

Targeted Action Fund (TAF) Requests February 2014

The Legislative & Regulatory Policy Committee was recently asked to consider two Targeted Action Fund (TAF) requests detailed below. The Policy Committee will be reviewing these requests in advance of the Board of Directors Meeting on February 2, and the outcome of their deliberation will be provided to the Board. The proposals which follow are provided for your information and review, pending Policy Committee consideration.

Request #1:

WERF Targeted Collaborative Research on Energy Recovery from Incineration of Biosolids

Requested Amount: \$7,000

NACWA is requesting approval of \$7,000 from the FY 2014 TAF budget to help support targeted research to determine and demonstrate that energy recovery from the thermal oxidation (incineration) of biosolids is technically and economically viable and to develop information that will help educate regulators on the benefits of renewable energy recovery from biosolids. The TAF funds would be provided to the Water Environment Research Foundation (WERF) to support a Targeted Collaborative Research (TCR) study on the feasibility of energy recovery from biosolids incineration. A number of NACWA members have already contributed to the initial funding for this project, and NACWA's contribution would ensure that the project can move forward. The Co-Chairs of the Biosolids Management Committee have reviewed the proposal and believe the contribution is a good opportunity to leverage a small investment into a very beneficial report for NACWA members.

Thermal oxidation (incineration) has, until recently, been practiced in the wastewater industry as solely a volume reduction and sterilization method for biosolids management. Existing systems are largely not designed to harness excess energy. Members who are working to comply with the March 2011 Clean Air Act regulations for sewage sludge incineration are faced with significant costs and would benefit from the research and additional technical guidance the study would provide. Specifically, the study would provide information on how to make investments to existing incineration infrastructure to not only achieve compliance, but also recover energy and save money – now and into the future as incinerators are further upgraded and replaced. The study would also help to identify efficient energy recovery processes for those members who may be considering thermal technologies, including pyrolysis, to manage their biosolids as a part of larger, energy-related initiatives consistent with the Utility of the Future. Considering the prospect of efficient energy recovery at a reasonable financial return, members that operate or are contemplating thermal oxidation technologies may have real incentives to pursue energy neutrality. The study will also include triple bottom line analyses that will inform regulators and lawmakers of the benefits of renewable energy recovery from biosolids.

Specific Research Topics

As currently envisioned, the study will also investigate how increasing dewatered solids concentrations increases energy production, as well as how opportunities for co-combustion with alternative feedstocks,

such as screenings, biomass, etc., will increase electricity production from incineration. Specific research focus areas include:

- Examining the energy potential from the thermal oxidation of biosolids and other residuals by documenting the effectiveness of energy or heat recovery from up-to-date thermal oxidation units with combined heat and power recovery;
- Determining the potential for renewable energy recovery from thermal oxidation of wastewater residuals nationwide;
- Comparing the triple bottom line value of energy recovered from wastewater residuals by thermal oxidation in contrast to the same energy obtained from coal;
- Identifying process schemes that will achieve energy recovery towards energy neutrality for incineration, pyrolysis and gasification and evaluating process equipment requirements to meet these schemes.

Request #2:

NACWA Support of CASA Research Project/White Paper on Citizen Suit Issues

Requested Amount: \$20,000

NACWA is requesting approval of \$10,000 in Fiscal Year (FY) 2014 and \$10,000 in FY 2015 TAF resources – for a total of \$20,000 over two years – to provide financial support for a research project and resulting white paper exploring the impacts of Clean Water Act (CWA) citizen suits on municipal clean water utilities. The concept of the white paper originated in discussions among researchers and the California Association of Sanitation Agencies (CASA). CASA has requested NACWA's support for the project – both financially and to provide content for the document. A proposal for the white paper, which would be drafted by the Wheeler Institute for Water Law & Policy at the University of California, Berkeley Law School, is included under this agenda item. The leadership of NACWA's Legal Affairs Committee has reviewed this request and is supportive.

Citizen suits can present significant challenges to municipal clean water utilities. There is a growing consensus among NACWA members that their use by environmental activists groups is increasing, particularly related to sanitary sewer overflow (SSO) issues. The problem of citizen suits has become particularly acute in California, where recent years have seen a perceived increase in the number of lawsuits filed by citizen groups against clean water utilities. Oftentimes these lawsuits may be related to trivial or non-existent CWA violations and result in questionable environmental benefit; however, they still require significant financial resources to defend and address.

In order to help confront this issue, CASA is spearheading the fundraising for an independent research project and white paper by a respected academic institution to examine the impacts of citizen suits on the municipal clean water community. The white paper, as described in the proposal, will explore a wide range of regulatory, legal, and financial issues to help inform its analysis. Among the questions the paper will seek to address are whether there is a quantifiable increase in citizen suits against wastewater utilities, what the costs of these suits are for ratepayers, whether these suits result in cost-effective environmental improvements, and whether these suits can in fact lead to undesirable outcomes or unintended effects.

Additionally, the paper will examine whether there are more effective ways than the citizen suit approach to achieve clean water goals while also protecting the interests of ratepayers and taxpayers.

Although significant components of the research in the paper would focus on California examples, the larger analyses and conclusions in the paper regarding the impact of citizen suits would be broad enough to apply nationally. These analyses and conclusions could be used by NACWA members in other parts of the country as they face their own citizen suit challenges. The paper could also be valuable to NACWA as an organization in helping inform the Association's future legal, regulatory, and legislative advocacy on citizen suit issues.

As a financial contributor to the project, NACWA would have editorial input into the entire white paper, including any overarching policy recommendations and conclusions. Additionally, CASA has indicated that it is open to including broader national examples and discussion in the paper wherever feasible. Work is expected to be on the project in March or April 2014, with a final product ready in fall 2014.