Does your community want to host the 2007 Drinking Water Day Celebration?

Drinking Water Day events were held at the State House and at the MassDEP office in May 2006. We are looking for a community that would like to host May 2007’s celebration. Do you have a room that could accommodate 150 people for the awards and the luncheon? Do you have a new treatment plant or some project that you would like to showcase? If you are considering this opportunity please contact Marie.Tennant-DEP@state.ma.us or call 617-292-5885 for more information. As always, you may also contact the program director at Program.Director-DWP@state.ma.us.

replacing retiring water operators
A Perfect Storm on the Horizon

Printed with permission of NYCOM Bulletin by Donna Giliberto

Just as the sword fishermen in Sebastian Junger’s “The Perfect Storm” experienced a rare combination of meteorological factors that created the storm of the century, municipalities with aging wastewater and drinking water operators will soon find themselves looking into the eye of a storm. Unlike the 1991 storm that destroyed the Andrea Gail off the coast of Nova Scotia, municipal officials will have had considerable warning before experiencing the environmental and fiscal impact of replacing retiring water operators.

The term, “a perfect storm,” is used to describe the convergence of numerous factors, which result in a catastrophic event. In New York State the perfect storm brewing in the water field is made up of the age of water treatment operators, the anticipated flood of retirees, the lack of interest in the field, and the lure of private industry. Once these factors converge, local governments will find themselves with wastewater and drinking water systems without qualified individuals to operate them.

The first issue is the aging-out of the workforce. Almost 50 percent of today’s water operators will no longer be working in the next 10 years. Long-term municipal operators described the difficulty of recruiting individuals to replace retiring operators. There is a real documentable shortage of operators in the job market. Even if qualified candidates can be found, municipal salaries and benefit packages are not nearly as attractive as what is offered by private industry.
Another issue is that elected officials are not familiar with the amount of technical training that is required to operate a water plant nor are they familiar with the operation of the plant itself. A water plant is likely a municipality’s single largest investment and asset costing in the millions of dollars. Elected officials have a responsibility to oversee the plant; operators do the rest.

Another problem is that people are not choosing this field for a career. Why not? Operation of the water system is nearly the most invisible job on earth. We take for granted the availability of water. We don’t give a thought about how the water got to us and where it goes when it leaves us. If we don’t think about water why would we think about the people who work to ensure its availability and quality?

Also, plant operations are not attractive to the new crop of job candidates. In 10 years there will be a nationwide shortage of individuals working in trades such as plumber, electricians, carpenters and system operators. High school graduates are going to college for four-year degrees, not trade schools.

What would happen if your municipality did not have a certified water operator to run your plant? For one, public health and the environment would be compromised if operators were not in place. Second the system would violate state regulations and be subject to enforcement actions and fines. Guess who pays the fines? Third, water services would be lost, including any money that is made from selling those services to outside users.

So where does that leave us? There is no single answer to the question. However, the problem can be approached in a variety of ways. New York Rural Water Association (NYRWA) made presentations to educate elected officials on the requirements of a certified operator; running the water systems like a business, the competitive market for qualified operators, and the need to pay these individuals for their professionalism and dedication.

The second step was to develop an informational brochure directed at high schools, vocational schools, science colleges, and unemployment offices to encourage individuals to consider a career in the water industry. The next project is a public education and outreach effort at the New York State Fair. This effort will focus on raising the public’s awareness regarding what it takes to provide water services.

What can you do? Welcome the education and public awareness effort by visiting your water plant, supporting the educational needs of your operators, and placing value on not just the physical plant, but also the people who make sure our water is safe. With all parties contributing to this effort the Perfect Storm will pass us by; but if we continue to ignore the facts, well… we have had fair warning.

Contact Ms. Boepple at tmbH03@health.state.ny.us for more information on education/outreach efforts
Contact the author, Ms. Gilberto at Donna@nycom.org
Contact NYRWA at http://www.nyruralwater.org/
water fluoridation quality awards merited by 47 communities

The U.S. Centers for Disease Control and Prevention (CDC) recently awarded their 2005 Water Fluoridation Quality Awards to 47 of Massachusetts’ community water supplies that are fluoridated. Fluoridation is the adjustment of fluoride in the water to a level that is optimal for preventing tooth decay. The award recognizes those communities that have maintained a consistent level of optimally adjusted fluoridated water for the calendar year.

Community water fluoridation has been recognized by the CDC as one of the 10 great public health achievements of the 20th Century. CDC recommends water fluoridation as a safe, effective, and inexpensive method of preventing tooth decay. Studies have shown that tooth decay is preventable among all age groups, not just children.

In 2001, the U.S. Task Force on Community Preventive Services recommended that communities either adopt or maintain fluoridation of public drinking water supplies. More than 170 million people, or 67% of the United States population served by public water supplies, currently drink water with optimal fluoride levels for preventing decay.

“Water fluoridation is the single most equitable public health intervention for preventing tooth decay, reaching all members of a community regardless of their income level,” stated Dr. William R. Maas, DDS, MPH, director of the CDC Division of Oral Health. In addition, he noted, it is one of the most cost-effective public health interventions, saving approximately $38 in dental treatment costs for every dollar invested.

In Massachusetts more than 3.8 million residents in 135 communities are served by community water fluoridation. Each of these community’s water systems report their fluoride levels to the Massachusetts Department of Public Health Office of Oral Health; which then documents these results in the Water Fluoridation Reporting System (WFRS) monitored by the CDC.

The CDC Water Fluoridation Quality Awards are given to communities that: 1. adjust the fluoride concentration in their drinking water; 2. achieve a monthly average fluoride level that is in the optimal range (0.7-1.2 ppm) for 12 consecutive months in a year; and 3. document their fluoride levels in CDC’s WFRS.

The following MA communities have merited the 2005 CDC Water Fluoridation Quality Awards:

- Amherst
- Athol
- Beverly
- Cohasset
- Canton
- Dracut
- Fall River
- Haverhill
- Holyoke
- Lynn
- Marlborough
- Mansfield
- Newburyport
- North Reading
- Reading
- Rutland
- Sharon
- Southbridge
- Sudbury
- Taunton
- Walpole
- Wenham
- West Newbury
- Winchester
- Andover
- Bedford
- Burlington
- Concord
- Dedham-Westwood
- Essex
- Hamilton
- Hingham-Hull
- Hudson
- Lynnfield
- Manchester
- Millis
- North Andover
- Pembroke
- Rockport
- Seekonk
- Shrewsbury
- Sturbridge
- Swansea
- Tewksbury
- Wellesley
- Westford
- Weymouth

Save the Date

On January 17, 2007 there will be a training for PWSs on fluoridation, how to report, where to report, etc. The training will be given by DPH, MassDEP, and NEWWA. Please contact NEWWA for more information at 508-893-7979.
The Massachusetts Water Resources Authority (MWRA) conducted a two-day emergency response training exercise on September 27 & 28 at the Wachusett Reservoir and at MWRA’s Emergency Operations Center in Chelsea. Personnel from MassDEP, US EPA Region 1, and Boston Water and Sewer Commission attended the exercise.

The training exercise was designed by MWRA’s Emergency Services Unit to provide an opportunity for personnel to practice responding to an emergency situation.

**Scenario**

**Day 1** – It had been reported that a large 18-wheel truck, which was potentially loaded with bags of ethylene dibromide, failed to negotiate a curve and landed in the reservoir. This required the activation of the boom deployment and emergency sampling teams from the MWRA. Additional complications required the MWRA to shut down the reservoir intake.

**Day 2** – The complications from the event required the activation of an alternative source.

MWRA personnel had an opportunity to practice emergency communications, isolate parts of the system, inspect system components, boom deployment, risk communication (media and customers), activate back-up emergency source, and address other operational needs.

Would your system be prepared for this type of emergency event?

**Training your staff**

Emergency rehearsals, sometimes referred to as “table-top exercises,” are valuable tools to make sure employees are always prepared to respond. Ideally, rehearsals are set up by the water system manager and are unannounced to employees. During these rehearsals, employees are required to conduct actual responses. They make phone or radio calls, perform inspections, respond to inquiries, and do other tasks. The system gets assistance from partners such as local health jurisdictions and local emergency response people.

Practicing for an emergency is the only real way to thoroughly evaluate the emergency response plan and the system’s ability to implement it. Once the event has occurred it is important to evaluate and discuss the results. The system should conduct a staff meeting to go over the results and get input from those involved in the rehearsal. Then make modifications or set up training to be better prepared.


Do you want help setting up an emergency drill? Contact Michael.Maynard@state.ma.us or 508-767-2735.
Massachusetts Board of Certification of Operators of Drinking Water Facilities

November 2006       George Weber 617-727-6529

The Board of Certification of Operators of Drinking Water Facilities (“Board”) conducted a continuing educations audit of all licenses which resulted in the following enforcement actions:

Kevin Sweeney, New Bedford: In a final decision and order by default the Board revoked the drinking water operator license of Sweeney. In his license renewal form, Sweeney attested under the pains and penalties of perjury that he completed all continuing education requirements. The Board conducted an audit of all licensees to verify compliance with continuing education requirements. Sweeney failed to provide the Board the requested documentation to verify his compliance with the requirements. -more on next page-

Special Certified Operator Section

This fall issue of In The Main has a special section on Certified Operators. There are two press releases printed below in their entirety from the Division of Professional Licensure (DPL). The DPL has been much more aggressive on reviewing complaints and disciplining operators who do not adhere to Massachusetts regulations.

One press release deals with operators who have not acquired their required training contact hours (TCH). The regulations state that operators must acquire the correct amount of TCHs for renewal of their state certifications. In each 2-year cycle certified operators must acquire at least: VSS and VND - 5 TCHs; Grade 1 and 2 -10 TCHs; Grade 3 -15 TCHs; and Grade 4 - 20 TCHs.

By December 31, 2007 all certified operators must have acquired the correct amount of TCHs in order to renew their certified operator's license. Please refer to 236 CMR 2 through 5 for certified operator regulations. They can be found at http://www.mass.gov/dpl/boards/dw/rule_reg.htm. Also read up on the Board's policy 94-01 for procuring TCH renewals found at http://www.mass.gov/dep/water/compliance/certop.htm

The second press release deals with an operator that falsified documents. Please read up on the regulations and the operator guidance documents on line as stated in the previous paragraph. You may also want to look at New England Water Works operator’s page at http://newwa.org/Certification/operatorInfo.htm. They have listed the certified operators professional code of ethics along with other important information from the New England Certified Operators Committee.

If you have questions about your license contact, Paul Niman at 617-556-1166 or at Paul.Niman@state.ma.us.
Brian Geraghty, Centerville: Geraghty voluntarily surrendered his license to the Board for failing to complete the mandated continuing education requirements.

Richard Campobasso, Lincoln: Campobasso voluntarily surrendered his license to the Board for failing to complete the mandated continuing education requirements.

John Wezesa, Haverhill: Wezesa voluntarily surrendered his license to the Board for failing to complete the mandated continuing education requirements.

Kurt Schmidt, Truro: Schmidt voluntarily surrendered his license to the Board for failing to complete the mandated continuing education requirements.

Allen Macgilvray, Tyngsboro: Macgilvray voluntarily surrendered his license to the Board for failing to complete the mandated continuing education requirements.

James Hume, Merrimac: Hume voluntarily surrendered his license to the Board for failing to complete the mandated continuing education requirements.

In addition to the aforementioned disciplines the Board fined the following individuals $100 for non-compliance with the Board’s continuing education requirements:

<table>
<thead>
<tr>
<th>Operator</th>
<th>City or Town</th>
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<tr>
<td>William Lewis</td>
<td>Bridgewater</td>
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<td>Brendan Maye</td>
<td>Woburn</td>
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<tr>
<td>Matthew Proctor</td>
<td>Winthrop</td>
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<td>Fred McCullough</td>
<td>Groton</td>
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<td>Ted Shefton</td>
<td>Berlin</td>
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<td>David Eunson</td>
<td>Dunstable</td>
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<td>Gerald Masaitis</td>
<td>Lakeville</td>
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<td>John Simonds</td>
<td>Dennis</td>
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<tr>
<td>William Hamilton</td>
<td>New Salem</td>
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<td>John Hoadley</td>
<td>Hanover</td>
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<td>Ali Parand</td>
<td>Millis</td>
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<td>Richard Wheeler</td>
<td>Barr</td>
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<td>Dana Holman</td>
<td>Bourne</td>
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<tr>
<td>Richard Baraldi</td>
<td>Billerica</td>
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<tr>
<td>Michael Delaney</td>
<td>Hull</td>
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<tr>
<td>Brian Litchfield</td>
<td>G. Barrington</td>
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<td>Larry Thoresen</td>
<td>North Adams</td>
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<td>Alan Burke</td>
<td>Weymouth</td>
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<td>Dennis Roy</td>
<td>Rowley</td>
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<td>Peter Gavin</td>
<td>Quincy</td>
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<td>Malcolm Austin</td>
<td>East Falmouth</td>
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Consumers are urged to visit the Division of Professional Licensure’s website at www.mass.gov/reg and select the “check a license” option to determine whether a professional they are considering doing business with is licensed and in good standing.

The Division of Professional Licensure (“DPL”) is a regulatory agency within the Office of Consumer Affairs and Business Regulation. The agency is responsible for ensuring regulatory compliance and the integrity of the licensing process for approximately 330,000 licensees across 43 trades and professions under the jurisdiction of 30 boards of registration.

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The Massachusetts Board of Certification of Operators of Drinking Water Supply Facilities has fined Matthew S. Marro $2,500 and accepted the voluntary surrender of his Drinking Water Supply Facilities Operator License as of July 28, 2006.

The Board received a complaint from the Department of Environmental Protection (MassDEP) on March 8, 2006 regarding Matthew Marro’s operation of the city of Leominster’s drinking water supply facilities. After careful consideration of the complaint, the Board voted to summarily suspend Marro’s license on March 10, 2006. Marro subsequently waived his right to hearing within 10 days of his suspension.

In response to the Board’s summary suspension, Marro has voluntarily surrendered his license. Marro has admitted that while he was the primary certified operator of the city of Leominster’s drinking water supply facilities, he obtained data from the Fallbrook Lab using techniques that neither Marro nor the Lab were certified to perform. Marro reported this invalid data to MassDEP on 40 different occasions from February 2002 through September 2005.

Marro also has admitted that he failed to submit fecal coliform data for the city of Leominster drinking water supply system to MassDEP for compliance purposes in July and August 2002 and June and July 2003. In addition to these omissions of data, Marro has admitted that from January 2004 through August 2004, he reported unusually uniform pH and temperature readings for the city of Leominster drinking water supply. Furthermore, he has admitted that the validity of this data is questionable. Additionally, Marro has admitted that he failed to timely notify MassDEP on at least one occasion about low disinfectant measurements exceeding four hours in Leominster’s water supply. Receipt of such measurements should have triggered his issuance of an advisory to the city of Leominster that the water supply was unsafe to drink until the appropriate disinfectant levels had been reestablished. Finally, Marro has admitted that he failed to accurately and timely report turbidity levels for the Notown and Fallbrook treatment plants in Leominster.

In addition to working as the primary certified operator of the city of Leominster’s public water system, Marro also was the primary certified operator of the Meadow Woods Mobile Home Park Water Supply System. Marro admitted he failed to submit several key compliance data measurements for the Meadow Woods Mobile Home Park water supply system to MassDEP, including perchlorate, microscopic particulate, and bacteria levels.

Based on the above, Marro has admitted that he committed gross misconduct, failed to use reasonable care or judgment in the performance of his duties, and failed to comply with applicable federal or state laws as -more on next page-
described in the Board’s rules and regulations. He has agreed to voluntarily surrender his license to practice as a Drinking Water Supply Facilities Operator in the Commonwealth of Massachusetts and pay a $2500.00 fine.

The Board of Certification of Drinking Water Supply Facilities Operators licenses approximately 4,297 drinking water supply facilities operators throughout the Commonwealth. In fiscal year 2006, the Board received 26 complaints and resolved eight complaints from this and previous fiscal years. The Board entered into two consent agreements, placing one licensee on probation and fined another licensee.

Consumers are urged to visit the Division of Professional Licensure’s website at http://www.mass.gov/reg and select the “check a license” option to determine whether a professional with whom they are considering doing business is licensed and in good standing.

The Division of Professional Licensure is an agency within the Office of Consumer Affairs and Business Regulation. It is responsible for ensuring the integrity of the licensing process for 43 trades and professions regulated by 29 boards of registration, the updating and renewal of approximately 333,000 licenses and the maintenance of databases for licensing, enforcement, and revenue collection. In fiscal year 2006, the Division of Professional Licensure imposed record levels of enforcement, including 1,364 disciplinary actions, $209,591 in fines and returned more than $6,403 in refunds to consumers.

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### ground water rule

The US Environmental Protection Agency (EPA) published the Ground Water Rule in the Federal Register on November 08, 2006. To read the rule please go to http://www.gpoaccess.gov/fr/index.html and under vol 71 write in page 65573.

All PWSs will be required to abide by this rule which takes effect on January 8, 2007. The rule provides for increased protection against microbial pathogens from human fecal sources in the public water systems that use ground water sources, such as wells. If a PWS’s lab results for a source tests positive to indicators of microbial contamination, the source will be required to disinfect. MassDEP will be developing an implementation plan for this new rule in the next several months.

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### new regulations on-line

Changes in the Massachusetts Drinking Water Regulations (310 CMR 22.00) have been made. You may view an on-line copy and an excerpt of the changes at the MassDEP website at http://www.mass.gov/dep/water/laws/regulati.htm#dw. As always, an official copy of the regulations can be obtained at the State House Bookstore by calling 617-727-2834 in Boston or 413-784-1376 in Springfield. You may also order an official copy by going to http://www.sec.state.ma.us/spr/.

A good operator is an informed operator. Please be sure your facility has the most recent version of the regulations on hand.
In April 2004, the MassDEP adopted its Water Management Policy for Permit and Permit Amendment Applications and 5-Year Reviews (Policy - #BRP/DWM/DW/PO4-1). This policy established performance standards and conditions for Water Management Act (WMA) permits. Responding to permittees’ concerns about implementation of the policy, MassDEP prepared the Water Management Act Permitting Guidance - January 2006. The guidance describes the performance standards for residential gallons per capita day water use, unaccounted-for-water losses, establishes enforcement margins for minor violations, flexible options for summer water use, revises the offset requirements, and provides extended timelines.

Despite these revisions, the water supply community’s continued concerns led the Legislature to establish a Blue Ribbon Panel to evaluate the policy. The panel was established through Chapter 139 of the Acts of 2006, section 2200-0100 to “study the effectiveness of the Department of Environmental Protection’s guidance policy regarding the Water Management Act.” The Office of Commonwealth Development (OCD) was charged with selecting the panel members, moderating the meetings, and preparing the final report to the Legislature by December 31, 2006. The panel consists of members representing state agencies, public water supplies, municipal government, and environmental groups. Members include:

- Steve Angers, Trout Unlimited;
- Charles Aspinwall, MA Municipal Association and Town of Millis;
- Gary Clayton, Mass Audubon;
- Ian Cooke, Executive Director of the Neponset Water Resources Association;
- Mary Griffin, Acting Deputy Commissioner for Policy and Planning, MassDEP;
- Andrew Gottlieb, Chief, OCD;
- Pam Heidell, Policy and Planning Manager, Mass. Water Resources Authority;
- David Lutes, Undersecretary of Policy, Executive Office of Environmental Affairs;
- Jim Marshall, President of Massachusetts Water Works Association; and
- Steve McCurdy, Deputy Chief, OCD.

During the first meeting held on September 9, 2006, the panel identified the subjects to be discussed in subsequent meetings. These topics include concerns about whether MassDEP followed proper legal process when developing and implementing the policy (September 22, 2006); concerns about whether MassDEP properly interpreted the scientific issues and studies (October 6, 2006); potential costs to water suppliers, including the potential for lost revenue from reduced water consumption (October 20, 2006); and concerns about MassDEP’s balancing of competing needs for water, including protection of existing water uses and land values, water conservation, economic development, and protection of water supplies and quality, waste assimilation capacity, hydropower, recreation, and wildlife habitat (November 9, 2006).

Meetings have generally involved presentations from experts representing different positions on the issues, followed by discussion by the panel members. Copies of the meeting minutes, which include links to presentations and other handouts, are available on the OCD website (http://www.mass.gov/ (http://www.mass.gov/pageID=ocdterminal&L=2&L0=Home&LI=Environment&sid=Eocd&b=terminalcontent&f=ocdfrontpage_wmablueribbonpanel&csid=Eocd).

The recommendations and findings from the Blue Ribbon Panel meetings are to be summarized in a report presented to the Joint Committee on the Environment, Natural Resources, and Agriculture, and to the Senate and House Committees on Ways and Means by December 31, 2006.
Effective July 28, 2006 the maximum contaminant level (MCL) for perchlorate was set at 0.0020 milligrams per liter (mg/L) (2.0 parts per billion (ppb)). All community (COM) and non-transient non-community (NTNC) public water systems should have received their revised sampling schedules for the 2005 – 2007 compliance monitoring period. If you have not yet received your revised sampling schedule please contact your regional office.

All compliance monitoring samples for perchlorate shall be collected using the sterile sampling technique. Approved laboratories will provide sterile sample bottles, filters, and collection instructions. For a list of MassDEP approved labs go to http://www.mass.gov/dep/water/drinking/wespub03.htm and select the document under the heading “List of DEP-Approved Perchlorate Laboratories.” Currently the labs that are MassDEP approved for perchlorate analysis are not available on our “On-Line Searchable Laboratory Certification Listing” web page.

Training material for the perchlorate rule is available on our website at: http://www.mass.gov/dep/water/drinking/percinfo.htm. Training contact hours (TCHs) will not be available for the perchlorate training. Additional information regarding perchlorate, included best environmental management practices (BMPs) for fireworks displays and blasting activities are also available on that page.

Waiver applications for the 2008 – 2010 compliance monitoring period will be available on our website at: http://www.mass.gov/dep/water/approvals/dwsforms.htm#waivers. The 2008-2010 waiver application will include requests for perchlorate waivers.

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**don't forget to sample for perchlorate**

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**Fish on patrol**

**Drinking Water Kept Safe From Terrorists**


New York City is guarding the water supply for 9 million people against terrorist attack and keeping tabs on its quality with tiny fish called bluegills. These 3-inch bluegills react quickly to small changes in water purity, acting as a “canary in a coal mine,” NY DEP spokesman Ian Michaels said.

Bill Lawler, the co-founder of Intelligent Automation Corp. (IAC) is using U.S. Army technology developed 30 years ago. He said, “The Army tells us there’s no man-made sensor that can detect toxins in the water.”

IAC’s equipment monitors the behavior of eight bluegills in a tank, including their respiration rate, average depth, and even whether they cough. Sensors detect electrical signals generated by the fish’s muscle movements.

The fish change their movements if there is toxin in the water, triggering an alarm that notifies workers who can shut down waterworks if necessary. “One fish can’t drive an alarm, but if five or six are having a bad day, there’s something wrong,” Lawler said.

The $45,000 system can detect toxic metals, cyanide, pesticides, and organic solvents and hasn’t reported any false positives, Lawler said. San Francisco and the U.S. Army at Fort Detrick, Maryland use this technology. San Francisco began using the so-called Intelligent Aquatic BioMonitoring System earlier this year. A third U.S. city, which the company declined to identify, is also using the technology, Lawler said.

Note: New York’s water system supplies about 1.1 billion gallons of drinking water a day to the city and nearby counties. The water comes from 19 reservoirs in a 1,972-mile watershed north and west of New York, in some places more than 125 miles from the city.

For more information on Aquatic Bio-Monitoring please visit http://www.iac-online.com/
fireworks, perchlorate, and drinking water

The Massachusetts Department of Environmental Protection (MassDEP) promulgated in July 2006 a Maximum Contaminant Level (MCL) of 0.0020 mg/l for perchlorate, becoming the first state in the nation to regulate this contaminant.

Now that a Massachusetts MCL is in place, the focus has shifted to actions that can be taken to prevent or minimize uncontrolled releases of perchlorate to the environment. This is of particular concern in areas that could affect public and private drinking water supplies since perchlorate is highly water-soluble and can travel significant distances in groundwater with minimal attenuation or biodegradation. Drinking perchlorate-contaminated water can affect the function of the thyroid gland, which regulates the body’s metabolism.

Fireworks are one of the common products that use perchlorate compounds, and perchlorate has been detected in groundwater where fireworks displays have occurred. Based upon the potential for fireworks displays to be a source of groundwater contamination, several communities have expressed concern about continuing with fireworks displays in the future. By implementing the steps set forth below, MassDEP believes communities may continue with fireworks displays while protecting drinking water supplies.

Steps to Reduce Perchlorate Contamination from Fireworks

First, perchlorate contamination of groundwater resulting from fireworks displays tends to be localized. This underscores the importance of distance: distance between the launch and deposition areas and nearby public and private drinking water supplies and recharge areas. The launch and deposition areas should never be located within the Zone II (recharge area) of a water supply well. The locations of public and private water supply wells, recharge areas, and surface water supplies are available through local officials and can be viewed on-line at http://maps.massgis.state.ma.us/.

Second, the cleanup and proper disposal of unburned paper debris, shell fragments and duds that collect on the ground following a fireworks display is critical. This material can contain substantial amounts of perchlorate. MassDEP has observed that while the collection of this material is a requirement of every fireworks permit, it often goes uncollected at many locations. If the fireworks display site (including both launch and deposition areas) is not cleaned up in a timely manner, the next rainfall can easily wash perchlorate into the groundwater.

Third and finally, it is also prudent to request low (or no) perchlorate-containing fireworks. This may require that you make inquiries with your suppliers and manufacturers.

Following these simple steps, MassDEP is confident that fireworks displays can continue to provide enjoyment to the thousands of Massachusetts’ residents who attend such events every year -- without posing undue public health risks or problems to the environment. MassDEP recommends that public water suppliers also work closely with local fire chiefs, who enforce permits issued for fireworks displays in their communities.

You may contact Rose Knox at the MassDEP Bureau of Waste Site Cleanup (BWSC) at 617-556-1026 or Rosemary.Knox@state.ma.us if you would like additional information, or please refer to the following link on MassDEP’s Website: http://mass.gov/dep/water/drinking/percinfo.htm.
On October 20, 2006, the United States Environmental Protection Agency (EPA) issued new guidance regarding the management of aerators during the collection of tap samples to comply with the Lead and Copper Rule (LCR). The new guidance states: “public water systems should not recommend that customers remove or clean aerators prior to or during the collection of tap samples for lead.” Although EPA’s regulations do not have specific requirements regarding aerators, EPA has issued this new guidance because sampling guides that they have developed recommend the removal of aerators prior to sampling. EPA has determined that the removal of the aerator prior to sampling may inadvertently reduce the lead level at the consumers’ tap, thereby potentially reducing the ability to identify components of the system that may be contributing lead to the drinking water. EPA guidance further recommends that the public water system may want to consider re-sampling the site, if the initial sample results are above the action level, to determine whether particulate matter is the source of the high lead. MassDEP reminds public water systems that any and all additional sampling must be approved by the regional office and must be included in the 90th percentile calculation.

EPA’s recommendation not to remove aerators applies only to tap samples collected to measure lead and copper for use in the 90th percentile lead and copper calculations. It does not apply to tap samples that may be collected for water quality monitoring. The aerator should still be removed for the collection of monitoring samples for pH and/or dissolved oxygen. Additionally, EPA continues to recommend that homeowners regularly clean their aerators to remove particulate matter.

MassDEP has updated its homeowner lead and copper sampling protocol and forms to comply with the new EPA guidance. For a copy of the revised MassDEP guidance and form please visit our website at http://www.mass.gov/dep/water/approvals/dwsforms.htm#lead. Questions on this article may be directed to Paul Niman at 617-556-1166 or by email at the above address.