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## **In the Works**

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In The Works is a monthly newsletter providing Environment, Health and Safety (EH&S) news and regulatory updates. The newsletter is provided by Loureiro Engineering Associates, Inc. of Plainville, Connecticut.

## **CONNECTICUT**

### **Connecticut's Department of Energy and Environmental Protection Continues to Make Progress on A Series of Historic Requests for Proposals That Will Bring Cleaner, More Affordable, and More Reliable Energy to Connecticut Families and Businesses**

Connecticut's Department of Energy and Environmental Protection (DEEP) continues to make progress on a series of historic Requests for Proposals (RFPs) to secure, new cost-effective clean energy resources that will help to ensure affordable and reliable electricity for Connecticut families and businesses – especially during winter months when demand for electricity is high.

DEEP has issued the final version of an RFP for natural gas resources, seeking bids for liquefied natural gas, natural gas pipeline capacity and natural gas storage. The intent of the RFP – issued on June 2 – is to procure natural gas resources that will be utilized by natural gas generators in the New England region to improve the affordability and reliability of regional electric supply. Bids will be due on this natural gas RFP on Wednesday, June 29, 2016. Once bids have been received, DEEP will evaluate the submissions for possible selection towards the end of the summer. This is the third and final RFP DEEP is issuing as required by Public Act 15-107.

The two previously issued RFPs sought project bids for:

- Large-scale clean energy, (20 Megawatt and above) and associated transmission
- Small-scale clean energy, energy efficiency, and energy storage (2-20MW).

Information for the large-scale clean energy procurement is available on the New England Clean Energy RFP website. Information for the other two RFPs is available on DEEP's website.

A lack of natural gas pipeline capacity to serve electric power plants in the region is threatening the reliability and affordability of power in New England. Due to a limitation in the design of the regional energy market, natural gas power plants do not invest in the pipeline capacity needed to secure the fuel they need to run on the coldest winter days. As a result, the region is relying on dirtier oil and coal plants to maintain reliable electric power in winter peak periods.

DEEP has recognized that a variety of resources offer the potential to address this problem, such as gas pipelines, gas storage and liquefied natural gas; as well as clean energy generation such as renewables and hydropower, energy storage, and energy efficiency. Projects to accomplish this may be selected through the three competitive RFPs, which are open to a very broad range of resources in order to secure the greatest benefits for electric ratepayers at the lowest costs.

The RFPs are authorized under Public Act 15-0107, which, together with an earlier statute, Public Act 13-303, authorizes the Department to seek proposals from a broad range of resources that can help to address energy infrastructure constraints in New England. Under these two Public Acts, DEEP has the authority to select clean energy projects to meet up to 15% of the state's electric demand, and natural gas resources up to 375,000 mmcf/day.

In May, DEEP received 107 proposals from bidders in response to an RFP for new, small-scale clean energy projects. The 107 project proposals included a wide range of technologies: 66 solar projects, 12 fuel cells, 15 energy storage systems, 1 hydropower, 7 wind, 1 combined heat and power, 3 anaerobic generation and 2 energy efficiency projects. Most of the projects would be located in Connecticut, with a handful in the rest of New England, New York and Canada.

### **Evaluation of Bids Continuing for Three State RFPs**

DEEP in coordination with utility and state partners in Rhode Island and Massachusetts, is currently evaluating more than 50 responses to an RFP for large-scale renewables and hydropower, including six new transmission lines to deliver incremental clean energy to New England. Projects are being evaluated on a broad range of threshold eligibility, pricing, and qualitative factors.

### **Project Selection**

The Commissioner of DEEP will make the final selection of any projects under all three RFPs, after consulting with the Connecticut Attorney General, Consumer Counsel, and Procurement Manager. The costs and benefits of projects will be compared among the three RFPs. No project may be selected unless its benefits exceed the costs to Connecticut ratepayers. Contracts awarded under this RFP will be subject to review and approval by the Connecticut Public Utilities Regulatory Authority.

“Our use of open and competitive RFPs is a creative and innovative approach to securing the energy resources we need to meet the needs of our families and businesses,” DEEP Commissioner Klee said. “Through these RFPs we can transition to cleaner forms of power generation while addressing gaps in the system that drive up prices and threaten the supply of the electricity we need.”

<http://www.ct.gov/deep/cwp/view.asp?Q=581414&A=4808>

# MASSACHUSETTS

## **Massachusetts Department of Environmental Protection Warns Warmer Weather Can Bring Elevated Ozone and Fine Particle Pollution**

As warmer weather approaches, the Massachusetts Department of Environmental Protection (MassDEP) reminds residents that current air quality readings and forecasts for ground-level ozone and fine particle pollution are available on the “MassAIR” web site. Ozone can cause unhealthy air quality during the warmer weather, and fine particles can cause unhealthy air at any time of year.

“MassAIR provides near real-time air quality readings from our 20 air quality monitoring stations located across the Commonwealth,” said MassDEP Commissioner Martin Suuberg. “This resource can help all residents, particularly those with respiratory issues, to plan their outdoor activities to avoid times when pollutant levels are at their highest.” Those without an internet connection can call the MassAIR hotline at 1-800-882-1497 to get that day’s air quality forecast.

As the season of strong sunlight and high temperatures begins, these factors boost the production of ground-level ozone. Ground-level ozone is created when hydrocarbons – found in gasoline, solvents, paints and many household products – chemically react on hot, sunny days with nitrogen oxides, a group of pollutants produced through fuel combustion.

Ozone affects everyone, but some people are more sensitive than others. Numerous scientific studies have linked ozone exposure to coughing and throat irritation, increased sensitivity to allergens, uncomfortable sensations in the chest, and lung inflammation and function. When ground-level ozone reaches unhealthy levels, children face a higher risk because they spend more time playing outdoors in warmer weather and are more likely to have asthma. People with respiratory diseases also are vulnerable, even at lower ozone levels.

In October 2015, the U.S. Environmental Protection Agency (EPA) lowered the national ozone standard from 0.075 parts per million (ppm) to 0.070 ppm. This means there likely will be more air quality alerts this summer because the standard will be lower for when ozone levels become labeled “unhealthy.”

Fine particles are tiny bits of soot, dust and liquid droplets produced from vehicles, industry and wood-burning. These particles can reach unhealthy concentrations at any time of year. Summer is when fine particle concentrations tend to be highest, often on the same days when ozone concentrations are high.

Numerous scientific studies have linked fine particles with asthma and chronic bronchitis, coughing, chest tightness, shortness of breath, heart attacks, and premature death. Those most susceptible to health problems when fine particle levels are high are children, because their lungs are still developing, the elderly, particularly those with or prone to cardiovascular disease, and people with asthma or other respiratory ailments.

The air quality in Massachusetts – based on decades of monitoring – has greatly improved, thanks to statewide and regional efforts to cut emissions from power plants, incinerators, businesses, cars and other vehicles, and paints and consumer products. Pollutant levels currently meet federal standards, including the new ozone standard; however, unhealthy levels still occur on too many days and ongoing pollution reduction efforts are needed.

MassAIR contains a number of user-friendly features including:

- Easily customized graphs that display hourly data for the most recent two days and daily values for the last week, month and year by monitoring site and pollutant – making it possible to identify air quality trends in a particular location or region; and,
- Information on a variety of air pollutants and standards, health and environmental effects, and long-term air quality trends.

## **NEW HAMPSHIRE**

### **New Hampshire Department of Environmental Services Releases New Hampshire Inventory of Tidal Shoreline Protection Structures**

A new dataset showing the location, type and size of New Hampshire’s tidal shoreline protection structures in 17 coastal communities is now available for download and viewing on the N.H. Coastal Viewer, an online mapping tool. New Hampshire Department of Environmental Services (NHDES) staff identified rip rap, walls, berms, and jetties along 326 miles of tidal shoreline using aerial photography and field verification. A unique thing about the work is that it was done at the close scale of 1:1500, getting into the nooks and crannies of N.H.’s tidally influenced shoreline.

Municipal staff and volunteers, state and regional government staff, and the public can use the shoreline structure inventory dataset to inform vulnerability assessments.

Walls and other hard structures are only a few of the many approaches that can be used to protect against coastal hazards, and in some cases, these structures may cause more erosion to surrounding land and result in costly repair bills. The shoreline protection technique of using natural materials that mimic the native environment is called a “living shoreline” and has the added bonuses of providing habitat, cleaning water, preventing erosion and rebounding after storm events.

“By understanding where N.H.’s hardened shorelines are located and how they interact with our intact natural shorelines, resource managers can begin to identify opportunities for more resilient and holistic solutions that help protect economic, cultural, and natural resources,” said Kirsten Howard, Coastal Program staff.

Results showed that a total of 12 percent of N.H.’s tidal shoreline is covered by hard structures, but when zooming in to the ocean facing coastline, seventy percent is hardened.

The inventory has been a springboard for more work, including developing a way to evaluate the condition of the structures.

The shoreline structure inventory dataset is housed on NH GRANIT and is available to view on the Coastal Viewer, an online mapping tool that gives anyone with an Internet connection the ability to access more than 150 spatial data sets and to make and share their own customized maps. The information can be viewed town by town or zoomed in to see a specific area within a town as well as displayed with other features, such as roads, critical facilities and natural habitats for users to get a baseline picture of what's going on.

Access the shoreline structure inventory dataset on the N.H. coastal viewer at:  
<http://www.granit.unh.edu/nhcoastalviewer> - under the oceans and coasts map layer.

Find the N.H. inventory of tidal shoreline protection structures report at:  
<http://des.nh.gov/organization/commissioner/pip/publications/documents/r-wd-16-09.pdf>