Also note that you will be signing up for all of the Web Academy webinars from the same link, but you can attend any of them you choose to when presented. For more information, go to:

<http://www.epa.gov/fgc/web-academy.html?CFID=1723705&CFTOKEN=73543085>.

### **Advanced Energy 2012, 30-31 OCT 12, New York, NY**

The conference program for Advanced Energy 2012 will feature several plenary events, an open-access exhibit hall, and a poster session. The educational program will comprise a comprehensive offering of tracks and sessions that extend across all the partner conferences, and feature topic experts and thought leaders from every area of the energy industry. For more information, go to:

<http://www.aertc.org/conference2012/?CFID=1001803&CFTOKEN=38722823>.

### **Comprehensive Polychlorinated Biphenyls Training, 6-8 NOV 12, Kansas City, KS**

The course covers the TSCA "cradle to grave" regulation of polychlorinated biphenyls (PCBs). It identifies the many uses of PCBs, including the non-liquid forms that pose particular compliance challenges for both regulators and regulated parties. Health and environmental concerns associated with PCBs are explained and then linked to key provisions in the regulations. This course is intended for Inspectors, Regulators, Auditors or those in the field with a need for detailed and comprehensive information concerning polychlorinated biphenyls (PCBs) and the Toxic Substances Control Act (TSCA) regulations governing their use, management, and disposal. The course will be held at the EPA Region 7 Headquarters. For more information, go to:

<http://www.fedcenter.gov/Events/index.cfm?id=22087>.

### **NWCC Wind Wildlife Research meeting, 27-30 NOV 12, Denver, CO**

The National Wind Coordinating Collaborative's (NWCC) biennial Wind Wildlife Research Meeting provides an internationally recognized forum for researchers and wind-wildlife stakeholders to hear contributed papers, view research posters, and listen to panels that synthesize the most recent wind power-related wildlife research. Academics, researchers, conservation scientists, consultants, federal and state officials, NGO representatives, and industry professionals come together for this unique opportunity. For more information, go to:

<http://www.nationalwind.org/issues/wildlife/researchmeetingix.aspx?CFID=1001891&CFTOKEN=95920556>.

### **AWEA Regional Wind Energy Summit – Southwest, 5-6 DEC 12, Houston, TX**

Obtain a comprehensive view of all critical aspects of wind energy in the Southwest Power Pool (SPP) and Electric Reliability Council of Texas (ERCOT) regions of the United States, and delve deep into the most important present and forecasted issues facing wind energy development in these regions. For more information, go to: <http://www.awea.org/events/AWEA-Regional-Wind-Energy-Summit-South-Central.cfm?CFID=1001918&CFTOKEN=30073911>.

### **Globalcon 2013, 6-7 MAR 13, Philadelphia, PA**

Globalcon is designed for professionals seeking to expand their knowledge of fast-moving developments in the energy field, explore promising new technologies, compare energy supply options, and learn about innovative and cost-conscious project implementation strategies. For more information, go to:

<http://www.globalconevent.com/?CFID=1440188&CFTOKEN=15724012>.

**American Water Works Association (AWWA) Annual Conference and Exhibition 2013, 9-13 JUN 13, Denver, CO**

ACE13 provides an environment where water professionals can be leaders and learn from leaders in the water industry. Nowhere else can you find a similar gathering of water professionals from around the world intent on providing leadership and guidance for the future of safe water. For more information, go to:

<http://www.awwa.org/ACE13/index.cfm?ItemNumber=59012&navItemNumber=58997&showLogin=N>.

**StormCon Conference 2013, 18-22 AUG 13, Myrtle Beach, SC**

StormCon is the only North American event dedicated exclusively to stormwater and surface-water professionals across the continent: municipal stormwater and public works managers, industrial stormwater managers, engineering consultants, regulatory personnel, watershed management professionals, and others concerned with stormwater and surface-water quality. For more information, go to:

[http://www.stormcon.com/call\\_papers\\_2013.html?CFID=2208750&CFTOKEN=71207034](http://www.stormcon.com/call_papers_2013.html?CFID=2208750&CFTOKEN=71207034).

## 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

<b>Beginning Date</b>	<b>End Date</b>	<b>Course</b>	<b>Location</b>
10 DEC 12	14 DEC 12	CEC Captain's Leadership Seminar	Washington, DC
11 DEC 12	12 DEC 12	Uniform Federal Policy for Quality Assurance Project Plans	Washington, DC
14 JAN 13	18 JAN 13	US Marine Corps Facilities Management	Washington, DC
22 JAN 13	24 JAN 13	Advanced Munitions Response Site Management	Norfolk, VA
11 FEB 13	15 FEB 13	Energy Management Course	Washington, DC
12 FEB 13	14 FEB 13	Introduction to Cultural Resource Management Laws & Regulations	Scholfield Barracks, HI
25 FEB 13	28 FEB 13	Integrated EMS and Compliance Auditing	Norfolk, VA
26 FEB 13	1 MAR 13	DoD Pesticide Applicator Recertification	Virginia Beach, VA
4 MAR 13	4 MAR 13	HAZWOPER for Uncontrolled Haz Waste Site Workers - Refresher	Washington, DC
5 MAR 13	5 MAR 13	HAZWOPER for Uncontrolled Haz Waste Site Workers - Refresher	Washington, DC
6 MAR 13	6 MAR 13	HAZWOPER for Uncontrolled Haz Waste Site Workers - Refresher	Norfolk, VA
7 MAR 13	7 MAR 13	HAZWOPER for Uncontrolled Haz Waste Site Workers - Refresher	Norfolk, VA
11 MAR 13	14 MAR 13	Integrated EMS and Compliance Auditing	Washington, DC

**CECOS Classroom Courses**

<b>Beginning Date</b>	<b>End Date</b>	<b>Course</b>	<b>Location</b>
9 APR 13	12 APR 13	Environmental Protection	Washington, DC
10 APR 13	11 APR 13	Buying Green: A Multifunctional Approach to Pollution Prevention	Washington, DC
22 APR 13	26 APR 13	Intro to Public Works Dept & FEC Operations	MIDLANT Region
23 APR 13	25 APR 13	Intro to Hazardous Waste Generation & Handling	Quantico, VA
26 APR 13	26 APR 13	RCRA Hazardous Waste Review	Quantico, VA
29 APR 13	3 MAY 13	Intro to FEAD/ ROICC	MIDLANT Region
29 APR 13	3 MAY 13	Intro to FMD & Production Div Operations	MIDLANT Region
30 APR 13	2 MAY 13	Intro to Hazardous Waste Generation & Handling	Cherry Point, NC
3 MAY 13	3 MAY 13	RCRA Hazardous Waste Review	Cherry Point, NC
6 MAY 13	10 MAY 13	DoD Initial Pest Mgmt PAR/QAE and IPM Coordinator	Virginia Beach, VA
7 MAY 13	9 MAY 13	Advanced Historic Preservation Law & Section 106 Compliance	Ft. Belvoir, VA
21 MAY 13	24 MAY 13	Natural Resource Compliance	MCB Quantico, VA
4 JUN 13	7 JUN 13	Adv. Environmental Law (Compliance Offering)	Norfolk, VA
13 JUN 13	13 JUN 13	RCRA Hazardous Waste Review	Norfolk, VA
18 JUN 13	20 JUN 13	Intro to Hazardous Waste Generation & Handling	Camp Lejeune, NC
18 JUN 13	20 JUN 13	Environmental Negotiation Workshop	Norfolk, VA
19 JUN 13	19 JUN 13	HAZWOPER for Uncontrolled Haz Waste Site Workers - Refresher	Camp Lejeune, NC

**CECOS Classroom Courses**

<b>Beginning Date</b>	<b>End Date</b>	<b>Course</b>	<b>Location</b>
20 JUN 13	20 JUN 13	HAZWOPER for Uncontrolled Haz Waste Site Workers - Refresher	Camp Lejeune, NC
21 JUN 13	21 JUN 13	RCRA Hazardous Waste Review	Camp Lejeune, NC
16 JUL 13	19 JUL 13	Adv. Environmental Law (Strategic Env. Planning)	Norfolk, VA
22 JUL 13	26 JUL 13	Advanced Environmental Management	MIDLANT Region
19 AUG 13	23 AUG 13	US Marine Corps Facilities Management	Washington, DC
26 AUG 13	30 AUG 13	Adv Public Works Dept & Fac Eng Command Operations	Washington, DC
27 AUG 13	29 AUG 13	MCON Programming and Budgeting	Washington, DC
9 SEP 13	9 SEP 13	National Env Policy Act (NEPA) Navy Executive Overview	Norfolk, VA
10 SEP 13	12 SEP 13	National Env Policy Act (NEPA) Application	Norfolk, VA
10 SEP 13	12 SEP 13	Basic Environmental Law	Norfolk, VA
17 SEP 13	19 SEP 13	Environmental Negotiation Workshop (Compliance Offering)	Norfolk, VA

**CECOS Online Courses/Web Conferences**

<b>Beginning Date</b>	<b>End Date</b>	<b>Course</b>	<b>Location</b>
10 DEC 12	13 DEC 12	Advancing an Effective EMS	Web Conference
5 NOV 12	8 NOV 12	EPCRA and Toxic Release Inventory (TRI) Reporting	Web Conference
Various		HAZWOPER for Uncontrolled Hazardous Waste Site Workers - Refresher	On-Line
Various		Construction Technology for Non-Engineers	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](http://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

## STAFF

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## LINK HELP

SECURE SITES – Links beginning with https:// may give a security error. To get around this problem copy the link and paste it in your browser.

DENIX - Many of our links are to DENIX. To subscribe to DENIX, go to: <https://www.denix.osd.mil/denix/register.html> and register.

If you find a dead link, please contact us at [dodcreg3@navy.mil](mailto:dodcreg3@navy.mil) and we will find the link for you.

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If your email address or phone number changes, please send an email with the updated information.

If you or your organization would like to submit an article, story, or picture for future newsletters, send it to: [dodcreg3@navy.mil](mailto:dodcreg3@navy.mil). Thanks.