



## Maine Department of Environmental Protection

### Bureau of Land & Water Quality

O&M Newsletter

August 2007

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

#### Index

<b>DMR QA Study 27</b>	<b>Page 1</b>
<b>Fall 2007 Exams</b>	<b>Page 2</b>
<b>For Practice</b>	<b>Page 2</b>
<b>Approved Training</b>	<b>Page 2</b>
<b>Answers to For Practice</b>	<b>Page 4</b>

the analysis of provider samples during June, July and early August. The samples are required to be analyzed in the same way that routine effluent samples are done. The intent of this program is to ensure that the lab's normal compliance monitoring data is reliable.

You must report test results on the forms sent with the samples from the provider. You may use either copies of the EPA Data Report Form from the DMR-QA booklet or similar provider-supplied forms to complete each data package. You will need to prepare a separate data package for each provider lab that is used. Each provider can only evaluate test results from their own test samples.

#### DMR-QA Study 27 Data Reporting Procedures

Those wastewater treatment facility laboratories that routinely participate in the annual quality assurance studies required by EPA received their DMR-QA booklets in mid-May. Many labs have a preferred PT provider and a standing order for test samples. The fresh water dischargers needed to add "*E. coli*" to their list of analytes for the first time this year. A copy of the "Low-level Mercury" raw data (as reported on a provider's Data Reporting Form by a permittee's commercial laboratory) is needed in order to complete a Data Package for this analyte. All test samples should have been ordered by wastewater permittees and commercial laboratories from PT providers by June 1, 2007.

Report the test results to your provider(s) via mail by about August 17, 2007. It must arrive by August 31, 2007 in order to be valid. Online submission of data should still be done early, if possible. Mark your calendars so that you don't forget. This needs to be done before the provider's reporting deadline if earlier than August 31, 2007.

Laboratories were in the process of receiving their test samples and doing

Please do not send copies of your data packages to either DEP or EPA. You should always keep copies of all your data packages for your own records, of course. Also, the provider labs will send both DEP and EPA copies of each permittee's evaluations by October 26, 2007. You don't need to do this.

Good luck with all of your laboratory analyses, whether routine or quality assurance samples. If you have any general laboratory questions, please contact your assigned DEP inspector. If you have specific concerns about the DMR-QA program, please call me at 287-4869.

***Ken Jones***

### **Fall 2007 Exams**

The next wastewater operator certification exam will be given on November, 14, 2007. The deadline for mailing you application is September 14, 2007 or hand deliver it to JETCC by September 28, 2007.

***Dick Darling***

### **For Practice**

1. Which of the following wastewater characteristics can be easily monitored on a continuous basis?
  - a. BOD
  - b. Temperature
  - c. pH
  - d. ORP

2. Part of the required maintenance for capillary or liquid thermometers includes checking for:
  - a. corrosion
  - b. high fluid level
  - c. loose connections
  - d. leaks
3. Before making a final decision, all information pertaining to the situation should be:
  - a. analyzed.
  - b. discussed with everyone in the plant.
  - c. written down on an approved form.
  - d. none of the above.
4. The wastewater treatment process which has a low F:M ratio and a hydraulic detention time of more than 12 hours is called:
  - a. conventional activated sludge.
  - b. contact stabilization.
  - c. extended aeration.
  - d. trickling filter.

### ***Approved Training***

August 21 & 28, September 4, 11 & 18, 2007 in Rumford, ME – VSWS & Class I Water Certification Preparation – Sponsored by MRWA – Approved for 12 hours

\*\*\*\*\*

August 21 & 28, September 4, 11 & 18, 2007 in York, ME – VSWS & Class I Water Certification Preparation – Sponsored by MRWA – Approved for 12 hours

\*\*\*\*\*

August 22 & 29, September 5, 12 & 19, 2007 in Lincoln, ME – Class II, III & IV Water Distribution Certification Preparation – Sponsored by MRWA – Approved for 12 hours

August 23 & 30, September 6, 13 & 20, 2007 in Presque Isle, ME – Class II, III & IV Water Treatment Certification Preparation – Sponsored by MRWA – Approved for 16.25 hours

\*\*\*\*\*

August 23 & 30, September 6, 13 & 20, 2007 in York, ME – Class II, III & IV Water Treatment Certification Preparation – Sponsored by MRWA – Approved for 16.25 hours

\*\*\*\*\*

October 3&4, 2007 in Yarmouth, ME – Laboratory Procedures w/NEWEA Exam – Sponsored by NEIWPC – Approved for 9 hours

\*\*\*\*\*

October 4, 11, 18, 25, Nov 1 & 8, 2007 in Augusta, ME – Basic Wastewater Treatment – sponsored by JETCC – Approved for 24 hours

\*\*\*\*\*

October 23, 2007 in Portland, ME – Applying Process Control Techniques to WWTF Operations – sponsored by JETCC – Approved for 6 hours

\*\*\*\*\*

October 24, 2007 in Presque Isle, ME – Pump Rebuild and Maintenance Workshop – sponsored by JETCC – Approved for 6 hours

\*\*\*\*\*

October 30, 2007 in Bangor, ME – Basics of Electricity, Arc Flash Protection – sponsored by NEIWPC – Approved for 6 hours

\*\*\*\*\*

November 7, 2007 in Presque Isle, ME – QA/QC of Laboratory equipment with Review of new *E. coli* methods – sponsored by JETCC – Approved for 6 hours

\*\*\*\*\*

November 8, 2007 in Presque Isle, ME – Wastewater Laboratory Analysis issues – sponsored by JETCC – Approved for 6 hours

\*\*\*\*\*

November 15, 2007 in Saco, ME – Effective Management Practices for Supervisors and Operators – sponsored by JETCC – Approved for 6 hours

November 27 or 28, 2007 in Gardiner, ME – Arc Flash CMP Electrical Safety/BLS Inspection – sponsored by JETCC – Approved for 6 hours

\*\*\*\*\*

December 4, 2007 in Brunswick, ME – Pump Station Retrofits and Troubleshooting – sponsored by JETCC – Approved for 6 hours

\*\*\*\*\*

December 6, 2007 in Waterville, ME – PVC Valves and Joining Overview – sponsored by JETCC – Approved for 6 hours

\*\*\*\*\*

December 12, 2007 in Winthrop, ME – Mixerology 101 – sponsored by JETCC – Approved for 6 hours

\*\*\*\*\*

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

**Answers to *For Practice*:**

1. a Temperature, pH and ORP can all be measured accurately with electronic probes that can give instantaneous and continuous readings. BOD requires a laboratory procedure and incubation of the samples for five days.
2. d Capillary thermometers rely on the expansion a contraction of a fixed amount of liquid to display the temperature. If some of the liquid leaks from the device, the readings will be inaccurate.
3. a In the decision making process it is necessary to analyze all available information that affects the decision. It is not always possible or necessary to discuss the information with everyone in the plant. Also, it is not always possible or necessary to write all the information down before making a decision.

4. c Conventional Activated Sludge systems have an F:M ratio of 0.2 to 0.5 and a hydraulic detention time of 4 to 8 hours.  
Contact Stabilization systems have an F:M ratio of 0.2 to 0.6 and a hydraulic detention time of 0.5 to 1.0 hour.  
Extended Aeration systems have an F:M ratio of 0.02 to 0.10 and a hydraulic detention time of 18 to 30 hours.  
Trickling filters are not suspended growth treatment systems and do not have an F:M ratio.