

US EPA ARCHIVE DOCUMENT

**State Innovation Grant Project
Narragansett Bay Commission
Progress Report - 1
September 1, 2008 – December 31, 2008**

Project Title: Sustainable Energy Management Practices for Wastewater Treatment Facilities

Part 1 – Synopsis of Accomplishments

During the current Project Reporting Period September 1st through December 31st, 2008 the following activities took place: the Project Partners (NBC, RIDEM, URI and RIMES) met a variety of times to discuss and plan activities associated with project development and implementation, a draft QAPP was developed and submitted to EPA for review and comment, a meeting of the EF-EMS Steering Committee took place on December 22nd, an EF-EMS Kick-Off Meeting was scheduled and is being planned for mid February 2009, a site visit was conducted of an end-use FOG facility located in Newport Rhode Island, and a FOG-ERP compliance and BMP checklist was developed and trial tested at three local restaurants. Throughout the reporting period the Project Partners NBC, RIDEM, URI and RIMES met and/or communicated with each other and EPA on a regular basis. Please see the attached Project Milestone Table for a more detailed summary of project activities.

Part 2 – Narrative Discussion

Quality Assurance Project Plan (QAPP) – Throughout the current project period a draft QAPP was developed and submitted to EPA for review. Two issues regarding the QAPP currently remain outstanding:

1. The development of an acceptable statistical procedure for analyzing and managing data as part of both the EF-EMS project and the FOG-ERP Project, and
2. The development of a plan for possibly collecting samples of wastewater from restaurants for FOG analysis at EPA's Laboratory.

Both of these issues will be addressed during the next reporting period.

I. WWTF Energy Focused Environmental Management System Project

Management System Steering Committee – A Steering Committee was formed and an initial meeting was held on December 22nd 2008. During this first Steering Committee Meeting the following individuals were in attendance:

- James McCaughey, NBC
- Barry Wenskowicz, NBC
- David Aucoin, NBC
- Richard Enander PhD., RIDEM
- Gene Park, PhD., URI
- John Gilheeney, RIMES
- Beth Termini, EPA
- Gina Snyder, EPA

- Bill Patenaude, RIDEM
- Bill Harritos, QDC – NWPCA
- Dennis Colberg, QDC – NWPCA
- Peter Eldridge, West Warwick WWTF - NWPCA

In addition to those in attendance meeting invitations were sent to the following individuals:

- Anne Leiby, EPA - New England, Region 1
- Thomas Coughlin, National Grid
- Bernard Bishop, Town of South Kingston WWTF - NWPCA
- Brent Herring, Untied Water - NWPCA
- Andy Dzykewicz, Rhode Island Office of Energy Resources
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Some of the noted suggestions and ideas that came out of this meeting are as follows:

- Document some WWTF energy success stories – show cost savings
- The best day/time for holding meetings and/or workshops are on Wednesdays 9:00 AM – 12:00 PM
- Move the Roundtable Meetings around to encourage attendance – both the Warwick Library and WWTF has worked well for the NWPCA
- Contact Ocean State Power with respect to participation
- Contact the Rhode Island Public Utilities Commission
- Contact the Rhode Island Office of Energy Resources with project updates and to help encourage National Grid to participate
- Make contact with RISE/Thielsch Engineering
- Tie in Roundtable meetings with NWPCA Executive Committee Meetings
- Have a speaker from a WWTF (one from MA that is participating in their energy management project) to speak at the “Kick-Off” meeting
- Check with Save-the-Bay – perhaps they can help with giving some form of recognition for WWTF participating in program
- Hold Project Kick-Off meeting around mid February
- Send out initial Kick-Off Meeting notices in mid-January
- Hold next steering committee meeting about two weeks before Kick-Off meeting

As a result of this Steering Committee Meeting the Project Partners: met with a representative of RISE on January 14th, 2009, initiated planning activities for a EF-EMS Project Kick-Off Meeting including developing a meeting agenda, identifying speakers, writing a meeting invitation letter, and putting together an attendee mailing list. The Kick-Off Meeting is tentatively scheduled date of February 25th, 2009.

The EF-EMS Steering Committee process performed exceptionally well with each of the attendees contributing useful ideas and suggestions associated with project development and implementation. Every effort will be put forth by the Project Partners to include representatives from National Grid and/or RISE and the PUC in future Steering Committee Meetings. The next Steering Committee Meeting is scheduled for February 13th, 2009.

Energy Focused Environmental Management System Training Program for WWTFs – Utilizing EPA’s Energy Guidebook - During this Project Reporting Period RIMES developed a

draft Power Point presentation on “Ensuring a Sustainable Future: Energy Management for Wastewater Treatment Facilities.” This presentation will be the focal point of the Guidebook Training Program.

Project Kick-Off Meeting/Workshop – A date of February 25th has been set for the Project Kick-Off Meeting to be held at NBC’s Corporate Office at One Service Road in Providence. The EF-EMS Steering Committee members prepared a draft agenda and an invitation letter to be sent out to the target audience.

Hold an EPA Energy Guidebook Training Workshop for Participating WWTFs – Several locations were investigated for holding this workshop including – NBC’s Corporate Office Building Board Room in Providence, URI’s Bay Campus Auditorium in Kingstown, and the Crown Plaza Inn located in Warwick. A final date and location for this Workshop will set after the Project Kick-Off Meeting.

Energy Use Baseline for Participating WWTF – No action on this project task has been taken to-date however throughout the current project period NBC continued to monitor the energy use of its various facilities and continued to update this information in the Portfolio Manager.

EF-EMS Roundtable – On September 23rd and December 9th, 2008 NBC’s ESTA Program Manager attended meetings of the Massachusetts Energy Management Roundtable for Water and Wastewater Utilities. This Roundtable consisting of about 14 individual water/wastewater utilities through central and western Massachusetts meet on a quarterly basis to discuss their on-going energy management projects and programs. Attendance at these meeting is helping with the development of ideas for the Rhode Island WWTF EF-EMS Roundtable.

WWTF Energy Use Assessments – On January 14th NBC staff met with a representative of RISE to find out more about their energy management services and to see if they would be interested in participating in the WWTF EF-EMS Project. RISE, a division of Thielsch Engineering, located in Cranston Rhode Island, works in conjunction/cooperation with National Grid to perform and/or coordinate energy conservation assessments. RISE will conduct, free of charge, an Energy Management Assessment of office facilities, looking at the use of both electricity and natural gas, and will make suggestions on equipment and procedural improvements that take advantage of the various incentive programs offered by National Grid. RISE can also coordinate an industrial Energy Management Assessment of industrial site with its engineering division. This industrial assessment may or may not have a cost associated with it and requires further investigation. A follow-up meeting will be held with RISE Engineering in order to find out more about what is involved with having an assessment done of WWTFs.

II. FOG Environmental Results Program Project

FOG-ERP Steering Committee During the current Project Reporting Period the Project Partners began identifying potential FOG-ERP Steering Committee members. A final list of potential members will be complete during the next reporting period.

Identification of Industry Sector Universe - A review of NBC permit files and records has identified 400 restaurants in the Field’s Point servicing district and 200 restaurants in the Bucklin Point Serving District. All identified restaurants will be participating in the project.

FOG Management Checklist and set of Best Management Practice (BMP) Factsheets –

Throughout the Project Period NBC and URI develop a combined regulatory compliance and FOG BMP checklist that will be used for collecting initial baseline data from all 600 restaurants included in the Sector Universe.

Trial Checklist Runs On November 13th 2008 the Project Partners accompanied NBC Pretreatment Technicians on site visits of three food service establishments located in the City of Pawtucket in order to perform a trial run of the FOG Checklist and the overall FOG ERP Assessment process. As a result of this trial run several modification were made to the checklist including: elimination of redundant questions, clarification on questions regarding the management of the two identified FOG waste streams (i.e. Brown Grease vs. Yellow Grease), and collection of quantitative data on the amounts of fresh oil being used by those restaurants that utilize frialators.

Kick-Off Workshop - Initial project activity plans included holding a workshop to announce the new FOG-ERP initiative. However, after much discussion of concerns with respect to collecting unbiased baseline data it was decided to wait and hold the workshop after the baseline assessment has been completed. In this way the baseline environmental performance of each restaurant less likely to be influenced by project activities. The post baseline workshop will focus on implementing identified BMPs.

ERP Assessments – No action taken

ERP Certification – No action taken

Statistical Analysis – No action taken

Part 3 – Projection of Activities, Accomplishments, and Major Expenditures for Next Quarter Report

I. WWTF Energy Focused Environmental Management System Project

QAPP – Finalize QAPP – Early February 2009

Project Kick-Off Meeting – Hold meeting on February 25, 2009

Steering Committee Meeting – Hold next meeting on February 13, 2009

EPA Energy Guidebook Training Workshop – Hold workshop in late march to Early April 2009

II. FOG Environmental Results Program Project

FOG-ERP Steering Committee– Hold first Steering Committee Meeting in early March 2009

ERP Assessments – Initiate assessment in February 2009

ERP Certification – Develop Certification procedures in February 2009

Part 4 – Financial Report

Project expenditures for each of the Project Partners for the current Reporting Period have not been not been tabulated at this time and no draw-downs on grant funds have been made to-date. All expenses during this time however will be associated with staff salary and fringe. An estimate of NBC grant related expenses are as follows:

	Salary	Fringe	Total Personnel	Other	Match Funds	Grant Funds
NBC	\$3,225	\$1,775	\$5,00	\$0.00	\$2,500	\$2,500
RIDEM						
RIMES						
URI						

The rate of spending to-date is close to what was originally anticipated.

Attachments:

1. Project Milestone Summary Table
2. FOG-ERP Compliance/BMP Checklists