

## COMMISSIONER'S COLUMN

### Greening the Junkyards

Earlier this year on Earth Day, the U.S. EPA awarded Environmental Merit Awards for Lifetime Achievement to the team of Jeff Kantor and Bob Phelps, two NH Motor Vehicle Recyclers. This award recognized over 20 years of environmental stewardship and highlighted the successes of the partnership between the motor vehicle recycling industry and NHDES. To emphasize the innovative work done by these two men, their industry partners and the NHDES staff involved, it is worth exploring how the NH Green Yards Program went from a small compliance assurance project for junkyards to a nationally-recognized environmental program for motor vehicle recycling facilities (MVRFs).

In the mid-1990s, NHDES determined that there needed to be a strategy for improving work practices at junkyards that manage end-of-life vehicles. These vehicles may contain a number of environmental pollutants, such as gasoline, motor oil, lubricants and antifreeze, which is why activities at these types of facilities are regulated by various local, state and federal authorities. Because of this, implementation of compliance assurance measures was confusing to regulators and operators alike, leaving a daunting task for the newly-appointed NH Green Yards Program Manager, Pamela Sprague (now Hoyt-Denison). She proposed that before NHDES took any action, staff first needed to learn about the industry practices and educate operators on

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### NHDES Staffer Assists in Environmental Efforts in Nepal

On April 25, 2015, a devastating 7.8 magnitude earth quake struck Nepal, approximately 80km from Katmandu. Over 8,000 people lost their lives and hundreds of thousands were left homeless. NHDES' Rick Treiss, volunteering with Team Rubicon, spent two weeks in late May in Nepal as a team Water Sanitation and Hygiene specialist. The primary mission was based in the village of Sermathang. The village is approximately 100 miles northwest of Kathmandu at an elevation of 8,700 ft. It is primarily a trekking village and is a gateway to Langtang National Park.

The team provided emergency medical care, demolition and debris removal, distributed materials for the construction of temporary shelters and provided food supplies. Rick worked on the damage assessment of village's primary water supply, consulted on the development of an alternative water source and processed water for team and community drinking through a treatment system. Field sanitation was an everyday task and generally involved the management of human fecal waste. NHDES is proud of Rick's efforts to assist the people of Nepal. ■



*Rick, operating a portable water filtration system to treat water for the villagers. Image courtesy Team Rubicon.*



Bob Phelps and Pam Hoyt-Denison

the potential hazards. Only then would NHDES be ready to develop a regulatory approach to protect the environment.

In 2002, NHDES surveyed approximately 200 facilities across the state about fluids management, stormwater permits and solid waste management. Not surprisingly, the results showed a lack of understanding of environmental regulations, but not necessarily intentional mismanagement. Not long after the surveys, Jeff Kantor and Bob Phelps came knocking on NHDES' door with a handshake, an open door policy and the backing of the entire Auto & Truck Recycling Association of NH (ATRA). The members of ATRA understood that the future of their businesses and industry were in their hands and they were prepared to step up and work for the greater good.

Having acknowledged the importance of the industry and the common goal of instilling sustainable change at the facilities to preserve the integrity of NH's air, land and water, the work began. With the assistance of ATRA and NHDES' Pollution Prevention Program, the NH Green Yards Program was implemented in two phases. Phase I – *Education and Compliance Assistance* – included workshops on the health and environmental hazards that come with the industry, open houses at facilities and a conference at which then Governor Lynch assisted Bob with the removal of mercury

switches, which were used for lighting controls, among other uses, in vehicles. Phase II – *Environmental Self-Audit and Compliance Certification* – consisted of a blitz of Best Management Practices compliance inspections conducted by a multitude of NHDES inspectors and the deployment of a Self-Audit Checklist created specifically for facility owners to share with their employees on how to comply with the environmental regulations. It was during

this time that an increasing number of NH's wells were found to be contaminated with MtBE, an octane-enhancing additive to gasoline. The Program was able to work with the remediation teams and the facility operators to quickly investigate if the contamination stemmed from activities at the MVRFs. Those facilities that were contaminated now hold groundwater monitoring permits and are being remediated. Without the collaborative efforts of the industry, this effort would have been far less efficient.

With Phase I complete and Phase II well on its way, a legislative study commission of industry stakeholders was convened to review state statutes and rules on how the industry is regulated. One of Jeff's favorite sayings is, "If you don't like the rule, then change it!" He and Bob knew the rule writing process well and knew how to make their views heard at the State House and on Capitol Hill. Their work promoted legislation reflecting the modernization of the industry and its importance to our state and nation.

In the past few years, the NH Green Yards Program completed a portion of an online training program designed to assist municipal officials in implementing local licensing of these facilities. Jeff, Bob and other members of ATRA were instrumental in bringing the training program to life. On camera, they related how the old practices of dumping

fluids on the ground, burning cars and burying waste are no longer recognized as the way to operate. They stressed the importance of well-run facilities to municipalities. In 2014, we lost Bob to cancer; and, recently Jeff retired from the business due to his own battle with cancer. The work continues, however. Directly due to Bob and Jeff's influence, the next generation of auto recyclers has accepted the challenge of maintaining environmental sustainability. ATRA members and NHDES staff continue to collaborate to eliminate the potential for contamination from gasoline and its components.

The landscape of NH's motor vehicle recycling industry is vastly different than it was just 15 years ago and the Environmental Merit Award was a fitting recognition of the environmental protection achieved by Jeff, Bob and the NHDES Green Yards Program staff. There is still a lot of work to do but the knowledge gained in deploying environmentally-sustainable business practices through the partnership between the industry and NHDES have the Granite State at the forefront of "greening the junkyards."

## ENVIRONMENTAL NEWS

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## Fire Grenades!

Decades before traditional red fire extinguishers that adorn office walls and storage areas under kitchen sinks became commonplace, devices called fire grenades were used to combat fires. Fire grenades were small glass bulbs that could fit in the palm of a hand and contained carbon tetrachloride, an effective fire extinguishing chemical. When thrown into fires, the device would break and carbon tetrachloride would discharge from the broken chemical-containing bulb, hopefully extinguishing the fire and leading to the nickname of fire grenade. However, in the 1940s, fire grenades were banned after the discovery that carbon tetrachloride had the potential to cause serious health effects.

Today, fire grenades have become a highly sought after collector's item that are regularly bought, sold and shipped around the world. What is important to remember, however, is that fire grenades were manufactured to break and spill the highly toxic chemical contained inside the devices' bulb, meaning that extra care must be taken to avoid breaking the device during transit. On May 21, the Hudson USPS Post Office experienced the perils of shipping fire grenades when carbon tetrachloride was spilled on the mail room floor from one of two fire grenades that were being shipped through the New Hampshire post office. After the carbon tetrachloride was released from one of the fire grenades, the USPS contacted the Hudson Fire Department and then, later on, NHDES to inquire about reporting requirements. The Hudson Fire Department quickly responded, placing absorbent material on the spill area and evacuat-

ing the entire building.

When the NHDES staff arrived following the containment of much of the spill by the Hudson Fire Department, he realized that the spill had been spread across the mail room floor by a mop and that the debris from the spill was collected outside of the building. Consequently, the Post Office staff were allowed to re-occupy the office section of the building but the mail room remained evacuated until the spill had been totally cleaned up using the NHDES response contractor's spill equipment. Once the equipment arrived, the remainder of the spill was quickly cleaned up.

The dangerous carbon tetrachloride spill at the Hudson USPS Post Office in May should be a message to all buyers and individuals who potentially handle fire grenades: carbon tetrachloride is a significantly toxic

chemical and should be handled carefully to insure the safety of all involved. The greatest of care needs to be used in the transport of these devices, particularly in their shipment when they are being bought and sold. NHDES suggests that anyone shipping these devices should first inform the shipping company of the contents and receive guidance on packaging and any shipping requirements. At a minimum, they should be packaged in a protective container with some type of shock absorbing material inside. However, if a spill does occur, contact the local Fire Department immediately. ■



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## NHDES Commissioner Burack Receives Truman Scholar Award for Public Service

On May 27, Tom Burack, Commissioner of NHDES was presented the Judge Joseph Edward Stevens, Jr. legal public service award from the Harry S. Truman Scholarship Foundation. Burack was a Truman Scholar in 1980. The award was named in Judge Stevens' memory in honor of his dedication to the Foundation as a Board Member, including President, and as an attorney. Stevens' wife attended the ceremony, which was held in the chambers of Associate Justice of the U.S. Supreme Court Clarence Thomas, as Justice Thomas and Judge Stevens were longtime friends and colleagues.

Following the award presentation in chambers, Justice Thomas spoke with the nearly 50 new Truman Scholars. Burack then addressed the scholars, providing insight into his career as an attorney and environmental leader. ■



Associate Justice of the Supreme Court of the United States Clarence Thomas presents the Stevens Award to Commissioner Burack.

## Tales from the Field: Successful Oil Spill Containment

On May 26, the National Oceanic and Atmospheric Administration (NOAA) vessel Ferdinand Hassler was tied off to the pier in Newcastle when it released waste oil onto the deck and into the Piscataqua River. The United States Coast Guard (USCG) was first on site and requested the use of some of the 1,800 feet of boom that NHDES maintains in a response trailer at the USCG facility for just this purpose. The Coast Guard, NHDES and the vessel's Commanding Officer established a Unified Command to ensure a coordinated effort during the cleanup.

Some oil was outside the area of the boom in a nearby cove and river channel, but most was held close to the vessel area by the wind and currents. Under the NHDES/Portsmouth Naval Shipyard (PNSY) Mutual Aid Agreement, PNSY deployed an oil skimming vessel to assist with oil collection before conditions in the river changed. By nightfall, the oil

had been contained to the area inside the boom and removed from the water using a vacuum truck and absorbent materials, and PNSY had collected the recoverable oil in the river. The USCG checked the shoreline on foot and NHDES inspected the river and shoreline from the water

using one of the NHDES spill response boats. Both were satisfied there was no impact. Fresh absorbents were placed in the containment area over night and the ship security was set to monitor the boom.

On May 27 and 28, NOAA's contractor, Enpro Services, cleaned any remaining oil on the ship, some pier surfaces and two nearby privately-owned boats, and replaced oiled lines. With minimal sheen noted in the dock area and no additional oil found during multiple inspections, the containment boom was removed on May 28. Thanks to the timely actions by all involved, as well as the extensive amount of planning, agreements and equipment already in place, the spill was quickly contained and impacts to the local area were minimized. ■



## NHDES Announces Acting Assistant Commissioner

Keith DuBois joined NHDES in 2002 and has served in the position of project manager within the Hazardous Waste Remediation Bureau (2002 – 2007), manager of the Brownfields Program (2007 -2012), and as Assistant Director of the Waste Management Division since July 2012. Keith came to NHDES after seventeen years in the environmental consulting industry. His environmental consulting experience was focused on the design and implementation of hydrogeological site investigations and remedial action plans at commercial, industrial and EPA Superfund sites. He is a licensed professional geologist and earned a BS degree in earth and space sciences from S.U.N.Y at Stony Brook and a MS degree in geology from Boston College. ■



## MtBE Case Oral Arguments

In 2003, the State of New Hampshire sued twenty-two gasoline manufacturers and refiners seeking damages for their roles in the statewide contamination of groundwater with the gasoline additive MtBE. In 2013, the State settled the lawsuit with all but one of the defendants, obtaining \$136.5 million that was used to establish the State's MtBE Remediation Fund, to pay administrative costs and to pay legal costs.

The remaining defendant, ExxonMobil Inc., elected to go to trial and on April 9, 2013 the jury rendered a \$236 million verdict against it. ExxonMobil filed an appeal to the New Hampshire Supreme Court. Their brief and the State of New Hampshire's response can be viewed at the following link: <http://www.pawalaw.com/index.php> under breaking news.

On May 21, 2015, the State, along with nationally-recognized outside attorneys from both sides, argued the case. Each side was provided one hour to present their cases. Audio and video recordings of their arguments can be accessed via the New Hampshire Supreme Court website. The New Hampshire Supreme Court is likely to issue its ruling on the appeal this year. ■



## NHDES Receives Corporate Recognition Award from Toastmaster's International

For the past five years, over 100 NHDES staff have taken advantage of, and graduated from, the very successful NHDES Speechcraft Program. The Speechcraft Program is run by members of the Karner Blue Toastmaster Club; one of the 14,650 clubs in 126 countries that make up the global network of meeting locations for the world leader in communication development, Toastmasters International. Offered on a quarterly basis, the NHDES Speechcraft program is an eight-week program where participants are taught public speaking skills through their work presenting six speeches, introducing other speakers, serving as evaluators and practicing extemporaneous speaking to help develop skills answering impromptu questions. Given the difficulty of the program, participants are mentored by a seasoned public speaker who helps guide them through the program. Overall, the NHDES Speechcraft Program has made a true positive impact on employees who have graduated from the program and NHDES Commissioner Tom Burack even claims the program as "...one of the aspects of DES of which I'm most proud."



However, not only NHDES staff have given rave reviews for the Speechcraft Program. On May 14, NHDES was presented with the prestigious Corporate Recognition Award from Toastmaster's International. Mike Storkey, 1<sup>st</sup> Vice President of Toastmaster's International, made the trip from Queensland, Australia to present NHDES Commissioner Tom Burack with the award for NHDES' support of the Karner Blue Toastmaster Club and for support of the Toastmaster Speechcraft program. Receiving the Corporate Recognition Award is extremely commendable on the part of NHDES. It is awarded to organizations that have displayed significant support for the Toastmasters program. To show their support of NHDES in the success of the NHDES Speechcraft Program, a few members of the Toastmasters District 45 leadership team were also in attendance when the award was presented: District 45 Governor, Patricia MacNevin, DTM; District 45 Lt. Gov. Education & Training, Sandra Hachey, DTM; and District 45 Lt. Gov. Marketing, Tom Goodwin, DTM.

NHDES Commissioner Tom Burack was particularly proud of the achievement stating that "We are all ambassadors for the New Hampshire Department of Environmental Services and for our mission, and when those ambassadors have the Toastmasters and Speechcrafters skills, they are especially effective. They help to build public support for our work, they burnish our image and reputation, and they make us valued and valuable partners and collaborators." ■

## CPM Project recognized with Askew Award

On June 5, NHDES staff Tara Mae Albert, Kimmi Durgin and Laura Weit-Marcum, and Dept. of Resources and Economic Development staff Jenn Codispoti, were recognized for exemplary work in the completion of their Certified Public Manager (CPM) Project with the George C. Askew Award. The project, titled "Integrated Online Training for NH State Government," explored the current training methods utilized by state employees and how integrating innovative education and training methods would improve efficiencies within each agency. The project team presented its findings at the August 2014 Commissioners' Meeting, which opened the door for the interagency MOODLE Users Group to implement a Learning Management System that will be available for state employees to provide training for other staff members and the regulated community by the end of 2015.

The American Academy of Certified Public Managers created the Askew Award (a national award) to acknowledge the efforts of those who have demonstrat-

ed exemplary work in the completion of their CPM projects, which are a vital component of each CPM program participant's training. ■



## Making Our Children's Schools Safer One Art Room and Science Lab at a Time

On May 28 and 29, the Pollution Prevention program participated in two days of workshops at the River Valley Community College, organized and hosted by the Upper Valley Lake Sunapee Regional Planning Commission. The workshops were funded by a grant from the U.S. Department of Agriculture and featured renowned chemist, Dave Waddell, who provided an in-depth look at common hazardous chemicals and materials found within school science laboratories and art classrooms. Day one of this two-day series focused on science labs in schools and the serious dangers that chemicals used in experiments may pose to both the students and the staff. Dave provided best management practices for common chemicals found in school chemistry labs as well as real life examples of proper and improper storage of these chemicals. The workshop addressed ways in which chemistry teachers can conduct experiments in class using less dangerous



*Teachers participate in small-scale chemistry demonstration*

chemicals or chemical mixtures and ways to reduce the overall use of chemicals through “small scale” chemistry. Managing splashes and spills was a focus of this session and a mock spill was staged to demonstrate the appropriate techniques to contain and clean up a spill of hazardous chemicals.

Day two of this series focused on hazardous chemicals found in schools’ art studios and art classrooms. Dave Waddell discussed many of the hidden hazards found in a wide variety of paints, cleaning agents, ceramics supplies, photography chemistry and

many other art media materials. He emphasized the importance of adequate ventilation and the use of personal protective equipment like gloves and eyewear. He also encouraged teachers to examine their classroom eyewash stations to ensure they are accessible and functioning properly in the case of an emergency. This workshop provided art teachers with important tools and information to make their classrooms safer by substituting hazardous materials with safer alternatives. ■

## NHDES Presents Awards to City of Portsmouth and David Paris, Manchester Water Works

The Drinking Water Source Protection field has many unsung heroes whose everyday effort and commitment to protecting New Hampshire’s drinking water to help maintain our quality of life. To recognize the efforts of those exceptional individuals, NHDES recently presented two awards at its annual Drinking Water Source Protection Conference at the Grapone Center in Concord on May 6.

During the awards ceremony, NHDES Commissioner Tom Burack presented awards to two deserving recipients: David Paris of Manchester Water Works who received the “Source Water Protection” award, and the City of Portsmouth that received the “Source Water Sustainability” award. David Paris has worked for Manchester Water Works for the past forty years and recently decided to retire. Throughout his career, Mr. Paris demonstrated outstanding leadership and efforts in his goal to constantly improve protection of the city’s drinking water source, Lake Massabesic. Like David Paris, the City of Portsmouth should also be commended for the variety of water conservation measures being implemented. In particular, the City of Portsmouth was recognized for implementing New Hampshire’s first customer rebate program that provides incentives for customers to install more water-efficient appliances.

On top of the awards ceremony, the over 230 water suppliers, municipal officials, volunteers, and industry consultants at the conference were able to attend informational conference sessions related to improving efforts in protecting New Hampshire water sources. In particular, the conference featured Dr. Mark Borsuk, an associate professor of Engineering at the Thayer School of Engineering at Dartmouth College. Dr. Borsuk provided a summary of a statewide public survey conducted in 2014 by Dartmouth College to estimate the health impacts associated with exposure to arsenic that is often found in private well water in New Hampshire. Other conference sessions covered NHDES’ on-going work to address MtBE in groundwater and “emerging” contaminants in drinking water now being studied by researchers and EPA. ■

# Moultonborough Academy Takes Home Top Honors at the 2015 NH Envirothon Competition

The 2015 competition saw twenty-four high school and three middle school teams vie for this year's top prize during the daylong festivities held on May 19, 2015 and hosted by New England College in Henniker. Moultonborough Academy emerged as the overall winner, while a team from Souhegan High School took second place and one from Concord High School earned third place honors. As the 2015 winners, Moultonborough Academy will now represent New Hampshire at the North American Competition (with a theme of "Urban Forestry") to be held later this summer at Missouri State University in Springfield, Missouri (<http://www.envirothon.org>).



*Moultonborough Academy team.*

*(L-R): Shaw Smith – Advisor, Brittney Delaney (jr.), Gwen Fifield (jr.), Quin Trexler (sr.), Eleanor Eaton (jr.), Meghan Hurley (jr).*

have in many of my AP [advanced placement] classes.”

Teachers who are interested in coaching a team, professionals interested in volunteering their time, and anyone interested in providing financial support should contact the New Hampshire Envirothon Coordinator by email at [nhenvirothon@gmail.com](mailto:nhenvirothon@gmail.com) or by U.S. Mail at: New Hampshire Envirothon Coordinator, 1197 Route 12A, Surry, NH, 03431. There's no better way to build a cadre of youth who are more dedicated to addressing New Hampshire's environmental and natural resource challenges than to help foster the future success of the Envirothon program. More information can be found on its webpage located at <http://nhenvirothon.org>. ■

In 1990, a group of New Hampshire professionals from the environmental and natural resource management fields got together and decided to run a program that was designed to challenge students in crafting creative solutions to contemporary environmental issues. In the fall of 1991, the New Hampshire Association of Conservation Districts assumed sponsorship of the New Hampshire program, based on a model created by the Pennsylvania Conservation Districts in 1979. As a result of that effort, the first New Hampshire Envirothon was held in 1992 at Fox Park in Plymouth. Since that time, it has provided both middle and high school students with exciting, practical challenges outside of the classroom. One recent ConVal High School senior's impression of the New Hampshire Envirothon program was expressed, "Envirothon has been my favorite activity in high school and I feel privileged to have been a member of four ConVal teams. I have without a doubt learned more through my experiences on Envirothon than I

## 2015 Waste Management Seminar

On November 2, 2015, the Business and Industry Association (NH BIA) and NHDES, in partnership with the New Hampshire Municipal Association, will present an all-day conference focusing on waste management issues. This year's seminar is the successor to similar seminars in the past – namely the "Contaminated Sites" and "Consultant's Day"

seminars. The conference will run from 8 AM to 5 PM at the Radisson Hotel in Manchester (700 Elm Street). As soon as the agenda is finalized, it will be posted on the NHDES and NH BIA websites. To register, go to the NH BIA website (<http://www.biaofnh.com/>) and look under Programs and Events. ■



[twitter.com/NHDES](https://twitter.com/NHDES)

# Resiliency Taking Root

Volunteers and NHDES Coastal Program staff helped plant a beach grass garden at Hampton Beach State Park that will be used to re-vegetate and restore sand dunes at other sites within and near the park in the fall. Much of the beach grass on the dunes has been trampled by beach walkers. The dunes are important because they help protect the coastal development behind them from storms. Wind and waves are a part of life on the sand dune, but the dunes can't build back up their sand without the beach grass to anchor them down. With climate change comes the risk of more frequent storms with bigger and stronger waves, which threaten both the dunes and the people and property behind them.

The project is funded by a resiliency technical assistance grant from the NHDES Coastal Program because of its contribution to protecting NH's coast from erosion and storms. NH Sea Grant/UNH Cooperative Extension and the University of New Hampshire are using the funds to manage the restoration, coordinate volunteers and work with the community and beach users to use designated walking paths to avoid trampling and damaging the dunes.

Funding for this project is made possible by National Oceanic and Atmospheric Administration Office for Coastal Management. ■



Image courtesy Team Rubicon

Rick Treiss, whose story appears on page 1, with children from Sermathang, Nepal. >>



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