

## REQUEST FOR PROPOSALS

### Advance Methane Recovery and Use as a Clean Energy Source at Landfills in China

Proposals are invited from environmental engineering consulting or similar organizations, which specialize in landfill gas, to hold two 2-day training sessions in China. The deadline of submission of proposals is January 24, 2010.

#### I. Background Information

California State University, Fullerton (CSUF or University) has recently been awarded a one-year project by the United States Environmental Protection Agency's (USEPA) Methane to Markets (M2M) Partnership. The M2M Partnership is an international initiative designed to advance cost-effective, near-term methane recovery and utilize it as a clean energy source. The goal of the M2M Partnership is to reduce global methane emissions.

One main task of the awarded project is to have presentations in China to the leaders of municipalities and operators of landfills. Two 2-day training sessions are planned; each session will consist of training presentations and workshops. The topics will cover the legal, technical and financial aspects of landfill gas (LFG) recovery and energy utilization. The presentation will be unique, practical, comprehensive, and China-specific. It would include the practical experiences from both China and the United States with emphasis on the needs of Chinese attendees. The main focus of the presentation is to introduce LFG collection concepts, general design information, and funding mechanisms. In addition, China-specific landfill gas estimation model and case studies of assistance from the M2M Partnership in China will be presented. In-country examples of construction and operation LFG projects will also be covered. Posters of example projects will be prepared and exhibited. Site-specific measures of financial cost/benefits of potential emission reduction and energy recovery projects will be discussed. Emphasis will also be put on carbon financing to increase interests in LFG project development, accelerate that development, and reduce the risk perceived by the cash-poor local municipalities.

To achieve the above-mentioned objectives, the project team will consist of three partners. The CSUF group, lead by Jeff Kuo, a professor at the Civil and Environmental Engineering Department, who serves as the Principal Investigator (PI) of this project and will provide academic input and overall project management. The Chinese group, consisting of Mr. Haiyun Xu of China Academy of Urban Construction and Dr. Guoqiang Lu of Department of Climate Change, National Development and Reform Commission, will provide first-hand local information, knowledge, and support. The third partner is an environmental engineering consulting or similar organization (the "**Subcontractor**") that specializes in landfill gas (LFG) projects. The subcontractor should be well-versed in the operational issues related to the collection and utilization of LFG and has experiences on these types of systems at many landfill sites in China and Asia. This request for proposal (RFPs) is to solicit proposals from well-qualified organizations to work as the subcontractor of this project to provide necessary assistance.

#### II. Subcontractor Scope of Services

The subcontractor will develop and implement the training sessions with the assistance and under the overall management of CSUF, and support CSUF in the preparation of the project website and reports

to the USEPA. The subcontractor will also provide translation between English and Chinese documents, as requested by CSUF.

The specific tasks that the subcontractor needs to accomplish are described below:

### **Task 1 – Initial Survey on Training Locations**

- Identify potential attendees from lists of attendees at previous conferences and workshops, professional contacts, and the subcontractor's contacts in China;
- Survey some of the identified potential attendees to gauge the level of interest in a training session on energy recovery and emission reduction of landfill gas to be held at certain proposed locations; and
- Evaluate results and prepare a summary report for recommendation of training locations.

### **Task 2 – Preparation for Training Presentations and Workshops**

- Engage two Chinese experts (Mr. Haiyun Xu and Dr. Guoqiang Lu) to assist with various tasks, including identifying potential attendees, contacting government officials and industry leaders to support and co-sponsor the training sessions, and conducting selected portions of the training presentations;
- Prepare training presentations and workshop content as necessary and appropriate (in Chinese) to reflect up-to-date information (in regulations, technologies, industrial practice, etc.);
- After the presentations are finalized, make electronic copies on CDs for distribution to attendees at training sessions;
- Contact local government/trade associations to obtain cooperation and support for the training sessions;
- Secure venues and negotiate deals (room and equipment rental, support personnel, reception, meals, lodging);
- Issue announcement/invitation to potential attendees;
- Prepare a minimum of four (4) posters of case studies of LFG studies in China; and
- Formulate measurements of output and outcome for the training session.

### **Task 3 – Implementation of Training Sessions**

- Provide attendance to ensure smooth progress of the training sessions;
- Coordinate with venues to be ready for training sessions;
- Conduct two consecutive 2-day training sessions and workshops (with one traveling day in between) in Chinese (Mandarin);
- Solicit feedback from attendees on presentation topics, workshop contents, and format; and
- Perform digital audio-recording of the presentations and workshop.

### **Task 4 – Evaluation and Follow Up**

- Prepare list of attendees;
- Summarize feedback from attendees and prepare a brief report;
- Review and edit, if necessary, the digital audio records of the presentations and workshop;
- Provide information in digital format to CSUF for its use in developing (and maintaining) a project website (in English) to track project developments and outputs throughout the lifetime of the project; and
- Perform measurement of output and outcomes of the project.

### **Task 5 – Management and Reporting**

- Management of the subcontractor's staff and resources to execute the scope of work; and
- Furnish information to CSUF as necessary to prepare progress reports, draft final report and final report to the USEPA.

### **III. Workshop Locations and Schedule**

Although the final training locations will be selected, two sites that are being considered by the PI are Jinan and Chengdu (or Chongqing) based on the survey results from Task 1, responses from local governments and trade associations, and input from our team of Chinese experts.

The workshops are to be held in the first half of April 2010.

### **IV. Project Term**

February 1, 2010 to October 31, 2010.

### **V. Maximum Amount of Funds Available**

The maximum amount of funds available to the Subcontractor is USD \$70,000. This amount covers all the labor, travel and lodging, and all the other relevant and appropriate expenses, including but not limited to Subcontractor's administrative costs and related fees for all tasks/services described in Section II; rental and all the other expenses for using the workshop facilities; and the labor, travel and lodging, and all the other relevant and appropriate expenses of the two Chinese experts as well as other guest speakers invited for the workshops.

### **VI. Additional information**

Please contact Jeff Kuo ([jkuo@fullerton.edu](mailto:jkuo@fullerton.edu)) if you have questions regarding this RFP. If you would like to be considered, please email a seven-page (maximum) proposal including a proposed budget and proposed course topics and schedule for the workshops to Jeff Kuo ([jkuo@fullerton.edu](mailto:jkuo@fullerton.edu)) by January 24, 2010. The CSUF will select a subcontractor, by the end of January 2010, after reviewing all the proposals.