

Bay Area Biosolids to Energy Coalition Request for Qualifications

December 1, 2009

I. INTRODUCTION

1. Summary

In 2006, Bay Area sanitation agencies executed a Joint Exercise of Powers Agreement (JEPA) to plan a regional biosolids processing facility. These agencies, herein referred to as the Coalition, seek to select through this Request for Qualifications (RFQ) process, at least three qualified Proposers, who will in turn become qualified to participate in a subsequent Request for Proposals (RFP) to develop a biosolids to energy facility. This project, called the Bay Area Biosolids to Energy project (B2E), has undergone a preliminary planning phase to determine the project's biosolids processing capacity and permitting feasibility. The term Proposer shall refer to any legal entity (ies) submitting a response package in response to this RFQ.

Proposers responding to this RFQ must have proven expertise and extensive experience in biosolids management, particularly in the design, construction, operation, and maintenance of biosolids processing facilities.

The Coalition will select at least three Proposers, considered to be qualified for further consideration under a subsequent RFP process aimed toward awarding a contract for either a design-build-operate (DBO) or a design-build-own-operate (DBOO) facility to be sited in the nine-county Bay Area. Contract terms under consideration may range from ten to twenty years. This RFQ document will pre-qualify Proposers for the anticipated RFP document, which may result in a contract with the Coalition.

2. Tentative Schedule

The Coalition has established the following target dates for issuance, receipt and evaluation of response packages in addition to award of an Agreement in response to this RFQ. The following dates are tentative, non-binding, and are subject to change without prior notice:

Advertisement of RFQ	December 1, 2009
Pre-Submittal Conference	January 8, 2010
Deadline for Proposers to Submit Questions	January 18, 2010
Deadline for Proposers to Submit Qualifications	February 19, 2010
Posting of Proposer Ranking	March 22, 2010

II. BACKGROUND

1. Bay Area Biosolids to Energy Coalition

In 2004, Bay Area agencies funded the Bay Area Clean Water Agencies (BACWA) Biosolids Committee to evaluate a regional biosolids processing facility. In 2006, several of these agencies executed a Joint Exercise of Powers Agreement (JEPA) to plan a regional processing facility. This agreement was amended in 2009 to allow other agencies to join the coalition effort. While the majority of the Coalition agencies beneficially reuse biosolids either as daily landfill cover or as soil amendment on agricultural fields, increasing regulations on many aspects of these practices have motivated the Coalition agencies to look for other solutions. The goals of the Bay Area Biosolids to Energy project are to:

- Diversify biosolids management portfolio with a long-term, sustainable option for ultimate local biosolids beneficial reuse
- Manage risks/uncertainties associated with present practices
- Maximize resource development potential of biosolids through conversion to a net energy source
- Minimize greenhouse gas (GHG) impacts

The current Coalition members are: the San Francisco Public Utilities Commission, the City of Burlingame, the City of Livermore, the City of Richmond, the North San Mateo County Sanitation District, the West County Wastewater District, the Central Marin Sanitation Agency, Delta Diablo Sanitation District, Dublin San Ramon Services District, Fairfield-Suisun Sewer District, Ironhouse Sanitary District, Sausalito Marin City Sanitary District, South Bayside System Authority, Union Sanitary District, the City of Millbrae, and Vallejo Sanitation District. The Coalition may increase or decrease in membership as the project develops.

2. Bay Area Biosolids to Energy Project

A. Background and Objectives

Most of the Coalition members' facilities generate anaerobically digested Class B biosolids (latest analytical data will be submitted upon request); one member produces lime stabilized, Class B biosolids. Biosolids from these facilities will generally be free of grit, screenings, and will be dewatered. Throughout the year, the Coalition members have contracts with vendors to land apply or otherwise beneficially reuse their biosolids. The Project will be relied upon to diversify the Coalition members biosolids reuse options.

Significant potential exists for the public wastewater sector development to help achieve state and federal goals to meet electricity and low carbon fuel needs with renewable sources. Across the San Francisco Bay Area, agencies have implemented programs to capture methane gas through anaerobic digestion. However, the biosolids still retain energy content after digestion. A regional biosolids processing facility operated under the direction of the Coalition will use biosolids (and potentially other waste derived biomass feedstocks) to generate renewable energy. This facility must be located within the nine county Bay Area to reducing vehicle biosolids hauling miles. Trucking of biosolids is currently estimated to exceed one million miles per year for all the Coalition agencies combined which generate associated greenhouse gas emissions.

While open to the use of any available technologies, the B2E project is requiring that the technology used have air cleaning systems that guarantee compliance with stringent Bay Area air quality standards. Coalition members are approaching this project with the concept that all air regulations will be met continuously over the life of the project. The project seeks to maximize net energy production while deploying state of art conversion technologies in order to generate the greatest environmental and economic benefits to the surrounding community.

B. Current Status

The Coalition has completed a preliminary marketing study, technical assessment, permitting assessment, preliminary technology screening, and preliminary site screenings. In addition, the Coalition has undertaken an effort to seek third party funding for the planning and construction of a biosolids to energy facility; this work is still underway. It is the Coalition's expectation that such funds, if successfully obtained, would be used to offset project costs.

The Coalition has sought to identify known sites within the nine-county Bay Area that might accommodate this project. The Coalition is in the process of evaluating sites for permissibility, attainability, and whether the site has a history of challenging environmental or community issues. Proposers to this RFQ may either identify a specific site of their own or propose that the Coalition work with the Proposer to continue site screening for compatibility with the technology proposed. The Coalition has also formed a Communications subcommittee which will have a major and ongoing role through project development.

Recent work completed by the Coalition indicates that the quantities available for the proposed facility are between 75,000-92,000 wet tons/year, with increases or decreases in final contracted quantity depending on final price and travel distance to project location. It is a goal of the

Coalition to foster the development of greater contracted capacity for the facility through outreach and third party funding.

III. SCOPE OF SERVICES

1. Introduction

The qualified Proposer or Proposers must be able to provide long term biosolids to energy processing capabilities to the Coalition agencies that are cost effective, efficient, and reliable. Proposers may include other organic feedstocks in the project proposal, but these feedstocks must not result in any detrimental environmental effect (i.e. additional residuals that require special handling, air emissions, toxic emissions, etc.). The qualified Proposer or Proposers will work under the direction of the Coalition.

2. Biosolids Characteristics

Coalition members' biosolids will generally have the following characteristics:

- Cake dryness – 14-30%
- Biosolids quality– Class B pathogen levels as defined in 40 CFR Part 503.32
 - Pollutant levels below Table 3 in 40 CFR Part 503.13

Biosolids can be delivered to the Proposers' facilities by the individual agencies' hauling contractor, at that agency's discretion. The Proposer may provide a discussion of a hauling option in their response.

3. Schedule

This RFQ process will result in the selection of at least three Proposers considered to be qualified to respond to a future RFP for this project. The subsequent RFP will likely be released within six months of the conclusion of the RFQ process. The RFP for the proposed project currently anticipates a project agreement that will extend between ten and twenty years. The Coalition anticipates that facilities should be ready to receive biosolids within four years of award of a project agreement. Proposers shall predicate their proposal on schedule constraints detailed herein.

4. General Description of Project Requirements

Proposers must be qualified to design, build, and operate a facility capable of generating renewable energy from biosolids through an integrated process that is optimized for efficiency and has considerable environmental benefit. Most of the biosolids to be supplied by the Coalition are digested and dewatered. For purposes of this RFQ, Proposers may propose on either a DBO or a DBOO project delivery option.

Renewable energy generation and biosolids to energy processes must:

- Be capable of processing biosolids for energy production in accordance with applicable federal, state, and local regulations, including 40 CRF 503.
- Not produce any residuals that could be characterized as a hazardous waste.
- Provide a state of the art facility that will be compatible with the local community with regard to aesthetics, noise, and odor controls.
- Include appropriate treatment and disposal of all byproducts and waste streams in accordance with federal, state, and local regulations.

In addition, proposed energy generation facilities must employ a technology that has been proven for biosolids-only processing (as defined in Section IV); it is incumbent upon the Proposer to provide evidence of the technology's viability for biosolids (e.g. references from other facilities). For example, if the technology is one that has been proven in full scale for solid waste, pilot or demonstration plant data for biosolids should be provided. The Proposer may include other organic waste streams in the Proposal, but these waste streams must not create any hazardous byproducts or create surplus emissions that will either cause a failure of compliance with federal, state, and local regulations or would require further treatment not specified in the proposed facility.

Any proposed facility should be ready to receive biosolids within four years of contract award. During a six month start up period, performance testing must be performed that verifies that the constructed facility meets design specifications and operates reliably, and that the product meets required standards. Appropriate treatment and management of all waste streams and byproducts must also be demonstrated. For all constructed facilities, whether new or existing, the Proposer shall be fully responsible for siting, permitting, facilitation of public participation, design, financing, construction and operation. Interim disposal and reuse services, such as land application or landfill alternative daily cover, must be provided by Proposers who intend to develop a facility to provide the services described in this RFQ.

5. Project Elements

For a project to be ultimately selected, each Proposer must provide documentation of how the following elements will be addressed:

- The site of operations must be located no more than 160 miles (one-way distance) from the City of San Francisco and must be located in the nine county Bay Area. The site must be permittable (i.e. must not violate local zoning regulations) for the facilities.
- Constructing and/or operating facilities that do not cause nuisance, including dust, odor and vectors, and visual impacts;
- Appropriate and adequate staffing and maintenance plans;

- Appropriate and adequate health and safety plans, including training, reporting procedures and regular reviews and updates.
- Unprocessed biosolids from any supplier must not be stored outdoors and must be stored in indoor holding areas equipped with odor and spill control facilities;
- All by-products and waste streams will be appropriately managed; stockpiling of more than five (5) days is not permitted;
- Facilities shall be open to receive deliveries of biosolids from the Coalition agencies at least five (5) days a week (Monday through Friday) year-round, except Thanksgiving Day and Christmas Day. The facility shall be available for the delivery of biosolids at least 10 hours per day.
- Odor control facilities shall be integrated into the project such that no odors are detected beyond the fenceline of the proposed facility; and
- The proposed facility must be constructed and operated in compliance with any mitigation determined by CEQA/NEPA

Proposals not demonstrating how they would address the criteria listed above will not be considered. Those proposals that meet the minimum criteria will be evaluated based on the criteria described in Section IV of this document.

IV. QUALIFICATIONS

Any Joint Venture (JV) responding to this RFQ must clearly identify the lead Proposer (referred to hereafter as the Lead JV Partner).

To qualify, the Proposer or Lead JV Partner must demonstrate relevant expertise to successfully perform their role and responsibilities in the scope of services described in this RFQ. At a minimum, the criteria described in Section III, Part 3, must be met. Proposals not meeting these criteria will not be considered.

Proposals will be evaluated based on the following criteria:

- **Project Experience:** The highest scores will be given to those proposers able to demonstrate successful financial and operational experience with biosolids management, particularly in biosolids to energy projects. Proposers should include the following in their proposal:
 - Proposers should demonstrate that they have the core competencies necessary to cover all project aspects, including but not limited to: biosolids handling, engineering design, operations, process development, financing, and construction.
 - Proposers should describe their experience in designing and operating facilities, including reference names and phone numbers for other projects and contracts. For facilities employing similar technology to that proposed, Proposers may include the net price at those facilities for reference. Provide at least one reference for design, construction, and operations experience of a currently

operating facility using similar processes anywhere in the world. Include the name of the person, the entity, the address, and telephone number for the facility.

- Provide reference(s) for experience in biosolids management. This experience does not necessarily have to involve the same process as that proposed as the Coalition is seeking experience with management issues particular to biosolids such as safe handling practices, odor and aesthetic mitigation, air quality issues, and sensitivity to community issues.
 - Documentation from tests of other facilities using the same process, same/similar feedstock, and product quality.
 - Proposer must document, either through existing plant data or pilot data, that the process will comply with all federal, state and local regulations, such as air quality, and that pollution mitigation measures are sufficient to satisfy the stringent Bay Area air, water, and land pollution regulations.
 - Proposer must demonstrate a reasonable approach to public outreach throughout the life of the project.
- **Project Schedule:** A higher score will be given to those projects with expedient and achievable schedules. The Proposer should provide information on the project's schedule, including planning, public participation, design, permitting, construction, and a detailed, realistic start date for receipt of the Coalition agencies' biosolids.
 - **Project Siting:** Additional points will be given to those sites identified that minimize environmental impacts either by location (i.e. site is isolated and not located near sensitive receptors, waters of the state, etc) or by existing or proposed mitigation (i.e. extensive odor control facilities, aesthetic improvements, traffic mitigation). Proposers with identified sites should identify the site location and ownership, along with hauling routes and distances. Other relevant site information should also be provided in this section, such as acreage/footprint, distance to nearest residences, neighboring land use, any sensitive receptors, prevailing wind direction, hydrology, groundwater levels, and ability to make use of other alternative energy sources, such as wind or solar energy. Proposers without identified sites should describe their approach for site selection, including public outreach and potential mitigation.
 - **Technology Viability:** Preference will be given to Proposers demonstrating operation of a process/facility without substantial operational, safety, or community issues for the past two (2) years. Preference will also be given to those projects that minimize or eliminate byproducts and waste streams, or which have alternative reuse markets for such byproducts. Proposers should describe the processing technology to be employed, along with an example of an installation or demonstration project for biosolids anywhere in the world. Byproducts and waste streams must be characterized and treatment and disposal methods must be described. Documentation from pilot tests or other facilities using similar process feedstock and product quality should also be provided. Those Proposers who have operational biosolids to energy facilities will be given a higher score.
 - **Sustainability/Reuse:** Preference will be given to those proposals that maximize beneficial reuse of biosolids and support/enhance Coalition agencies' overall landfill

diversion goals (as defined by AB 939). Alternatives that propose beneficially reuse of byproducts will be given preference. In addition, those proposals which minimize greenhouse gas emissions/carbon footprint and have the potential to provide a benefit under AB32 will be given a higher score.

- **Scalability:** Preference will be given to those proposals that allow for the ability to economically increase processing capacity in the future.

V. SUBMITTAL REQUIREMENTS

1. Pre-Submittal Conference, and Requests for Information

The pre-submittal conference is scheduled for Thursday, January 8, 2010. Questions regarding the RFQ will be addressed at this conference and any new information will be provided at that time. While Coalition members may provide oral clarifications, explanations, or responses to any inquiries, the Coalition is not bound by any oral representation. If any new and/or substantive information is provided in response to questions raised at the pre-submittal conference, it will be memorialized in a written addendum to this RFQ. Proposers may register an intent to submit via e-mail to Caroline Quinn (BAB2Eproject@ddsd.org) or Natalie Sierra (nsierra@swater.org).

All requests for information concerning the RFQ, whether submitted before or after the pre-submittal conference, must be in writing and directed to Caroline Quinn (BAB2Eproject@ddsd.org) or Natalie Sierra (nsierra@swater.org). All inquiries should include the title of the RFQ. Substantive replies will be memorialized in written addenda to be made part of this RFQ.

2. Response Package

Deliver the following items in a secure electronic format (i.e. PDF) with the file name ***Biosolids to Energy Processing Services, by (Proposer's Name)*** by February 19, 2010:

Response packages should be sent via e-mail to Caroline Quinn (BAB2E@ddsd.org) or Natalie Sierra (nsierra@swater.org). If file is too large for electronic delivery, the package may be sent on CD to”

Caroline Quinn, P.E.
Engineering Services Director
Delta Diablo Sanitation District
2500 Pittsburg-Antioch Highway
Antioch, CA 94509

3. Response Package Format and Content

The response package shall be (1) clear and concise, (2) responsive to all RFQ requirements, (3) presented in the form of a written report separated by tabs into the following subheadings, and (4) should not exceed fifty (50) pages:

- A. Cover Letter
- B. Executive Summary
- C. Work Approach
- D. Approach to Fulfilling Project Requirements
- E. Project Schedule
- F. Project Team Organization and Availability
- G. Proposer Qualifications
- H. References
- Exhibit A - Organizational Chart
- Exhibit B – Key/Lead Team Members; Resumes

B. Executive Summary

Provide an executive summary that (1) includes a brief overview of the proposal's principal elements, (2) demonstrates an understanding of the project objectives, and (3) describes the approach for carrying out the scope of services.

C. Work Approach

Describe the overall project approach that your team proposes to use to successfully carry out this project, including but not limited to the following:

- Overall approach for meeting goals and objectives of this RFQ, including identification and assessment of proposed technology and selection of delivery option (DBO or DBOO);
- Approach for coordinating/managing all work activities to meet project milestones and deliverable due dates;
- Processes/measures for controlling cost and schedule, tracking delivery/performance and maximizing QA/QC;
- Brief overview of financial approach to the project;
- Processes for internal and external notification and resolution of technical conflicts and cost/schedule variances;
- Understanding of potential design, environmental and/or construction constraints and how the Proposer can complete this project on schedule and within budget;
- Team organization, availability of individuals identified in the proposal, and proposed internal (within consulting team) and external (including Coalition agencies) reporting relationships; and

- Location where the work is to be managed and location where each component of the work is to be performed.

D. Approach to Fulfilling Project Requirements

It is essential that the project team demonstrate their understanding of the project requirements outlined in Section III. Clearly describe the Proposer's approach to fulfilling these requirements. Include a full description of siting considerations and permitting requirements together with the approach the team will utilize to ensure a successful process and outcome. The Proposer should also describe the Team's approach to facilitation of public participation, including an approach to engaging and securing support from stakeholders across all phases of the project.

E. Project Schedule

The project schedule developed by the Proposer shall meet the timeline outlined in this RFQ. The schedule provided by the selected Proposer will become part of the Agreement.

F. Project Team Organization and Availability

It is critical that the Proposer clearly outlines how the Project Team will be organized and demonstrates a strong commitment to this project. Proposer should provide an Organizational Chart that illustrates the team structure and resumes of all Key/Lead Team Members in Exhibits A and B of the Proposal, respectively.

G. Proposer Qualifications

Clearly demonstrate that the Proposer (or JV Partner), and Subconsultants meet all the qualification requirements outlined in Section IV. Provide sufficient information in the proposal for the Selection Panel to evaluate the Proposer's ability to successfully complete the tasks outlined in the scope of services, including, but not limited to the following:

- A description and background summary of the Prime Proposer or JV Partners consulting firm(s). Summary shall include corporate qualifications, commitment, strength, and technical capabilities to fulfill all services specified and required, and successfully accomplish the work.
- If a JV, include a description of the organization, relationships, and defined responsibilities of all Partners in the JV. Describe any previous project-specific associations of the JV Partners. The Lead JV Partner shall demonstrate proven experience in managing and leading.

Clearly demonstrate that the key/lead team members proposed by the Proposer meet all the qualification requirements outlined in this RFQ. Information should be organized in sections by demonstrated past performance, corporate experience, and key team member experience. Provide resumes in Exhibit B to contain sufficient information in the proposal for the Selection Panel to evaluate the ability and experience of each key/lead team member to successfully fulfill their roles, and complete the scope of services. The information required in this section for Key/Lead Team Members applies to both the key/lead positions and the additional key individuals proposed by the Proposer.

Briefly describe the role, responsibilities, qualifications, and company affiliation of each individual on the Proposer team for the scopes of services outlined in this RFQ. Discuss team members' background and experience that demonstrate a strong ability to successfully perform the work.

H. References

References will be considered as part of the evaluation of written proposals. The Coalition will utilize the references included in Proposers' proposals to verify Proposers' and their employees' and Subconsultants' qualifications and ability to successfully perform the services requested under this RFQ.

Provide the names and contact information of references knowledgeable about the work of the Proposer (or each JV Partner) on projects with a scope of work most similar to this project and completed within the past ten (10) years. Include name, title, company, address, telephone number, fax number and e-mail address. All contact information must be current as of proposal submittal date.

The Coalition will not be responsible for non-responsive references or references with incorrect contact information. A reference will be found non-responsive if the Proposer's information cannot be verified by a reference within seven (7) calendar days of first contact attempt by Coalition staff. The Coalition may, at its discretion, make contact with individuals, entities or firms provided in all or some of the references and will apply the same reference checking criteria to all proposers.

Exhibit A - Organizational Chart

The Organizational Chart must illustrate the team structure of all proposed staff to be included as Exhibit A of the submitted Proposal. This includes support staff for aspects of the project including planning, public outreach, construction, operation, and maintenance.

Exhibit B - Resumes

VI. EVALUATION AND SELECTION

1. Initial Screening

Coalition staff will review each response package to determine if they are responsive and responsible. Proposers' response packages will be reviewed for completeness, format requirements, verifiable references, and responsiveness to any supplemental requirements. Only those response packages that are properly completed, and meet the minimum format and content requirements will be considered in the evaluation process.

2. Overall Evaluation Process

A Selection Panel will be used to evaluate written response packages. The Selection Panel will evaluate and score each response package in accordance with the pre-established evaluation criteria described herein (see below).

The Selection Panel will be comprised of individuals who are knowledgeable on the subject matter, and may include staff from any of the Coalition agencies.

3. Written Response Package Evaluation

The selection panel will evaluate and score written proposals using the following point scale:

Evaluation Criteria	Points
Project Experience	35
Project Schedule	10
Project Siting	10
Technology Viability	25
Sustainability/Reuse	15
Scalability	5
	100

Proposers will be ranked starting with the Proposer receiving the highest total score, then continuing with the Proposer receiving the second highest total score, and so on. The highest scoring Proposers will be eligible to proceed in responding to the future RFP, which will ultimately lead to the award of a Project Development Agreement.

4. Financial Responsibility

The Coalition accepts no financial responsibility for any costs incurred by a Proposer in either responding to this RFQ or participating in oral presentations. The response packages in response to the RFQ will become the property of the Coalition and may be used by the Coalition in any way it deems appropriate.

5. Modifications

The Coalition reserves the unqualified right to modify and/or suspend any and all aspects of the RFQ, to obtain further information from any Proposer responding to the RFQ, to waive any defect as to form or content of this RFQ or any response thereto and to reject any and all responses to this RFQ.

6. Claims

No Proposer responding to this RFQ shall obtain any claim or right of action against the Coalition by reason of any aspect of the RFQ, and defects or abnormalities contained herein, and defects or abnormalities in the selection process, the rejection of any response package, the acceptance of any response package, any statements, representation, acts or omissions of the Coalition, the exercise of any discretion set forth in or with respect to any of the foregoing, and any and all other matters arising out of all or any of the foregoing.

7. Interpretation and Addenda

Any interpretation of, or change in, the RFQ will be made by addendum and shall become a part of the RFQ and of any Agreement awarded.

8. Inquiries

All requests for information concerning the RFQ, whether submitted before or after the pre-submittal conference, must be in writing and directed to Caroline Quinn (BAB2Eproject@ddsd.org) or Natalie Sierra (nsierra@sfgwater.org).

9. Release of Liability

The Coalition will utilize the references included in Proposers' response packages to verify Proposers' and their employees' and Subconsultants' qualifications and ability to successfully perform the services requested under this RFQ. In addition the Coalition may make its own independent reference checks with other parties.

10. Reservations of Rights by the Coalition

The issuance of this RFQ does not constitute a commitment by the Coalition that any agreement will actually be entered into by the Coalition. The Coalition expressly reserves the right at any time to:

1. Waive or correct any defect or informality in any response, response package, or proposal procedure;
2. Reject any or all response packages;
3. Reissue a RFQ;
4. Prior to submission deadline for response packages, modify all or any portion of the selection procedures, including deadlines for accepting responses, the specifications or requirements for any materials, equipment or services to be provided under this RFQ, or the requirements for contents or format of the response packages;
5. Procure any materials, equipment or services specified in this RFQ by any other means;
or
6. Determine that no project will be pursued.

11. No Waiver

No waiver by the Coalition of any provision of this RFQ shall be implied from any failure by the Coalition to recognize or take action on account of any failure by a Proposer to observe any provision of this RFQ.