



BAGUIO WATER DISTRICT

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TERMS OF REFERENCE

I. SCOPE OF WORK

A. PREPARATION OF BIDS

1. The supply, delivery, installation, and commissioning of a 20-Ft Containerized Ultra-Filtration System with a permeate capacity of 70 m³/hr is intended for treating Oil and Grease at Camp Allen Deep Well.
2. Works provided must be within the Approved Budget Cost for the Contract.
3. All work items shall be thoroughly accomplished by the bidder in accordance to the attached specifications.
4. Design, and specifications must conform with the Baguio Water District requirements and other accepted standard specifications, (Philippine National Standards for Drinking Water 2017).
5. Water treatment devices and equipment shall have a Valid Certificate of Product Registration (CPR).
6. Any revision in any of the part of the approved work shall be properly coordinated with BWD or its authorized representative before implementation.
7. Safety practice should be incorporated on the contract.
8. Documents to be submitted must be accompanied by a detailed cost estimate of each item as categorized below (fig. A-1).

| ITEM NO. | PARTICULARS | QTY | UNIT | UNIT COST/QTY | TOTAL COST |
|----------|--|-----|------|---------------|------------|
| 1 | MOBILIZATION | | LOT | | |
| 2 | FEED WATER SAMPLING TESTING AND ANALYSIS | | LOT | | |
| 3 | SET UP LAYOUT OF SKID | | LOT | | |
| 5 | INSTALLATION AND ASSEMBLY OF PIPINGS | | LOT | | |
| 6 | INSTALLATION/ASSEMBLY OF FILTERS (PRE-FILTERS; ULTRA-FILTER MEMBRANES AND ITS ACCESSORIES) | | SET | | |



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| | | | | | |
|----|--|--|-----|--|--|
| 7 | INSTALLATION OF UF BACKWASH SYSTEM & ACCESSORIES | | PCS | | |
| 8 | INSTALLATION OF CONTROL/INSTRUMENTATION PANELS | | LOT | | |
| 9 | INSTALLATION OF UF CIP TANK & ACCESSORIES | | PC | | |
| 10 | AIR COMPRESSORS & ACCESSORIES | | LOT | | |
| 11 | ELECTRICAL WORKS | | LOT | | |
| 12 | PRODUCT WATER TESTING AND ANALYSIS | | LOT | | |
| 13 | COMMISSIONING & TEST PERIOD & TRAINING OF WATER QUALITY CREW ON THE OPERATION & MAINTENANCE OF THE EQUIPMENT | | YR | | |
| 14 | DEMOBILIZATION | | LOT | | |

Fig.A-1

9. Provide a set of approved plans needed for the implementation.

B. IMPLEMENTATION

1. Items for use must be the same specifications indicated in the bid and approved by BWD before installation.
2. Proper utilization of appropriate PPEs shall be strictly observed for the whole duration of the contract.
3. Shop drawings must be provided by the contractor and must be duly approved by BWD prior to implementation.
4. The contractor shall furnish all as-built plans, operational manuals and submit to BWD.
5. All works, parts of the equipment shall be guaranteed by the contractor, **PRODUCT WATER SHALL PASS THE STANDARDS SETFORTH BY THE 2017 PNSDW** (Benzene and other petroleum-based hydrocarbons/polyaromatic hydrocarbons and other compounds).



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II. REQUIREMENTS AND SPECIFICATIONS

The project for which this specification for implementation hereto applies, is the supply, delivery, installation, and commissioning of a 20-Ft Containerized Ultra-Filtration System with a permeate capacity of 70 m³/hr. This system is intended for treating Oil and Grease at Camp Allen Deep Well.

The bidder shall provide all necessary materials, labor, equipment, supplies, and tools to complete the project in accordance with the approved contract duration, design and specifications of the procuring entity.

III. CONTRACT DURATION

The contract duration shall be forty-five (45) calendar days and divided into two (2) phases:

- A. First Phase – Submission of shop drawings and all other preparatory works: fifteen (15) calendar days
- B. Second Phase – Installation and testing works: thirty (30) calendar days

The first phase shall be commenced within five (5) calendar days from receipt of the Notice to Proceed. Immediately after the first phase and approval of the same by BWD, the second phase shall ensue.

Warranty shall be one (1) calendar year after turn-over. During the period the contractor shall do regular preventive maintenance works and submit to BWD quarterly laboratory test result to assure efficiency of the treatment process.

Training on operation and maintenance of the equipment shall also be conducted to Water Quality Personnel in preparation for future turnover of the operation and maintenance of the equipment.

IV. TERMS OF PAYMENT

In consideration to the works and services required by this Terms of Reference, payment shall be made as follows:

- a. BWD shall, upon a written request of the contractor which shall be submitted as a contract document, make an advance payment to the



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contractor in an amount not exceeding fifteen percent (15%) of the total contract price, to be made in lump sum or, at the most, two installments.

The advance payment shall be repaid by the contractor by deducting fifteen percent (15%) from his periodic progress payments a percentage equal to the percentage of the total contract price used for the advance payment.

- b. Progress payments shall be made upon submission of all necessary documents, which shall be evaluated and certified by the Water Quality Section and approved by the General Manager of BWD.

Moreover, progress payments are subject to retention of ten percent (10%). Such retention shall be based on the total amount due to the contractor prior to any deduction and shall be retained from every progress payment until fifty percent (50%) of the value of the works, as determined by BWD, are completed. If, after fifty percent (50%) completion, the work is satisfactorily done and on schedule, no additional retention shall be made; otherwise, the ten percent (10%) retention shall be imposed.

- c. Where the contractor refuses or fails to satisfactorily complete the work within the specified contract time, plus any time extension duly granted and is hereby in default under the contract, the contractor shall pay the procuring entity for liquidated damages, and not by way of penalty, an amount, as provided in the conditions of contract, equal to at least one tenth (1/10) of one (1) percent of the cost of the unperformed portion of the works for every day of delay.

In case that the delay in the completion of the work exceeds a time duration equivalent to ten percent (10%) of the specified contract time plus any time extension duly granted to the contractor, BWD may rescind the contract, forfeit the contractor's performance security and takeover the prosecution of the project or award the same to a qualified contractor through negotiated contract.



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V. APPROVED BUDGET FOR THE CONTRACT

The approved budget for the contract is Twenty- Five Million, Philippine Peso only (Php. 25,000,000.00).

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Recommending Approval:

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Engr. Salvador M. Royeca
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