

REQUEST FOR PROPOSALS

FEASIBILITY STUDY FOR THE

ORAN TERTIARY WASTEWATER TREATMENT FACILITY

Submission Deadline: **4:00 P.M.**

LOCAL TIME

OCTOBER 20, 2010

Submission Place: **Mr. Abdelouaheb Smati**
Director of Projects
Ministry of Water Resources
03 Rue du Caire
Kouba, Alger, Algiers
Tel.: 213 21 28 31 49

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.

**N.B.: Any and all questions pertaining to the RFP should be sent to Nina Patel, USTDA,
1000 Wilson Blvd, Suite 1600, Arlington, VA 22209-3901, Tel: (703) 875-4357,
Fax: (703) 875-4009, npatel@ustda.gov**

REQUEST FOR PROPOSALS

SECTION 1:	INTRODUCTION	4
1.1	BACKGROUND SUMMARY	4
1.2	OBJECTIVE	5
1.3	PROPOSALS TO BE SUBMITTED	5
1.4	CONTRACT FUNDED BY USTDA	5
SECTION 2:	INSTRUCTIONS TO OFFERORS	6
2.1	PROJECT TITLE.....	6
2.2	DEFINITIONS.....	6
2.3	DEFINITIONAL MISSION REPORT	6
2.4	EXAMINATION OF DOCUMENTS	6
2.5	PROJECT FUNDING SOURCE.....	7
2.6	RESPONSIBILITY FOR COSTS	7
2.7	TAXES.....	7
2.8	CONFIDENTIALITY.....	7
2.9	ECONOMY OF PROPOSALS	7
2.10	OFFEROR CERTIFICATIONS	7
2.11	CONDITIONS REQUIRED FOR PARTICIPATION	8
2.12	LANGUAGE OF PROPOSAL.....	8
2.13	PROPOSAL SUBMISSION REQUIREMENTS	8
2.14	PACKAGING	8
2.15	AUTHORIZED SIGNATURE	8
2.16	EFFECTIVE PERIOD OF PROPOSAL	9
2.17	EXCEPTIONS	9
2.18	OFFEROR QUALIFICATIONS	9
2.19	RIGHT TO REJECT PROPOSALS	9
2.20	PRIME CONTRACTOR RESPONSIBILITY	9
2.21	AWARD	9
2.22	COMPLETE SERVICES	10
2.23	INVOICING AND PAYMENT	10
SECTION 3:	PROPOSAL FORMAT AND CONTENT	11
3.1	EXECUTIVE SUMMARY	11
3.2	COMPANY INFORMATION.....	12
3.2.1	COMPANY PROFILE	12
3.2.2	OFFEROR'S AUTHORIZED NEGOTIATOR.....	12
3.2.3	NEGOTIATION PREREQUISITES	12
3.2.4	OFFEROR'S REPRESENTATIONS	13
3.2.5	SUBCONTRACTOR PROFILE.....	14
3.2.6	SUBCONTRACTOR'S REPRESENTATIONS.....	14
3.3	ORGANIZATIONAL STRUCTURE, MANAGEMENT, AND KEY PERSONNEL	15
3.4	TECHNICAL APPROACH AND WORK PLAN	16
3.5	EXPERIENCE AND QUALIFICATIONS	16
SECTION 4:	AWARD CRITERIA	17

ANNEX 1	FEDBIZOPPS ANNOUNCEMENT
ANNEX 2	BACKGROUND DEFINITIONAL MISSION REPORT
ANNEX 3	USTDA NATIONALITY REQUIREMENTS
ANNEX 4	USTDA GRANT AGREEMENT, INCLUDING MANDATORY CONTRACT CLAUSES
ANNEX 5	TERMS OF REFERENCE (FROM USTDA GRANT AGREEMENT)
ANNEX 6	COMPANY INFORMATION

Section 1: INTRODUCTION

The U.S. Trade and Development Agency (USTDA) has provided a grant in the amount of US\$256,741 to the Ministère des Ressources en Eau (Ministry of Water Resources) (the "Grantee") in accordance with a grant agreement dated April 28, 2010 (the "Grant Agreement"). USTDA has provided a grant to the Grantee for the Oran Tertiary Wastewater Treatment Facility Feasibility Study. 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

Algeria suffers from a chronic water deficit, worsened by inconsistent weather patterns and high population growth in large urban centers. Algeria is 95 percent arid land and 80 percent of Algeria's land surface is in desert zones where rainfall is negligible. Water is one of the main concerns for Algeria's future. The persistent water shortages in Algeria are affecting agriculture productivity and the rationing of potable water has become a necessity in major urban centers of the country over the last decade. Agriculture was once Algeria's dominant sector, but more recently agriculture production has decreased substantially. In Algeria, only one-tenth of the 7.5 million hectares of cultivable land receives adequate rainfall. As a result, the Government of Algeria currently considers wastewater reuse for agricultural irrigation a priority in order to enhance agribusiness development opportunities.

Oran, located on the Mediterranean coast in northwestern Algeria, is the second major city in Algeria. It is a major port, and since the 1960s it has been the commercial, industrial, and educational center of western Algeria. Agricultural production in the Oran province is also an important economic activity and includes production of wine, cereals, vegetables and fruit.

The El Karma Wastewater Treatment Plant (WWTP) in Oran currently processes wastewater generated by approximately 1,500,000 inhabitants. L'Office National de l'Assainissement (ONA) (National Office of Sanitation), the Algerian institution responsible for wastewater management, is interested in assessing tertiary wastewater treatment technologies to upgrade the quality of El Karma WWTP effluent. L'Office National de l'Irrigation et du Drainage (ONID) (National Office of Irrigation and Drainage), the Ministry agency responsible for providing water for agriculture development, is also interested in investigating the suitability of tertiary wastewater treatment technology for agricultural irrigation in the Oran area. ONID has already identified 8,990 hectares of food crops that will be irrigated with the tertiary effluent produced by the El Karma WWTP. The tertiary upgrade is necessary to increase water supply to ameliorate the shortage conditions that prevail in the Oran area and the general region. The project is in agreement with current Government of Algeria water resources conservation policies and with an overall strategic plan aimed at reducing dependency on overexploited surface and groundwater resources in the study area.

The Feasibility Study (FS) will assess the technical, economic, financial and regulatory feasibility and the environmental and developmental impacts associated with wastewater reclamation at the WWTP for conveyance, distribution, and food crop irrigation in the Oran area. The study will provide ONID and ONA with a preliminary design for the tertiary treatment plant

and the tools to evaluate several different technologies and processes to ensure cost-effective solutions for wastewater reuse. The FS will also assess the financial and environmental sustainability of the proposed tertiary upgrade. Although tertiary effluent reuse is in use around the world, it would be new to Algeria. Additionally, while this study is focused on Oran, ONID will use the results of this FS to implement municipal wastewater tertiary treatment projects for wastewater reuse projects throughout Algeria.

A background Definitional Mission is provided for reference in Annex 2.

1.2 OBJECTIVE

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\$256,741. **The USTDA grant of US\$256,741 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\$256,741 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.

The total budget for the study is \$296,741, of which \$256,741 is being requested from USTDA. The Grantee will cost share \$40,000 of the project costs through in-kind contribution of ground transportation and translation services.

Section 2: INSTRUCTIONS TO OFFERORS

2.1 PROJECT TITLE

The project is called the Oran Tertiary Wastewater Treatment Facility Feasibility Study.

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. A copy of the report is attached at Annex 2 for background information only. Please note that the TOR referenced in the report are included in this RFP as Annex 5.

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\$256,741.

The total budget for the study is \$296,741, of which \$256,741 is being requested from USTDA. The Grantee will cost share \$40,000 of the project costs through in-kind contribution of ground transportation and translation services.

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. 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 only English.

2.13 PROPOSAL SUBMISSION REQUIREMENTS

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

**Mr. Abdelouaheb Smati
Director of Projects
Ministry of Water Resources
03 Rue du Caire
Kouba, Alger, Algiers
Tel.: 213 21 28 31 49**

An Original and eight (8) copies of your proposal must be received at the above address no later than 4:00 p.m. Local Time on October 20, 2010.

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 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 and eight (8) copies should be collectively wrapped and sealed, and clearly labeled.

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 NINETY (90) 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\$256,741, which is a fixed amount.

Offerors shall submit one (1) original and eight (8) copies of the proposal. Proposals received by fax cannot be accepted.

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.

Signed: _____
(Authorized Representative)

Print Name: _____

Title: _____

Date: _____

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.

Signed: _____
(Authorized Representative)

Print Name: _____

Title: _____

Date: _____

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. Firms' specific experience related to the assignment: 25 points maximum
 - Firms' overall experience: 15 points
 - Firms' overseas experience: 10 points
2. Adequacy of proposed work plan and methodology in response to the TOR: 25 points maximum
 - Knowledge of proposed work and understanding of service: 10 points
 - Appropriateness of proposed methodology and workplan: 15 points
3. Qualifications and competence of the key staff for the assignment: 25 points maximum
 - Team Leader's experience in similar projects: 5 points
 - Project Engineer's experience in similar projects: 5 points
 - Mechanical Engineer's experience in similar projects: 5 points
 - Electrical Engineer's experience in similar projects: 5 points
 - Economist / Financial Analyst's experience in similar projects: 5 points
4. Past performance: 25 points maximum
 - Six relevant and verifiable projects: 25 points
 - Five relevant and verifiable projects: 20 points
 - Four relevant and verifiable projects: 15 points
 - Three relevant and verifiable projects: 10 points
 - Two relevant and verifiable projects: 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

MR. ABDELOUAHED SMATI, DIRECTOR OF PROJECTS, MINISTRY OF WATER RESOURCES, 03 RUE DU CAIRE, KOUBA, ALGER, ALGIERS, TEL.: 213 21 28 31 49

ALGERIA: ORAN WASTEWATER TERTIARY TREATMENT FACILITY FEASIBILITY STUDY

POC: Nina Patel, USTDA, 1000 Wilson Boulevard, Suite 1600, Arlington, VA 22209-3901, Tel: (703) 875-4357, Fax: (703) 875-4009. Algeria: Oran Wastewater Tertiary Treatment Facility Feasibility Study. 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 Oran Wastewater Tertiary Treatment Facility.

Algeria suffers from a chronic water deficit, worsened by inconsistent weather patterns and high population growth in large urban centers. Algeria is 95 percent arid land and 80 percent of Algeria's land surface is in desert zones where rainfall is negligible. Water is one of the main concerns for Algeria's future. The persistent water shortages in Algeria are affecting agriculture productivity and the rationing of potable water has become a necessity in major urban centers of the country over the last decade. Agriculture was once Algeria's dominant sector, but more recently agriculture production has decreased substantially. In Algeria, only one-tenth of the 7.5 million hectares of cultivable land receives adequate rainfall. As a result, the Government of Algeria currently considers wastewater reuse for agricultural irrigation a priority in order to enhance agribusiness development opportunities.

Oran, located on the Mediterranean coast in northwestern Algeria, is the second major city in Algeria. It is a major port, and since the 1960s it has been the commercial, industrial, and educational center of western Algeria. Agricultural production in the Oran province is also an important economic activity and includes production of wine, cereals, vegetables and fruit.

The El Karma Wastewater Treatment Plant (WWTP) in Oran currently processes wastewater generated by approximately 1,500,000 inhabitants. L'Office National de l'Assainissement (ONA) (National Office of Sanitation), the Algerian institution responsible for wastewater management, is interested in assessing tertiary wastewater treatment technologies to upgrade the quality of El Karma WWTP effluent. L'Office National de l'Irrigation et du Drainage (ONID) (National Office of Irrigation and Drainage), the Ministry agency responsible for providing water for agriculture development, is also interested in investigating the suitability of tertiary wastewater treatment technology for agricultural irrigation in the Oran area. ONID has already identified 8,990 hectares of food crops that will be irrigated with the tertiary effluent produced by the El Karma WWTP. The tertiary upgrade is necessary to increase water supply to ameliorate the shortage conditions that prevail in the Oran area and the general region. The project is in agreement with current Government of Algeria water resources conservation policies and with an overall strategic plan aimed at reducing dependency on overexploited surface and groundwater resources in the study area.

The Feasibility Study (FS) will assess the technical, economic, financial and regulatory feasibility and the environmental and developmental impacts associated with wastewater

reclamation at the WWTP for conveyance, distribution, and food crop irrigation in the Oran area. The study will provide ONID and ONA with a preliminary design for the tertiary treatment plant and the tools to evaluate several different technologies and processes to ensure cost-effective solutions for wastewater reuse. The FS also will assess the financial and environmental sustainability of the proposed tertiary upgrade. Although tertiary effluent reuse is in use around the world, it would be new to Algeria. Additionally, while this study is focused on Oran, ONID will use the results of this FS to implement municipal wastewater tertiary treatment projects for wastewater reuse projects throughout Algeria.

The U.S. firm selected will be paid in U.S. dollars from a \$256,741 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 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 directly to the Grantee by **4:00 PM Local Time on October 20, 2010** 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

EL KARMA TERTIARY WASTEWATER TREATMENT FACILITY PROJECT

Project Sponsor: Ministère des Ressources en Eau (MRE) / Office National de
l'Irrigation et du Drainage (ONID)

Project Sponsor Representative in Charge: Abdelmalek Sellal, Minister

Project Title: El Karma Tertiary Wastewater Treatment Facility Project

Proposal Type: Feasibility Study (FS)

B2. PROJECT DESCRIPTION

The Algerian Ministère des Ressources en Eau (MRE, Project Sponsor, Grantee) represented by the Office National de l'Irrigation et du Drainage (ONID) has requested U.S. Trade and Development Agency (USTDA) technical assistance for the feasibility assessment of a wastewater reclamation project at the El Karma Wastewater Treatment Plant (WWTP) in Oran, Algeria.

The objective of the Study is to assess the technical, economic, financial and regulatory feasibility and the environmental and developmental impacts associated with wastewater reclamation at this WWTP for conveyance, distribution and food crop irrigation in the Study area. ONID has indicated that the most likely use would be for tomato cultivation.

Oran is a major city on the Mediterranean coast in northwestern Algeria, see Figure B2.1. The city has a population of 683,250 (2006), while the metropolitan area has a population of approximately 2 million, making it the second largest city in Algeria. Oran is a major port, and since the 1960s it has been the commercial, industrial, and educational center of western Algeria.

The El Karma WWTP consists of a recently commissioned (March 01, 2006) activated sludge facility designed to process wastewater generated by 1,500,000 inhabitants. Currently, the El Karma WWTP is processing 60,000 m³/day. The 2015 maximum flow is 270,000 m³/day and the average flow is 201,400 m³/day (53.20 MGD) (see Appendix B2.1 for technical details on the Oran WWTP). The facility is operated in compliance with secondary treatment effluent parameters (30 ppm of BOD₅ and 30 ppm of TS) by Société de l'eau et de l'assainissement d'Oran (SEOR). SEOR is a consortium, led by Spain's Sociedad General de Aguas de Barcelona (www.agbar.es), awarded a 5-year management contract in 2008 for the water and wastewater treatment systems for Oran.

The Office National de l'Assainissement (ONA), the Algerian institution responsible for wastewater management, is interested in assessing tertiary wastewater treatment technologies to upgrade the quality of Oran WWTP effluent (<http://www.ona-dz.org/fr/>). ONID (<http://www.onid.com.dz/>) has identified 8,990⁴ hectares of agriculture land for food crop irrigation that will be irrigated with the tertiary effluent produced by El Karma WWTP.



Figure B2.1 – Oran Panoramic View

⁴ Etude d'Aménagement Hydro-Agricole de la Plaine de M'leta (W. D'Oran) by SCET Tunisie, November 2008 (version definitive)

ONID, the MRE agency responsible for providing water for agriculture development, is interested in investigating the suitability of tertiary wastewater treatment technology for wastewater conditioning for agricultural irrigation in Algeria. The Project would employ technology not currently in use in Algeria such as micro filtration (MF) and ultra filtration (UF) wastewater treatment. ONID will use the results of this feasibility study (FS) to implement municipal wastewater tertiary treatment projects for wastewater reuse projects throughout Algeria.

The proposed action is part of a necessary non-potable water supply service expansion to ameliorate water supply shortage conditions that prevail in the Oran area and the general region. The proposal is in agreement with current Government of Algeria water resources conservation policies and it concurs with an overall strategic plan aimed at reducing dependency on overexploited surface and groundwater resources in the study area. The Contractor will lend its expertise for the assessment of the technical, economical, financial feasibility of the intended action.

B2.1 Background

Algeria suffers from a chronic water deficit, worsened by inconsistent weather patterns and high population growth in large urban centers. The persistent water shortage in Algeria is hurting the national economy, especially when it harms agriculture. Rationing of potable water has become a necessity in major urban centers of the country over the last decade. Algeria is 95 percent arid land and 80 percent of Algeria's land surface is in desert zones where rainfall is negligible. Water is one of the main concerns for Algeria's future.

Agriculture used to be Algeria's dominant sector. For example, Algeria produced more than 90 percent of its grain needs in 1962, but more recently agriculture production has decreased substantially. In Algeria only one-tenth of the 7.5 million hectares of cultivable land receives adequate rainfall. In order to compensate for the lack of rainfall, since the early 1990s the Government of Algeria has recognized that irrigation projects are essential to allow more intensive cultivation. Nonetheless, unreliable rainfall patterns, floods, and drought have had a considerable negative impact on the country's arable land. As a result, the Government of Algeria currently considers wastewater reuse for agricultural irrigation a priority in order to enhance agribusiness development opportunities. Local agricultural products in the Oran wilaya (province) include wine, cereals, vegetables and fruit.

Project Sponsors

In Algeria wastewater treatment and conditioning for irrigation involves the coordinated work of the Office National de l'Assainissement (ONA) and Office National de l'Irrigation et du Drainage (ONID) both of which are functional entities of the Ministère des Ressources en Eau. ONA (<http://www.onid.com.dz/>) is responsible for wastewater treatment and ONID (<http://www.onid.com.dz/>) is responsible for irrigation and drainage.

Economic Fundamentals

There are many examples of wastewater reuse for irrigation in the Mediterranean region, including in Spain, France, Morocco, Tunisia, and Israel⁵. While applications and costs vary widely and project specific criteria need to be carefully analyzed, experience shows that the capital and operational cost of advanced wastewater treatment for water reuse in agricultural irrigation in Algeria should be below the typical cost of producing irrigation water from other sources (i.e. brackish water or seawater desalination). This is based on additional cost of treatment beyond secondary treatment levels for discharge into the environment and assuming that, due to scarcity of supply, potable water from aquifers and dams is unavailable for irrigation. The FS will perform a detailed economic analysis of the projects to determine the viability of wastewater reuse as compared with alternatives.

Project Location

Oran is a major city on the Mediterranean coast in northwestern Algeria. The city has a population of 683,250 (2006), while the metropolitan area has a population of approximately 2 million, making it the second largest city in Algeria. Oran is a major port, and since the 1960s it has been the commercial, industrial, and educational center of western Algeria.

Water Resources Sector

Algeria's water resources strategy focuses on expanding storage facilities by building new dams and desalination plants, better rehabilitation and management of existing infrastructure, and wastewater treatment and reuse for agricultural production. A new water code was adopted in 2005, targeting reduction of the critical water supply-demand gap and the Government has earmarked public investment for a 10-year integrated water resource management initiative. The time frame has been stepped up for urgent investments and alternative schemes launched for water production and wastewater treatment infrastructure. Minister of Water Resources Abdelmalek Sellal has recently indicated that the Algerian Government is devoting \$19 billion for the development of the water sector for the period 2010-2014. Many opportunities have been identified in the various market segments. Multilateral investors and donors also give priority to the water sector in Algeria, with \$4 billion in investment planned over the next fifteen years.

Over the last five years, Algeria has made significant improvements in water management, including an increase in the effectiveness of water control, irrigation and distribution. However, the country has long suffered from troubling institutional and operational inefficiencies. The World Bank has attributed failure within the sector to a consistent bias towards capital investments over operation and maintenance activities. During the last decades, water planners and policymakers targeted infrastructure such as dams and transfers while largely ignoring management and institution building. Water utilities have a poor record of meeting delivery services standards, with relatively high access but relatively poor quality service. Most of the existing wastewater treatment plants are not functioning due to poor operations and

⁵ "The cost of wastewater reclamation and reuse in agricultural production in the Mediterranean countries", D. Hidalgo and R. Irusta; Environmental Division, CARTIF, Parque Tecnológico de Boecillo, 205, Valladolid 47151, Spain (E-mail: dolhid@cartif.es)

maintenance. The average level of non-revenue water for the country is estimated at about 40 percent.

The Ministry of Water Resources (MRE) has addressed many of these problems through a sector reform program which prioritizes the sustainable use of water. A new Water Law, passed in August 2005 provides for the private sector participation in the sector, leading to the development of several seawater desalination plants on a build-own-operate-transfer (BOOT) basis and establishment of public private partnerships, in the form of management contracts, for the operation of water and wastewater treatment service areas in four wilayas (provinces). The letting of management contracts for 10 additional wilayas is currently being planned.

B2.2 Proposed Actions

ONID has requested USTDA technical assistance for the assessment of tertiary wastewater treatment at the El Karma WWTP in Oran. Wastewater reuse is of paramount importance in Oran due to the Government of Algeria's interest in developing the Mieta Hydro-Agricola Management Project in this Wilaya. ONID has requested a FS that will provide a detailed analysis of tertiary wastewater treatment technologies that will ensure cost-effective solutions for wastewater reuse. The FS will assess the financial and environmental sustainability of the proposed action. The FS will guide tertiary wastewater management investment to ensure compliance with environmental standards for wastewater reuse, preserve and protect water supply sources, reduce health risks and promote sustainable economic development. These projects would employ technology not currently in use in Algeria such as Membrane Bioreactors and/or Ultrafiltration (UF) and Ultraviolet (UV). Tertiary wastewater treatment monitoring will also be required to ensure the effluent quality for food crop irrigation. Although secondary and tertiary effluent reuse is no longer a new development, pilot studies data are sometimes used to select better treatment system configuration, particularly where there is an existing secondary treatment plant as in Oran. Such as pilot study may be funded by ONID and/or ONA subsequent to the USTDA funded FS. However, it is beyond the scope of this Project.

C2. PROJECT SPONSOR'S CAPABILITIES AND COMMITMENT

In Algeria wastewater treatment and conditioning for irrigation involves the coordinated work of the Office National de l'Assainissement (ONA) and Office National de l'Irrigation et du Drainage (ONID) both of which are functional entities of the Ministère des Ressources en Eau. ONA (<http://www.onid.com.dz/>) is responsible for wastewater treatment and ONID (<http://www.onid.com.dz/>) is responsible for irrigation and drainage.

ONID is a public institution created by Decree 05/183 of 18/05/2005. Its mission is to contribute to the development of agricultural water for the purpose of: ensuring reasonable food security; creating a large number of direct and indirect employment and reducing rural exodus; reducing food imports and boost non-oil exports through quality agricultural products; and achieving a sustainable and harmonious environment. The medium-term objective of ONID is to ensure continuous supply of water for irrigation for the 200,000 hectares equipped today in large irrigated areas and increase supply to cover 400,000 hectares by 2015.

ONA is a financially autonomous industrial and commercial national public corporation created by executive decree in 2001. It is placed under the Minister of Water Resources' supervision, and its head office is based in Algiers. ONA is charged with addressing all requirements for adequate collection and treatment of wastewater throughout the country including carrying out new projects financed by the state or local authorities. ONA has offices in each of the wilayas (provinces) and works closely with local government officials to ensure proper management and operation of the wastewater treatment systems. ONA has been given the mandate to implement an overhaul of the country's wastewater treatment infrastructure. ONA has a budget of over \$200 million per year for new capital expenditure over the next five years. There are seven waste water treatment projects valued at an estimated \$137 million up for tender for the remainder of 2009. The Government has approved \$220 million for eight large and medium-scale projects to be opened for tender January-April 2010.

MRE, through ONID and ONA, is moving aggressively toward implementing large-scale wastewater reuse programs throughout the country, particularly in areas with strong agricultural growth potential. In support of its goal of increasing wastewater treatment for reuse, MRE has commissioned a study, performed by U.S. company, AECOM, which assesses the opportunities for wastewater reuse in Algeria, including: a preliminary site survey and data collection; a strategic plan for reutilization of treated wastewater throughout the country; a feasibility study and elaboration of a preliminary project, and development of standards for treated wastewater reutilization. Existing standards actually in use in other countries, and more specifically, in countries showing similarities with Algeria in terms of cultures, climate, etc., were studied.

D2. IMPLEMENTATION FINANCING

The most likely vehicle for financing the Project is a design-build-operate (DBO) contract tendered and financed through MRE. Minister of Water Resources Abdelmalek Sellal has recently indicated that the Algerian Government is devoting \$19 billion for the development of the water sector for the period 2010-2014. While there have been examples of public private partnerships in the water sector in Algeria recently, notably several concessions for desalination plants on a 25 year build-own-operate-transfer (BOOT) basis and management contracts for municipal water and wastewater treatment services, there is unlikely to be any private sector financing for the implementation of the tertiary treatment facility at Oran.

The U.S. Export-Import Bank (Ex-Im) provides working capital guarantees (pre-export financing); export credit insurance; and loan guarantees and direct loans (buyer financing). Ex-Im is open for public and private sector transactions in Algeria for short, medium and long term financing. Ex-Im has had limited activity in Algeria over the past decade with transactions in the oil and gas, electric power, aircraft, and heavy equipment areas. Ex-Im's Environmental Exports Program offers additional incentives for qualifying transactions, including:

- Certain renewable energy and water transactions are eligible for 18-year repayment terms; and
- All qualifying environmental export transactions, including renewable energy and water projects, are eligible for:

- o Capitalized interest during construction; and
- o Automatic availability for up to 30% local cost financing.

The World Bank has been active in the water sector in Algeria since the late 1970s. It has financed six loans:

- 1978: Loan 1545-AL, US\$82 million, Algiers Sewerage Project ; construction of sewer interceptors and sewage treatment plant in Algiers;
- 1980: S-17-AL, US\$5 million Water Resources Study and Master Plan for Algiers;
- 1984: Loan 2461-AL, US\$290 million, Water Supply in Algiers;
- 1985: Loan 2591-AL US\$262 million, Water Supply and Sewerage in Constantine and Oran;
- 1987: Loan 2821-AL US\$250 million, Second National Water Supply Rehabilitation Project; and
- 1994: Loan 3743-AL US\$110 million, Urban Water Supply and Sewerage Rehabilitation Project

The World Bank has indicated that the Government of Algeria is not currently interested in securing World Bank loan financing for projects in the water sector. The World Bank's most recent activity in the sector was a reimbursable technical assistance project for the establishment of public private partnerships in the form of management contracts for the management and operation of water and wastewater systems in four wilayas. The Bank was commissioned to perform a water sector strategy for the Government of Algeria, but the report was not finalized due to disagreement over the final recommendations.

E2. U.S. EXPORT POTENTIAL

E2.1 Planned Wastewater Treatment Capital Investment

The Project Sponsor indicates that they have confirmed plans for upgrading the El Karma facility to tertiary treatment standards during the current planning horizon (2010-2014). The tertiary treatment facility will range in size from the current 71,137 m³/day (18.8 MGD) to the ultimate design capacity 201,400 m³/day (53.20 MGD). Table E2.1 shows the estimated capital investment and potential export potential of the proposed tertiary upgrade at the El Karma WWTP.

Table E2.1 – El Karma Project Tertiary Treatment Export Potential (US\$)

Tertiary Treatment System	MGD	Total Cost	Export Potential
Current Flow Scenario (2010)			
Microfiltration (MF)	18.8 (71,137 m ³ /day)	19.59	13.71
Ultraviolet (UV)	18.8	11.22	7.85
Total MF UV	18.8	30.81	21.56
Ultimate Design Capacity (2015)			
Microfiltration (MF)	53.2 (201,400 m ³ /day)	47.44	33.21
Ultraviolet (UV)	53.2	39.08	27.35
Total MF UV	53.2	86.52	60.56

E2.2 Wastewater Treatment Technology U.S. Export Potential

The cost of the tertiary treatment design and engineering services along with equipment and technology needed for wastewater conditioning for reuse is estimated at 70% to 80% of the total capital investment for the tertiary treatment facility. As shown in Table E2.1 the U.S. export potential associated with the El Karma facility upgrade from secondary to tertiary treatment standards is US\$21.56 million and US\$60.56 million for the current and ultimate design flow, respectively.

The cost of the tertiary treatment technology was estimated using the treatment technologies construction costs presented in the consulted technical literature (http://your.kingcounty.gov/cdnrollin/ary/wastewater/rw/0803_FeasibilityStudy/Appendices/RWF_FeasibilityStudy_Mar08.pdf). A polynomial regression equation was derived using the microfiltration (MF) and ultraviolet (UV) data to obtain a cost curve for each of these processes. These equations are:

UV Equation

$$f(x) = 2.369372178400e+05 \\ + 5.047034406244e+05 * x \\ + 4.238779235929e+03 * x^2$$

Where: x is the size of the tertiary facility in MGD

MF Equation

$$f(x) = 4.380952380952e+06 \\ + 8.095238095238e+05 * x$$

Where: x is the size of the tertiary facility in MGD

AJGB International, Inc. has discussed the project with several U.S. consultants and manufacturers of wastewater treatment technology. Our preliminary assessment indicates that there is a mixed reaction with regard to participating in projects in Algeria; for instance, IRG was definitely interested in projects in Algeria, while Black & Veatch was not interested. U.S. engineering and design companies that have participated in similar projects in the Middle East include:

- AECOM, Los Angeles, CA
- Black and Veatch, Kansas City, MO
- CDM International, Cambridge, MA
- CH2M-Hill, Denver CO
- Luis Berger Group, Washington, DC
- MW Harza, Pasadena, CA
- TetraTech, Pasadena, MA

U.S. companies currently active in this sector in Algeria include GE (desalination), Aeromod (sequential oxidation wastewater treatment), and AECOM (feasibility study for wastewater reuse).

U.S. companies such as Filtronic, Inc., GE, ITT and Koch Membrane Systems are proven manufacturers of advanced wastewater treatment technologies suitable for the required application. Many of the required technologies (i.e. MF, UF, RO, UV) offer good potential for U.S. exports as these are generally turnkey installations. AJGB has spoken with several U.S. suppliers. GE has an office in Algeria and is actively pursuing the market for UF and MBR treatment. ITT is active in the MENA region and is interested to introduce its proprietary SBR technology (ICEAS) combined with UF to address the reuse market in Algeria.

Potential U.S. suppliers of wastewater technology and equipment are listed below.

Technology	Supplier
Wastewater Treatment Equipment	U.S. Filters Waukesha, WI
	Smith and Loveless, Lanexa, KS
	Waterlink, Canton, OH
	Severn Trent Services, Fort Washington, PA
	The Dow Chemical Co, Midland, MI
	Filtronic, Inc., Anaheim, CA
	GE, Fairfield, CT
	ITT, White Plains, NY
	Koch Membrane Systems, Inc., Wilmington, MA
Pumps and Controls	Fairbanks Morse Pumps, Aurora, IL
	Gorman Rupp, Mansfield, OH
	Smith and Loveless, Lanexa, OH

F1. FOREIGN COMPETITION AND MARKET ENTRY ISSUES

Algeria has proven to be a challenging market for U.S. companies in the water supply and wastewater treatment sector. In general, U.S. water and wastewater companies have not been very active historically in the northern Africa region, particularly relative to French and other European suppliers. For example, U.S. companies did not participate in four recently let management contracts for water and wastewater treatment systems in Algeria, while European companies such as Suez (French), Gelsenwasser (German), and Agbar (Spanish) were awarded contracts. In the area of advanced wastewater treatment, companies such as Degremont (French), Sereco (Italian), and Biwater (UK) are actively pursuing the Algerian market and are competitive with U.S. suppliers. Wabag (German) is also a major competitor, having built 16 water and wastewater treatment plants in Algeria, including Oran and Barak, the

two largest wastewater treatment facilities. WABAG is currently administering five of the country's wastewater plants, which were completed on the basis of DBO (design build operate) models.

However, a few U.S. companies have been successful in the Algerian market:

- GE has been active in brackish water desalination in Algeria for over thirty years through its subsidiary Ionics. And in 2008, GE completed the Hamma Seawater Desalination Plant. The project was awarded as a 25 year build own operate (BOOT) contract and is currently the largest desalination plant in northern Africa with production of 200 cubic meters of treated water per day.
- U.S. company Aeromod has had recent success, selling its Sequox (sequential oxidation) technology for several wastewater treatment plants.
- U.S. engineering company AECOM's subsidiary, Tecslut, recently completed a countrywide survey of prospective wastewater reuse projects for MRE.

U.S. companies are competitive globally in the area of advanced wastewater treatment and a number of companies are actively pursuing, or have expressed interest in, projects in Algeria (Burgess and Niple, Tetrattech, GE, Aeromod, AECOM, ITT).

The Minister of Water Resources Abdelmalek Sellal has recently instructed his Ministry to actively expand beyond traditional German and French firms and target American and South Korean firms. Market receptivity to U.S. technology in the field of water resources, specifically in wastewater treatment process plants, is very high at this time. According to the U.S. Commercial Service office in Algeria, the Ministry has also recently implemented four exceptional measures to facilitate U.S. company entrance into the wastewater treatment market:

- 1 – There is now a four month, versus the traditional two month, timeline for companies to prepare bids;
- 2 – Tender documents will now be made available in English;
- 3 – Tender documents will now be written to U.S. technical specifications; and
- 4 – U.S. companies may submit their offers in English

Aside from foreign competition, there are other challenges to market entry for U.S. companies. Algeria has consistently ranked poorly in indicators such as Transparency International's Corruption Perception Index (ranked 111 out of 180 countries in year 2009) and the World Bank's Doing Business Report (ranked 136 out of 183 countries in year 2009). The Algerian Government has also recently implemented new controversial measures concerning trade and investment enforceable as of July 27, 2009. Below are several policies which have been implemented recently:

- Refurbished heavy equipment ban (implemented Aug 2009);

- All foreign investment can only be realized with 51% Algerian majority investment;
- Foreign investors must commit to preferential treatment for Algerian goods and labor in order to obtain Algerian Government investment incentives;
- Import activities can only be exercised by individuals or foreign legal entities within the framework of a partnership whose resident national shareholding is equal to at least 30% of the share capital; and
- A letter of credit (LC) is the only way to pay for imports. LCs may only be opened with correspondent banks approved by Algerian banks.

G1. DEVELOPMENTAL IMPACT

G1.1 Infrastructure

The Project would develop tertiary wastewater treatment infrastructure that reduces public health risks, enhances agriculture productivity, deters environmental deterioration and promotes social wellbeing and economic growth. If fully implemented the project would develop a tertiary wastewater treatment facility at the El Karma WWTP with a capacity of 201,440 cubic meters per day that would provide reclaimed water for agricultural crop irrigation and industrial use. The Project will supply irrigated areas and may require additional distribution networks to reach those areas. The TOR for the FS will require a detailed account of the expected infrastructure developmental impact for the Project.

G1.2 Human Capacity Building

The Project, if fully implemented, would create an estimated 30 jobs during construction and 10 long-term jobs for plant maintenance and operation. We estimate that a minimum of 900 jobs would be created from an additional 8,990 hectares of agricultural production irrigated with reclaimed water. This is based on an estimated one full time employee per 10 hectares for mechanized wheat farming, the least labor intensive of the likely crops. ONID has indicated that the most likely use of reclaimed water would be for tomato cultivation, which is one of the most labor intensive agricultural activities, requiring up to 15 full time employees per 10 hectares, for a total of about 13,500 jobs. Training in advanced wastewater treatment technologies such as MF, UF, and/or RO would be required during project implementation, particularly during the two year operation phase of the design, build, operate contract. The TOR for the FS includes a detailed analysis of the expected workforce requirements, including training for the Project.

G1.3 Technology Transfer and Productivity Improvements

Advanced wastewater treatment technologies such as MF, UF, and RO are new to the Algerian market. If fully implemented the Project would entail transfer of knowledge of these technologies to local operators. The TOR for the FS will require a detailed account of the expected technology transfer developmental impact for the Project.

H1. IMPACT ON THE ENVIRONMENT

There is no expected negative impact on the environment from the proposed Project. Positive environmental impacts of the project would come from decreased levels of untreated or insufficiently treated wastewater into the environment. The Project would further mitigate the release of pollutants, oxygen-demanding substances, pathogens, nutrients, and inorganic and synthetic organic chemicals into the environment. Additional health benefits for agricultural producers and consumers are expected to result from the introduction of tertiary treatment for wastewater reuse in food crop irrigation. Currently secondary treated wastewater is being used in some areas of the country for food crop irrigation, which may pose serious health risks depending upon the characteristics of the treated water, the agricultural application, and other factors. We recommend that the TOR include a preliminary environmental impact assessment in line with USTDA's basic requirements.

I1. IMPACT ON U.S. LABOR

The Project would provide municipal wastewater treatment and reuse for agricultural irrigation. The Project would not promote the establishment of any business other than for the purpose of serving the local market more efficiently (e.g. local agent/distributor). Based upon our review, we found that the Project does not provide: (a) any financial incentive to a business enterprise currently located in the United States for the purpose of inducing such an enterprise to relocate outside the United States if such incentive or inducement is likely to reduce the number of employees of such business enterprise in the United States because United States production is being replaced by such enterprise outside the United States; (b) assistance for any project or activity that contributes to the violation of internationally recognized workers rights; or (c) direct assistance for establishing or expanding production of any commodity for export by any country other than the United States, if the commodity is likely to be in surplus on world markets at the time the resulting productive capacity is expected to become operative and if the assistance will cause substantial injury to United States producers of the same, similar, or competing commodity.

Positive impacts on U.S. labor would come from prospective U.S. exports of goods and services, as described in section E1 above.

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

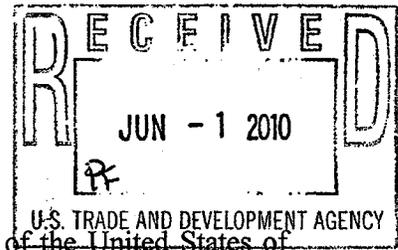
"Source" means the country from which shipment is made.

"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 the Ministère des Ressources en Eau (Ministry of Water Resources) of Algeria ("Grantee"). USTDA agrees to provide the Grantee under the terms of this Agreement US\$256,741 ("USTDA Grant") to fund the cost of goods and services required for a feasibility, study ("Study") on the proposed Oran Tertiary Wastewater Treatment Facility project ("Project") in Algeria ("Host Country").

PDF: CK
SS
HL
PH
KK
MB
JJ

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.

CS: LZ
JW
PD

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 office space, and secretarial support. In addition to the USTDA funding provided under this Agreement, the Grantee shall be responsible for ensuring that it covers at least US\$40,000 of costs to complete the full Terms of Reference. The Grantee shall provide \$40,000 worth of in-kind costs including such costs as the Contractor's ground transportation and translation services required for the project.

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). 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 January 31, 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 Minister of Water Resources. 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: Mr. Farid Ladjel
Head, Tizi Ouzou District

Office National de l'Assainissement (ONA) (National Office for Sewage)
Carrefour Sidi-Arcine
Route de Baraki
Algiers, Algeria

Phone: 213 21 76 20 34
Fax: 213 (0)7 70 92 81 52
Email: faridladjel@yahoo.fr

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 10/11 1001
Activity No.: 2010-21012A
Reservation No.: 2010210010
Grant No.: GH 2010210006

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 Ministère des Ressources en Eau of Algeria, 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 Ministère des
Ressources en Eau**

By: *D. Dean*

By: *[Signature]*

Date: 4/28/2010

Date: 28/04/2010

Witnessed:

Witnessed:

By: *[Signature]*

By: *[Signature]*

Annex I -- Terms of Reference

Annex II -- USTDA Mandatory Clauses

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 Ministère des Ressources en Eau ("Client"), dated _____ ("Grant Agreement"). The Client has selected _____ ("Contractor") to perform the feasibility study ("Study") for the Oran Tertiary Wastewater Treatment Facility project ("Project") in Algeria ("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 January 31, 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. Grantee Cost Share

The Grantee agrees that, in addition to the funding provided by the USTDA Grant, it shall be responsible for ensuring that it cover at least US\$ 40,000 worth of in-kind costs including such costs as the Contractor's ground transportation and translation services required for the project to complete the full Terms of Reference as set forth in Annex I to the Grant Agreement and this Contract.

M. 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.

N. 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 10/11 1001
Activity No.: 2010-21012A
Reservation No.: 2010210010

Grant No.:GH 2010210006

O. Definitions

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

P. 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

Annex I

Terms of Reference

The objective of the Study is to assess the technical, economic, financial and regulatory feasibility and the environmental and developmental impacts associated with wastewater reclamation at the El Karma Wastewater Treatment Plant (WWTP) for conveyance, distribution and food crop irrigation reuse in the study area.

The El Karma WWTP in Oran consists of a recently commissioned activated sludge facility designed to process wastewater generated by 1,500,000 inhabitants. The Office National de l'Assainissement (ONA), the Algerian institution responsible for wastewater management within the Ministry of Water Resources, is interested in assessing tertiary wastewater treatment technologies to upgrade the quality of El Karma WWTP effluent.

The Office National de l'Irrigation et du Drainage (ONID), the agency responsible for providing water for agriculture development under the Ministry of Water Resources, is interested in investigating the suitability of tertiary wastewater treatment technology for wastewater conditioning for agriculture land irrigation in Algeria. ONID will use the results of this feasibility study (FS) to implement municipal wastewater tertiary treatment projects for wastewater reuse projects throughout Algeria.

Task 1 DETAILED BACKGROUND REVIEW

The Contractor shall begin work by becoming familiar with the Project area's environmental setting. The Contractor shall review all available information on the El Karma WWTP design and performance (influent and effluent monitoring data). As a result of this task, the Contractor shall become fully acquainted with the plant's service area and its potential water reuse customers; WWTP effluent characteristics; and the scope of technical services required to complete this assignment as described in these Terms of Reference.

TASK 2 PROJECT MANAGEMENT PLAN

As part of this task the Contractor shall coordinate Project activities between all Project team members including the Contractor staff, Grantee, ONID, and ONA personnel and other stakeholders. The Contractor shall organize a one day workshop in Algeria at the start of the Project to exchange ideas and develop an integrated work plan for all components of the Project. The Contractor shall prepare a detailed Project management plan outlining the responsibility of each professional participating in the Project.

Deliverable: The Contractor shall prepare an Inception Report and Project Management Plan.

TASK 3 ASSESSMENT OF POTENTIAL DEMAND FOR RECLAIMED WATER

The Contractor shall review and analyze the information and data provided by ONID that identifies and establishes the potential universe of agricultural customers for reclaimed water in the study area. The assessment shall include, but not be limited to, a characterization of the potential agricultural customers' reclaimed water daily demand and ability to pay, and shall account for seasonal variations.

Deliverable: The Contractor shall prepare a Reclaimed Water Demand Survey Report.

TASK 4 REVIEW OF RECLAIMED WATER QUALITY REGULATORY REQUIREMENTS

The Contractor shall investigate, obtain and review all reclaimed water regulatory requirements under Government of Algeria law and regulations. These shall include water quality requirements for water reuse and environmental discharge. In the event water quality standards are not specified in Algerian regulations, the Contractor shall propose the adoption of appropriate reclaimed water quality standards such as those promulgated by World Health Organization or the State of California, which have been adopted for water reuse projects in many countries.

The Contractor shall identify and describe the reclaimed water system sampling and analysis required to ensure that the reclaimed water quality produced by the Project meets the water quality demanded by the potential reclaimed water users and by any applicable regulatory requirements.

Deliverable: The Contractor shall prepare a Reclaimed Water Quality Regulatory Requirements Report.

TASK 5 ESTABLISH PROJECTED RECLAIMED WATER FLOWS

The Contractor shall assess the wastewater flow to be treated at the WWTP. The determination of the design flow for water reclamation will be based on: 1) the reclaimed water demand survey data analyzed in Task 3; 2) the availability of secondary treated wastewater flow; 3) the Grantee's specific tertiary wastewater treatment system planning issues; and 4) the technological constraints identified by the Contractor. At the end of this task, the Contractor shall determine the quantity of wastewater that shall be treated at the tertiary treatment facilities including a definition of the average, peak and seasonal variations of the flow.

Deliverable: The Contractor shall prepare a Tertiary Treatment Wastewater Flow Rate Report.

TASK 6 TERTIARY TREATMENT TECHNOLOGIES EVALUATION

The Contractor shall assess the various tertiary treatment technologies necessary to meet the water quality requirements required by the reclaimed wastewater users. The Contractor shall assess the various tertiary treatment technologies in accordance with the following subtasks.

Subtask 6.1 Establishing Design Criteria

The Contractor shall work closely with the Grantee to establish the design criteria for the various components of the existing wastewater facilities. The Contractor shall provide the technical specifications for the required modifications to the current WWTP in order to facilitate the incorporation of the tertiary wastewater management system. The Contractor shall also provide the hydraulic design criteria for the conveyance of the effluent from the existing secondary treatment system to the tertiary treatment units. The Contractor, utilizing existing information on the power supply and availability provided by the Grantee, shall establish the power source and cost of the electric power supply for the Project. The Contractor shall prepare the design criteria for the reclaimed water storage and conveyance and related appurtenances such as pump stations. As indicated in Task 4, when establishing appropriate design parameters, the Contractor shall take local and international regulations on wastewater treatment for agriculture reuse into account. At the completion of this Task, the Contractor shall prepare a technical memorandum to document the proposed design criteria for the Project.

Deliverable: The Contractor shall prepare a detailed Design Criteria Report which will include the technical memorandum proposing design criteria for the Project.

Subtask 6.2 Evaluation of Tertiary Treatment Solutions

The Contractor shall identify, describe and evaluate viable tertiary wastewater treatment solutions. These solutions will be identified based on actual wastewater characteristics (quantity and quality), water quality requirements for reuse, land availability, implementation costs and operation and maintenance (O&M) factors. The Contractor shall identify all components of the tertiary wastewater management systems including, but not limited to, pumps, Ultra Filtration and UV units. A conceptual design shall be prepared for each tertiary wastewater management solution. The technical details of each solution shall include pipeline sizes and route alignment, pump stations, process flow diagrams, site layouts, hydraulic profiles and equipment list. In addition, the Contractor shall assess alternative pipeline materials.

The Contractor shall provide a detailed evaluation of potential viable solutions. Criteria to be used in the evaluation shall include, but will not be limited to: expected effectiveness and reliability, health risks and environmental concerns, implementability and constructability, expandability, operational considerations, and ability to be implemented in phases. As part of the evaluation, the Contractor shall prepare and articulate a comprehensive cost analysis of the solutions that includes life cycle costs, present costs, and cost/benefits.

Deliverable: The Contractor shall prepare a Tertiary Wastewater Treatment Solutions Evaluation Report.

Subtask 6.3 Preliminary Design

The Contractor shall prepare the preliminary design for all required refurbishment, improvement, and expansion wastewater management work under the preferred solution selected in subtask 6.2. The work shall include, but not be limited to, the design for the refurbishment and expansion of pump stations, electrical and mechanical equipment within the existing wastewater treatment system and discharge pipelines. The Contractor shall also prepare preliminary designs for reclaimed water storage, conveyance and distribution pipelines. All available topographic and geotechnical surveys shall be provided by the Grantee. Any supplemental topographic and geotechnical surveys will be funded and conducted by the Grantee. The Contractor shall discuss the preliminary design with the Grantee prior to its completion and shall present the overall preliminary design for the Project in a descriptive and schematic form.

Deliverable: The Contractor shall prepare a Preliminary Design Report.

TASK 7 FEASIBILITY ANALYSIS OF THE WASTEWATER RECLAMATION PROJECT

The Contractor shall conduct a detailed feasibility analysis of the preliminary design developed in Task 6.

Subtask 7.1 Technical Assessment

The Contractor shall conduct a technical assessment that shall include, but not be limited to, the analysis of the following factors:

- Engineering and design parameters, discussing the complexity, and limitations of the design;
- Constructability of the Project with identification of major problem areas;
- Operability including operating costs;
- Maintenance requirements, personnel needs and costs;
- Long-term adaptability and effects on the existing secondary wastewater treatment system; and
- Life cycle costs.

Subtask 7.2 Economic Analysis

The Contractor shall conduct an assessment of the Project based on economic indicators that shall include, but will not be limited to, the effect of wastewater reclamation and reuse on agriculture production and industrial output. The Contractor shall examine the economic benefits of using reclaimed water in the service area as opposed to using groundwater and surface water systems. The Contractor shall estimate the economic and financial impacts of project implementation by comparing current socioeconomic conditions (without the Project) to future potential socioeconomic scenarios (with the Project).

Subtask 7.3 Financial Analysis

As part of the feasibility study, the Contractor shall prepare a financial plan for project implementation. The financial plan shall satisfy the requirements of the Grantee which, in this case, is also the Project financier. In addition, the financial plan shall satisfy the requirements of all prospective funding institutions which shall be identified by the Grantee at the onset of the assignment. The Contractor shall assess the potential interest of the U.S. Ex-Im Bank, World Bank, African Development Bank and other local and international financial institutions interested in lending support to the Project.

The financial plan shall include, but not be limited to, a detailed analysis of the proposed debt-equity structure and a full description of the cost-recovery program required for the self-sustainability of the Project.

The cost-recovery program shall take into account the costs associated with the operation and maintenance of the Project plus the debt service and the cost of replacement. As future significant capital expenditures are required to replace Project facilities and equipment, it will be appropriate to include depreciation components in reclaimed water charges and deposit these amounts in a replacement account such as a trust fund. The contractor shall identify all potential sources of revenue for the Project.

Subtask 7.4 Human Health and Preliminary Environmental Analysis

The Contractor shall conduct a preliminary review of the Project's anticipated impact on the environment with reference to local requirements and those of multilateral lending agencies (such as the World Bank). This review shall 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. This shall include the identification of steps that will need to be undertaken by the Grantee subsequent to the Study's completion and prior to Project implementation. The Contractor shall identify and discuss the impacts on human health and environment that may result from implementation of the Project. The Contractor shall take into account the Government of Algeria's procedures and Grantee guidelines as it relates to the environment.

Subtask 7.5 Water Quality Impacts

The Contractor shall identify short-term and long-term (positive and/or negative) impacts on water quality that may result from the implementation of the Project. The analysis shall include the identification and discussion of mitigation measures available to reduce water quality impacts to the greatest extent possible.

Subtask 7.6 Ecological Impacts

The Contractor shall discuss any short-term and long-term impacts on sensitive life forms and ecological systems caused by the implementation of the Project. It shall include the identification and discussion of mitigation measures available to reduce negative impacts to the greatest extent possible.

Subtask 7.7 Socioeconomic Impacts

The Contractor shall identify, discuss and analyze short-term and long-term impacts on human health and wellbeing, employment, income, education, agricultural production, and commercial and industrial activity that may result from the implementation of the Project.

Deliverable: The Contractor shall prepare a Feasibility Evaluation Report.

TASK 8 DEVELOPMENTAL IMPACT ASSESSMENT

The environmental, technical, economical and financial analysis discussed above should serve as a basis for assessing the Project's potential developmental impact. The Contractor shall identify the benefits of the Project's development and establish a methodology to measure these benefits. The assessment shall focus on specific examples of the categories listed below:

Infrastructure: The Contractor shall provide a synopsis of the infrastructure built as a result of the Project implementation.

Building Human Capacity: The Contractor shall estimate the number and type of jobs that would be necessary if the recommendations were implemented. The Contractor shall distinguish between temporary jobs and permanent jobs that would be created or maintained. Additionally, the Contractor shall comment on any training recommended in the Final Report, including an estimate of the number of people to be trained, type of training required and desired outcome of training.

Technology Transfer and Productivity Improvement: The Contractor shall discuss any advanced technologies that have been implemented or may be implemented as a result of the Project. Additionally, the Contractor shall discuss the efficiency gains expected and the possible improvements resulting in quality and quantity of water from

the introduction of these new technologies. The Contractor shall provide estimates of all the benefits expected from productivity and shall discuss how wastewater reclamation technology can be replicated in other parts of Algeria to generate water for safe reuse.

Market-oriented reform: The Contractor shall discuss any market-oriented reforms that would facilitate implementation of the Project or that would result from Project implementation. These may include government wastewater management policy changes, change in tax policy and tariffs, privatization of state owned assets, or increased competition in a particular sector associated with wastewater reclamation projects.

Other: The Contractor shall discuss any other developmental benefits to the Project, including any spin-off or demonstration effects. Such impacts may include improved food security, increases in industrial productivity, investments, and the creation of indirect jobs that are not captured in the four categories listed above.

Deliverable: The Contractor shall prepare a Developmental Impact Report.

TASK 9 ANALYSIS OF U. S. MANUFACTURERS OF WASTEWATER RECLAMATION TECHNOLOGY

The Contractor shall assess the availability of U.S. manufactured equipment and products for all components of the wastewater reclamation system. The Contractor shall provide detailed technical specifications of the U.S. manufactured equipment and include business name, website, point of contact, address, telephone and fax numbers, and an email address for each manufacturer.

The Contractor shall contact the U.S. manufacturers identified in this task and discuss potential business opportunities related to the Project. The Contractor must assess the U.S. manufacturer's interests in participating in the implementation and include this information in the Final Report conclusions.

Deliverable: The Contractor shall prepare a report on U.S. Manufacturers of Wastewater Reclamation Technology.

TASK 10 PROJECT IMPLEMENTATION PLAN

The Contractor shall prepare an Implementation Plan that describes and documents the timeframe and financial resources available for the implementation of the Project. The Implementation Plan shall provide detailed information on the Grantee's confirmed schedule for the design, acquisition and deployment of the wastewater reclamation system. The Implementation Plan shall contain an overview of the wastewater reclamation system, a brief description of the major tasks involved in the implementation, the overall resources needed to support the implementation effort (such as hardware, software, facilities, materials, and personnel), and any site-specific implementation requirements. The Implementation Plan shall be developed by the Contractor in

partnership with the Grantee and with input from other Government of Algeria institutions with vested interest in the Project and stakeholders identified during Task 3. The Implementation Plan shall be used for guidance during the Implementation Phase. The Contractor shall prepare an overall plan for the implementation of the Project's components for the wastewater treatment upgrade including tertiary treatment facilities and wastewater conveyance systems. The Contractor shall also include a procurement plan for the acquisition of the equipment needed for the Project's implementation.

Deliverable: The Contractor shall prepare a Project Implementation Plan.

TASK 11 WORKSHOP

The Contractor shall organize and carry out a one-day workshop to present the findings of the Study and showcase, promote and demonstrate the benefits of advanced wastewater treatment technology manufactured in the U.S. The workshop shall aim at providing Algerian Government institutions with a direct opportunity to learn about how U.S. wastewater technology can be used to cost-effectively meet water quality requirements for wastewater reclamation and reuse. The workshop shall be a full day event in Algeria and shall be divided into three sessions. The first session will discuss the results and recommendations of the Study. The second session will speak to the capability of U.S. wastewater technology in meeting water quality standards for wastewater reclamation and reuse. The third session is aimed at addressing audience questions regarding specific applications. The workshop audience will include personnel from the Grantee, ONA, ONID, the Agence Nationale des Barrages et Transferts (ANBT) and other stakeholders and institutions identified during the study. In preparation for the workshop, the Contractor shall prepare a Workshop Hand-out and a power point presentation.

Deliverable: The Contractor shall prepare a Workshop Hand-out and other Workshop materials and conduct the Workshop.

Task 12 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, documents and Workshop materials 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.

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 6

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: _____

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).

E. 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: _____