



**Maine Department of Environmental Protection  
Bureau of Land & Water Quality  
O&M Newsletter**

November 2007

A monthly newsletter for wastewater discharge licensees, treatment facility operators, and associated persons

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**The Maine Healthy Beaches Program**

In response to growing concern about public health risks associated with pollution at bathing beaches, the Maine Healthy Beaches Program (MHBP) was established in accordance with the

Beaches Environmental Assessment, Closure and Health (BEACH) Act of 2000. The Beach Act was designed to

help states monitor their *public* salt water beaches for disease-causing microorganisms and to notify the public when a potential health risk is present. The MHBP is administered by the Maine Cooperative Extension through an EPA grant to the Maine Coastal Program of the State Planning Office.

The purposes of the MHBP include public education, measurement of water quality and assessment of factors impacting water quality at participating beaches. The number of participating beaches has grown in the five years of the program's existence from 5 to 44. Many steps have been taken by the MHBP to establish an effective procedure for monitoring beach water quality including:

- Gathering extensive information from participating municipalities and state park beaches;
- Surveying beach users to establish the extent
- of public knowledge and incidence of health problems related to swimming in coastal areas;

- Developing monitoring methods for coastal swim beaches;
- Developing a public education and notification program;
- Conducting sanitary shoreline/watershed surveys;
- Working with towns and state parks to identify sources of pollution; and,
- Promoting regional collaborative efforts to address water quality issues.

There are several criteria used to rate the health of a beach. These include water quality history, potential or actual sources of pollution, current conditions and water test results. Water quality is based on the concentration of the indicator organism *Enterococci*. The MHBP uses the Enterolert method for analyzing water samples and the results are usually available 24-36 hours after sample collection. The most commonly reported symptom of water-related illness is diarrhea which can be caused by bacteria, parasites and viruses.

Beach monitoring occurs weekly from Memorial Day to Labor Day. The sampling protocol includes measuring air and water temperature, salinity, weather conditions, and other observations such as the presence of ducks, seals, etc. Samples are collected in whirl-pak bags or sterile bottles, kept cool to 4°-10° C and are analyzed within 6 hours of being collected.

A single sample with an *Enterococci* concentration at or above 104

colonies/100 ml or five samples with a geometric mean of 35 colonies/100 collected over a 30 day period may result in a beach closure or advisory. Beach closures are not based simply on the exceedence of bacteria limits, but also on Risk Assessment Matrices that are developed for all beaches in the program. Decisions regarding the issuance of a beach closure are coordinated between the Beach Manager, Program Coordinator, and the State Epidemiologist.

Things you can do to find out if it's safe to swim at your beach include:

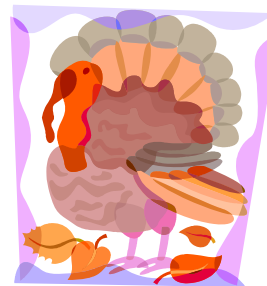
- Find out if your beach is in the Maine Healthy Beaches Program;
- Look for any advisory/closure signs at the beach entrance; and,
- Contact your local health official to see if a beach advisory has been posted.

Happy swimming and enjoy Maine's beautiful beaches!

*The information above is from the Maine Healthy Beaches website.*

<http://www.mainehealthybeaches.org/>

***Submitted by John Glow***



## **2008 Clean Water Needs Survey**

Well it seems like we just finished collecting wastewater needs data for the 2004 survey and here we go again. The 2004 report has not been released to Congress yet, but the Clean Water Act of 1972 requires that another round of needs be collected in 2008. The upcoming data collection period will run from January 2008 thru October 2008. During that time, any needs that have not been constructed or funded as of January 1, 2008 can be entered into the national database, with appropriate documentation. This exercise, while somewhat annoying, is important because Maine's needs, compared with total national wastewater needs may determine how State Revolving Funds will be allotted to Maine in the future. If our percentage of the national total drops, we may receive less money to loan to towns and districts to upgrade your wastewater infrastructure.

This year's process will have a different twist to it. Several subcommittees have been working for the past couple years to transform the old cumbersome data entry system into a web-based data entry system. In addition, with permission from the State's Needs Survey Coordinator, local entities can obtain permission and gain access to enter data directly through the web-site, with oversight from the State.

Over the next several months, we will be sending out reminders, current summary sheets for your system(s), letters inquiring into future needs for your system(s), additional information on the web site and instructions on how to request permission to enter data directly

into the web-based data collection system.

Remember, it is in the best interests of the municipalities and sewer districts to help us develop the greatest needs possible in order to secure the low interest State Revolving Funds in the future.

***David Breau, Clean Water SRF Program***

### **Reminder**

Facilities that have Reduced Toxicity Monitoring under Chapter 530 are required to submit their Toxicity Certifications to the Department by December 31. For more information contact your inspector.

***Bill Sheehan***

### **For Practice**

1. What is the best long-term fix for F/M sludge bulking?
  - a. Increase sludge wasting.
  - b. Decrease sludge wasting.
  - c. Add chlorine to the RAS.
  - d. Reduce sludge age.
2. How would you reduce the growth of bacteria in a filter bed?
  - a. Adjust the pH
  - b. Backwash more frequently
  - c. Pre-chlorinate
  - d. Slow the rate of filtration

3. If the feed time for sludge centrifuge operated in a batch mode is less than the optimum time,
  - a. a better concentrate will result
  - b. a better effluent quality will result
  - c. a dryer discharge solid will result
  - d. a wetter discharge solid will result
  
4. Determine the solids loading on a floatation unit if the flow is 0.65 MGD and the influent suspended solids are 1,750 mg/l
  - a. 10,000 lb/day
  - b. 9,487 lb/day
  - c. 6,328 lb/day
  - d. 1,700 lb/day

### ***Approved Training***

November 15, 2007 in Saco, ME – Effective Management Practices for Supervisors and Operators – sponsored by JETCC – Approved for 6 hours  
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November 27 or 28, 2007 in Gardiner, ME – Arc Flash CMP Electrical Safety/BLS Inspection – sponsored by JETCC – Approved for 6 hours  
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December 4, 2007 in Brunswick, ME – Pump Station Retrofits and Troubleshooting – sponsored by JETCC – Approved for 6 hours  
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December 6, 2007 in Waterville, ME – PVC Valves and Joining Overview – sponsored by JETCC – Approved for 6 hours  
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December 11 & 12, 2007 in Freeport, ME – MRWA Annual Conference – sponsored by MRWA – Approved hours depend on sessions attended.  
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December 12, 2007 in Winthrop, ME – Mixerology 101 – sponsored by JETCC – Approved for 6 hours  
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January 27-30, 2008 in Boston MA – Annual NEWEA Conference – Sponsored by NEWEA – Approved for various hours  
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Note: JETCC stands for Joint Environmental Training Coordinating Committee – PO Box 487 – Scarborough, ME 04070-0487 – Tel (207) 253-8020

Efficiency Maine is a program of the Maine Public Utilities Commission - 18 State House Station, Augusta, ME 04333-0018  
Tel: 207-287-8350

MRWA stands for Maine Rural Water Association - 14 Maine Street, Box 36 - Brunswick, ME 04011 – Tel (207) 729-6569

NEIWPC stands for New England Interstate Water Pollution Control Commission – 116 John St. – Lowell, MA 01852-1124 – Tel (978) 323-7929

NEWEA stands for New England Water Environment Association – 100 Tower Office Park, Suite K, Woburn, MA 01801 – Tel (781)939-0908

## Answers to For Practice:

1. a. To reduce bulking caused by a low F:M sludge, you need to raise the F:M (Food:Microorganism) Ratio. To do this, you must reduce the mass of micro-organisms in the system. This is done by increasing the wasting rate and cutting the sludge mass in the system.
2. c Pre-chlorination provides a chlorine residual in the water influent to the filter, reducing or eliminating microbial growth on the filter.
3. d If a centrifuge is not run for the optimum time, all the water that can be removed from the sludge will not be removed and the sludge will not be as dry as it can possibly be.
4. a  $0.65 \text{ MGD} \times 1750 \text{ mg/L} \times 8.34 = 9487 \text{ pounds/day}$

## Fall 2007 Exams

The Fall 2007 wastewater certification exam will was given on November, 14, 2007. The results will be back from ABC in 4 to 6 weeks. Please don't call JETCC or this office to ask about your scores. As soon as we have them, we'll get the results to you.

If you want to sit for the May, 2008 exam, contact JETCC and ask for an application.

The deadline for submittal is postmarked by March 24, 2008 or hand delivered to JETCC by March 28, 2008. The date for that exam date is May 14, 2008.

*Happy Thanksgiving*