Maine Department of Environmental Protection

Bureau of Land & Water Quality

O&M Newsletter

January 2009

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

Index

WASTEWATER INFRASTRUCTURE STIMULUS FUNDING OPPORTUNITY

TO: Wastewater Systems and Interested Parties

From: Stephen McLaughlin, P.E., Engineering Manager
Clean Water State Revolving Loan Fund (CWSRF) Program
Maine Department of Environmental Protection

Date: January 7, 2008

Subj: Economic Stimulus/Recovery Information

The Clean Water State Revolving Fund (CWSRF) Program is anticipating a federal economic stimulus/recovery package to be passed by Congress early in 2009. The Department of Environmental Protection expects **$50 to 90 million** will be made available for wastewater and non-point source abatement projects to be funded through the CWSRF.

These new funds are to quickly create jobs to boost the economy. Therefore, wastewater projects that are ready to proceed and can move quickly will be the most likely to receive funding. Projects should be able to go to construction by June or July 2009. In order to meet this time frame, applicants for these funds must complete the following:

- Submit environmental information for review and determination (CE or FONSI) on forms provided by the Department.
- Procure any environmental permitting needed.
- Complete designs and get Plans & Specifications approved by the Department by April of 2009.
- Receive Maine Municipal Bond Bank loan application approval after stimulus projects are selected.
- Bid by June 2009.

To help ensure the money moves quickly, the Department will propose rule changes that will allow CWSRF loans from these stimulus funds to be made at **zero percent.** There is also a high likelihood that the stimulus bill will allow the program to **forgive a portion of the principal. Additional incentives of principal forgiveness may be allowed for energy saving projects dealing with wastewater treatment (new energy efficient motors, blowers, diffusers, VFDs, lighting, HVAC systems, insulation, windows, solar, windmills, etc).** No details are available on the stimulus bill at this time. However, final requirements may be known by February.

What do you need to do?

By Friday January 30, 2009, if you have wastewater projects that can fit the time frame above and qualify for this stimulus funding, send the following information electronically to Steve McLaughlin at the DEP (Steve.A.McLaughlin@maine.gov):

1) Municipality or District
2) Short project description
3) Total Project Cost
4) Construction Cost
5) Engineering Cost
6) Month in 2009 to go to bid
7) Engineer contact and municipal contact information (email addresses and telephone numbers)

If you have questions, email Steve McLaughlin or call 287-7768. Future information on the stimulus finding will be posted on the DEP website at www.maine.gov/dep/blwq/docgrant/srfparag.htm .

Websites of the Month

http://www.rurdev.usda.gov/me/CBP/waterand.htm

USDA Rural Development Water and Waste Program

Rural Development (RD) provides a variety of financial services to communities. RD administers water and sewer loan and grant programs to assist communities in providing safe drinking water and modern sewage disposal systems. RD often partners with other lending programs such as the State Revolving Fund at DEP and the Maine Bond Bank and the Community Development Block Grant program at DHHS.

http://www.mainerivers.org/index.htm

Maine Rivers

Maine Rivers began in 1998 as a project of the Natural Resources Council of Maine, and became an independent organization in the spring of 2003. Their mission is to protect, restore and enhance the health and vitality of Maine's Rivers. This site includes river news and history, rivershed profiles, and links to organizations working in river watersheds.

http://www.epa.gov/watertrain/cwa/index.htm

Clean Water Act Training Module
This site provides a web based slide show on the Clean Water Act. The module includes information on water quality standards, antidegradation, impaired waters, TMDLs, permitting, biosolids, CSOs and other issues.

Brian Kavanah

Fall Exam

The results from the Fall Exam are in. Those of you who passed will be receiving your certificates soon, if you have no already received them. The results are:

Grade 1	8 of 11	73%
Grade 2	7 of 7	100%
Grade 3	3 of 10	33%
Grade 4	0 of 3	0%
Grade 5	1 of 11	9%
Grade SITS-1	2 of 3	67%
Grade SITS-2	6 of 6	100%
Overall	27 of 51	53%

Applications for the May 13, 2009 Spring Exam will be due in to the JETCC office by March 27, 2008 or postmarked by March 25, 2009.

Dick Darling

Getting Credit for Your Training

Several sign-in sheets from training sessions throughout the State have been received with illegible signatures and no Certification Numbers anywhere near the operator's name. We try to maintain good records of the training you take for recertification, but if you don't help us, we can't help you. If you attend a training session where your name is not pre-printed on an attendance sheet, make sure your name is legibly printed and that you write down your wastewater (and, if appropriate, water) operator certification number on the sign-in sheet. Otherwise, you might not get the credit that you should and you might have to submit a copy of the certificate from the training session. That's a hassle for everyone that can be avoided.

Dick Darling

For Practice

1. A new industry is planning to locate in your town and will be discharging process water to your treatment facility. You get a sample of process water from another factory that has the same pollutants in the same quantities as the water that will be come into your facility. You mix some of the sample with some of your present influent in the same ratio that you expect when the new factory comes on line. When you run an OUR test on this mixture, you note that the respiration rate decreases dramatically. This indicates:

a. The mixture is toxic to the mixed liquor.
b. The sample is over aerated.
c. The MLSS must be decreased to accept this waste.
d. The new waste may require additional aeration to stabilize.

2. Your discharge license requires you to store wastewater in your lagoon for 150 days in the winter. If you have an average influent flow of 127,500 gallons/day and a total pond area of 23.42 acres (1,020,000 sq. ft.), how much freeboard do you need in your 5 foot deep lagoon?
   a. 0.5 ft.
   b. 1.5 ft.
   c. 2.5 ft.
   d. 3.5 ft.

3. The term "return sludge" usually refers to sludge from:

   a. Primary Clarifiers
   b. Secondary Clarifiers
   c. Aerobic Digesters
   d. Anaerobic Digesters

4. Which waterborne disease is not caused by a virus?

   a. Hepatitis
   b. Cholera
   c. AIDS
   d. Smallpox

Approved Training

January 22, 2009 in Caribou, ME - Budgeting For Maximum Information - sponsored by MRWA – Approved for 4 hours
*****
January 25, 2009 in Thomaston, ME - Chasing the Thermal 'Demons' From the Process - sponsored by MRWA – Approved for 4 hours
*****
January 26, 2009 in Houlton, ME - Chasing the Thermal 'Demons' From the Process - sponsored by MRWA – Approved for 4 hours
*****
January 27, 2009 in Presque Isle, ME - Chemical Issues - sponsored by MRWA – Approved for 4 hours
*****
January 28, 2009 in Grand Isle, ME - Chemical Issues - sponsored by MRWA – Approved for 4 hours
*****
February 3, 2009 in Bangor, ME - Chemical Issues - sponsored by MRWA – Approved for 4 hours
*****
February 4, 2009 in Mattawamkeag, ME - Chemical Issues - sponsored by MRWA – Approved for 4 hours
*****
February 4, 2009 in Kennebunkport, ME, sponsored by JETCC – Approved for 6 hours
*****
February 4, 2009 in Belfast, Greenville, Houlton & Lewiston ME - Automatic Valve Seminar - sponsored by MRWA – Approved for 4 hours
*****
February 10 & 11, 2009 in Portland, ME –
MWUA Annual Conference – Sponsored by MWUA – Approved for various hours
******
February 12, 2009 in Bangor, ME - Instrumentation Measurement & Control with Use of SCADA for Process Efficiency – Sponsored by JETCC/NEIWPCC – Approved for 6 hours
*****
February 12, 2009 in Farmington, ME - Budgeting For Maximum Information - sponsored by MRWA – Approved for 4 hours
*****
February 12, 2009 in Thomaston, ME - Chemical Issues - sponsored by MRWA – Approved for 4 hours

February 24, 2009 in Lewiston, ME - Chemical Handling, Reporting And Overview of WARN – Sponsored by JETCC – Approved for 6 hours
*****
February 26, 2009 in Presque Isle, ME - Chemical Handling, Reporting And Overview of WARN – Sponsored by JETCC – Approved for 6 hours
*****
February 26, 2009 in Berwick, ME – Confined Space Entry – Sponsored by JETCC – Approved for 6 safety hours
*****
March 3, 2009 in Yarmouth, ME - Asset Management Applications – Sponsored by JETCC – Approved for 6 hours
*****
March 3, 2009 in Lincoln, ME – ICS & NIMS – Sponsored by MRWA – Approved for 4 hours
*****
March 4, 2009 in Fairfield, ME – BOD and TSS Review – Sponsored by JETCC – Approved for 6 hours
*****
March 11, 2009 in Bangor, ME – Basic Math for Operators – Sponsored by MRWA – Approved for 6 hours
*****
March 12, 2009 in Orono, ME - PVC Valves, Connections & Joining – Sponsored by JETCC – Approved for 6 hours
*****
March 18, 2009 in Augusta, ME - DEP Issues Briefing – Sponsored by JETCC – Approved for 6 hours
*****
March 19, 2009 in Jay, ME - Hands-On Applications to Minimize Pump & Facility Maintenance – Sponsored by JETCC – Approved for 6 hours
*****
March 24, 2009 in Wells, ME – BOD and TSS Review – Sponsored by JETCC – Approved for 6 hours
*****
March 25, 2009 in Various Locations in ME - True Confessions of a Water/Wastewater Operator – Sponsored by MRWA – Approved for 4 hours
*****
March 25, 2009 in Orono, ME - PVC Valves, Connections & Joining – Sponsored by JETCC – Approved for 6 hours
*****
March 31, April 7, 14, 21, 28, May 5, 2009 in Biddeford, ME – Basic Wastewater - Sponsored by JETCC – Approved for 24 hours
*****
April 16, 2009 in Portland, ME – Using PowerPoint to Make Your Point – Sponsored by JETCC – Approved for 6 hours
*****
April 28, 2009 in Augusta, ME - FOG Management Overview - Controlling Collection System Impacts & Disposal Options - Sponsored by JETCC/ NEIWPCC – Approved for 6 hours
*****
Note: JETCC stands for Joint Environmental Training Coordinating Committee – PO Box 487 – Scarborough, ME 04070-0487 – Tel (207) 253-8020

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

NEIWPCC 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. A dramatic decrease in the respiration rate indicates that the mixed liquor is not using the new waste as food, requiring more oxygen. This usually indicates the presence of a material that is toxic to your sludge. You may have to require removal of the toxic material or your sludge may gradually acclimate itself to the new material.

2. c. 127,500 gal/day * 150 days = 19,125,000 gals
   19,125,000 gals / 7.5 cu. ft./gal = 2,550,000 cu. ft.
   2,550,000 cu. ft. /1,020,000 sq. ft. = 2.5 ft of freeboard.
   You would need to draw down your lagoon so that less than 2.5 feet of water remained in the lagoon at the beginning of the storage season.

3. b. Return sludge is the settled mixed liquor containing active microorganisms which is returned to the aeration basin from the secondary clarifiers.

4. b. Cholera is caused by a bacteria. Viruses cause all the other diseases.