

### Helping Homeowners Prevent Heating Oil Leaks and Spills

Nearly half of Connecticut residents heat their homes with oil and have a tank filled with gallons of fuel sitting in the basement. You may be one of them.

As fall sets in, with winter not far behind, now is the time to make sure your aboveground oil heating system is properly maintained and in good working order. As in any home maintenance situation, early detection of a potential problem is key. A small upgrade to the tank, oil line, piping or fittings could save you thousands of dollars in the future.



If you have doubts, take it from the Connecticut couple featured in DEEP's new video, *Prevent Home Heating Oil Leaks and Spills*. They share their experience dealing with an oil leak in their basement.

The couple invested in an energy upgrade to their home by installing additional insulation in their attic and they were eager to see how it would affect their oil usage. They were dismayed to find no improvement. With the help of their local oil service technician they found that the line connecting their oil tank into their furnace ran under the concrete basement floor and over time the line had corroded and leaked into the ground below. Unfortunately, the oil contaminated the soil under the couple's basement and garage. At the time of the interview, the basement and garage were in the process of being remediated and the couple had been working to resolve the situation with contractors and their insurance agency for more than a year. Looking back, the couple wishes they had paid the \$300 to replace the oil line with one that is above ground or made sure it was in a protective sleeve such as plastic tubing.

DEEP's Emergency Response and Spill Prevention team receives many residential heating oil spill reports each year. Some spills are detected early and can be minor; in other cases, the leaks are underground and can go undetected for years contaminating soil and groundwater and having the potential to affect drinking wells. In many instances, these spills could have been avoided if homeowners had known that they should be inspecting their home's oil system on a yearly basis.

To help homeowners evaluate their oil system DEEP has compiled an **Oil Tank Safety Checklist**. Some of the items a homeowner would look for are obvious, such as leaks at filters and valves and checking the oil tank's seams for rust or damage but other items require the help of a licensed professional oil service technician to ensure the system is working properly.

\*\*Continued on page 2\*\*

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Continued from page 1

It's important to note that not all oil leaks are as severe as the one shown in the video. Many people have used oil for years to heat their homes without ever having a problem. Some had a leak or spill that could have been prevented by being proactive and educating themselves on home heating oil tank safety. To learn more about this topic, please visit DEEP's **Home Heating Oil Tanks** webpage.

## Sustainable CT to Promote More Livable Communities

In the Town of Durham, public officials and residents are working together to make roadways safer for all users, including pedestrians and cyclists. The City of Hartford developed a comprehensive new **zoning code**, prioritizing development with environmental sustainability. The Town of **Windham** is collaborating with community partners to create public art that also generates clean energy. And, that's just a sampling of what Connecticut cities and towns are doing.

There is strong momentum to accelerate sustainability practices in Connecticut. As a result local and regional representatives from Connecticut's 169 towns and cities along with key agencies and businesses helped develop **Sustainable CT** which will launch in November.

Created by towns and for towns, Sustainable CT will be a voluntary certification program to recognize Connecticut municipalities for making their communities more vibrant, resilient and livable. It includes approximately 55 best practices along with

Sustainable CT Local Actions. Statewide Impact.

opportunities for grant funding. Towns may choose which actions they will implement to achieve differing certification levels. The program is designed to support all Connecticut municipalities, regardless of size, geography or resources.

Among a number of areas, the Sustainable CT roadmap is designed to help communities work toward achieving more clean and diverse transportation systems and choices. For example, a municipality may choose to widen sidewalks, incorporate street furniture and improve the tree belts in one or more neighborhoods. These improvements can increase walking, biking and public transit use. There are obvious environmental benefits that come with fewer cars on the road — reducing greenhouse gas emissions and improving air and water quality. But program actions were also designed to realize other co-benefits.

Safer roadways encourage residents to walk and bike more often, helping promote health. Streetscape improvements can reduce serious injuries and fatalities by lowering the number of speeding drivers. From an economic perspective, more feet on the street can increase retail sales, decrease commercial vacancies, increase local property tax revenue, and ultimately revitalize a neighborhood. And from a community-building perspective, walkable neighborhoods generate strong personal connectivity, leading to higher rates of community engagement, volunteerism, and consequently, economic growth.

Communities may choose to work together on making infrastructure improvements or take steps toward resilient planning at the local and regional level. The best practices encompass many areas of sustainability which benefit all Connecticut residents including stewardship of land and natural resources as well as inclusive public services.

Visit **www.sustainablect.org** for more information, urge your municipal CEO to register for the program and encourage local organizations in your town to serve on your municipality's Sustainability Team, the group that will help implement actions to achieve certification.

Sustainable CT is supported by the Emily Hall Tremaine Foundation, Hampshire Foundation and Common Sense Fund. The Institute for Sustainable Energy at Eastern CT State University is the program lead.

### Award winning CT Company Shares Steps towards Sustainability

**Pratt and Whitney**, a Connecticut company that is a world leader in their field, manufactures and services large commercial and military aircraft engines. The Middletown facility won a 2017 **Green Circle Sustainability Award** — an award given only to those who take a holistic approach to permanently reducing their environmental impacts. The company was honored for a number of sustainability components at their facility.

More than a year before receiving the award, the facility took steps towards facility-wide improvements. They looked at ways to upgrade the building, identified changes in the manufacturing process, and participated in projects to benefit the surrounding community.

The Middletown location dates back to the early 1950s and the engine test cells were built in 1967. Over the years, changes were made to the infrastructure to meet growing business demands. Recently the focus was on improving energy efficiency, one of the easiest and most cost effective ways to reduce environmental impacts and save money. Electric motors on HVAC and process equipment were retrofitted with variable frequency drives and existing lighting was replaced with more efficient LEDs. LEDs last an extremely long time, contain no mercury, and produce less unwanted heat which is beneficial during the cooling season.

From 2015-16, these and other improvements reduced operating costs and cut greenhouse gas emissions by 504 metric tons, reduced hazardous waste by over 45,000 pounds and cut water consumption by 2.4 million gallons.

In an interview with Jeffrey Thompson, Associate Director of Facilities, he gave advice for companies that are just beginning their sustainability journey. He suggested starting with a robust preventive maintenance plan. "Total preventive maintenance is one of the most effective waste reduction programs at Pratt & Whitney. At the Middletown site it resulted in major savings from industrial gas usage when system leaks and other issues were identified, reducing nitrogen by 52% and argon consumption by 46%.

"In 1996, our parent company, United Technologies, set a goal of 10x improvement for environment and safety factors. It was daunting and easy to be overwhelmed by this task. We overcame this obstacle using value stream mapping (a lean-manufacturing technique to analyze the flow of materials to produce a product from beginning to end) and took small steps in the right direction. We prioritized projects in order of impact and difficulty. The team focused on quick wins first, built support and showed an immediate impact toward the end goal. Over these past decades, the site's total waste production is 91% recycled, and since 2014 has over a 30% increase in recycling." Part of that recycling success is the wood pallet program — 90% of the waste wood generated on site is recycled, after being reused whenever possible.

The company went beyond focusing on their facility and looked for ways to benefit the neighboring watershed by being a sponsor of the **Source to Sea Connecticut River cleanup effort**. Employees lead community events to collect and dispose of garbage they remove from the river.



Thompson concluded, "It's great to work at a company that gets it — investing in sustainability is the right thing to do for our operations, and it sends a message to our employees and customers that we care about the environment."

As a lead sponsor of the Source to Sea Connecticut River cleanup project, employees removed two pick-up trucks full of trash including tires, wood, metal and recyclables.

#### Ask Eartha

I'm aware that certain toxic chemicals have been banned in children's products, but are our pets being exposed to harmful chemicals in any of their products? Carlos E., Bristol

In a lot of ways pets are like children — they're small in size, put things in their mouths, roll around on the lawn and play on the floor. These furry family additions may unintentionally be exposed to dangerous chemicals in and around the home. A study by the Environmental Working Group (EWG) showed dogs and cats were exposed to carcinogens, neurotoxins and/or endocrine disrupters. Unlike certain children's products that have begun to be regulated, animal products are not as closely controlled, but you can make eco-friendly choices that can protect your pet and reduce their environmental impact.

#### Let's start with plastics.

Bisphenol A (BPA) is found in the lining of many food cans and in pet water bowls made of polycarbonate plastic (PC) and may be leaching from these products. To avoid adding toxic chemicals to your pet's diet and the environment, look for cans that say BPA free, contact the manufacturer to double-check, and try cutting down on canned foods. If you use dry food or treats, transfer them into a glass or other container since chemicals may be in linings of these packages. Choose bowls made from stainless steel, ceramic or glass and avoid



plastic chew toys with polyvinyl chloride (#3 PVC), polycarbonate (#7 OTHER), and polystyrene (#6 PS). The **Pet Sustainability Coalition** is made up of pet supply companies and promotes environmental sustainability and safety in the pet industry. Try to buy from **members** of this Coalition.

Pets can also be exposed to flame retardant chemicals, known as PBDEs, and like children, are more vulnerable to these chemicals since they spend more time exposed to them. These chemicals are released from furniture to the dust in the room. When pets groom themselves they lick off the dust from their fur and paws. Dust can also get into pet food dishes or food scraps eaten off of the floor. Avoid buying items such as foam pet beds and stain-proofed fabrics with these added chemicals. Vacuuming frequently with a HEPA



filter, wet mopping, dusting with a damp cloth and washing your pet frequently can help.

Many homeowners use chemicals in their yards and homes, and on their pets. To protect your pet, use Integrated Pest Management (IPM) to reduce the use of pesticides, remove pets from the area before applying pesticides and keep them away from treated areas until the pesticide is completely dry or longer depending on the product instructions. Keep all pet toys, chew bones, food bowls and bedding away from the area as well. Eartha previously addressed the use of "spot-on" flea and tick products.

By now, we all know to store all harmful products so your pet cannot get into them. This includes paint, deck sealer, household cleaners and, with the cooler months coming up, antifreeze and de-icers. Use gravel, sand or pet-safe de-icers since sodium or calcium chloride can irritate paws and may be dangerous if ingested.



Eartha answers selected environmental questions. Email your question to **connie.mendolia@ct.gov** and watch future issues for your answer.

Not sure what goes in your recycling bin? Find out "What's In" and "What's Out" at www. RecycleCT.com



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*P2 View* is published by the Connecticut Department of Energy & Environmental Protection, Office of Pollution Prevention. Editor: Connie Mendolia. Contributors: Mary Sherwin, Kim Trella, Jessie Pelosi, Jennifer Reilly, and Alyssa Norwood.

Publication of this newsletter is funded by a grant from the U.S. EPA. The listing of websites in this publication is provided as a public service and does not constitute an endorsement by DEEP.

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