ON MY SOAPBOX:

Don’t Open the Closet Door, There May be a Monster in There!

By Mac Richardson, Newsletter Co-Editor

Most of us are familiar with the boogey man, even if we have never met him. Maybe we remember our childhood when we were worried about what could happen, or maybe we have children that had their worries. So what do you say to the question, “Daddy (or Mommy) can you guarantee me that there is nothing and nobody in the closet and there never can be? No matter how many times you search the closet for your child, there is always that lingering doubt, what if?

The fact is it is impossible – or at least vanishingly close to it – to be able to prove a non-event into the future. Yet this is increasingly the position that wastewater treatment professionals find ourselves pushed into. Whether it be the case for biosolids or estrogenic compounds in our effluent, micro constituents of concern are a tough nut to crack. In essence we are being asked by some in the public to guarantee that absolutely nothing harmful is or ever will be found in our effluent or our biosolids. An honest person can’t give that guarantee. So what are we to do?

My answer, and I welcome thoughts from others on this, starts with that last question. So, what would you do with our biosolids? What would you do with our effluent? Fundamentally, we are animals that live in an environment, and we need to understand how we fit in – how our wastes, like those of all God’s creatures, can be recycled. Nature is all about cycles -- the water cycle, the carbon cycle, the nitrogen cycle, well, you get the point. We need to be a part of these cycles, not trying to blast our unwanted wastes into space or to the moon (although this suggestion was made to me once as a serious proposal for LAWPCA biosolids). I would continue by pointing out that we in the wastewater and biosolids field don’t make all of this ourselves (although I have often been told that I am full of it, I swear I do not produce 12 million gallons per day by myself). Truly our wastes are a reflection of who we are as a people and as a society. If the public does not like what they see in our effluent or our biosolids, they best take a gaze in the mirror. Lastly I would point out that we in the

Cont’d on page 3
Keeping our Environment Clean and Healthy: Why You Should Support Medicine Disposal Day

By Mac Richardson, Newsletter Co-Editor

According to the Water Environment Federation, there are more than 100,000 chemicals in use commercially at the present time and hundreds of new chemicals are introduced each year. Some of these compounds, particularly pharmaceuticals and personal care products (PPCPs) and pharmaceutically active compounds (PhACs) have come under increased scrutiny due to their potential to act as endocrine disrupting compounds (EDCs). That is, plainly stated, some of the drugs, creams and soaps that we use can cause changes in the way that fish and other animals grow, reproduce and act.

One often reported occurrence is that some fish downstream of wastewater treatment facilities have shown changes from male forms to female forms. The compounds most often implicated in this particular issue are the estrogens estrone, estradiol (which are naturally excreted to some degree by all humans) and the synthetic estrogen ethinylestradiol (the active ingredient in most birth control pills) and nonylphenol and octylphenol (used in soaps, contraceptives and as a plasticizer and emulsifier in a wide range of products).

The above is just one example of emerging research that has been made possible, at least in part, by our ability to analyze for a much greater variety of chemicals at a much lower concentration than ever before. For example, ibuprofen (advil and motrin brand pain relievers) has been found in most rivers and wastewater treatment plant effluents tested. The exact effect of this finding, like many others, is difficult to assess, particularly in light of the low concentrations detected and the potential for chemicals to interact in unknown ways. This in turn can cause fear and distrust in people concerning our environment and the work that is being done at our pollution control facilities. Work is ongoing to understand how wastewater treatment can most effectively degrade potentially harmful chemicals. Some treatments may be very costly while others may concentrate PhACs, causing disposal problems with treatment plant biosolids. In any case, a few things are clear at this time. First, flushing unwanted medications down the toilet is not a practice that can be recommended for most medicines at this time. Until we are better able to determine how treatment facilities and our society at large can best protect our environment, the most rational and cost effective step to help preserve our environment is to return unwanted medications to a well organized Medicine Collection Day.

No rational person would give an unknown combination of medicines to their families, let’s get together to keep these medications out of the environment as well. Take any unused or unwanted medications to a local collection day. Many communities in the United States participated in a collection day on Saturday, April 30, but there will be more!. This is your chance to do some good for your environment.

UPCOMING EVENTS:

**Clean Water Week**
June 5-11 – (Poster Presentation to Governor)

**NEWEA Spring Meeting & Exhibition**
June 6-9 – Sagamore Village, Lake George NY

**MWWCA Golf Tournament**
September 14 – Sugarloaf/USA

**MWWCA Fall Convention**
September 15-16 – Sugarloaf/USA

Maine WasteWater NEWS is a quarterly publication of the Maine WasteWater Control Association. (Publication months: Feb, May, Aug, Nov) Opinions expressed in this publication should be addressed to: MW-WCA, 60 Community Drive, Augusta, ME 04330.
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I would like to thank MWWCA and NEWEA for sponsoring the Operators Exchange Program. It gave me the opportunity to visit utilities in other states and network with other operators. I had the chance to meet many great operators who took the time to show me their wastewater treatment facilities. I also appreciated the NEWEA committee members taking time out of their busy schedules to meet with me in the evening for dinner.

I was in Rhode Island for three days, toured six treatment facilities and attended the fall trade show.

The first plant I visited was the West Warwick plant which was recovering from the spring flood. They have composted their sludge for almost 20 years. They get their ash from Maine to mix with their sludge and wood chips. There is always a connection.

While I was there, they were pulling every electrical wire in the plant due to the flood. We have experienced floods at the Augusta Plant but never anything this catastrophic.

The Warwick facility also went underwater during the flood. I found it interesting that the plant had a 17 ft flood wall around the plant. The height was determined from previous flood heights. The problem was this flood crested at 21 feet. Once the water went over the wall there was no way to get it out. Personnel were in the process of cleaning up the plant and getting it back on line.

Cranston was burning sludge while I was there. They have one large and one small furnace. Most area facilities bring sludge to Cranston for incineration. It was hot and dusty during the incineration process. I have never toured an incinerator before and found it very interesting.

Narragansett was set in a beautiful location by the beach. It is a very different plant from what I am used to seeing. It is a small plant with oxidation ditches. Seems like the perfect place to work.

NBC Bucklin is a large plant with a normal flow of 22 MGD, with storm flows up to 106 MGD. My plant runs around 4 MGD with storm flows up to 36 MGD. This plant has anaerobic digesters so they use the methane to heat the facility. They use ultraviolet for disinfection. Augusta had anaerobic digesters years ago but removed them and built sludge holding tanks instead. Now many plants are converting back to digestion because of the methane production.

It was interesting to tour a larger facility that runs processes different from the disinfection and sludge processes that we run in Augusta.

The South Kingston plant was connected by tunnels. All the wiring, pumps and other equipment is contained within these tunnels. It is great for maintenance. One of the most interesting pieces of equipment in South Kingston was the TOBO blowers. They are a much more efficient blower than the old style of blower we use in Augusta. It was the first suggestion I made when I got back to work.

These six facilities had equipment, processes and flows that differ from what I am used to in Augusta. It was a great learning experience to see how these facilities run different processes and equipment to achieve the same goal we are all aiming for – cleaner receiving waters.

I stayed at the Fairfield Inn and was picked up every morning for that days tours and returned in the evening to be escorted to dinner by a NEWEA representative. Everyone I met during the three days I spent in Rhode Island was very professional and courteous.

The operator exchange program is a great opportunity for operators in New England to tour different facilities and garner ideas to try at their home facility. I find employees in this field to be passionate about what they and are more than willing to share knowledge and ideas. I learned a great deal in Rhode Island and want to thank all those involved for giving me this opportunity.

Sincerely,
Kirby Pinkham, Senior Operator
Greater Augusta Utilities District

On My Soapbox cont’d

wastewater treatment “industry” (does community sound better?) are amenable to treating biosolids and our effluent to the standards that the public sets, just realize that more treatment, more testing, more research costs more money. Please don’t rail about how every load of biosolids should be tested for metals, dioxins, and all suspected carcinogens and then turn around and tell us that it costs too much to provide service! Consensus is difficult to achieve, and our regulatory system is far from perfect, but if the truth is to be told, it is pretty darn good. The fact is that our wastewater treatment infrastructure, including biosolids utilization has had a greater positive effect upon human health than nearly anything we have done in the last 150 years – including all the money we have poured into medical research and treatment.

Going forward, I believe we have to be open to evaluating the environmental risks that remain, prioritizing our resources, and then hold ourselves to the highest levels of performance. To do anything less is kind of like refusing to tuck our children into bed at night or failing to feed them healthy food. ☹️
Healthier Aging and Breathing Easier In Our Backyard

By Deb Avalone-King, Maine Department of Environmental Protection

Wintertime in Maine brings significant increases in particle matter air pollution from home heating, wood burning and even how we furnish and maintain our homes. While we’ve long known that real world air pollution levels have harmful affects on our respiratory health, the latest scientific research has shown a direct correlation to increased blood pressure and vascular inflammation after just two hours of exposure to particle matter.

According to numerous studies from the federal Environmental Protection Agency’s (EPA), there is now extensive evidence that even short-term exposure to ultrafine particle matter causes cardiovascular affects that can lead to changes in heart rhythm, systemic inflammation, vascular function (e.g. blood pressure, vessel constriction), reduced coagulation factors, arrhythmias and sudden cardiac death. They’ve even discovered increased diabetes risks from air pollution.

With such a growing list of known health risks from air pollution, it is wise to be alert to opportunities that will reduce your family’s exposure to air pollution both in your homes and your backyard. The American Heart Association advocates that “reducing air pollution in homes is a modifiable condition where people have some control.”

Common indoor pollutants include tobacco smoke, animal dander, dust mites, cockroaches, mold, dust and pollen. Other sources of indoor air pollution that can contribute particles include wood smoke from fireplaces and leaky wood stoves; combustion products of oil, gas, kerosene and coal; and building materials and furnishings made of pressed wood products. Pesticides, household cleaning products and substances with irritating odors can also add to the mix.

Even outdoor pollution seeps into our homes. A recent study by the Connecticut-based nonprofit Environmental Health & Human Health, Inc. documented how outside air can affect our homes. They found that “after just one hour of a ‘smoky’ outdoor situation – in a house with good interior air circulation—the concentration of emissions inside the house is about half of that outside the home.”

The good news is you can reduce air pollutants in and around your home and help your family to age healthier and breathe easier. Some of the practical advice the EPA and we at the Maine Department of Environmental Protection offer to improve your home’s air quality is to avoid tobacco and wood smoke, reduce mold and dust in your home, keep pets out of sleeping areas, tune up furnace and heating units annually and fix water leaks promptly.

Installing a high efficiency particulate air (HEPA) filtration system in your home is also a smart way to stay healthier. Just be careful to choose a system that does not use an ozone purifier – that type of unit can worsen the air in your home even further by adding ozone into the air. For information on choosing a safe and effective HEPA air filtration system, visit www.epa.gov/iaq/pubs/ozonegen.html.

Every day, our Maine Department of Environmental Protection staff meteorologist reviews monitored particle pollution data and weather information. Whenever unhealthy concentrations are expected, staff will issue an advisory message to the press and public. Air quality updates are made available to the public on the 24-hour toll-free Maine Air Quality hotline at (800) 223-1196 or online at www.maine.gov/dep/air/ozone/index.html.

This column was submitted by Deb Avalone-King, an Environmental Specialist with the Maine Department of Environmental Protection’s Bureau of Air Quality. In Our Backyard is a monthly column developed by the Maine DEP. E-mail your environmental questions to infodep@maine.gov or send them to In Our Backyard, Maine DEP, 17 State House Station, Augusta, ME 04333.

The Maine Department of Environmental Protection is responsible for protecting and restoring Maine’s natural resources and enforcing the state’s environmental laws. Legislative mandate directs DEP to prevent, abate and control the pollution of the air, water and land. The charge is to preserve, improve and prevent diminution of the natural environment of the State. The department is also directed to protect and enhance the public’s right to use and enjoy Maine’s natural resources. For more information about the Maine Department of Environmental Protection, visit www.maine.gov/dep.

JETCC Management Candidate School

The 2011-2012 Management Candidate School for Wastewater and Drinking Water Operators is in the works. This 12-month program is designed for mid-level operators with a commitment their industry. Look for details in July! For more information contact Leeann at jetcc@maine.rr.com.
Flushables Update
By Aubrey Strause, Newsletter Co-Editor

On Friday, March 25, members of the MWWCA testified before the Environmental and Natural Resources Committee in Augusta in support of proposed L.D. 781, “An Act to Establish Flushability Standards for Consumer Products Advertised as Flushable”, sponsored by Representative Melissa Walsh-Innes (D-Yarmouth). Supporters of the bill who testified included Mark Holt (Town of Jay WWTF), Scott Firmin (Portland Water District), David Sawyer (a licensed plumber in the Midcoast region), Coco Canning (a septic hauler from southern Maine), and Leonard Blanchette (Brunswick Sewer District), each discussing their experiences dealing with equipment failures resulting from improper disposal of consumer products, and cost and additional labor required to respond.

Those testifying in favor of the bill relayed information to the Committee about the public’s lack of understanding about what materials are appropriate for flushing and how inconsistent product labeling adds to the confusion. Aubrey Strause (Tata & Howard) summarized the results of a comprehensive survey developed by MWWCA, and did showed Committee members a number of products that contained inaccurate and misleading labeling with respect to disposal and flushing. She demonstrated the strength of some products advertised as flushable that do not satisfy industry guidelines for flushability. A legislative advocate from the non-woven fabrics industry spoke against L.D. 781, the only voice in opposition.

The result of the hearing is that the bill will be held over until the next session. In the meantime, the industry has committed to working on this issue with MWWCA. MWWCA formed a Flushables Working Group to lay out a roadmap for actions that will lead to real changes. Thanks to representatives from the 52 facilities and towns in the State that responded to the MWWCA Flushables survey: the information gathered from that survey made this hearing possible. We will continue to keep members updated on the status of this bill.

Hach Equipment Giveaway
The Hach company will award one industrial site and one municipal wastewater treatment facility with $50,000 in Hach products as part of its “Big Picture” contest. The objective of the contest is to demonstrate how wastewater treatment facilities can reduce chemical and energy costs through tighter process control. Another $40,000 equipment prize package will be given to a “Fan Favorite”. To enter the contest, submit a video or PowerPoint that explains how Hach equipment would help you see the “Big Picture”. To learn more about the contest rules and factors Hach will use in selecting winners, go to http://hachbigpicture.com/.

Call for Abstracts!
By Aubrey Strause, Newsletter Co-Editor

With the Spring Conference behind us, the MWWCA Personnel Advancement Committee is actively seeking topics and speakers for Technical Sessions at our Fall Convention. The Fall Convention will be held at Sugarloaf Ski Resort from September 14-16, 2011. Suggestions can be focused on operations, technology, management, regulatory compliance, construction, safety, personnel, communications, or any other aspect of the water resource protection industry. If you have ideas for sessions, please send them to Aubrey Strause at astrause@tataandhoward.com.

MARK YOUR CALENDARS!
MWWCA Fall Convention
September 15-16, 2011
Sugarloaf/USA

This is your newsletter – if you have news you would like to pass along or an opinion to express that would be of interest to the membership of MWWCA we are always interested in receiving material and will make every effort to incorporate your submissions.
Clinton Johnston, a former Kennebec Sanitary Treatment District (KSTD) employee who retired in July 1997 passed away recently at the age of 84. Clinton worked at KSTD for 20 years and was an important part of the era when KSTD was land-applying 100% of its biosolids. His work ethic affected many KSTD employees and his mannerism as a coworker is highly remembered.

Steve Butler Obituary
(by Kenneth W. Locke, Director of Environmental Services, City of Brewer)

On Saturday, February 19, 2011, at approximately 4:40 PM, Steve Butler passed away at Eastern Maine Healthcare, in Brewer, Maine. Steve was a very important and valuable part of the team that made Brewer Water Pollution Control Facility the success that it is today: award winning. He came to work for the Facility (for the second time, as he worked for Brewer for a couple of years in the late 1980’s) in 1991 as a Operator 1 which was an entry-level position at the time. Through hard work, dedication and determination, he was promoted to the facility Lab Manager position in 2002- a position he has held since. Steve absolutely flourished in this position, as his attention to detail and love for his work made him the perfect person to operate the lab and determine the facility process control.

Steve was well-known throughout the State of Maine wastewater industry for his overall knowledge and his excellent wastewater training abilities. He was always receiving calls from operators from other facilities with lab or process control-related questions and he was always happy (ecstatic!) to help out a fellow operator. As a trainer, every class he taught for JETCC would fill up almost immediately as all the operators in the State enjoyed Steve’s humorous, low-key, laid back, down-home approach of sharing his knowledge of wastewater. In September 2008, Steve was awarded the prestigious “Lee A. Agger Environmental Training Award” for meritorious support and service in training environmental professionals in the State of Maine. Three words in the text of the award speak volumes of Steve and his personality: Support; Service; and Professional. He was all of them and much more.

Steve was the kindest, most thoughtful, helpful and loving friend and co-worker you could ever have. He was always willing to help out wherever he could and was always the first to volunteer for extra projects and to fill in for those that needed time off. Those that were his friends were friends for life. Everyone that knew him well will remember him for his keen sense of humor and extremely quick wit, as nobody was exempt from his good natured ribbing and a good joke.

Steve will be missed by us all at the Facility, and by all those throughout the City and the wastewater industry that knew Steve well. Steve faced some medical challenges in recent years, but he always kept a positive attitude, worked hard and never complained. Please keep Steve’s family in your prayers, especially his daughter Pauline, three brothers Doug, Bill and Paul, and his many nieces and nephews who loved him, and who he loved very much.

Contact Tim LeVasseur at TLevasseur@kstd.com with information on retirements, promotions, memorials, or other events impacting MWWCA members that should be included in our “Milestones” segment.
Blast From the Past: 1984
By Tim LeVasseur, Kennebec Sanitary Treatment District

This picture appeared on the September 1984 MWWCA Journal cover. Can you identify who these guys are and what are they doing?

They are signing “A Bill to Improve Water Quality Through Training”. Pictured from left are; Jerome “Frenchie” Guevremont, Kirk “Mr. NERWI” Laflin, Governor “Joe” Brennan, Commissioner Henry “Hank” Warren, and Stephen, “Gimpy” Broadbent.

This legislation provided initial funding to a group called ETCC, which eventually became JETCC.

Not only are these guys great-looking but they do great work! Will one of you four please tell the rest of us what you’re looking at, though? 😊

Washington, DC Fly-In

On April 4 and 5, 2011, cherry blossoms were in full bloom as several members of MWWCA and representatives from Maine attended the Water Environment Federation (WEF) and New England Water Environment Association (NEWEA) Legislative “Fly-In” in Washington, DC.

WEF hosted a breakfast and legislative workshop on April 4 to discuss current water and wastewater-related legislative issues around the country. The “Fly-In” event also included a Congressional Breakfast on April 5, hosted by NEWEA, featuring speakers including Maine Congresswoman Chellie Pingree (1st District), USEPA Region 1 Administrator Curt Spalding, Vermont Senator Bernie Sanders, attorney Bill Taylor from Pierce Atwood, and Massachusetts Congressman Jim McGovern, among others. The theme of the speakers was the need to prioritize continued funding for wastewater treatment and infrastructure improvements even in the climate of fiscal uncertainty and the woes surrounding the federal budget.

Members of the Maine delegation met with both Congresswoman Pingree and Congressman Mike Michaud (2nd District), as well as Senator Susan Collins and Senator Olympia Snowe. Our representatives expressed their continued support for water and wastewater funding. 😊

Shown, standing, left to right: Howard Carter (City of Saco); Maine Senator Susan Collins; Greg Cataldo (Woodard & Curran); Chuck Applebee (City of Gardiner); Dan Bisson (CDM); and Mac Richardson (Lewiston/Auburn Water Pollution Control Authority). Seated, left to right: Paul Rodriguez, 2011 MWWCA President (Woodard & Curran); Jeff McBurnie (New England Organics); Brad Moore (City of Bangor); Aubrey Strause (Tata & Howard); and Phil Nadeau (City of Lewiston)
MWWCA hosted its annual Spring Conference at the Howard Johnson Plaza Hotel & Conference Center on Friday, April 29, and is pleased to announce a turnout of approximately 130 attendees at the event. Technical Sessions included: Applications of Computational Fluid Dynamics (CFD) in Wastewater Operations; Pump 101: Operations and Demonstrations; Process Control and Troubleshooting; an introduction to Membrane Bioreactor (MBR) and Integrated Fixed-Film Activated Sludge (IFAS) innovative technologies; Composting 101; and many more.

Speakers during the lunch business meeting included John F. Hart, who is a member of the 2010-2011 Board of Trustees for the Water Environment Federation (WEF), an international organization of water quality professionals headquartered in Alexandria, Va. John is currently the Chief Operator at the Saco, Maine Wastewater Treatment Facility. John helped Howard Carter, Past President of the New England Water Environment Association (NEWEA) honor the many Mainers and Maine facilities who received awards from USEPA Region 1, NEWEA, and other organizations this year. MWWCA President Paul Rodriguez presided over the Business meeting and other speakers, which included Dan Bisson, President-Elect of NEWEA and long time MWWCA member.

Thanks to all of the enthusiastic, knowledgeable professionals who took the time to serve as presenters and speakers at this conference. The success of MWWCA conferences is linked directly to the consistent quality of the people that volunteer their time and expertise at these events. Thank you for your support.

Before the CFD session got rowdy and bouncer Dave Hughes had to settle everyone down.

President Paul Rodriguez periodically updates attendees on the Royal Wedding festivities.

Ken Jones realizes that the notes on his palm have smeared and that he’ll just have to tell jokes.
Upcoming JETCC Training Events

“Energy Management Roundtable Series for Water and Wastewater Utilities” (Third in a Series)

Date and Time: May 24, 2011, 9:00 AM - 12:00 PM (Optional Plant Tour, 1:00 - 2:30 PM)

Location: Portland Water District, Nixon Training Room

Speakers: USEPA, Portland Water District, and Maine Power Options

Credits: MEDWP and MEDEP: 2.5 Training Credit Hours (MEDEP: additional 1 TCH for plant tour)

Cost: $35 per person

Registration Deadline: 5/17/2011

Objectives of the Series:
Develop and implement energy management programs
Identify energy saving opportunities through energy tracking and auditing
Identify sources of funding
Share experiences with other facilities

“Emerging Issues With Flushables”

Date and Time: Thursday, May 26, 2011, 8:30 AM – 3:30 PM

Location: Maine DOT John E. Dority Training Center, Fairfield, ME

Speakers: Aubrey Strause (Tata & Howard, Inc.), Tim LeVasseur (Kennebec Sanitary Treatment District), and Ross Nason (Kennebec County Council of Governments)

Credits: MEDWP: 3 Training Contact Hours; MEDEP: 6 TCH

Cost: $105 per person

Course #: J1138

Registration Deadline: 5/19/2011

Objectives of the Course:
Examine the issues associated with the disposal of non-flushable wastes.
Review how collection systems in Maine have dealt with the problem.
Cover ways to investigate the issue and highlight steps some facilities have taken.
Review sewer use ordinances, other legal controls, and legislation.
Learn about public relations approaches to educate your community.

Discuss microconstituents: pharmaceuticals and personal care products. Analytical detection, side effects, treatment, current regulatory guidance, and pollution prevention.

Call JETCC at (207) 253-8020 to register for either course! ☺