

**REQUEST FOR PROPOSALS**

**FEASIBILITY STUDY FOR THE**

**SHANDONG ENVIRONMENTAL EMERGENCY RESPONSE SYSTEM**

Submission Deadline: **16:00**

**LOCAL TIME**

**September 28, 2011**

Submission Place: Shandong Environmental Protection Bureau  
International Cooperation Division,  
No. 12 Zhijinshi Street  
Jinan, China

Phone: (86) 531-8610-6152  
Fax: (86) 531-8603-8443  
Email: 86106150@163.com

SEALED PROPOSALS SHALL BE CLEARLY MARKED AND RECEIVED PRIOR TO THE TIME AND DATE SPECIFIED ABOVE. PROPOSALS RECEIVED AFTER SAID TIME AND DATE WILL NOT BE ACCEPTED OR CONSIDERED.

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## **Section 1: INTRODUCTION**

The U.S. Trade and Development Agency (USTDA) has provided a grant in the amount of US\$346,634 to Shandong Environmental Protection Bureau (the "Grantee") in accordance with a grant agreement dated July 8, 2011 (the "Grant Agreement"). The grant will fund the cost of goods and services required for a feasibility study ("FS") on the proposed Environmental Emergency Response System in the People's Republic of China ("Host Country"). The Grant Agreement is attached at Annex 4 for reference. The Grantee is soliciting technical proposals from qualified U.S. firms to provide expert consulting services to perform the Feasibility Study.

### **1.1 BACKGROUND SUMMARY**

Accompanying China's rapid economic growth has been a corresponding rise in environmental degradation. China has already become the world's largest emitter of greenhouse gases and toxic byproducts caused by industrialization. Pollution dramatically affects human health and welfare and the economy. The Chinese Academy of Environmental Planning estimates the total cost of environmental degradation to be around \$197 billion in 2008, or 3.9% of total economic output. Pollution costs surged nearly 75% between 2004 – 2008. China saw double the number of environmental accidents in the first half of 2010 compared to the year before.

China's newly-released 12<sup>th</sup> Five Year Plan (2012-2017) has placed special emphasis on reducing environmental pollution and hazardous emissions. Environmental protection efforts are being stepped up to prevent and better handle environmental incidents. Capital spending on pollution control has risen quickly in recent years, reaching more than \$21.7 billion in 2010. Emission reduction and environmental clean-up is expected to exceed a staggering \$477 billion over the next five years, or more than \$95 billion per year.

In Shandong, the economy continues to grow at a spectacular pace and the standard of living is among the highest in the nation. However, the risks related to environmental degradation and contamination have also increased dramatically along with this growth. Key hazards include emissions of heavy metals and toxic substances that are byproducts from the metal mining and smelting industries; spills from lead battery factories; waste from leather production facilities; and chemicals produced by various industries leaked into waterways, among other toxic substances. Airborne pollutants also pass into Shandong from neighboring provinces and cities. The problems associated with of contamination of air and water resources continue to grow unabated.

Environmental emergencies in China are growing more diverse and more complex. The situation is complicated by the contradiction between maintaining high levels of economic growth and the environment's capacity to bear the burden of unchecked expansion. The task of regulating and enforcing environmental safety has also become more challenging.

Given this challenge, the Shandong Province Environmental Protection Bureau, Environmental Safety & Emergency Management Division (SEPB), is planning a major investment to expand their ability to monitor and quickly respond to environmental disasters. SEPB is in the process of building a new space to house a real-time environmental safety monitoring network and

emergency response command center. To develop the best system possible, SEPB requested USTDA support for a feasibility study on the system design, which would enable them to:

- Fast-track the design and development of an environmental safety control system;
- Reinforce industrial environmental safety and policy enforcement;
- Strengthen environmental emergency early warning and monitoring capabilities;
- Improve the efficiency and effectiveness of response to sudden environmental events;
- Identify and implement dedicated environmental emergency response human resources and equipment; and
- Develop and deploy an information network and control platform for provincial environmental safety management

USTDA funding for this feasibility study will provide expert evaluation of SEPB's budget, structure, software and equipment options for the development of its environmental safety and emergency response management plan. U.S. information technology companies are very competitive in this sector and see this an opportunity to establish U.S. products as part of one of the most advanced emergency response systems being developed in China. Furthermore, the adoption of successful feasibility study-identified solutions could serve as a model for environmental management systems across China.

## 1.2 OBJECTIVE

The objectives of the feasibility study are to:

- 1) Speed up the establishment of an environmental safety control system;
- 2) Reinforce basic work on industrial environmental safety;
- 3) Strengthen environmental safety early warning and monitoring;
- 4) Improve responses to "sudden environmental events";
- 5) Put into effect dedicated environmental emergency response human resources and equipment;
- 6) Develop and establish command and control platform for provincial environmental safety emergency response management.

The Terms of Reference (TOR) for this Feasibility Study are attached as Annex 5.

## 1.3 PROPOSALS TO BE SUBMITTED

Technical proposals are solicited from interested and qualified U.S. firms. The administrative and technical requirements as detailed throughout the Request for Proposals (RFP) will apply. Specific proposal format and content requirements are detailed in Section 3.

The amount for the contract has been established by a USTDA grant of US\$346,634. **The USTDA grant of \$US346,634 is a fixed amount. Accordingly, COST will not be a factor in the evaluation and therefore, cost proposals should not be submitted.** Upon detailed evaluation of technical proposals, the Grantee shall select one firm for contract negotiations.

#### **1.4 CONTRACT FUNDED BY USTDA**

In accordance with the terms and conditions of the Grant Agreement, USTDA has provided a grant in the amount of US\$346,634 to the Grantee. The funding provided under the Grant Agreement shall be used to fund the costs of the contract between the Grantee and the U.S. firm selected by the Grantee to perform the TOR. The contract must include certain USTDA Mandatory Contract Clauses relating to nationality, taxes, payment, reporting, and other matters. The USTDA nationality requirements and the USTDA Mandatory Contract Clauses are attached at Annexes 3 and 4, respectively, for reference.

## **Section 2: INSTRUCTIONS TO OFFERORS**

### **2.1 PROJECT TITLE**

The project is called "Shandong Environmental Emergency Response System."

### **2.2 DEFINITIONS**

Please note the following definitions of terms as used in this RFP.

The term "Request for Proposals" means this solicitation of a formal technical proposal, including qualifications statement.

The term "Offeror" means the U.S. firm, including any and all subcontractors, which responds to the RFP and submits a formal proposal and which may or may not be successful in being awarded this procurement.

### **2.3 DEFINITIONAL MISSION REPORT**

USTDA sponsored a Definitional Mission to address technical, financial, sociopolitical, environmental and other aspects of the proposed project. Sections of this report are attached in Annex II for background information only. Please note that the TOR referenced in the report are included in this RFP as Annex V.

### **2.4 EXAMINATION OF DOCUMENTS**

Offerors should carefully examine this RFP. It will be assumed that Offerors have done such inspection and that through examinations, inquiries and investigation they have become familiarized with local conditions and the nature of problems to be solved during the execution of the Feasibility Study.

Offerors shall address all items as specified in this RFP. Failure to adhere to this format may disqualify an Offeror from further consideration.

Submission of a proposal shall constitute evidence that the Offeror has made all the above mentioned examinations and investigations, and is free of any uncertainty with respect to conditions which would affect the execution and completion of the Feasibility Study.

## **2.5 PROJECT FUNDING SOURCE**

The Feasibility Study will be funded under a grant from USTDA. The total amount of the grant is not to exceed US\$346,634.

## **2.6 RESPONSIBILITY FOR COSTS**

Offeror shall be fully responsible for all costs incurred in the development and submission of the proposal. Neither USTDA nor the Grantee assumes any obligation as a result of the issuance of this RFP, the preparation or submission of a proposal by an Offeror, the evaluation of proposals, final selection or negotiation of a contract.

## **2.7 TAXES**

Offerors should submit proposals that note that in accordance with the USTDA Mandatory Contract Clauses, USTDA grant funds shall not be used to pay any taxes, tariffs, duties, fees or other levies imposed under laws in effect in the Host Country.

## **2.8 CONFIDENTIALITY**

The Grantee will preserve the confidentiality of any business proprietary or confidential information submitted by the Offeror, which is clearly designated as such by the Offeror, to the extent permitted by the laws of the Host Country.

## **2.9 ECONOMY OF PROPOSALS**

Proposal documents should be prepared simply and economically, providing a comprehensive yet concise description of the Offeror's capabilities to satisfy the requirements of the RFP. Emphasis should be placed on completeness and clarity of content.

## **2.10 OFFEROR CERTIFICATIONS**

The Offeror shall certify (a) that its proposal is genuine and is not made in the interest of, or on behalf of, any undisclosed person, firm, or corporation, and is not submitted in conformity with, and agreement of, any undisclosed group, association, organization, or corporation; (b) that it has not directly or indirectly induced or solicited any other Offeror to put in a false proposal; (c) that it has not solicited or induced any other person, firm, or corporation to refrain from submitting a proposal; and (d) that it has not sought by collusion to obtain for itself any advantage over any other Offeror or over the Grantee or USTDA or any employee thereof.

## **2.11 CONDITIONS REQUIRED FOR PARTICIPATION**

Only U.S. firms are eligible to participate in this tender. However, U.S. firms may utilize subcontractors from the Host Country for up to 20 percent of the amount of the USTDA grant for

specific services from the TOR identified in the subcontract. USTDA's nationality requirements, including definitions, are detailed in Annex 3. [IF THERE IS A GRANTEE COST SHARE, ADD "Refer to Section 1.4 of this RFP for additional information on the applicability of USTDA's Nationality Requirements."]

## 2.12 LANGUAGE OF PROPOSAL

All proposal documents shall be prepared and submitted in English and also in Chinese.

## 2.13 PROPOSAL SUBMISSION REQUIREMENTS

### ELECTRONIC AND HARDCOPY DELIVERY IS REQUIRED

The **Cover Letter** in the proposal must be addressed to:

Shandong Environmental Protection Bureau  
International Cooperation Division,  
No. 12 Zhijinshi Street  
Jinan, China

Phone: (86) 531-8610-6152  
Fax: (86) 531-8603-8443  
Email: 86106150@163.com

**An Original (1 Chinese, 1 English) and eight (8) copies (4 Chinese, 4 English) of your proposal must be received at the above address no later than 16:00, on September 28, 2011.**

**A password encrypted electronic copy of the proposal (Chinese and English) should be emailed to 86106150@163.com before the deadline. The encryption password should be enclosed in the letter with delivery of hard copies.**

Proposals may be either sent by mail, overnight courier, or hand-delivered. Whether the proposal is sent by mail, courier or hand-delivered, the Offeror shall be responsible for actual delivery of the proposal to the above address before the deadline. Any proposal received after the deadline will be returned unopened. The Grantee will promptly notify any Offeror if its proposal was received late.

Upon timely receipt, all proposals become the property of the Grantee.

## 2.14 PACKAGING

The original proposal (1 Chinese, 1 English) and each copy of the proposal must be sealed to ensure confidentiality of the information. The proposals should be individually wrapped and sealed, and labeled for content including "original" or "copy number x"; the original (1 Chinese, 1 English) and eight (8) additional copies (4 Chinese, 4 English) should be collectively wrapped and sealed, and clearly labeled.

A password encrypted electronic copy of the proposal (Chinese and English) should be emailed to [86106150@163.com](mailto:86106150@163.com) before the deadline. The encryption password should be enclosed in the letter with delivery of hard copies.

Neither USTDA nor the Grantee will be responsible for premature opening of proposals not properly wrapped, sealed and labeled.

## **2.15 AUTHORIZED SIGNATURE**

The proposal must contain the signature of a duly authorized officer or agent of the Offeror empowered with the right to bind the Offeror.

## **2.16 EFFECTIVE PERIOD OF PROPOSAL**

The proposal shall be binding upon the Offeror for SIXTY (60) days after the proposal due date, and Offeror may withdraw or modify this proposal at any time prior to the due date upon written request, signed in the same manner and by the same person who signed the original proposal.

## **2.17 EXCEPTIONS**

All Offerors agree by their response to this RFP announcement to abide by the procedures set forth herein. No exceptions shall be permitted.

## **2.18 OFFEROR QUALIFICATIONS**

As provided in Section 3, Offerors shall submit evidence that they have relevant past experience and have previously delivered advisory, feasibility study and/or other services similar to those required in the TOR, as applicable.

## **2.19 RIGHT TO REJECT PROPOSALS**

The Grantee reserves the right to reject any and all proposals.

## **2.20 PRIME CONTRACTOR RESPONSIBILITY**

Offerors have the option of subcontracting parts of the services they propose. The Offeror's proposal must include a description of any anticipated subcontracting arrangements, including the name, address, and qualifications of any subcontractors. USTDA nationality provisions apply to the use of subcontractors and are set forth in detail in Annex 3. The successful Offeror shall cause appropriate provisions of its contract, including all of the applicable USTDA Mandatory Contract Clauses, to be inserted in any subcontract funded or partially funded by USTDA grant funds.

## **2.21 AWARD**

The Grantee shall make an award resulting from this RFP to the best qualified Offeror, on the basis of the evaluation factors set forth herein. The Grantee reserves the right to reject any and all proposals received and, in all cases, the Grantee will be the judge as to whether a proposal has or has not satisfactorily met the requirements of this RFP.

## **2.22 COMPLETE SERVICES**

The successful Offeror shall be required to (a) provide local transportation, office space and secretarial support required to perform the TOR if such support is not provided by the Grantee; (b) provide and perform all necessary labor, supervision and services; and (c) in accordance with best technical and business practice, and in accordance with the requirements, stipulations, provisions and conditions of this RFP and the resultant contract, execute and complete the TOR to the satisfaction of the Grantee and USTDA.

## **2.23 INVOICING AND PAYMENT**

Deliverables under the contract shall be delivered on a schedule to be agreed upon in a contract with the Grantee. The Contractor may submit invoices to the designated Grantee Project Director in accordance with a schedule to be negotiated and included in the contract. After the Grantee's approval of each invoice, the Grantee will forward the invoice to USTDA. If all of the requirements of USTDA's Mandatory Contract Clauses are met, USTDA shall make its respective disbursement of the grant funds directly to the U.S. firm in the United States. All payments by USTDA under the Grant Agreement will be made in U.S. currency. Detailed provisions with respect to invoicing and disbursement of grant funds are set forth in the USTDA Mandatory Contract Clauses attached in Annex 4.

### Section 3: PROPOSAL FORMAT AND CONTENT

To expedite proposal review and evaluation, and to assure that each proposal receives the same orderly review, all proposals must follow the format described in this section.

Proposal sections and pages shall be appropriately numbered and the proposal shall include a Table of Contents. Offerors are encouraged to submit concise and clear responses to the RFP. Proposals shall contain all elements of information requested without exception. Instructions regarding the required scope and content are given in this section. The Grantee reserves the right to include any part of the selected proposal in the final contract.

The proposal shall consist of a technical proposal only. A cost proposal is NOT required because the amount for the contract has been established by a USTDA grant of US\$346,634, which is a fixed amount.

Offerors shall submit an original (1 Chinese, 1 English) and eight (8) copies (4 Chinese, 4 English) of the proposal. Proposals received by fax cannot be accepted.

A password encrypted electronic copy of the proposal (Chinese and English) should be emailed to [86106150@163.com](mailto:86106150@163.com) before the deadline. The encryption password should be enclosed in the letter with delivery of hard copies.

Each proposal must include the following:

- Transmittal Letter,
- Cover/Title Page,
- Table of Contents,
- Executive Summary,
- Company Information,
- Organizational Structure, Management Plan, and Key Personnel,
- Technical Approach and Work Plan, and
- Experience and Qualifications.

Detailed requirements and directions for the preparation of the proposal are presented below.

#### 3.1 EXECUTIVE SUMMARY

An Executive Summary should be prepared describing the major elements of the proposal, including any conclusions, assumptions, and general recommendations the Offeror desires to make. Offerors are requested to make every effort to limit the length of the Executive Summary to no more than five (5) pages.

## **3.2 COMPANY INFORMATION**

For convenience, the information required in this Section 3.2 may be submitted in the form attached in Annex 6 hereto.

### **3.2.1 Company Profile**

Provide the information listed below relative to the Offeror's firm. If the Offeror is proposing to subcontract some of the proposed work to another firm(s), the information requested in sections 3.2.5 and 3.2.6 below must be provided for each subcontractor.

1. Name of firm and business address (street address only), including telephone and fax numbers.
2. Year established (include predecessor companies and year(s) established, if appropriate).
3. Type of ownership (e.g. public, private or closely held).
4. If private or closely held company, provide list of shareholders and the percentage of their ownership.
5. List of directors and principal officers (President, Chief Executive Officer, Vice-President(s), Secretary and Treasurer; provide full names including first, middle and last). Please place an asterisk (\*) next to the names of those principal officers who will be involved in the Feasibility Study.
6. If Offeror is a subsidiary, indicate if Offeror is a wholly-owned or partially-owned subsidiary. Provide the information requested in items 1 through 5 above for the Offeror's parent(s).
7. Project Manager's name, address, telephone number, e-mail address and fax number.

### **3.2.2 Offeror's Authorized Negotiator**

Provide name, title, address, telephone number, e-mail address and fax number of the Offeror's authorized negotiator. The person cited shall be empowered to make binding commitments for the Offeror and its subcontractors, if any.

### **3.2.3 Negotiation Prerequisites**

1. Discuss any current or anticipated commitments which may impact the ability of the Offeror or its subcontractors to complete the Feasibility Study as proposed and reflect such impact within the project schedule.
2. Identify any specific information which is needed from the Grantee before commencing contract negotiations.

### 3.2.4 Offeror's Representations

If any of the following representations cannot be made, or if there are exceptions, the Offeror must provide an explanation.

1. Offeror is a corporation *[insert applicable type of entity if not a corporation]* duly organized, validly existing and in good standing under the laws of the State of \_\_\_\_\_. The Offeror has all the requisite corporate power and authority to conduct its business as presently conducted, to submit this proposal, and if selected, to execute and deliver a contract to the Grantee for the performance of the Feasibility Study. The Offeror is not debarred, suspended, or to the best of its knowledge or belief, proposed for debarment, or ineligible for the award of contracts by any federal or state governmental agency or authority.
2. The Offeror has included, with this proposal, a certified copy of its Articles of Incorporation, and a certificate of good standing issued within one month of the date of its proposal by the State of \_\_\_\_\_. The Offeror commits to notify USTDA and the Grantee if they become aware of any change in their status in the state in which they are incorporated. USTDA retains the right to request an updated certificate of good standing.
3. Neither the Offeror nor any of its principal officers have, within the three-year period preceding this RFP, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state or local government contract or subcontract; violation of federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating federal or state criminal tax laws, or receiving stolen property.
4. Neither the Offeror, nor any of its principal officers, is presently indicted for, or otherwise criminally or civilly charged with, commission of any of the offenses enumerated in paragraph 3 above.
5. There are no federal or state tax liens pending against the assets, property or business of the Offeror. The Offeror, has not, within the three-year period preceding this RFP, been notified of any delinquent federal or state taxes in an amount that exceeds \$3,000 for which the liability remains unsatisfied. Taxes are considered delinquent if (a) the tax liability has been fully determined, with no pending administrative or judicial appeals; and (b) a taxpayer has failed to pay the tax liability when full payment is due and required.
6. The Offeror has not commenced a voluntary case or other proceeding seeking liquidation, reorganization or other relief with respect to itself or its debts under any bankruptcy, insolvency or other similar law. The Offeror has not had filed against it an involuntary petition under any bankruptcy, insolvency or similar law.

The selected Offeror shall notify the Grantee and USTDA if any of the representations included in its proposal are no longer true and correct at the time of its entry into a contract with the Grantee.

### **3.2.5 Subcontractor Profile**

1. Name of firm and business address (street address only), including telephone and fax numbers.
2. Year established (include predecessor companies and year(s) established, if appropriate).

### **3.2.6 Subcontractor's Representations**

If any of the following representations cannot be made, or if there are exceptions, the Subcontractor must provide an explanation.

1. Subcontractor is a corporation [*insert applicable type of entity if not a corporation*] duly organized, validly existing and in good standing under the laws of the State of \_\_\_\_\_. The subcontractor has all the requisite corporate power and authority to conduct its business as presently conducted, to participate in this proposal, and if the Offeror is selected, to execute and deliver a subcontract to the Offeror for the performance of the Feasibility Study and to perform the Feasibility Study. The subcontractor is not debarred, suspended, or to the best of its knowledge or belief, proposed for debarment or ineligible for the award of contracts by any federal or state governmental agency or authority.
2. Neither the subcontractor nor any of its principal officers have, within the three-year period preceding this RFP, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state or local government contract or subcontract; violation of federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating federal or state criminal tax laws, or receiving stolen property.
3. Neither the subcontractor, nor any of its principal officers, is presently indicted for, or otherwise criminally or civilly charged with, commission of any of the offenses enumerated in paragraph 2 above.
4. There are no federal or state tax liens pending against the assets, property or business of the subcontractor. The subcontractor, has not, within the three-year period preceding this RFP, been notified of any delinquent federal or state taxes in an amount that exceeds \$3,000 for which the liability remains unsatisfied. Taxes are considered delinquent if (a) the tax liability has been fully determined, with no pending administrative or judicial appeals; and (b) a taxpayer has failed to pay the tax liability when full payment is due and required.

5. The subcontractor has not commenced a voluntary case or other proceeding seeking liquidation, reorganization or other relief with respect to itself or its debts under any bankruptcy, insolvency or other similar law. The subcontractor has not had filed against it an involuntary petition under any bankruptcy, insolvency or similar law.

The selected subcontractor shall notify the Offeror, Grantee and USTDA if any of the representations included in this proposal are no longer true and correct at the time of the Offeror's entry into a contract with the Grantee.

### **3.3 ORGANIZATIONAL STRUCTURE, MANAGEMENT, AND KEY PERSONNEL**

Describe the Offeror's proposed project organizational structure. Discuss how the project will be managed including the principal and key staff assignments for this Feasibility Study. Identify the Project Manager who will be the individual responsible for this project. The Project Manager shall have the responsibility and authority to act on behalf of the Offeror in all matters related to the Feasibility Study.

Provide a listing of personnel (including subcontractors) to be engaged in the project, including both U.S. and local subcontractors, with the following information for key staff: position in the project; pertinent experience, curriculum vitae; other relevant information. If subcontractors are to be used, the Offeror shall describe the organizational relationship, if any, between the Offeror and the subcontractor.

A manpower schedule and the level of effort for the project period, by activities and tasks, as detailed under the Technical Approach and Work Plan shall be submitted. A statement confirming the availability of the proposed project manager and key staff over the duration of the project must be included in the proposal.

### **3.4 TECHNICAL APPROACH AND WORK PLAN**

Describe in detail the proposed Technical Approach and Work Plan (the "Work Plan"). Discuss the Offeror's methodology for completing the project requirements. Include a brief narrative of the Offeror's methodology for completing the tasks within each activity series. Begin with the information gathering phase and continue through delivery and approval of all required reports.

Prepare a detailed schedule of performance that describes all activities and tasks within the Work Plan, including periodic reporting or review points, incremental delivery dates, and other project milestones.

Based on the Work Plan, and previous project experience, describe any support that the Offeror will require from the Grantee. Detail the amount of staff time required by the Grantee or other participating agencies and any work space or facilities needed to complete the Feasibility Study.

### **3.5 EXPERIENCE AND QUALIFICATIONS**

Provide a discussion of the Offeror's experience and qualifications that are relevant to the objectives and TOR for the Feasibility Study. If a subcontractor(s) is being used, similar information must be provided for the prime and each subcontractor firm proposed for the project. The Offeror shall provide information with respect to relevant experience and qualifications of key staff proposed. The Offeror shall include letters of commitment from the individuals proposed confirming their availability for contract performance.

As many as possible but not more than six (6) relevant and verifiable project references must be provided for each of the Offeror and any subcontractor, including the following information:

- Project name,
- Name and address of client (indicate if joint venture),
- Client contact person (name/ position/ current phone and fax numbers),
- Period of Contract,
- Description of services provided,
- Dollar amount of Contract, and
- Status and comments.

Offerors are strongly encouraged to include in their experience summary primarily those projects that are similar to or larger in scope than the Feasibility Study as described in this RFP.

### **Section 4: AWARD CRITERIA**

Individual proposals will be initially evaluated by a Procurement Selection Committee of representatives from the Grantee. The Committee will then conduct a final evaluation and completion of ranking of qualified Offerors. The Grantee will notify USTDA of the best qualified Offeror, and upon receipt of USTDA's no-objection letter, the Grantee shall promptly notify all Offerors of the award and negotiate a contract with the best qualified Offeror. If a satisfactory contract cannot be negotiated with the best qualified Offeror, negotiations will be formally terminated. Negotiations may then be undertaken with the second most qualified Offeror and so forth.

The selection of the Contractor will be based on the following criteria:

1. IT strategy and system design (40%) (company experience 15 points, proposed personnel experience 25 points)
2. Environmental emergency treatment (30%) (company experience 10 points, proposed personnel experience 20 points)
3. China market experience (20%) (company experience 10 points, proposed personnel experience 10 points)
4. Financial modeling for IT projects (10%) (company experience 5 points, proposed personnel experience 5 points).

Proposals that do not include all requested information may be considered non-responsive.  
Price will not be a factor in contractor selection.

## ANNEX 1

### CONTACT

Shandong Environmental Protection Bureau  
International Cooperation Division,  
No. 12 Zhijinshi Street  
Jinan, China

Phone: (86) 531-8610-6152  
Fax: (86) 531-8603-8443  
Email: 86106150@163.com

Appropriation No.: 11 11/12 1001  
Activity No.: 2011-61020A  
Reservation No.: 2011 185  
Grant No.: GH201161185  
Title: Shandong Environmental Emergency Response System.

POC: Nina Patel, USTDA, 1000 Wilson Boulevard, Suite 1600, Arlington, VA 22209-3901, Tel: (703) 875-4357, Fax: (703) 875-4009. Shandong Environmental Emergency Response System. The Grantee invites submission of qualifications and proposal data (collectively referred to as the "Proposal") from interested U.S. firms that are qualified on the basis of experience and capability to develop a feasibility study for the development of a plans to improve the environmental safety and monitoring mechanisms for provincial, municipal, and county-level EPA.

China's 12<sup>th</sup> Five Year Plan has placed special emphasis on reducing environmental pollution and hazardous emissions. Environmental protection efforts are being stepped up to prevent and better handle environmental incidents. In Shandong, the economy continues to grow at a spectacular pace. The risks related to environmental degradation and contamination have increased as a result. Key hazards include emissions of heavy metals and toxic substances that are byproducts from the metal mining and smelting industries; spills from lead battery factories; waste from leather production facilities; chemicals produced by various industries leaked into waterways, among other toxic substances. Airborne pollutants also pass into Shandong from neighboring provinces and cities. The problems associated with of contamination of air and water resources continue to grow unabated.

The Environmental Protection Bureau (EPB) of Shandong Province is the provincial entity responsible for implementing national policy, laws, and regulations relating to environmental protection. The EPB also formulates municipal environmental protection policy. The Environmental Safety & Emergency Management Division of the Environmental Protection Bureau of Shandong Province has put forward a proposal for a feasibility study on erecting a real-time province-wide environmental safety monitoring

network and emergency response command center. The project is designed to strengthen response to environmental hazards, coordinate recovery and reconstruction efforts, ensure environmental safety, protect public health, maintain social stability, and promote economic development and social harmony. The feasibility study will address the challenges of establishing:

- Real-time environmental safety and emergency management monitoring and detection network and system
- Emergency early warning network and system for environmental safety
- Emergency command and control center

The feasibility study is expected to achieve the following results:

- Prepare the environmental safety emergency management mechanisms for provincial, municipal and county level EPA
- Define a plan to deploy an improved environmental monitoring network and environmental information network by 2015
- Design a provincial unified command center and emergency management system that is well structured, responsive, and efficient in handling environmental emergency situations.

The U.S. firm selected will be paid in U.S. dollars from a \$346,634 grant to the Grantee from the U.S. Trade and Development Agency (USTDA).

A detailed Request for Proposals (RFP), which includes requirements for the Proposal, the Terms of Reference, and a background definitional mission/desk study report are available from USTDA, at 1000 Wilson Boulevard, Suite 1600, Arlington, VA 22209-3901. To request the RFP in PDF format, please go to:

<https://www.ustda.gov/businessopps/rfpform.asp>. Requests for a mailed hardcopy version of the RFP may also be faxed to the IRC, USTDA at 703-875-4009. In the fax, please include your firm's name, contact person, address, and telephone number. Some firms have found that RFP materials sent by U.S. mail do not reach them in time for preparation of an adequate response. Firms that want USTDA to use an overnight delivery service should include the name of the delivery service and your firm's account number in the request for the RFP. Firms that want to send a courier to USTDA to retrieve the RFP should allow one hour after faxing the request to USTDA before scheduling a pick-up. Please note that no telephone requests for the RFP will be honored. Please check your internal fax verification receipt. Because of the large number of RFP requests, USTDA cannot respond to requests for fax verification. Requests for RFPs received before 4:00 PM will be mailed the same day. Requests received after 4:00 PM will be mailed the following day. Please check with your courier and/or mail room before calling USTDA.

Only U.S. firms and individuals may bid on this USTDA financed activity. Interested firms, their subcontractors and employees of all participants must qualify under USTDA's nationality requirements as of the due date for submission of qualifications and proposals and, if selected to carry out the USTDA-financed activity, must continue to meet such

requirements throughout the duration of the USTDA-financed activity. All goods and services to be provided by the selected firm shall have their nationality, source and origin in the U.S. or host country. The U.S. firm may use subcontractors from the host country for up to 20 percent of the USTDA grant amount. Details of USTDA's nationality requirements and mandatory contract clauses are also included in the RFP.

Interested U.S. firms should submit their Proposal in English and Chinese respectively. Two versions of the proposal, one in English and the other in Chinese, should be submitted in two separated documents directly to the Grantee by 16:00, September 28, 2011 at the above address. Evaluation criteria for the Proposal are included in the RFP. Price will not be a factor in contractor selection, and therefore, cost proposals should NOT be submitted. The Grantee reserves the right to reject any and/or all Proposals. The Grantee also reserves the right to contract with the selected firm for subsequent work related to the project. The Grantee is not bound to pay for any costs associated with the preparation and submission of Proposals.

## ANNEX 2

### USTDA Definitional Mission Shandong Environmental Emergency Response System Completed February 11, 2011

#### A. Executive Summary

Accompanying China's rapid economic growth has been a corresponding rise in environmental degradation. China has already become the world's largest emitter of greenhouse gases and toxic byproducts caused by industrialization. Pollution dramatically affects human health and welfare and the economy. The costs are high. The Chinese Academy of Environmental Planning estimates the total cost of environmental degradation to be around RMB1.28 trillion (\$197 billion) in 2008, or 3.9% of total economic output. Pollution costs surged nearly 75% between 2004 – 2008. China has seen double the number of environmental accidents in the first half of 2010 compared to last year.<sup>1</sup>

China's 12<sup>th</sup> Five Year Plan has placed special emphasis on reducing environmental pollution and hazardous emissions. Environmental protection efforts are being stepped up to prevent and better handle environmental incidents. Capital spending on pollution control has risen fast in recent years reaching more than RMB 141 billion (\$21.7 billion) in 2010. Emission reduction and environmental clean-up is expected to exceed a staggering RMB 3.1 trillion (\$477 billion) over the next five years, or more than \$95 billion per year.<sup>2</sup>

In Shandong, the economy continues to grow at a spectacular pace. The risks related to environmental degradation and contamination have increased as a result. Key hazards include emissions of heavy metals and toxic substances that are byproducts from the metal mining and smelting industries; spills from lead battery factories; waste from leather production facilities; chemicals produced by various industries leaked into waterways, among other toxic substances. Airborne pollutants also pass into Shandong from neighboring provinces and cities. The problems associated with of contamination of air and water resources continue to grow unabated.

Environmental emergencies in China are growing more diverse and more complex. There has been a strong contradiction between maintaining a high level of economic growth and the environment's capacity to bear the burden of such unchecked expansion. The task regulating and enforcing environmental safety has also become more challenging. This is true in part because people are becoming more demanding and outspoken about the government stepping up to protect the water they drink and air they breathe.

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<sup>1</sup> Bloomberg

<sup>2</sup> SCMP January 9, 2011

China's news media captures the steady stream of environmental disaster. On July 28, 2010, 7,000 barrels from two Yongji chemical warehouses washed into the Songhua River in the northeast part of China. Eight teams of more than 1,000 soldiers, technicians, and local volunteers canvassed the river to fish out the barrels. Public water was cut off, resulting in panic buying of bottled water in Jilin and riverside communities as far as Harbin, hundreds of kilometers downriver.<sup>3</sup>

On July 16, 2010 a huge explosion and major oil spill occurred at Dalian's Xingang port. The explosion created a 183-square-kilometer oil slick which cost the Dalian city government an estimated RMB 1 billion (\$160 million) to clean. Twenty thousand fishermen were hired to clean up the oil, many only using their bare hands. The shores and waters off Shandong have been hit by a green algae plague caused by polluted runoffs into waterways that could block sunshine and consume large amounts of oxygen, killing off fish stock.

The Shandong Province Environmental Protection Bureau, Environmental Safety & Emergency Management Division, has put forward a proposal for a feasibility study on erecting a real-time province-wide environmental safety monitoring network and emergency response command center. The project is designed to strengthen response to environmental hazards, coordinate recovery and reconstruction efforts, ensure environmental safety, protect public health, maintain social stability, and promote economic development and social harmony. The feasibility study will address the challenges of establishing:

- Real-time environmental safety and emergency management monitoring and detection network and system
- Emergency early warning network and system for environmental safety
- Emergency command and control center

## **B. Project Description**

The Environmental Safety & Emergency Management Division of the Environmental Protection Bureau of Shandong Province has put forward a proposal to establish and improve viable mechanisms and systems for environmental emergency prevention and environmental emergency response. Currently, the environmental protection agencies of the Shandong government display varying and conflicting levels of knowledge and capabilities. Capacity and preparedness of personnel varies widely. The objectives of the study are to:

- Speed up the establishment of an environmental safety control system;
- Reinforce basic work on industrial environmental safety;
- Strengthen environmental safety early warning and monitoring;
- Improve responses to "sudden environmental events";

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<sup>3</sup> On November 13, 2005, a PetroChina chemical plant explosion that killed 5 people dumped an estimated 100 tons of benzene into the Songhua River.

- Put into effect dedicated environmental emergency response human resources and equipment;
- Develop and establish command and control platform for provincial environmental safety emergency response management

The feasibility study is expected to achieve the following results:

- Prepare the environmental safety emergency management mechanisms for provincial, municipal and county level EPA
- Define a plan to deploy an improved environmental monitoring network and environmental information network by 2015
- Design a provincial unified command center and emergency management system that is well structured, responsive, and efficient in handling environmental emergency situations.

### C. Project Sponsor's Capabilities and Commitment

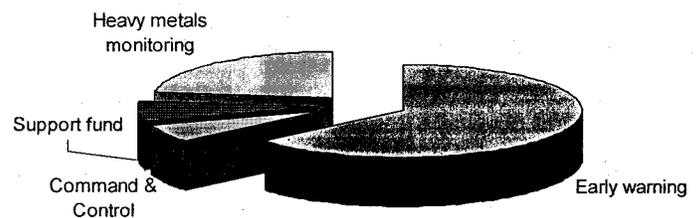
The project sponsor is the Environmental Protection Bureau of Shandong Province, the official government agency responsible for developing and maintaining environmental protection in Shandong. The Ministry of Environmental Protection in Beijing has given its endorsement of the project, and is looking forward to reviewing the accomplishments of the project.

### D. Implementation Financing

Shandong has allocated a budget of RMB 2,288,777,000 (\$352 million) for the Provincial environmental emergency response and early warning system over the next five years. Additional funds will be committed for heavy metal pollutant prevention efforts.

Key infrastructure projects associated with this effort include:

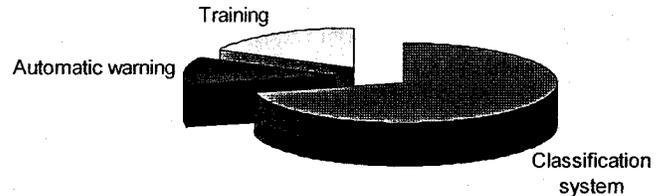
- Environmental Safety Warning and Control system: for early warning monitoring sites to be installed at key river sections. Estimated budget: RMB 1,966,732,000 (\$302 million).
- Environmental Safety and Emergency Response Management, Command, and Control platform – RMB 203,070,000 (\$31.2 million).
- Environmental Emergency and Protection support fund – RMB 205,775,000 (\$31.6 million)
- Environmental Emergency Materials storage facilities and supplies – RMB 13,200,000 (\$2 million).



- Integrated control of heavy metal pollution engineering projects – RMB 704,595,000 (\$108.4 million).

The largest investment is clearly the early warning system. This \$302 million budget can be broken down as follows:

- Environmental monitoring and early warning and classification system – RMB 1,401,832,000 (\$216 million) (71.1%)
- Automated, online environmental safety warning and monitoring system – RMB 227,700,000 (\$35 million) (11.5%)
- Environmental safety prevention and control monitoring staff training, including some equipment purchasing – RMB 337,200,000 (\$52 million) (17.1%).



Financing for the project will be shared by public funding sources at the provincial, city, and district government levels in Shandong. That the funding is committed from local sources shows a resolve to get underway and construct the environmental protection network and emergency response system. The has expressed a desire to utilize American consultants and experts on the project.

There is an increase to be made in public financing mechanisms that will allocate more financial resources to key environmental safety protection measures and capacity building exercises. The establishment of environmental emergency response system project will be included in the public emergency system plan.

### **E. Imported Content**

Shandong EPB has expressed a willingness to open procurement to foreign companies. It should be noted that the largest portion of the budget is destined for sensors and monitoring equipment, where Chinese firms are comfortably situated. However there are still sizable opportunities for U.S. firms to provide networking, data center platforms, monitoring software, and professional services covering 17 major cities and 140 counties.

Key opportunities for U.S. firms include the following:

<b>Technology category</b>	<b>Leading U.S. Suppliers</b>
Networking equipment <ul style="list-style-type: none"> <li>- Switches and routers:</li> <li>- Wireless Controller, Mobility Service Engine</li> <li>- Unified Communication: Contact Center</li> </ul>	Cisco, Motorola, Microsoft, IBM
Data center(s) <ul style="list-style-type: none"> <li>- Blade Servers</li> <li>- Service Control Engines</li> <li>- Digital Media Controllers</li> <li>- Storage</li> <li>- Video Surveillance Media Server</li> <li>- Video Conferencing</li> </ul>	IBM, Cisco, Microsoft, Sun, Oracle, HP

#### **F. Developmental Impact**

China's rapid economic expansion, development, and urbanization has led to an increase in environmental problems, air and water pollution, cases of lead poisoning, and people are clamoring for the government to clamp down on polluters. The environmental problems are starting to threaten economic growth and raise the potential for social unrest. With the implementation of a real-time monitoring, detection, and early warning network and system and a comprehensive emergency response command and control center, Chinese authorities will be better equipped to deal with outbreaks and incidents by collecting information that allows for decision-making and environmental emergency response to be more scientific and effective. Similarly, they will be in a stronger position to enforce environmental protection guidelines among industries and penalize polluters. They will be able to make inroads in emission controls, starting a long sought-after reversal in environmental degradation, and creating a more sustainable environment for its citizens and their children.

Category	Explanation
<b>Infrastructure</b>	<p>Expedite construction of environmental safety and emergency response management mechanisms for every city, county, and district with reference to national environmental protection management system.</p> <p>Strengthen environmental incident prevention. Shandong seeks to build up early warning capacity, speed up construction of the provincial environmental safety and protection control system including an automated pollution monitoring network and environmental emergency early warning network. It is especially important that this system be deployed around urban and rural drinking water sources and key sources and risks of pollution to ensure timely response in case of emergencies. By the end of 2012, there will be an automated monitoring network in place for major rivers, key sources of pollution (more than 1000), and urban sewage treatment plants, connected to a provincial environmental information network. The end result will be a information system that enables real-time monitoring of environmental quality, pollution situation, and status changes.</p> <p>The environmental bureaus at province, county and city level will compile a comprehensive data set and database covering and investigating all types of pollution sources – heavy metals, dangerous chemical, radioactive and hazardous waste – and key polluting industries and enterprises. The system will have to be fully staffed and establish points of coordination for environmental incident and emergency response network for rapid and timely response to all kinds of environmental emergencies.</p>
<b>Market-Oriented Reform</b>	<p>The proposed project is expected to be state-owned and no consequential market-oriented reforms are anticipated.</p>
<b>Human Resources Capacity Building</b>	<p>The estimated number of people who will work for the new environmental safety emergency response management work teams will number between 800-1000 people (these are “new positions” but it is not know if they will be “new hires”). Additionally, about 6000 people province wide are expected to receive training.</p> <p>The environmental bureaus will urge industries and</p>

	<p>enterprises to adopt environmental protection best practices, put together emergency contingency plans, implement environmental risk assessments, and treat hazardous materials accordingly. The appropriate agencies will increase supervision and monitoring of industries and enterprises close to large populations and close to key water sources, through the use of online monitoring tools.</p>
<p><b>Technology Transfer and Productivity Improvements</b></p>	<p>Strengthen information network and command and control capacity by raising and building out environmental information and data gathering abilities, improving transmission of data and emergency response information, analysis and tactical action.</p> <p>The proposed communications network and data center will enable more effective tracking of data related to environmental quality, pollution-related geographic information, information on heavy metals and hazardous chemicals, emergency response management that fully captures various types of environmental safety risk sources and their physical location. It will also allow the EPA to track expert human resources required in emergencies.</p> <p>Likely new technologies to be transferred to China include:</p> <ul style="list-style-type: none"> <li>• Real-time environmental sensor monitoring</li> <li>• GIS for environmental hazard monitoring</li> <li>• Advanced data center management</li> <li>• Advanced command and control systems</li> <li>• Push-to-talk communications for emergency response teams.</li> </ul>

The project will contribute to a number of positive economic, development and environmental impacts:

**G. Environmental Impact**

The entire project is geared to improving environmental quality in Shandong. As a result of the feasibility study, and eventual project if implemented, many positive impacts can be anticipated. Improved environmental emergency response command and control will allow rapid, comprehensive and efficient response to environmental emergencies. The system will address on-site information on sudden environmental events and emergency response actions, monitoring data, information collection and dissemination, transmission equipment, command and control vehicle, development of “sudden environmental event and emergency response command. The proposed environmental monitoring and control

center will monitor changes in key rivers and maritime conditions due to sewage (or chemical) discharge by enterprises. It will be a 24 hour monitoring system with real-time data collection, data syndication (streaming), streaming, analysis, and issuance of early warning when required. Environmental bureaus will be better able to connect with the monitoring and detection systems of transportation and maritime bureaus to get timely access to information to accidents and spills involving cars, trains, or ships. Other positive impacts are likely.

#### **H. Impact on U.S. Labor.**

This technical assistance for the Shandong EPB has the potential to have a positive impact on U.S. labor. The project could create export opportunities for some or all of the \$149 million estimated value of the first phase of implementation. There is no aspect of the project that would contravene the Foreign Operations, Export Financing and Related Programs Appropriates legislation.

#### **I. Qualifications.**

The Consultant should provide a consulting team comprising a mix of experts with proven experience in the following areas:

- Management consulting
- Telecommunications networking
- Emergency operations centers
- Environmental monitoring and/or environmental science
- Financial modeling
- China market experience.

#### **J. Justification**

Shandong EPB has the procurement funds for sensors, monitoring equipment, data center, and networking but it lacks a comprehensive strategic framework for ensuring that those funds get spent wisely and effectively. The feasibility study will provide an expert evaluation of the Shandong EPB's budget, structure, software and equipment for its environmental safety and emergency response management plan that ensures a high degree of success in the outcome.

## ANNEX 3



### U.S. TRADE AND DEVELOPMENT AGENCY Arlington, VA 22209-2131

#### NATIONALITY, SOURCE, AND ORIGIN REQUIREMENTS

The purpose of USTDA's nationality, source, and origin requirements is to assure the maximum practicable participation of American contractors, technology, equipment and materials in the prefeasibility, feasibility, and implementation stages of a project.

#### **USTDA STANDARD RULE (GRANT AGREEMENT STANDARD LANGUAGE):**

Except as USTDA may otherwise agree, each of the following provisions shall apply to the delivery of goods and services funded by USTDA under this Grant Agreement: (a) for professional services, the Contractor must be either a U.S. firm or U.S. individual; (b) the Contractor may use U.S. subcontractors without limitation, but the use of subcontractors from host country may not exceed twenty percent (20%) of the USTDA Grant amount and may only be used for specific services from the Terms of Reference identified in the subcontract; (c) employees of U.S. Contractor or U.S. subcontractor firms responsible for professional services shall be U.S. citizens or non-U.S. citizens lawfully admitted for permanent residence in the U.S.; (d) goods purchased for implementation of the Study and associated delivery services (e.g., international transportation and insurance) must have their nationality, source and origin in the United States; and (e) goods and services incidental to Study support (e.g., local lodging, food, and transportation) in host country are not subject to the above restrictions. USTDA will make available further details concerning these standards of eligibility upon request.

#### **NATIONALITY:**

##### 1) Rule

Except as USTDA may otherwise agree, the Contractor for USTDA funded activities must be either a U.S. firm or a U.S. individual. Prime contractors may utilize U.S.

subcontractors without limitation, but the use of host country subcontractors is limited to 20% of the USTDA grant amount.

## 2) Application

Accordingly, only a U.S. firm or U.S. individual may submit proposals on USTDA funded activities. Although those proposals may include subcontracting arrangements with host country firms or individuals for up to 20% of the USTDA grant amount, they may not include subcontracts with third country entities. U.S. firms submitting proposals must ensure that the professional services funded by the USTDA grant, to the extent not subcontracted to host country entities, are supplied by employees of the firm or employees of U.S. subcontractor firms who are U.S. individuals.

Interested U.S. firms and consultants who submit proposals must meet USTDA nationality requirements as of the due date for the submission of proposals and, if selected, must continue to meet such requirements throughout the duration of the USTDA-financed activity. These nationality provisions apply to whatever portion of the Terms of Reference is funded with the USTDA grant.

## 3) Definitions

A "U.S. individual" is (a) a U.S. citizen, or (b) a non-U.S. citizen lawfully admitted for permanent residence in the U.S. (a green card holder).

A "U.S. firm" is a privately owned firm which is incorporated in the U.S., with its principal place of business in the U.S., and which is either (a) more than 50% owned by U.S. individuals, or (b) has been incorporated in the U.S. for more than three (3) years prior to the issuance date of the request for proposals; has performed similar services in the U.S. for that three (3) year period; employs U.S. citizens in more than half of its permanent full-time positions in the U.S.; and has the existing capability in the U.S. to perform the work in question.

A partnership, organized in the U.S. with its principal place of business in the U.S., may also qualify as a "U.S. firm" as would a joint venture organized or incorporated in the United States consisting entirely of U.S. firms and/or U.S. individuals.

A nonprofit organization, such as an educational institution, foundation, or association may also qualify as a "U.S. firm" if it is incorporated in the United States and managed by a governing body, a majority of whose members are U.S. individuals.

## SOURCE AND ORIGIN:

### 1) Rule

In addition to the nationality requirement stated above, any goods (e.g., equipment and materials) and services related to their shipment (e.g., international transportation and insurance) funded under the USTDA Grant Agreement must have their source and origin in the United States, unless USTDA otherwise agrees. However, necessary purchases of goods and project support services which are unavailable from a U.S. source (e.g., local food, housing and transportation) are eligible without specific USTDA approval.

### 2) Application

Accordingly, the prime contractor must be able to demonstrate that all goods and services purchased in the host country to carry out the Terms of Reference for a USTDA Grant Agreement that were not of U.S. source and origin were unavailable in the United States.

### 3) Definitions

“Source” means the country from which shipment is made.

“Origin” means the place of production, through manufacturing, assembly or otherwise.

*Questions regarding these nationality, source and origin requirements may be addressed to the USTDA Office of General Counsel.*

## ANNEX 4

### GRANT AGREEMENT

This Grant Agreement is entered into between the Government of the United States of America, acting through the U.S. Trade and Development Agency ("USTDA") and Shandong Environmental Protection Bureau ("Grantee"). USTDA agrees to provide the Grantee under the terms of this Agreement US\$346,634 ("USTDA Grant") to fund the cost of goods and services required for a feasibility study ("Study") on the proposed Shandong Environmental Emergency Response System ("Project") in the People's Republic of China ("Host Country").

#### **1. USTDA Funding**

The funding to be provided under this Grant Agreement shall be used to fund the costs of a contract between the Grantee and the U.S. firm selected by the Grantee ("Contractor") under which the Contractor will perform the Study ("Contract"). Payment to the Contractor will be made directly by USTDA on behalf of the Grantee with the USTDA Grant funds provided under this Grant Agreement.

#### **2. Terms of Reference**

The Terms of Reference for the Study ("Terms of Reference") are attached as Annex I and are hereby made a part of this Grant Agreement. The Study will examine the technical, financial, environmental, and other critical aspects of the proposed Project. The Terms of Reference for the Study shall also be included in the Contract.

#### **3. Standards of Conduct**

USTDA and the Grantee recognize the existence of standards of conduct for public officials, and commercial entities, in their respective countries. The parties to this Grant Agreement and the Contractor shall observe these standards, which include not accepting payment of money or anything of value, directly or indirectly, from any person for the purpose of illegally or improperly inducing anyone to take any action favorable to any party in connection with the Study.

#### **4. Grantee Responsibilities**

The Grantee shall undertake its best efforts to provide reasonable support for the Contractor, such as local transportation, office space, and secretarial support, as well as supply all the reference material identified in the Terms of Reference (TOR) that are needed for the Contractor to effectively implement the prescribed tasks.

## **5. USTDA as Financier**

### **(A) USTDA Approval of Competitive Selection Procedures**

Selection of the U.S. Contractor shall be carried out by the Grantee according to its established procedures for the competitive selection of contractors with advance notice of the procurement published online through *Federal Business Opportunities* ([www.fedbizopps.gov](http://www.fedbizopps.gov)). Upon request, the Grantee will submit these contracting procedures and related documents to USTDA for information and/or approval.

### **(B) USTDA Approval of Contractor Selection**

The Grantee shall notify USTDA at the address of record set forth in Article 17 below upon selection of the Contractor to perform the Study. Upon approval of this selection by USTDA, the Grantee and the Contractor shall then enter into a contract for performance of the Study. The Grantee shall notify in writing the U.S. firms that submitted unsuccessful proposals to perform the Study that they were not selected.

### **(C) USTDA Approval of Contract Between Grantee and Contractor**

The Grantee and the Contractor shall enter into a contract for performance of the Study. This contract, and any amendments thereto, including assignments and changes in the Terms of Reference, must be approved by USTDA in writing. To expedite this approval, the Grantee (or the Contractor on the Grantee's behalf) shall transmit to USTDA, at the address set forth in Article 17 below, a photocopy of an English language version of the signed contract or a final negotiated draft version of the contract.

### **(D) USTDA Not a Party to the Contract**

It is understood by the parties that USTDA has reserved certain rights such as, but not limited to, the right to approve the terms of the contract and any amendments thereto, including assignments, the selection of all contractors, the Terms of Reference, the Final Report, and any and all documents related to any contract funded under the Grant Agreement. The parties hereto further understand and agree that USTDA, in reserving any or all of the foregoing approval rights, has acted solely as a financing entity to assure the proper use of United States Government funds, and that any decision by USTDA to exercise or refrain from exercising these approval rights shall be made as a financier in the course of funding the Study and shall not be construed as making USTDA a party to the contract. The parties hereto understand and agree that USTDA may, from time to time, exercise the foregoing approval rights, or discuss matters related to these rights and the Project with the parties to the contract or any subcontract, jointly or separately, without thereby incurring any responsibility or liability to such parties. Any approval or failure to approve by USTDA shall not bar the Grantee or USTDA from asserting any right they might have against the

Contractor, or relieve the Contractor of any liability which the Contractor might otherwise have to the Grantee or USTDA.

**(E) Grant Agreement Controlling**

Regardless of USTDA approval, the rights and obligations of any party to the contract or subcontract thereunder must be consistent with this Grant Agreement. In the event of any inconsistency between the Grant Agreement and any contract or subcontract funded by the Grant Agreement, the Grant Agreement shall be controlling.

**6. Disbursement Procedures**

**(A) USTDA Approval of Contract Required**

USTDA will make disbursements of Grant funds directly to the Contractor only after USTDA approves the Grantee's contract with the Contractor.

**(B) Contractor Invoice Requirements**

The Grantee should request disbursement of funds by USTDA to the Contractor for performance of the Study by submitting invoices in accordance with the procedures set forth in the USTDA Mandatory Clauses in Annex II.

**7. Effective Date**

The effective date of this Grant Agreement ("Effective Date") shall be the date of signature by both parties or, if the parties sign on different dates, the date of the last signature.

**8. Study Schedule**

**(A) Study Completion Date**

The completion date for the Study, which is October 30, 2012 is the date by which the parties estimate that the Study will have been completed.

**(B) Time Limitation on Disbursement of USTDA Grant Funds**

Except as USTDA may otherwise agree, (a) no USTDA funds may be disbursed under this Grant Agreement for goods and services which are provided prior to the Effective Date of the Grant Agreement; and (b) all funds made available under the Grant Agreement must be disbursed within four (4) years from the Effective Date of the Grant Agreement.

## **9. USTDA Mandatory Clauses**

All contracts funded under this Grant Agreement shall include the USTDA mandatory clauses set forth in Annex II to this Grant Agreement. All subcontracts funded or partially funded with USTDA Grant funds shall include the USTDA mandatory clauses, except for clauses B(1), G, H, I, and J.

## **10. Use of U.S. Carriers**

### **(A) Air**

Transportation by air of persons or property funded under the Grant Agreement shall be on U.S. flag carriers in accordance with the Fly America Act, 49 U.S.C. 40118, to the extent service by such carriers is available, as provided under applicable U.S. Government regulations.

### **(B) Marine**

Transportation by sea of property funded under the Grant Agreement shall be on U.S. carriers in accordance with U.S. cargo preference law.

## **11. Nationality, Source and Origin**

Except as USTDA may otherwise agree, the following provisions shall govern the delivery of goods and services funded by USTDA under the Grant Agreement: (a) for professional services, the Contractor must be either a U.S. firm or U.S. individual; (b) the Contractor may use U.S. subcontractors without limitation, but the use of subcontractors from Host Country may not exceed twenty percent (20%) of the USTDA Grant amount and may only be used for specific services from the Terms of Reference identified in the subcontract; (c) employees of U.S. Contractor or U.S. subcontractor firms responsible for professional services shall be U.S. citizens or non-U.S. citizens lawfully admitted for permanent residence in the U.S.; (d) goods purchased for performance of the Study and associated delivery services (e.g., international transportation and insurance) must have their nationality, source and origin in the United States; and (e) goods and services incidental to Study support (e.g., local lodging, food, and transportation) in Host Country are not subject to the above restrictions. USTDA will make available further details concerning these provisions upon request.

## **12. Taxes**

USTDA funds provided under the Grant Agreement shall not be used to pay any taxes, tariffs, duties, fees or other levies imposed under laws in effect in Host Country. Neither the Grantee nor the Contractor will seek reimbursement from USTDA for such taxes, tariffs, duties, fees or other levies.

### **13. Cooperation Between Parties and Follow-Up**

The parties will cooperate to assure that the purposes of the Grant Agreement are accomplished. For five (5) years following receipt by USTDA of the Final Report (as defined in Clause I of Annex II), the Grantee agrees to respond to any reasonable inquiries from USTDA about the status of the Project.

### **14. Implementation Letters**

To assist the Grantee in the implementation of the Study, USTDA may, from time to time, issue implementation letters that will provide additional information about matters covered by the Grant Agreement. The parties may also use jointly agreed upon implementation letters to confirm and record their mutual understanding of matters covered by the Grant Agreement.

### **15. Recordkeeping and Audit**

The Grantee agrees to maintain books, records, and other documents relating to the Study and the Grant Agreement adequate to demonstrate implementation of its responsibilities under the Grant Agreement, including the selection of contractors, receipt and approval of contract deliverables, and approval or disapproval of contractor invoices for payment by USTDA. Such books, records, and other documents shall be separately maintained for three (3) years after the date of the final disbursement by USTDA. The Grantee shall afford USTDA or its authorized representatives the opportunity at reasonable times to review books, records, and other documents relating to the Study and the Grant Agreement.

### **16. Representation of Parties**

For all purposes relevant to the Grant Agreement, the Government of the United States of America will be represented by the U. S. Ambassador to Host Country or USTDA and Grantee will be represented by the Mr. Zhang Bo, Director. The parties hereto may, by written notice, designate additional representatives for all purposes under the Grant Agreement.

### **17. Addresses of Record for Parties**

Any notice, request, document, or other communication submitted by either party to the other under the Grant Agreement shall be in writing or through a wire or electronic medium which produces a tangible record of the transmission, such as a telegram, cable or facsimile, and will be deemed duly given or sent when delivered to such party at the following:

To: Shandong Environmental Protection Bureau  
International Cooperation Division,

No. 12 Zhijinshi Street  
Jinan, China

Phone: (86) 531-8610-6152  
Fax: (86) 531-8603-8443  
Email: 86106150@163.com

To: U.S. Trade and Development Agency  
1000 Wilson Boulevard, Suite 1600  
Arlington, Virginia 22209-3901  
USA

Phone: (703) 875-4357  
Fax: (703) 875-4009

All such communications shall be in English, unless the parties otherwise agree in writing. In addition, the Grantee shall provide the Commercial Section of the U.S. Embassy in Host Country with a copy of each communication sent to USTDA.

Any communication relating to this Grant Agreement shall include the following fiscal data:

Appropriation No.: 11 11/12 1001  
Activity No.: 2011-61020A  
Reservation No.: 2011 185

Grant No.: GH201161185

### **18. Termination Clause**

Either party may terminate the Grant Agreement by giving the other party thirty (30) days advance written notice. The termination of the Grant Agreement will end any obligations of the parties to provide financial or other resources for the Study, except for payments which they are committed to make pursuant to noncancellable commitments entered into with third parties prior to the written notice of termination.

**19. Non-waiver of Rights and Remedies**

No delay in exercising any right or remedy accruing to either party in connection with the Grant Agreement shall be construed as a waiver of such right or remedy.

**20. U.S. Technology and Equipment**

By funding this Study, USTDA seeks to promote the project objectives of the Host Country through the use of U.S. technology, goods, and services. In recognition of this purpose, the Grantee agrees that it will allow U.S. suppliers to compete in the procurement of technology, goods and services needed for Project implementation.

**[THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK]**

**IN WITNESS WHEREOF, the Government of the United States of America and the Shandong Environmental Protection Bureau, each acting through its duly authorized representative, have caused this Agreement to be signed in the English language in their names and delivered as of the day and year written below. In the event that this Grant Agreement is signed in more than one language, the English language version shall govern.**

**For the Government of the  
United States of America**

**For the Shandong Environmental  
Protection Bureau**

By: \_\_\_\_\_

By: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Witnessed:

Witnessed:

By: \_\_\_\_\_

By: \_\_\_\_\_

**Annex I -- Terms of Reference**

**Annex II -- USTDA Mandatory Clauses**

## Annex I

### **Terms of Reference**

#### **Shandong Environmental Emergency System**

The objective of the Study is to determine the feasibility of implementing an environmental emergency response system for the Environmental Protection Department of Shandong Province. The Environmental Protection Department of Shandong Province ensures environmental safety and protects public health. In Shandong heavy industry is an important aspect of economic activity and there is sharp contradiction between rapid industrial growth and the carrying capacity of the environment. Environmental incidents pose significant economic risks and a serious threat to the health and safety of the people and social stability. To systematically address these issues Shandong Province will establish an environmental early warning and emergency response command system. The system will improve real time data monitoring and analysis of environmental conditions; establish an emergency operations and incident response command center; and deploy an effective early warning capability for environmental hazards. The system will address technical response and information management requirements at the provincial, municipal, and county levels.

#### **TASK 1: PROJECT KICK OFF**

The Contractor shall launch the Study by defining the detailed scope of work, research methodology, data gathering requirements, roles and responsibilities, and project plan with milestones and specific timetable for deliverables. The Contractor shall launch the Project with initial research and discussions with the Grantee to clarify Project objectives and goals. The Grantee shall be responsible for supplying all supply all the reference material identified in the TOR that are needed for the Contractor to effectively implement all of the prescribed tasks.

##### **1.1 Project Planning and Document Review**

The Contractor shall:

- Define Project approach and methodology, documentation standards, project management reporting requirements, benchmarks and workflow.
- Design research framework and data collection requirements including stakeholder interview questionnaire and evaluation methodology, data formatting and presentation templates, analysis framework and knowledge management process.
- Review all relevant research materials, policy documents, and past and ongoing environmental emergency response initiatives in Shandong Province prior to initial field visits.
- Seek Grantee views of past success/failures related to environmental emergency response and hazard mitigation.

- Obtain and review national guidelines and published studies related to environmental emergency response in order to ascertain the state of the environmental emergency response sector in China.

## **1.2 Project Kick off**

The Contractor shall:

- Meet with the Grantee to discuss overall project strategy, objectives and deliverables.
- Communicate, clarify and refine project objectives and scope.
- Form a joint Project team with the Grantee.
- Define the Grantee's and Contractor's roles and responsibilities and jointly prepare a Project plan.
- Obtain policy guidance from the Grantee.

Deliverable: The Contractor shall prepare a Feasibility Study Kick-off Report (5-10 pages) describing all the work performed under this Task 1, including a summary of initial observations and findings, detailed project methodology, benchmarks and timelines. The Contractor shall also summarize the Grantee's current operating state regarding the items and sources required under this task, and including the current technology and applications in use by the Grantee, and shall provide data organized and formatted to meet the needs of the Study as a whole.

## **TASK 2: SITUATION ANALYSIS**

The Contractor shall perform a situational analysis of the current status of the environmental emergency response structure in Shandong including policies, organization, legal framework and technical systems currently deployed. The Contractor shall identify the problems, opportunities, and challenges in the current environmental emergency response system and comprehensively assess the potential for new applications and solutions based on information and communications technologies and tools.

### **2.1 Conduct interviews**

The Contractor shall:

- Coordinate with the Grantee to identify and communicate with interview targets to comprehensively assess and document the current status of the following issues, at a minimum:
  - National and Provincial policy priorities
  - Organizations involved with environmental emergency response and their relationship to the Department of Environmental Protection
  - Key environmental risks in the Province and current mitigation strategies
  - Existing technology systems, processes, procedures and related assets currently in place to monitor and manage environmental hazards

- Future plans for information and technology systems related to environmental monitoring, assessment, analysis and emergency response
- Major academic and research programs underway related to ICT and environmental management and emergency response, and
- Other topics as may be required to develop a comprehensive understanding of the local situation for environmental emergency response.

**Deliverable:** The Contractor shall prepare a Situation Assessment report covering findings from its discovery activity in Shandong. The report shall be of no fewer than 25 written pages and/or 50 Powerpoint slides that comprehensively addresses each of the sub tasks identified above. The Situational Assessment report shall be substantively complete in all areas and provide an inventory and analysis of existing systems, procedures and technologies currently in use.

### **TASK 3: U.S. BEST PRACTICES**

Provide an overview of U.S. best practices for environmental emergency response.

The Contractor shall:

- Summarize U.S. policies, frameworks, technical standards and principle operating practices for the management of environmental hazards in the U.S. at the federal, state and community levels.
- Perform a high level gap analysis of U.S. best practices and the current situation in Shandong province
- Identify areas for potential improvement and explain observations in text, numeric and graphic presentation formats.

**Deliverable:** The Contractor shall prepare a comprehensive summary of U.S. best practices for environmental emergency management describing all the work performed under this Task 3, including the institutions and responsibilities, policies, operational doctrines and leading technological solutions and standards for environmental monitoring and emergency management in the U.S.

### **TASK 4: TECHNICAL PLAN**

The Contractor shall produce a comprehensive technical feasibility report defining requirements and detailed specifications for an integrated information system architecture for environmental safety and emergency response. The goal is to establish the feasibility of constructing a fully interconnected and interoperable safety early warning system and incident response capability serving the provincial, municipal and county levels. The Study will address the potential for a new information network to interconnect the provincial level network central node with 17 counties (cities, districts) support nodes and enterprise-level environment safety monitoring terminals, including more than 1000 key pollution sources and sewage treatment plants over time.

Based on feedback and discussion with the Grantee following the Situation Assessment report, the Contractor shall:

- Review Grantee plans, proposals, technical specifications and other materials and information to assist the Contractor to gain an accurate understanding of the Grantee's specific technical requirements.
- Develop an overall system and technical concept and high level specifications for the Shandong environment safety management system capable of monitoring critical environmental quality, pollution status and trends in real-time. The specifications shall include at a minimum:
  - Emergency operating center(s), including but not limited to:
    - Decision support system
    - Risk diffusion modeling (hazard maps)
    - Incident simulation
    - Communications networking requirements
    - Emergency dispatch system
    - Call center
    - Video conference system
    - Emergency command vehicles data collection, transmission, query and operation
    - Network architecture diagram with supporting written analysis
  - Incident management and decision support system, including but not limited to:
    - Monitoring of cross-sectional surface water quality
    - Atmospheric environmental monitoring focusing on heavy metals and other toxic and hazardous substances
    - Automatic monitoring network for major trans-boundary rivers
    - Key pollution sources including up to 20 large industrial enterprises believed to be leading polluters
    - Urban sewage treatment plants.
  - Monitoring and early warning, including but not limited to:
    - Sensor alarm and monitoring
    - Communications with existing provincial environmental monitoring centers
    - Emergency messaging
    - Video surveillance
    - Decision support system
    - Emergency roster (to be integrated into 12369 hotline call center)
    - Warning indicators management
    - Warning level management
    - Warning update and release
    - Warning distribution.
  - Emergency communications network, including but not limited to:
    - Interconnection between emergency operating centers, data centers, back-up facilities, and enterprise networks
    - Collection and transmission of sensor data

- Communications between EOCs and emergency personnel including emergency vehicles
  - Mobile monitoring and other new technologies.
- Data center(s), including but not limited to:
  - Physical size
  - Functional architecture
  - Server capacity
  - Storage capacity
  - Virtualization requirements
  - Other technology options
  - Power requirements.
- Geographic information system, including but not limited to:
  - *Drainage Area Emergency Dispatch Management GIS Sub-System*
  - *Sub-regional emergency dispatch GIS sub system*
  - *Key industrial factories emergency dispatch GIS sub system*
  - *Main roads emergency dispatch GIS sub system*
  - *Drinking water source management GIS sub*
  - *Radiation source management GIS sub system*
- Emergency response database(s), including but not limited to:
  - Propose a strategic approach to planning and managing database functionality focused on environmental quality monitoring and pollution, especially heavy metals and hazardous chemicals information.
  - Recommend technology approaches appropriate for the designing and procuring databases.

**Deliverable:** The Contractor shall prepare a comprehensive Technical Feasibility Report covering each of the sub tasks above. The Report shall be of sufficient scope and depth to enable the Grantee to make informed design and procurement decisions.

### **Task 5: Financial Analysis**

Make an analysis of funding requirements for the proposed environmental emergency management system.

The Contractor shall:

- Prepare a comprehensive cost model of capital expenses based on the solutions proposed and on inputs provided by the Grantee.
- Estimate cost of ownership and maintenance and related operating expenses over a five year period with inputs provided by the Grantee.
- Assist with the preparation of Grantee budget for the procurement of equipment and services.
- Identify opportunities for the solutions to be self-funding over time.
- Identify areas for potential public-private cooperation and investment.

Deliverables: Financial report and Excel forecast model. The Contractor shall prepare a Financial report and Excel forecast model estimating costs of implementing the Project, in accordance with the requirements under this task and including expansion of the system to include new users and applications for a period of five years. The analysis shall determine if the Grantee's own allocated financial resources are sufficient to cover project costs through full implementation and operation.

### **Task 6: Implementation Roadmap**

Develop an implementation roadmap for the environmental emergency management system. The Contractor shall address business planning issues, contingencies, project risks and mitigation strategies, sequencing of tasks and investments and related planning considerations.

- Prepare detailed project management plan and schedule in Gantt Chart format in close association with the Grantee
- Identify metrics to measure success for the remaining stage of the project planning period, for the procurement phase, and for assessing project success over time
- With Grantee approval, notify U.S. companies of timetable for procurement.
- Considerations associated with installation, improvement, and establishment of essential hardware and software elements of the system
- Operation and maintenance plan for ensuring overall system sustainability
- Identify metrics to measure success for the remaining stage of the project planning period, for the procurement phase, and for assessing project success over time

Deliverables: In accordance with all the requirements under this task, the Contractor shall prepare an Implementation Plan recommending actions best suited to assure successful implementation of the Project. In addition to the items listed in the task above, the Implementation Plan shall include an Action Plan containing specific steps for each major implementation component and specifying for each step the priority, roles and responsibilities of each party, schedule, budget and staffing requirements.

### **TASK 7: IMPACT ANALYSIS AND U.S. EXPORT POTENTIAL**

The Contractor shall conduct a preliminary review of the Project's anticipated economic, environmental, developmental, and trade impacts.

#### **7.1 Development Impact Analysis**

The Contractor shall provide a report on the developmental impacts of the Project in Shandong. While specific attention should be paid to the immediate impact of the Project, the Contractor shall include, where appropriate, any additional developmental benefits of the Project, including spin-off and demonstration effects. The analysis of potential benefits of the Study should be as concrete and detailed as possible. The

Contractor shall provide estimates of the Project's potential benefits in the following areas:

- Infrastructure: A statement on the infrastructure impact, giving a brief synopsis.
- Market-Oriented Reform: A description of any regulations, laws, or institutional changes that are recommended and the effect they would have if implemented.
- Human Capacity Building: A description of the number and type of positions that would be needed to construct and operate the Project. The Contractor shall also describe the job alternatives needed for the job classes that may be reduced as well as retraining needs for staff.
- Technology Transfer and Productivity Enhancement: A description of any advanced technologies that will be implemented as a result of the Project. A description of any efficiency that will be gained (e.g. productivity gains, savings in transmission costs or lower production costs).
- Other: any other developmental benefits to the Project, including spin-off or demonstration effects.

## **7.2 Economic impacts**

The Contractor shall explore and briefly report on any positive economic impacts that may be produced from the Project. The Contractor should seek to identify and quantify the economic benefits resulting from the program. The assessment should be made to the best of Contractor's internal abilities utilizing existing subject matter expertise. An exhaustive econometric forecast and analysis is not required.

## **7.3 Environmental & Other impacts**

The Contractor shall prepare a preliminary environmental impact assessment.

The Contractor shall:

- Make a preliminary review of the Project's anticipated impact on the environment with reference to local requirements.
- Identify potential negative impacts, discuss the extent to which they can be mitigated, and develop plans for a full environmental impact assessment if and when the Project moves forward to the implementation stage.
- Identify steps that will need to be undertaken by the Project sponsor subsequent to the Study's completion and prior to Project implementation.
- Identify the impact of equipment use and future replacement, the use of sustainable sources of energy and the use of appropriate technologies and equipment for the particular environment.

## **7.4 U.S. Export Potential**

The Contractor shall:

- Identify possible U.S. sources of supply including business name, point of contact for the party responsible for China sales, address, telephone, e-mail, and fax numbers for each source.

Deliverables: The Contractor shall prepare an Assessment of economic, environmental and developmental impacts in accordance with all requirements under this task, as well as a summary matrix of U.S. sources of supply and contact information.

### **Task 8: Final workshop**

The Contractor shall present project findings to the Grantee in a one-day Final Workshop. The Workshop will be conducted at the Grantee's facilities and the Grantee will be responsible for selecting local attendees and covering Workshop costs (tea service, meals, etc.). Both parties shall provide and pay for their respective interpreters if required.

Deliverable: The Contractor shall deliver a final workshop in Jinan, Shandong for up to 50 participants to be held at the Grantee's facility in accordance with the requirements under this task.

### **Task 9: Final Report**

**The Contractor shall prepare and deliver to the Grantee and USTDA a substantive and comprehensive final report of all work performed under these Terms of Reference ("Final Report"). The Final Report shall be organized according to the above tasks, and shall include all deliverables and documents that have been provided to the Grantee. The Final Report shall be prepared in accordance with Clause I of Annex II of the Grant Agreement.**

The Contractor will integrate the comments and feedback from the workshop into the final report and also include lessons learned from the workshop.

Additionally, the Contractor must provide five (5) hard copies of the Final Report to the Grantee. For the Grantee copies, all deliverables under Tasks 1 through 8 shall be translated into Chinese. Internal working memos and documents meant solely for group discussions and planning purposes shall not be translated into Chinese.

Each of the above tasks in this Terms of Reference must be distinctly set forth in the Final Report in a substantive and comprehensive manner, and shall include all corresponding deliverables, including any training materials provided to the Grantee. The Final Report, while aiming at optimum specifications and characteristics for the Project, shall also identify prospective U.S. sources of supply, including business name, point of contact, address, telephone, e-mail, and fax numbers for each source. The Final Report shall contain an executive summary and cover each of the itemized paragraphs described herein.

**Notes:**

- (1) The Contractor is responsible for compliance with U.S. export licensing requirements, if applicable, in the performance of the Terms of Reference.**
- (2) The Contractor and the Grantee shall be careful to ensure that the public version of the Final Report contains no security or confidential information.**
- (3) The Grantee and USTDA shall have an irrevocable, worldwide, royalty-free, non-exclusive right to use and distribute the Final Report and all work product that is developed under these Terms of Reference.**

## Annex II

### USTDA Mandatory Contract Clauses

#### A. USTDA Mandatory Clauses Controlling

The parties to this contract acknowledge that this contract is funded in whole or in part by the U.S. Trade and Development Agency ("USTDA") under the Grant Agreement between the Government of the United States of America acting through USTDA and the Shandong Environmental Protection Bureau ("Client"), dated \_\_\_\_\_ ("Grant Agreement"). The Client has selected \_\_\_\_\_ ("Contractor") to perform the feasibility study ("Study") for the Shandong Environmental Emergency Response System project ("Project") in the People's Republic of China ("Host Country"). Notwithstanding any other provisions of this contract, the following USTDA mandatory contract clauses shall govern. All subcontracts entered into by Contractor funded or partially funded with USTDA Grant funds shall include these USTDA mandatory contract clauses, except for clauses B(1), G, H, I, and J. In addition, in the event of any inconsistency between the Grant Agreement and any contract or subcontract thereunder, the Grant Agreement shall be controlling.

#### B. USTDA as Financier

##### (1) USTDA Approval of Contract

All contracts funded under the Grant Agreement, and any amendments thereto, including assignments and changes in the Terms of Reference, must be approved by USTDA in writing in order to be effective with respect to the expenditure of USTDA Grant funds. USTDA will not authorize the disbursement of USTDA Grant funds until the contract has been formally approved by USTDA or until the contract conforms to modifications required by USTDA during the contract review process.

##### (2) USTDA Not a Party to the Contract

It is understood by the parties that USTDA has reserved certain rights such as, but not limited to, the right to approve the terms of this contract and amendments thereto, including assignments, the selection of all contractors, the Terms of Reference, the Final Report, and any and all documents related to any contract funded under the Grant Agreement. The parties hereto further understand and agree that USTDA, in reserving any or all of the foregoing approval rights, has acted solely as a financing entity to assure the proper use of United States Government funds, and that any decision by USTDA to exercise or refrain from exercising these approval rights shall be made as a financier in the course of financing the Study and shall not be construed as making USTDA a party to the contract. The parties hereto understand and agree that USTDA may, from time to time, exercise the foregoing approval rights, or discuss matters related to these rights and the Project with the parties to the contract or any subcontract, jointly or separately, without thereby incurring any responsibility or liability to such parties. Any approval or failure to approve by USTDA shall not bar the Client or USTDA from asserting any right

they might have against the Contractor, or relieve the Contractor of any liability which the Contractor might otherwise have to the Client or USTDA.

### **C. Nationality, Source and Origin**

Except as USTDA may otherwise agree, the following provisions shall govern the delivery of goods and services funded by USTDA under the Grant Agreement: (a) for professional services, the Contractor must be either a U.S. firm or U.S. individual; (b) the Contractor may use U.S. subcontractors without limitation, but the use of subcontractors from Host Country may not exceed twenty percent (20%) of the USTDA Grant amount and may only be used for specific services from the Terms of Reference identified in the subcontract; (c) employees of U.S. Contractor or U.S. subcontractor firms responsible for professional services shall be U.S. citizens or non-U.S. citizens lawfully admitted for permanent residence in the U.S.; (d) goods purchased for performance of the Study and associated delivery services (e.g., international transportation and insurance) must have their nationality, source and origin in the United States; and (e) goods and services incidental to Study support (e.g., local lodging, food, and transportation) in Host Country are not subject to the above restrictions. USTDA will make available further details concerning these provisions upon request.

### **D. Recordkeeping and Audit**

The Contractor and subcontractors funded under the Grant Agreement shall maintain, in accordance with generally accepted accounting procedures, books, records, and other documents, sufficient to reflect properly all transactions under or in connection with the contract. These books, records, and other documents shall clearly identify and track the use and expenditure of USTDA funds, separately from other funding sources. Such books, records, and documents shall be maintained during the contract term and for a period of three (3) years after final disbursement by USTDA. The Contractor and subcontractors shall afford USTDA, or its authorized representatives, the opportunity at reasonable times for inspection and audit of such books, records, and other documentation.

### **E. U.S. Carriers**

#### **(1) Air**

Transportation by air of persons or property funded under the Grant Agreement shall be on U.S. flag carriers in accordance with the Fly America Act, 49 U.S.C. 40118, to the extent service by such carriers is available, as provided under applicable U.S. Government regulations.

#### **(2) Marine**

Transportation by sea of property funded under the Grant Agreement shall be on U.S. carriers in accordance with U.S. cargo preference law.

### **F. Workman's Compensation Insurance**

The Contractor shall provide adequate Workman's Compensation Insurance coverage for work performed under this Contract.

### **G. Reporting Requirements**

The Contractor shall advise USTDA by letter as to the status of the Project on March 1st annually for a period of two (2) years after completion of the Study. In addition, if at any time the Contractor receives follow-on work from the Client, the Contractor shall so notify USTDA and designate the Contractor's contact point including name, telephone, and fax number. Since this information may be made publicly available by USTDA, any information which is confidential shall be designated as such by the Contractor and provided separately to USTDA. USTDA will maintain the confidentiality of such information in accordance with applicable law.

### **H. Disbursement Procedures**

#### **(1) USTDA Approval of Contract**

Disbursement of Grant funds will be made only after USTDA approval of this contract. To make this review in a timely fashion, USTDA must receive from either the Client or the Contractor a photocopy of an English language version of a signed contract or a final negotiated draft version to the attention of the General Counsel's office at USTDA's address listed in Clause M below.

#### **(2) Payment Schedule Requirements**

A payment schedule for disbursement of Grant funds to the Contractor shall be included in this Contract. Such payment schedule must conform to the following USTDA requirements: (1) up to twenty percent (20%) of the total USTDA Grant amount may be used as a mobilization payment; (2) all other payments, with the exception of the final payment, shall be based upon contract performance milestones; and (3) the final payment may be no less than fifteen percent (15%) of the total USTDA Grant amount, payable upon receipt by USTDA of an approved Final Report in accordance with the specifications and quantities set forth in Clause I below. Invoicing procedures for all payments are described below.

#### **(3) Contractor Invoice Requirements**

USTDA will make all disbursements of USTDA Grant funds directly to the Contractor. The Contractor must provide USTDA with an ACH Vendor Enrollment Form (available from USTDA) with the first invoice. The Client shall request disbursement of funds by USTDA to the Contractor for performance of the contract by submitting the following to USTDA:

**(a) Contractor's Invoice**

The Contractor's invoice shall include reference to an item listed in the Contract payment schedule, the requested payment amount, and an appropriate certification by the Contractor, as follows:

(i) For a mobilization payment (if any):

"As a condition for this mobilization payment, the Contractor certifies that it will perform all work in accordance with the terms of its Contract with the Client. To the extent that the Contractor does not comply with the terms and conditions of the Contract, including the USTDA mandatory provisions contained therein, it will, upon USTDA's request, make an appropriate refund to USTDA. "

(ii) For contract performance milestone payments:

"The Contractor has performed the work described in this invoice in accordance with the terms of its contract with the Client and is entitled to payment thereunder. To the extent the Contractor has not complied with the terms and conditions of the Contract, including the USTDA mandatory provisions contained therein, it will, upon USTDA's request, make an appropriate refund to USTDA."

(iii) For final payment:

"The Contractor has performed the work described in this invoice in accordance with the terms of its contract with the Client and is entitled to payment thereunder. Specifically, the Contractor has submitted the Final Report to the Client, as required by the Contract, and received the Client's approval of the Final Report. To the extent the Contractor has not complied with the terms and conditions of the Contract, including the USTDA mandatory provisions contained therein, it will, upon USTDA's request, make an appropriate refund to USTDA."

**(b) Client's Approval of the Contractor's Invoice**

(i) The invoice for a mobilization payment must be approved in writing by the Client.

(ii) For contract performance milestone payments, the following certification by the Client must be provided on the invoice or separately:

"The services for which disbursement is requested by the Contractor have been performed satisfactorily, in accordance with applicable Contract provisions and the terms and conditions of the USTDA Grant Agreement."

(iii) For final payment, the following certification by the Client must be provided on the invoice or separately:

"The services for which disbursement is requested by the Contractor have been performed satisfactorily, in accordance with applicable Contract provisions and terms and conditions of the USTDA Grant Agreement. The Final Report submitted by the Contractor has been reviewed and approved by the Client. "

**(c) USTDA Address for Disbursement Requests**

Requests for disbursement shall be submitted by courier or mail to the attention of the Finance Department at USTDA's address listed in Clause M below.

**(4) Termination**

In the event that the Contract is terminated prior to completion, the Contractor will be eligible, subject to USTDA approval, for reasonable and documented costs which have been incurred in performing the Terms of Reference prior to termination, as well as reasonable wind down expenses. Reimbursement for such costs shall not exceed the total amount of undisbursed Grant funds. Likewise, in the event of such termination, USTDA is entitled to receive from the Contractor all USTDA Grant funds previously disbursed to the Contractor (including but not limited to mobilization payments) which exceed the reasonable and documented costs incurred in performing the Terms of Reference prior to termination.

**I. USTDA Final Report**

**(1) Definition**

"Final Report" shall mean the Final Report described in the attached Annex I Terms of Reference or, if no such "Final Report" is described therein, "Final Report" shall mean a substantive and comprehensive report of work performed in accordance with the attached Annex I Terms of Reference, including any documents delivered to the Client.

**(2) Final Report Submission Requirements**

The Contractor shall provide the following to USTDA:

**(a)** One (1) complete version of the Final Report for USTDA's records. This version shall have been approved by the Client in writing and must be in the English language. It is the responsibility of the Contractor to ensure that confidential information, if any, contained in this version be clearly marked. USTDA will maintain the confidentiality of such information in accordance with applicable law.

and

**(b)** One (1) copy of the Final Report suitable for public distribution ("Public Version"). The Public Version shall have been approved by the Client in writing and must be in the English language. As this version will be available for public distribution, it must not contain any confidential information. If the report in (a) above contains no confidential information, it may be used as the Public Version. In

any event, the Public Version must be informative and contain sufficient Project detail to be useful to prospective equipment and service providers.

and

(c) Two (2) CD-ROMs, each containing a complete copy of the Public Version of the Final Report. The electronic files on the CD-ROMs shall be submitted in a commonly accessible read-only format. As these CD-ROMs will be available for public distribution, they must not contain any confidential information. It is the responsibility of the Contractor to ensure that no confidential information is contained on the CD-ROMs.

The Contractor shall also provide one (1) copy of the Public Version of the Final Report to the Foreign Commercial Service Officer or the Economic Section of the U.S. Embassy in Host Country for informational purposes.

### **(3) Final Report Presentation**

All Final Reports submitted to USTDA must be paginated and include the following:

(a) The front cover of every Final Report shall contain the name of the Client, the name of the Contractor who prepared the report, a report title, USTDA's logo, USTDA's mailing and delivery addresses. If the complete version of the Final Report contains confidential information, the Contractor shall be responsible for labeling the front cover of that version of the Final Report with the term "Confidential Version." The Contractor shall be responsible for labeling the front cover of the Public Version of the Final Report with the term "Public Version." The front cover of every Final Report shall also contain the following disclaimer:

"This report was funded by the U.S. Trade and Development Agency (USTDA), an agency of the U. S. Government. The opinions, findings, conclusions or recommendations expressed in this document are those of the author(s) and do not necessarily represent the official position or policies of USTDA. USTDA makes no representation about, nor does it accept responsibility for, the accuracy or completeness of the information contained in this report."

(b) The inside front cover of every Final Report shall contain USTDA's logo, USTDA's mailing and delivery addresses, and USTDA's mission statement. Camera-ready copy of USTDA Final Report specifications will be available from USTDA upon request.

(c) The Contractor shall affix to the front of the CD-ROM a label identifying the Host Country, USTDA Activity Number, the name of the Client, the name of the Contractor who prepared the report, a report title, and the following language:

"The Contractor certifies that this CD-ROM contains the Public Version of the Final Report and that all contents are suitable for public distribution."

(d) The Contractor and any subcontractors that perform work pursuant to the Grant Agreement must be clearly identified in the Final Report. Business name, point of contact, address, telephone and fax numbers shall be included for Contractor and each subcontractor.

(e) The Final Report, while aiming at optimum specifications and characteristics for the Project, shall identify the availability of prospective U.S. sources of supply. Business name, point of contact, address, telephone and fax numbers shall be included for each commercial source.

(f) The Final Report shall be accompanied by a letter or other notation by the Client which states that the Client approves the Final Report. A certification by the Client to this effect provided on or with the invoice for final payment will meet this requirement.

#### **J. Modifications**

All changes, modifications, assignments or amendments to this contract, including the appendices, shall be made only by written agreement by the parties hereto, subject to written USTDA approval.

#### **K. Study Schedule**

##### **(1) Study Completion Date**

The completion date for the Study, which is October 30, 2012, is the date by which the parties estimate that the Study will have been completed.

##### **(2) Time Limitation on Disbursement of USTDA Grant Funds**

Except as USTDA may otherwise agree, (a) no USTDA funds may be disbursed under this contract for goods and services which are provided prior to the Effective Date of the Grant Agreement; and (b) all funds made available under the Grant Agreement must be disbursed within four (4) years from the Effective Date of the Grant Agreement.

#### **L. Business Practices**

The Contractor agrees not to pay, promise to pay, or authorize the payment of any money or anything of value, directly or indirectly, to any person (whether a governmental official or private individual) for the purpose of illegally or improperly inducing anyone to take any action favorable to any party in connection with the Study. The Client agrees not to receive any such payment. The Contractor and the Client agree that each will require that any agent or representative hired to represent them in connection with the Study will comply with this paragraph and all laws which apply to activities and obligations of each party under this

Contract, including but not limited to those laws and obligations dealing with improper payments as described above.

**M. USTDA Address and Fiscal Data**

Any communication with USTDA regarding this Contract shall be sent to the following address and include the fiscal data listed below:

U.S. Trade and Development Agency  
1000 Wilson Boulevard, Suite 1600  
Arlington, Virginia 22209-3901  
USA

Phone: (703) 875-4357  
Fax: (703) 875-4009

Fiscal Data:

Appropriation No.: 11 11/12 1001  
Activity No.: 2011-61020A  
Reservation No.: 2011 185

Grant No.: GH201161185

**N. Definitions**

All capitalized terms not otherwise defined herein shall have the meaning set forth in the Grant Agreement.

**O. Taxes**

USTDA funds provided under the Grant Agreement shall not be used to pay any taxes, tariffs, duties, fees or other levies imposed under laws in effect in Host Country. Neither the Client nor the Contractor will seek reimbursement from USTDA for such taxes, tariffs, duties, fees or other levies.



## ANNEX 5

### Terms of Reference

#### Shandong Environmental Emergency System

The objective of the Study is to determine the feasibility of implementing an environmental emergency response system for the Environmental Protection Department of Shandong Province. The Environmental Protection Department of Shandong Province ensures environmental safety and protects public health. In Shandong heavy industry is an important aspect of economic activity and there is sharp contradiction between rapid industrial growth and the carrying capacity of the environment. Environmental incidents pose significant economic risks and a serious threat to the health and safety of the people and social stability. To systematically address these issues Shandong Province will establish an environmental early warning and emergency response command system. The system will improve real time data monitoring and analysis of environmental conditions; establish a world class emergency operations and incident response command center; and deploy an effective early warning capability for environmental hazards. The system will address technical response and information management requirements at the provincial, municipal, and county levels.

#### **TASK 1: PROJECT KICK OFF**

The Contractor shall launch the study by defining the detailed scope of work, research methodology, data gathering requirements, roles and responsibilities, and project plan with milestones and specific timetable for deliverables. The Contractor shall launch the Project with initial research and discussions with the Grantee to clarify Project objectives and goals. The Grantee shall be responsible for supplying all the material needed for the Contractor to effectively implement these Terms of Reference (TOR).

##### **1.1 Project Planning and Document Review**

The Contractor shall:

- Define Project approach and methodology, documentation standards, project management reporting requirements, benchmarks and workflow.
- Design research framework and data collection requirements including stakeholder interview questionnaire and evaluation methodology, data formatting and presentation templates, analysis framework and knowledge management process.
- Review all relevant research materials, policy documents, and past and ongoing environmental emergency response initiatives in Shandong Province prior to initial field visits.
- Seek Grantee views of past success/failures related to environmental emergency response and hazard mitigation
- Obtain and review relevant national guidelines and published studies related to environmental emergency response in order to ascertain the state of the art of the environmental emergency response sector in China.

## **1.2 Project Kick off**

The Contractor shall:

- Meet with the Grantee to discuss overall project strategy, objectives and deliverables.
- Communicate, clarify and refine project objectives and scope.
- Form a joint Project team with the Grantee.
- Define the Grantee's and Contractor's roles and responsibilities and jointly prepare a Project plan.
- Obtain policy guidance from the Grantee. The Grantee and Contractor cannot change roles or responsibilities in this TOR without notification to and approval from USTDA

Deliverable: The Contractor shall prepare a Feasibility Study Kick-off Report (5-10 pages) describing all the work performed under this Task 1, including a summary of initial observations and findings, detailed project methodology, benchmarks and timelines. The Contractor shall also summarize the Grantee's current operating state regarding the items and sources required under this task, and including the current technology and applications in use by the Grantee, and shall provide data organized and formatted to meet the needs of the Study as a whole.

## **TASK 2: SITUATION ANALYSIS**

The Contractor shall perform a situational analysis of the current status of the environmental emergency response structure in Shandong including policies, organization, legal framework and technical systems currently deployed. The Contractor shall identify the problems, opportunities, and challenges in the current environmental emergency response system and comprehensively assess the potential for new applications and solutions based on information and communications technologies and tools.

### **2.1 Conduct interviews**

The Contractor shall:

- Coordinate with the Grantee to identify and communicate with interview targets to comprehensive assess and document the current status of the following issues, at a minimum:
  - National and Provincial policy priorities
  - Organizations involved with environmental emergency response and their relationship to the Department of Environmental Protection
  - Key environmental risks in the Province and current mitigation strategies
  - Existing technology systems, processes, procedures and related assets currently in place to monitor and manage environmental hazards
  - Future plans for information and technology systems related to environmental monitoring, assessment, analysis and emergency response
  - Major academic and research programs underway related to ICT and environmental management and emergency response

- Other topics as may be required to develop a comprehensive understanding of the local situation for environmental emergency response.

Deliverable: The Contractor shall prepare a Situation Assessment report covering findings from its discovery activity in Shandong and prepare a Situation Assessment report of no fewer than 25 written pages and/or 50 Powerpoint slides that comprehensively addresses each of the sub tasks identified above. The Situational Assessment shall be substantively complete in all areas and provide an inventory and analysis of existing systems, procedures and technologies currently in use.

### **TASK 3: U.S. BEST PRACTICES**

Provide an overview of U.S. best practices for environmental emergency response.

The Contractor shall:

- Summarize U.S. policies, frameworks, technical standards and principle operating practices for the management of environmental hazards in the U.S. at the federal, state and community levels.
- Perform a high level gap analysis of U.S. best practices and the current situation in Shandong province
- Identify areas for potential improvement and explain observations in text, numeric and graphic presentation formats.

Deliverable: The Contractor shall prepare a comprehensive summary of U.S. best practices for environmental emergency management that captures the institutions and responsibilities, policies, operational doctrines and leading technological solutions and standards for environmental monitoring and emergency management in the U.S.

### **TASK 4: TECHNICAL PLAN**

The Contractor shall produce a comprehensive technical feasibility report defining requirements and detailed specifications for an integrated information system architecture for environmental safety and emergency response. The goal is to establish the feasibility of constructing a fully interconnected and interoperable safety early warning system and incident response capability serving the provincial, municipal and county levels. The feasibility study will address the potential for a new information network to interconnect the provincial level network central node with 17 counties (cities, districts) support nodes and enterprise-level environment safety monitoring terminals, including more than 1000 key pollution sources and sewage treatment plants over time.

Based on feedback and discussion with the Grantee following the Situation Assessment report, the Contractor shall:

- Review Grantee plans, proposals, technical specifications and other materials and information to assist the Contractor to gain an accurate understanding of the Grantee's specific technical requirements.

- Develop an overall system and technical concept and high level specifications for the Shandong environment safety management system capable of monitoring critical environmental quality, pollution status and trends in real-time. The specifications shall include at a minimum:
  - Emergency operating center(s), including but not limited to:
    - Decision support system
    - Risk diffusion modeling (hazard maps)
    - Incident simulation
    - Communications networking requirements
    - Emergency dispatch system
    - Call center
    - Video conference system
    - Emergency command vehicles data collection, transmission, query and operation
    - Network architecture diagram with supporting written analysis
  - Incident management and decision support system, including but not limited to:
    - Monitoring of cross-sectional surface water quality
    - Atmospheric environmental monitoring focusing on heavy metals and other toxic and hazardous substances
    - Automatic monitoring network for major trans-boundary rivers
    - Key pollution sources including up to 20 large industrial enterprises believed to be leading polluters
    - Urban sewage treatment plants.
  - Monitoring and early warning, including but not limited to:
    - Sensor alarm and monitoring
    - Communications with existing provincial environmental monitoring centers
    - Emergency messaging
    - Video surveillance
    - Decision support system
    - Emergency roster (to be integrated into 12369 hotline call center)
    - Warning indicators management
    - Warning level management
    - Warning update and release
    - Warning distribution.
  - Emergency communications network, including but not limited to:
    - Interconnection between emergency operating centers, data centers, back-up facilities, and enterprise networks
    - Collection and transmission of sensor data
    - Communications between EOCs and emergency personnel including emergency vehicles
    - Mobile monitoring and other new technologies.
  - Data center(s), including but not limited to:
    - Physical size
    - Functional architecture
    - Server capacity

- Storage capacity
- Virtualization requirements
- Other technology options
- Power requirements.
- Geographic information system, including but not limited to:
  - *Drainage Area Emergency Dispatch Management GIS Sub-System*
  - *Sub-regional emergency dispatch GIS sub system*
  - *Key industrial factories emergency dispatch GIS sub system*
  - *Main roads emergency dispatch GIS sub system*
  - *Drinking water source management GIS sub*
  - *Radiation source management GIS sub system*
- Emergency response database(s), including but not limited to:
  - Propose a strategic approach to planning and managing database functionality focused on environmental quality monitoring and pollution, especially heavy metals and hazardous chemicals information.
  - Recommend technology approaches appropriate for the designing and procuring databases.

Deliverable: The Contractor shall prepare a comprehensive Technical Plan Report covering each of the sub tasks above. The Report shall be of sufficient scope and depth to enable the Grantee to make informed design and procurement decisions.

### **Task 5: Financial Analysis**

Make an analysis of funding requirements for the proposed environmental emergency management system.

The Contractor shall:

- Prepare a comprehensive cost model of capital expenses based on the solutions proposed and on inputs provided by the Grantee.
- Estimate cost of ownership and maintenance and related operating expenses over a five year period with inputs provided by the Grantee.
- Assist with the preparation of Grantee budget for the procurement of equipment and services.
- Identify opportunities for the solutions to be self-funding over time.
- Identify areas for potential public-private cooperation and investment.

Deliverables: Financial report and Excel forecast model. The Contractor shall prepare a Financial report and Excel forecast model estimating costs of implementing the Project, in accordance with the requirements under this task and including expansion of the system to include new users and applications for a period of five years. The analysis shall determine if the Grantee's own allocated financial resources are sufficient to cover project costs through full implementation and operation.

## **Task 6: Implementation Roadmap**

Develop an implementation roadmap for the environmental emergency management system. The Contractor shall address business planning issues, contingencies, project risks and mitigation strategies, sequencing of tasks and investments and related planning considerations.

- Prepare detailed project management plan and schedule in Gantt Chart format in close association with the Grantee
- Identify metrics to measure success for the remaining stage of the project planning period, for the procurement phase, and for assessing project success over time
- With Grantee approval, notify U.S. companies of timetable for procurement.
- Considerations associated with installation, improvement, and establishment of essential hardware and software elements of the system
- Operation and maintenance plan for ensuring overall system sustainability
- Identify metrics to measure success for the remaining stage of the project planning period, for the procurement phase, and for assessing project success over time
- With Grantee approval, notify U.S. companies of timetable for procurement.

Deliverables: In accordance with all the requirements under this task, the Contractor shall prepare an Implementation Plan recommending actions best suited to assure successful implementation of the Project. In addition to the items listed in the task above, the Implementation Plan shall include an Action Plan containing specific steps for each major implementation component and specifying for each step the priority, roles and responsibilities of each party, schedule, budget and staffing requirements.

## **TASK 7: IMPACT ANALYSIS AND U.S. EXPORT POTENTIAL**

The Contractor shall conduct a preliminary review of the Project's anticipated economic, environmental, developmental, and trade impacts.

### **7.1 Development Impact Analysis**

The Contractor shall provide a report on the developmental impacts of the Project in Shandong. While specific attention should be paid to the immediate impact of the Project, the Contractor shall include, where appropriate, any additional developmental benefits of the Project, including spin-off and demonstration effects. The analysis of potential benefits of the Study should be as concrete and detailed as possible. The Contractor shall provide estimates of the Project's potential benefits in the following areas:

- **Infrastructure:** A statement on the infrastructure impact giving a brief synopsis
- **Market-Oriented Reform:** A description of any regulations, laws, or institutional changes that are recommended and the effect they would have if implemented.
- **Human Capacity Building:** A description of the number and type of positions that would be needed to construct and operate the Project. The Contractor shall also describe the job alternatives needed for the job classes that may be reduced as well as retraining needs for staff.

- Technology Transfer and Productivity Enhancement: A description of any advanced technologies that will be implemented as a result of the Project. A description of any efficiency that will be gained (e.g. productivity gains, savings in transmission costs or lower production costs).
- Other: any other developmental benefits to the Project, including spin-off or demonstration effects.

## **7.2 Economic impacts**

The Contractor shall explore and briefly report on any positive economic impacts that may be produced from the Project. The Contractor should seek to identify and if possible, quantify, economic benefits resulting from the program. The assessment should be made to the best of Contractor's internal abilities and utilizing existing subject matter expertise. An exhaustive econometric forecast and analysis is not required.

## **7.3 Environmental & Other impacts**

The Contractor shall prepare a preliminary environmental impact assessment.

The Contractor shall:

- Make a preliminary review of the Project's anticipated impact on the environment with reference to local requirements.
- Identify potential negative impacts, discuss the extent to which they can be mitigated, and develop plans for a full environmental impact assessment if and when the Project moves forward to the implementation stage.
- Identify steps that will need to be undertaken by the Project sponsor subsequent to the study's completion and prior to Project implementation.
- Identify the impact of equipment use and future replacement, the use of sustainable sources of energy and the use of appropriate technologies and equipment for the particular environment.

## **7.5 U.S. Export Potential**

The Contractor shall:

- Identify possible U.S. sources of supply including contact information for party responsible for China sales.

Deliverables: Assessment of economic, environmental and developmental impacts.  
Summary matrix of U.S. sources of supply and contact information.

## **Task 8: Final workshop**

The Contractor shall present project findings to the Grantee in a one-day Final Workshop. The Workshop will be conducted at the Grantee's facilities and the Grantee will be responsible for selecting local attendees and covering Workshop costs (tea service, meals, etc.).

Deliverable: Final Workshop in Jinan, Shandong for up to 50 participants to be held at the Grantee's facility. The Grantee shall provide for any ancillary costs (tea service or lunch, etc.). Both parties shall provide interpreters if required.

### **Task 9: Final Report**

The Contractor shall prepare and provide to the Grantee and to USTDA a Final Report in accordance with Clause I of Annex II of the Grant Agreement. The Contractor will integrate the comments and feedback from the workshop into the final report and also include lessons learned from the workshop. All key deliverables shall be translated into Chinese. Internal working memos and documents meant solely for group discussions and planning purposes will not be translated into Chinese. Additionally, the Contractor must provide five (5) hard copies of the Final Report to the Grantee

Each of the above tasks in this Terms of Reference must be distinctly set forth in the Final Report in a substantive and comprehensive manner, and shall include all corresponding deliverables, including any training materials provided to the Grantee. The Final Report, while aiming at optimum specifications and characteristics for the Project, shall also identify prospective U.S. sources of supply. Business name, point of contact, address, telephone, e-mail, and fax numbers shall be included for each source. The Final Report shall contain an executive summary and cover each of the itemized paragraphs described herein.

#### Notes:

- (1) The Contractor is responsible for compliance with U.S. export licensing requirements, if applicable, in the performance of the Terms of Reference.
- (2) The Contractor and the Grantee shall be careful to ensure that the public version of the Final Report contains no security or confidential information.
- (3) The Grantee and USTDA shall have an irrevocable, worldwide, royalty-free, non-exclusive right to use and distribute the Final Report and all work products that are developed under these Terms of Reference.



7. Project Manager's name, address, telephone number, e-mail address and fax number .

**B. Offeror's Authorized Negotiator**

Provide name, title, address, telephone number, e-mail address and fax number of the Offeror's authorized negotiator. The person cited shall be empowered to make binding commitments for the Offeror and its subcontractors, if any.

**C. Negotiation Prerequisites**

1. Discuss any current or anticipated commitments which may impact the ability of the Offeror or its subcontractors to complete the Feasibility Study as proposed and reflect such impact within the project schedule.
2. Identify any specific information which is needed from the Grantee before commencing contract negotiations.

**D. Offeror's Representations**

Please provide exceptions and/or explanations in the event that any of the following representations cannot be made:

1. Offeror is a corporation [*insert applicable type of entity if not a corporation*] duly organized, validly existing and in good standing under the laws of the State of \_\_\_\_\_ . The Offeror has all the requisite corporate power and authority to conduct its business as presently conducted, to submit this proposal, and if selected, to execute and deliver a contract to the Grantee for the performance of the Feasibility Study. The Offeror is not debarred, suspended, or to the best of its knowledge or belief, proposed for debarment, or ineligible for the award of contracts by any federal or state governmental agency or authority.

2. The Offeror has included, with this proposal, a certified copy of its Articles of Incorporation, and a certificate of good standing issued within one month of the date of its proposal by the State of \_\_\_\_\_. The Offeror commits to notify USTDA and the Grantee if they become aware of any change in their status in the state in which they are incorporated. USTDA retains the right to request an updated certificate of good standing.
3. Neither the Offeror nor any of its principal officers have, within the three-year period preceding this RFP, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state or local government contract or subcontract; violation of federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating federal or state criminal tax laws, or receiving stolen property.
4. Neither the Offeror, nor any of its principal officers, is presently indicted for, or otherwise criminally or civilly charged with, commission of any of the offenses enumerated in paragraph 3 above.
5. There are no federal or state tax liens pending against the assets, property or business of the Offeror. The Offeror, has not, within the three-year period preceding this RFP, been notified of any delinquent federal or state taxes in an amount that exceeds \$3,000 for which the liability remains unsatisfied. Taxes are considered delinquent if (a) the tax liability has been fully determined, with no pending administrative or judicial appeals; and (b) a taxpayer has failed to pay the tax liability when full payment is due and required.
6. The Offeror has not commenced a voluntary case or other proceeding seeking liquidation, reorganization or other relief with respect to itself or its debts under any bankruptcy, insolvency or other similar law. The Offeror has not had filed against it an involuntary petition under any bankruptcy, insolvency or similar law.

The selected Offeror shall notify the Grantee and USTDA if any of the representations included in its proposal are no longer true and correct at the time of its entry into a contract with the Grantee.

Signed: \_\_\_\_\_  
(Authorized Representative)

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**E. Subcontractor Profile**

1. Name of firm and business address (street address only), including telephone and fax numbers.
  
  
  
  
  
  
  
  
  
  
2. Year established (include predecessor companies and year(s) established, if appropriate).

**F. Subcontractor's Representations**

If any of the following representations cannot be made, or if there are exceptions, the subcontractor must provide an explanation.

1. Subcontractor is a corporation [*insert applicable type of entity if not a corporation*] duly organized, validly existing and in good standing under the laws of the State of \_\_\_\_\_ . The subcontractor has all the requisite corporate power and authority to conduct its business as presently conducted, to participate in this proposal, and if the Offeror is selected, to execute and deliver a subcontract to the Offeror for the performance of the Feasibility Study and to perform the Feasibility Study. The subcontractor is not debarred, suspended, or to the best of its knowledge or belief, proposed for debarment or ineligible for the award of contracts by any federal or state governmental agency or authority.
  
2. Neither the subcontractor nor any of its principal officers have, within the three-year period preceding this RFP, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state or local government contract or subcontract; violation of federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating federal or state criminal tax laws, or receiving stolen property.

3. Neither the subcontractor, nor any of its principal officers, is presently indicted for, or otherwise criminally or civilly charged with, commission of any of the offenses enumerated in paragraph 2 above.
4. There are no federal or state tax liens pending against the assets, property or business of the subcontractor. The subcontractor, has not, within the three-year period preceding this RFP, been notified of any delinquent federal or state taxes in an amount that exceeds \$3,000 for which the liability remains unsatisfied. Taxes are considered delinquent if (a) the tax liability has been fully determined, with no pending administrative or judicial appeals; and (b) a taxpayer has failed to pay the tax liability when full payment is due and required.
5. The subcontractor has not commenced a voluntary case or other proceeding seeking liquidation, reorganization or other relief with respect to itself or its debts under any bankruptcy, insolvency or other similar law. The subcontractor has not had filed against it an involuntary petition under any bankruptcy, insolvency or similar law.

The selected subcontractor shall notify the Offeror, Grantee and USTDA if any of the representations included in this proposal are no longer true and correct at the time of the Offeror's entry into a contract with the Grantee.

Signed: \_\_\_\_\_  
(Authorized Representative)

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_