UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



REGION 1 1 CONGRESS STREET, SUITE 1100 BOSTON, MASSACHUSETTS 02114-2023

August 20, 2009

David P. Breau Division of Water Quality Management Department of Environmental Protection 17 State House Station Augusta, ME 04333

Dear Mr. McLaughlin:

I am pleased to inform you that EPA has reviewed and approved the revised business case provided by Olver Associates and the City of Belfast, Maine. This approval increases the amount of green project reserve for Belfast from \$70,000 to \$100,000. Below is the revised breakout for the Maine Clean Water State Revolving Fund ARRA Green Project Reserve List.

At this time EPA is approving the following projects and funding towards the green project reserve:

Bangor	NPS – Birch St Stormwater Mgmt	\$1,690,000
Bangor	NPS – St sweeper & in-stream monitor equip	\$270,000
Bangor	NPS – Penjajawoc Stream Stormwater Mgmt	\$877,000
Belfast	CSO Influent Pump Replace & Disinfection inc	\$100,000
Cumberland	NPS - Long Creek NPS	\$2,095,000
Limestone	Facility – WWTF Upgrade	\$1,500,000
<u>Machias</u>	Facility – WWTP Upgrade	\$50,000
TOTAL		\$6,582,000

The total green project reserve of \$6,582,000 that is being approved accounts for 21.7% of the State of Maine's ARRA CWSRF Capitalization grant exceeding the 20% requirement set forth in the March 2, 2009 ARRA Guidance. If a project from the GPR drops off the list or if one or more projects come in underbid and the GPR drops below the 20% requirement, EPA reserves the right to re-evaluate this approval at that time.

We appreciate the great working relationship demonstrated by the State during this process. Should you have any questions regarding this approval please contact me at (617) 918-1658.

Sincerely,

Katie Connors, Environmental Engineer

Municipal Assistance Unit

ENVIRONMENTAL ENGINEERS

November 20, 2009

Ms. Brandy Piers
Bureau of Land and Water Quality
Maine Department of Environmental Protection
17 State House Station
Augusta, Maine 04333

Dear Brandy:

We are writing to request that DEP consider the boiler replacement and influent pump replacements of the proposed Machias wastewater treatment plant upgrade project as a significant energy savings project with long-term environmental benefits. We are writing to present a business case for the inclusion of this project as part of the 20% Green Reserve stipulation under the American Recovery and Reinvestment Act of 2009.

The present plant boiler is about forty years old and very inefficient. The upgrade project will include a new energy efficient boiler with a programmable control system to substantially reduce oil consumption and carbon emissions. The oil fired boiler in the present treatment plant is approaching forty years old. It is very inefficient and frequently has soot buildup problems. The typical replacement of an old boiler with a new system usually consists of adding a modern high efficiency boiler package with a flame retention boiler feature. This generally can be expected to result in an 85% efficient operation. We propose to go beyond this traditional approach by utilizing a non-traditional condensing boiler with a 95% efficiency rating. We also intend to add a PLC microprocessor to the system which will control the boiler's internal temperature and operation based upon feedback data that considers both internal and external seasonal temperature heating requirements. Enclosed is a cut sheet that shows the unique features of the microprocessor system. For an initial expenditure of about \$60,000, including equipment, installation and engineering we have estimated annual operating cost savings of about \$5,000 per year which results in a ten year payback.

The plant's two influent pumps are also forty years old and inefficient. The pumps are being upgraded with energy efficient motors and variable frequency drives. The cost of the pumps upgrade, including equipment, installation, and engineering is \$108,000.

OLVER ASSOCIATES INC.

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We hope that this information is helpful as you review the proposed project components for inclusion as a Green Reserve project. If you have any questions, or need additional information, please call.

Very truly yours,

OLVER ASSOCIATES INC.

Mandy H. Olver P.H., Vice-President Construction Services Manager

MHO/ml

0277/090

CC: Ms. Betsy Fitzgerald, Town Manager