

Bay Area Biosolids-to-Energy Project

Quarterly Update

Spring 2011



A sixteen member consortium of Bay Area agencies charged with wastewater treatment for over two million residents is developing a Biosolids to Energy project to address biosolids management issues affecting agencies and their rate payers around the San Francisco Bay Area. Known as the **Bay Area Biosolids to Energy (BAB2E) Coalition**, the project goals are to maximize the renewable energy potential in biosolids and minimize greenhouse gas emissions, while diversifying biosolids management options to include alternatives that will not be dependent on agricultural use of the biosolids, or the need to send biosolids to landfills. The project is aligned with state and federal initiatives to develop renewable energy resources and reduce greenhouse gas emissions.

Recent Accomplishments and Activities

\$1 Million Grant Approved: In March 2011, the California Energy Commission approved a \$1 million Public Interest Energy Research (PIER) grant for the BAB2E project to demonstrate the efficacy of the steam/CO₂ reforming technology with biosolids on a commercial demonstration scale.

WERF to Peer-Review Demo Project: The Coalition is contracting with the Water Environment Research Foundation (WERF) for an independent Peer Review of the demonstration project. WERF is America's leading independent scientific research organization dedicated to wastewater issues.

Request for Proposals: The Coalition is in the process of establishing a governance structure suited to contracting for one or more biosolids to energy facilities in the Bay Area. This will lead to the issuance of a Request for Proposals.

The BAB2E Coalition, formed in 2007, has been evaluating alternative biosolids management options to diversify options and address initiatives, opportunities and challenges related to increasing restrictions of limited biosolids management options available to the San Francisco Bay Area.

For more information on their history or the project to date, please check out

www.bayareabiosolids.com/aboutus

The Coalition issued a Request for Qualifications and received Statements of Qualifications from 16 teams from around the world proposing various biosolids-to-energy technologies. The Coalition has short-listed three teams which will eventually receive a Request for Proposals to build a BAB2E facility in the nine-county Bay Area. The short listed firms are:

- Intellergy for a plant that would utilize a steam/CO₂ reforming process to produce electricity, utilizing fuel cells, and hydrogen gas.
- MaxWest for a gasification facility that would recycle heat from the gasifier and produce heat for on-site use to make wastewater plants more sustainable.
- Synagro for a dryer that would use waste heat from engines fueled by landfill methane gas to dry biosolids then use the dried biosolids as a renewable fuel in a biomass to energy plant.

The three short-listed technologies provide a range of technology options and innovative approaches, and include non-incineration processes. At time of issuing a Request for Proposals other firms may be invited to submit as well.

The Coalition has sought to develop multiple funding options for the BAB2E project, including grants from the California Energy Commission and U.S. Department of Energy.