



Maine Department of Environmental Protection

Bureau of Land & Water Quality

O&M Newsletter

December 2008

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

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TOXICS PROGRAM:

Have you gotten your Chapter 530 certification in to the Department yet?

Last year many wastewater facilities received a one page permit modification for toxics testing requirements. These were issued in response to modification of the requirements of Chapter 530 which was amended in 2005. Most who received the modification were granted some reduction in testing requirements. With the reduction came a requirement for facilities to file a certification statement with the Department annually by December 31st of each year.

The statement must describe the following:

- (a) Changes in the number or types of non-domestic wastes contributed directly or indirectly to the wastewater treatment works that may increase the toxicity of the discharge;
- (b) Changes in the operation of the treatment works that may increase the toxicity of the discharge; and
- (c) Changes in industrial manufacturing processes contributing wastewater to the treatment works that may increase the toxicity of the discharge.

Facilities should consult Chapter 530 Section 2 (D)(4) for the language of the full requirement. Some facilities may also have this language incorporated into their permit but for many the only reference to this requirement can be found in the permit modifications under the Reduced Surveillance Testing section.

Facilities that had reduced testing requirements prior to April 2006 probably have the requirement to report clearly spelled out in their permit for many who recently received the reductions in the modification, may not have been aware of this requirement and need to file these as soon as possible.

If there are questions please contact your inspector or Dennis Merrill.

Bill Sheehan



For Practice

1. A cross-connection is:
 - a. A special type of tap.
 - b. The connection of two approved water systems for fire protection purposes.
 - c. The connection of two pipes using an approved backflow prevention device.
 - d. Any connection which allows potable water to be contaminated.
2. A tank is 12 feet in diameter and 12 feet deep, how much water will it hold?
 - a. 6,191 gallons
 - b. 4,524 gallon
 - c. 10,152 gallons
 - d. 24,128 gallons
3. The hydrogen ion is most active (most corrosive) at a pH value below:
 - a. 4
 - b. 5
 - c. 7
 - d. 8
4. You observe a large number of dead fish floating in the receiving water downstream of your treatment plant. What is the most likely cause of that fish kill?
 - a. Not enough chlorine in your effluent.
 - b. High concentrations of heavy metals.
 - c. Very low water temperature.
 - d. Low dissolved oxygen levels in the receiving water.

Fall Exam

The results from the Fall Exam will be sent to those who took the exam as soon as they are received from ABC.

Applications for the May 13, 2009 Spring Exam will be due in to the JETCC office by March 27, 2009 or postmarked by March 25, 2009.

Dick Darling

Approved Training

New training schedules for the Spring are expected shortly. The next issue of the O&M News will have the Spring Training schedules.

Answers to *For Practice*:

1. d. A cross-connection is any connection which allows the contamination of potable water by wastewater or other non-potable water.
2. c. $\text{Volume} = \text{radius} * \text{radius} * \pi * \text{height} * 7.48 \text{ gal/cu. ft.}$
 $\text{Volume} = 6 \text{ ft} * 6 \text{ ft} * 3.14 * 12 \text{ ft} * 7.48 \text{ gal/cu. ft} = 10,152 \text{ gallons}$
3. a. pH is the measure of the ratio of hydrogen and hydroxide ions in a water solution. As the number of Hydrogen ions increases, the pH decreases. Thus, the lower the pH, the more corrosive the water becomes.

4. d The most common cause of large fish kills is lack of oxygen in the water. Heavy metals can accumulate in fish tissue and cause chronic health problems or mutations in later generations. Low chlorine levels in the effluent would have, if anything, a beneficial effect on fish in the receiving water. Fish, as cold-blooded animals, are not affected by low temperatures in the receiving waters.

