

Water-Wastewater Focus: Third Conference Call Notes

EVENT: 3rd Water-Wastewater Focus Meeting

MEETING DATE: November 30, 2005 1 pm EST

MEETING LOCATION: Telephone Conference

HOST ORGANIZATION: EPA, The Cadmus Group, Inc.

NEWS

- The Water-Wastewater (W-WW) Focus Website is now live. The site is a location for the group to post documents, contact information, meeting minutes, and other resources. Please visit www.energystar.gov/waterwastewaterfocus.
- The 2005 Webtech Conference technical session on W-WW was a success. There is an opportunity for a full W-WW session at the 2006 Webtech conference in Dallas. To participate, the W-WW Focus group will submit six papers collect to present; three on energy conservation, and three on energy production. If interested in contributing in this effort, please contact Jim Wheeler at Wheeler.james@epa.gov.

ENERGY EFFICIENCY GUIDEBOOK DEVELOPMENT UPDATE

- To serve the goals of its Water-Wastewater Focus, ENERGY STAR intends to provide a guidebook for facility operators and managers across the U.S. The guidebook will provide:
 - A comprehensive guide to energy efficiency measures with data on energy savings, costs and monetary savings and/or payback periods,
 - Data from case studies highlighting best practices that have already been implemented; and,
 - Conventional and advanced technologies, as well as existing and new plants.
- Lawrence Berkeley National Lab (LBNL) has completed a review of existing literature on energy efficiency in water and wastewater treatment sectors to determine if an updated, comprehensive energy management guidebook is needed. Rich Brown, of LBNL, presented the summary report to the Focus group.
- Thirteen existing guidebooks were examined and all are summarized in LBNL's report. The report identifies each guidebook, lists the topics covered by the guidebook, and summarizes the types of information they provide or lack. It was concluded that none of the existing guidebooks fully capture the goals described above in a single, complete document targeted at the right audience. Therefore, an effort is warranted to compile a new W-WW guidebook, drawing on the existing literature where possible.
- To provide the industry a useful and up-to-date resource, an ENERGY STAR Water-Wastewater guidebook will include:
 - Updated data to reflect the technological advances of the last ten years,
 - Information specific to medium and smaller plants, in addition to large plants,
 - Information for plants utilizing tertiary treatment methods,
 - ENERGY STAR's Energy Guidelines for Energy Management, (http://www.energystar.gov/index.cfm?c=guidelines.guidelines_index),

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- Design considerations; and,
- Financing opportunities for investments in energy efficiency.

BENCHMARKING UPDATE

- Steven Carlson of CDH Energy presented an update of AWWARF's Water and Wastewater Utility Energy Index. Data gathered in this project will be used as a foundation for an ENERGY STAR benchmarking system by creating program-wide energy performance metrics for water and wastewater utilities.
- The goal of energy performance benchmarking for the water and wastewater industries is to quantify the energy used to provide the service. It is also important to base benchmarking on measured data where practical and normalize for factors beyond the utility's control, such as population, the volume of water/wastewater delivered/treated and the mass of pollutants removed.
- An encouraging number of responses to the distributed energy surveys have been returned. Surveys completed and returned to date include:
 - 363 respondents from the waste water sector, 80 from NY
 - 216 respondents in the water sector, 42 from NY
- CDH has begun to assemble the data obtained from the surveys and will begin the data analysis. This analysis will identify parameters that explain energy use variation, define the ranking distribution from the data set, and formulate a comparison framework. An update on the data analysis will be presented at the next Focus meeting.
- Surveys will be available on the Focus Website at www.energystar.gov/waterwastewaterfocus.

INNOVATIVE FINANCIAL SOLUTIONS

- Energy consumption is typically the third largest operating cost category for most W-WW plants. Neil Zobler of the Catalyst Financial Group discussed options that exist for financing energy efficiency improvements in the W-WW industries.
- Mr. Zobler further discussed *Energy-Related Financing Options in the Drinking Water and Wastewater (DW/WW) Industries*, a report prepared by Catalyst Financial Group and The Cadmus Group for ENERGY STAR. The paper offers insights into whether and how financing might affect opportunities for pursuing improved energy efficiency in both industries by providing:
 - An overview of the drinking water and wastewater (DW/WW) industries,
 - Opportunities for energy efficiency improvements and pollution prevention,
 - Information on ways to finance energy improvements in these industries; and,
 - Discussion of barriers to implementing energy efficiency upgrades.
- Mr. Zobler highlighted that financing can come from internal and external sources. Externally, funding can be obtained from capital markets, energy saving service companies (through guaranteed savings performance contracts), local and regional incentive programs, and the federal government. For additional system benefits funds summary charts by state, visit <http://www.aceee.org/briefs/mktabl.htm>
- ENERGY STAR's Cash Flow Opportunity (CFO) Calculator is an easy to use, cost-free tool that is designed to help decision makers address critical questions about installing energy efficiency projects. It helps determine how much new energy efficiency equipment can be purchased from the anticipated savings.
 - The tool is available at http://www.energystar.gov/ia/business/cfo_calculator.xls

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- Visit <http://es.netspoke.com/attendee/conferenceDetails.asp?conferenceID=1279> to sign up for an online training session for new users of the CFO calculator.
- Energy efficiency improvements can be considered as debt-neutral and may not add to an organization's debt ceiling. Call participants voiced interest in further investigation into this area to identify the barriers to realizing debt-neutral efficiency investments.

IN-PERSON MEETING

- The Focus group came to the consensus that an in-person meeting would be extremely beneficial to move forward in developing a national W-WW energy efficiency program. The proposed 2-day workshop, to be held in late 2006 or Spring 2007, would have the following goals:
 - Share best practice models and come to a consensus as to which models should be included in the guide,
 - Discuss the benefits of measuring and tracking energy use in the water-wastewater sectors and outline ways in which an ENERGY STAR Water-Wastewater program can offer assistance; and,
 - Suggest organizations and associations EPA should partner with to create market change.

ACTION ITEMS

- Provide Katy Hatcher (hatcher.caterina@epa.gov) and Rich Brown (REBrown@lbl.gov) feedback on LBNL's literature review, along with any suggestions or concerns about the development of the W-WW energy efficiency guidebook.
- Continue efforts to include the W-WW Focus in related meeting and conference agendas.
- Develop a list of possible experts to sit on the Technical Steering Committee. E-mail Rich Brown at REBrown@lbl.gov to be included in the Technical Steering Committee.
- Set the date and develop an agenda for the proposed in-person workshop.
- Schedule update conference calls and presentations. Focus members voiced the benefits of setting a regular date to hold these meetings. Look for an e-mail from staff at The Cadmus Group for details about the next call to be held.

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ATENDEES

Table 1 Focus Attendees, November 30, 2005

Company	Last Name	First name	Title	Phone	Email address
Catalyst Financial Group, Inc.	Zobler	Neil	President	(203) 790-4177	nzobler@catalyst-financial.com
Columbus Water Works	Arnett	Cliff	Senior Vice President	(706) 649-3458	carnett@cwvga.org
Connecticut Department of Public Utility Control	Mann	Sharon	Utilities Examiner/Chair NARUC Staff Subcommittee on Water	(860) 827-2675	Sharon.Mann@po.state.ct.us
Lawrence Berkeley National Laboratory	Brown	Rich		(510) 486-5896	REBrown@lbl.gov
NYSERDA	Visalli	Joseph	Program Director	518-862-1090, ext. 3205	jrv@nyserda.org
Oak Ridge National Laboratory	Sharp	Terry	Project Manager	(865) 574-3559	sharptr@ornl.gov
Pennsylvania Dept. of Environmental Protection	Halterman	Kammy		(814) 332-6648	khalterman@state.pa.us
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USEPA-OW	Wheeler	James		(202) 260-5827	Wheeler.james@epa.gov
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ORG??	Alvers	Ken		Phone?	Email?
WAC	Clark	Steve		Phone?	Email?

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