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In the Works

Volume 17, Issue 7, July 2016

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. In this Issue you will find links to the following articles:

NATIONAL

The U.S. Environmental Protection Agency (EPA) recently released a report that shows compelling and clear evidence of long-term changes to our climate, and highlights impacts on human health and the environment in the United States and around the world. The report, Climate Change Indicators in the United States, features observed trend data on 37 climate indicators, including U.S and global temperatures, ocean acidity, sea level, river flooding, droughts and wildfires.

“With each new year of data, the signs of climate change are stronger and more compelling,” said Janet McCabe, acting assistant administrator for EPA’s Office of Air and Radiation. “This report reiterates that climate change is a present threat and underscores the need to reduce greenhouse gas pollution and prepare for the changes underway, to protect Americans’ health and safeguard our children’s future.”

The Report Shows:

- Carbon Dioxide Levels – Average annual carbon dioxide in the atmosphere has exceeded 400 parts per million for the first time in at least 800,000 years;
- Temperatures – Average surface air temperatures have risen across the U.S. since 1901. Eight of the top 10 warmest years on record have occurred since 1998, and 2012 and 2015 were the two warmest years on record;
- Sea level – Sea level (relative to the land) rose along much of the U.S. coastline between 1960 and 2015, particularly the Mid-Atlantic coast and parts of the Gulf coast;
- Coastal Flooding – Nearly every city with a long-term measurement site has experienced an increase in tidal flooding since the 1950s;
- Arctic Sea Ice – March sea ice reached the lowest extent on record in 2015-2016;
- Marine Species Distribution – As ocean waters have warmed, marine fish and invertebrate species along U.S. coasts, such as lobster, black sea bass, and red hake are shifting northward and moving deeper in the ocean; and

- Ragweed Pollen Season – Warmer temperatures and later fall frosts are increasing the length of ragweed pollen season, which has increased at 10 out of 11 locations studied in the central United States and Canada since 1995.

This fourth edition of the report, which was last published in 2014, provides additional years of data for previously-published indicators and adds seven new indicators: heat-related illnesses; West Nile Virus; river flooding; coastal flooding; Antarctic sea ice; stream temperature; and marine species distribution. The report also features a special section that highlights the many connections between climate change and human health.

EPA partners with more than 40 data contributors from various government agencies, academic institutions, and other organizations to develop the climate change indicators. Each indicator and the report in its entirety were peer-reviewed by independent experts.

Information about the Climate Change Indicators report: www.epa.gov/climate-indicators.

Information about climate change: www.epa.gov/climatechange

CONNECTICUT

New Connecticut DEEP Comprehensive Materials Management Strategy Highlights Urgency of Reducing Waste

“Taking out the garbage” could cost Connecticut’s residents, cities and towns, and businesses \$25 million more per year within the next decade unless steps are taken to reduce the volume of waste and increase recycling.

Fortunately, a new Comprehensive Materials Management Strategy (CMMS) just released by Connecticut’s Department of Energy and Environmental Protection (DEEP) provides a blueprint for avoiding these increased costs through initiatives that will divert 60% of trash from disposal by 2024

“Stepped up efforts to reduce waste, divert waste, and recycle are critical to controlling the future costs for waste disposal,” said DEEP Commissioner Robert Klee. “The CMMS outlines realistic steps we will take together to transition our materials management system from a cost driver to an economic driver for our cities and towns, and businesses.”

Klee said that if the average Connecticut resident continues to generate 3.5 pounds of trash every day, the total bill for trash disposal will spike by about \$25 million per year by 2024, adding new costs for taxpayers and businesses.

These increased costs will result from the added expense of transporting trash to out-of-state landfills hundreds of miles away, as the volume of waste exceeds the diminishing capacity of our aging and out-of-date trash-to-energy infrastructure.

Just a 10% reduction in waste, along with better recycling statewide, would stabilize rising costs while helping meet clean air and GHG reduction goals, according to DEEP's CMMS.

Key actions called for in the CMMS include:

- Strengthening local waste reduction and recycling programs.
- Fast-tracking the deployment of new technologies that more effectively sort recyclables and recover energy and materials of value from waste.
- Greater responsibility and participation by corporations that produce materials in sharing in the cost and development of recycling programs.
- Through the 21st century approach to materials management detailed in our new CMMS, we can help protect the environment and natural resources by increasing reuse and recycling and diverting more materials of value from the waste stream," Klee said. "At the same time, we can benefit our economy and taxpayers by creating jobs for our citizens in recycling industries and holding down the cost of waste disposal for our cities and towns as well as businesses."

The CMMS, which is an update to the state's 2006 Solid Waste Management Plan, can be found at www.ct.gov/deep/cmms.

By The Numbers

- Connecticut disposes over 2 million tons of trash and nearly 1 million tons of Construction and Demolition Waste each year.
- Connecticut recycles 1.25 million tons of "Municipal Solid Waste," or about 35% of the total.
- 40% of disposed trash consists of organic materials that could be composted or converted using anaerobic digestion technology.
- Recycling saves taxpayers and businesses an estimated \$75 million in avoided disposal fees each year.
- Each CT resident produces an average of 1,300 pounds of waste per year.
- 87% of CT disposed MSW goes to Connecticut's five trash-to-energy plants which generate electricity as a by-product.

NEW HAMPSHIRE

NHDES Releases New Hampshire Lake Information Mapper

The New Hampshire Department of Environmental Services (NHDES) has released a new interactive surface water quality map that provides links to historical and current lake trophic survey reports, current volunteer lake assessment program reports, and exotic aquatic species distribution information. More than 1,500 reports on greater than 750 lakes from 1975 to 2016 are available via this map.

This interactive map allows the user to zoom in and click on a lake of interest and access a pop up menu that displays the lake name, waterbody ID, trophic status, reports by year, and other information.

To access the map, please visit:

<http://nhdes.maps.arcgis.com/apps/webappviewer/index.html?id=1f45dc20877b4b959239b8a4a60ef540>