Request for proposals (RfP) for the installation of a 3000-liter microbulk cryogenic tank for the Leon Becerra Hospital in the city of Milagro, Ecuador

Summary of deadlines

Release request for proposals	**February 14, 2023**
Proposal Expiration/Last Proposal Submission Date	**March 1, 2023** **5pm EST**

Clinton Health Access Initiative (CHAI) invites interested and capable organizations to submit proposals to supply and install a 3000-liter microbulk cryogenic tank for the León Becerra Hospital in the city of Milagro, Ecuador

If you choose to submit your quote in response to this RFP, please electronically submit your submission to Rodrigo Valencia, COVID-19 Associate, South America, at rvalencia.ic@clintonhealthaccess.org before 5pm (EST) on Monday, March 1, 2023

Questions related to this RFP should be sent toRodrigo Valenciato the email mentioned above.

BACKGROUND

A. CLINTON HEALTH ACCESS INITIATIVE (CHAI)

Clinton Health Access Initiative, Inc. (CHAI) is a global health organization committed to saving lives and reducing the burden of disease in low- and middle-income countries, while strengthening the capacities of governments and the private sector in those countries. to create and maintain high-quality health systems that can succeed without our help. For more information, visit:www.clintonhealthaccess.org

B. THE PROGRAM: OXYGEN TECHNICAL ASSISTANCE

The first case of SARS-CoV-2 was registered in Latin America on February 26, 2020, when Brazil confirmed the presence of the virus in Sao Paulo, and since then, more than 46 million cases have been registered in the region. According to the statistics of the World Health Organization (WHO), in 2020, Latin America and the Caribbean was the region with the highest number of confirmed cases worldwide, representing a quarter of all cases worldwide.

Latin America continues to bear one of the highest burdens of COVID-19 in the world, and its health systems are among the hardest hit by the pandemic. Despite initial progress in preparing for an emergency response, many countries in the region continue to experience difficulties in providing quality and timely care to patients. Documented gaps have included limited testing capacity, difficulty connecting the patient care pathway with a single information system, limited capacity to implement oxygen therapy, drug stockouts, ICU saturation, and delays in implementation of a vaccination strategy or limited access to vaccines.

Since July 2021, CHAI began supporting Ecuador and Guatemala with a new program focused on strengthening the oxygen technical capacity of those two countries. Under the new Oxygen Technical Assistance Program, financed by UNITAID, CHAI is working with the Ministries of Health in the prioritization of five to six hospitals, in different departments of the mentioned countries, where the cases of COVID-19 are highest, as well as the gaps to provide adequate therapy to patients. Program interventions will include: a) improvement of hospital infrastructure, b) training in clinical aspects of oxygen therapy and also in O2 prognosis and related products, c) development of preventive and corrective maintenance programs for each of the hospitals prioritized,

C. TECHNICAL ASSISTANCE AT THE LEÓN BECERRA HOSPITAL

The objective of this main project of the León Becerra General Hospital is to have a continuous oxygen supply system through the new stationary cryogenic tank system, capable of covering the demand for the different areas of the hospital and the services provided by the hospital towards the citizenship .

Rural and urban of the Milagro canton.

- Offer quality care to patients admitted to this nursing home.
- Supply the demand for medical gases for the care of patients who enter this health home, either due to health problems from Covid-19, or different respiratory problems or pathologies.
- Satisfy the demands constantly and the different areas that use this service according to the needs.
- 24-hour medical oxygen supply.
- Maximize the use of biomedical equipment that demands the input.
- Optimization of the use of medicinal oxygen through the stationary cryogenic system.
- Guarantee safety in the handling of tanks in accordance with the safety standards of the Ministry of Public Health.

SCOPE OF WORK

This Request for Proposals (RFP) is intended to solicit competitive bids for thedelivery and installation of a 3,000-liter cryogenic tank that remains functional and operational for the León Becerra Hospital in the city of Milagro, the supplier will assume all installation and adaptation costs of the equipment called "3,000-liter cryogenic tank" after technical evaluation, as well as to determine the need to install a pressure reduction system based on the type of pipes that the hospital has.

A. TECHNICAL SPECIFICATIONS

Below we detail the specifications that the 3000-liter cryogenic tank must have to meet the needs of the León Becerra Hospital:

Component	Specification
Design Parameters	Vertical construction, microbulk tank type
	• Stainless steel or carbon steel outer shell
	□ Affixed lifting lugs for use w/ clevis pins
	• Stainless steel inner vessel (no aluminum)
	• Stainless steel piping
	• Vacuum pressure 0.05 bar (or better)
	• Pallet base (stainless steel)
	Maximum design pressure / test pressure (MAWP): 18 bar
	Minimum / maximum operating temperatures:
	• Inner vessel: -196°C / +20°C
	• Outer shell: -30°C / +50°C
Sizing	3000L LOX capacity (or equivalent size)
Microbulk Tank Features	Operating:
	• Fill coupling / type for LOX (specify type available)
	□ Bottom and top-fill lines
	• Pressure regulation
	□ Pressure build-up/blow-down assembly
	□ Pressure regulator with set-point feature for MAOP
	• Overfill protection system, comprising
	□ Fill line drain valve
	□ Trycock vent valve
	Monitoring:
	• Liquid level gauge (& type to be specified)
	• Liquid level transmitter (& type to be specified
	Safety:
	• Thermal relief valve
	• Safety valves: (primary (set at MAOP) and secondary (set at MAWP)) (no bursting discs)
	Additional offtake:
	• Economizer circuit/condensing coil *(preferred option)*
	• Discharge line for liquid offtake (indicate tanks that this is standard on, and if possible, for smaller units)

Ambient Vaporizer	Affixed to microbulk tank
	Nominal capacity (150 m^3/hr): XX (or equivalent size)
	All aluminum
	Rated working pressure: 36 bar
	Design / maximum allowable working temp -196°C / +50°C
	Inlet and outlet flange availability: ANSI, BSPP RC1, EN 1092, M40x2 thread, DIN 2635
	All models designed according to PED 2014/68/EU or ANSI B31.3
Documentation	P&ID – generic
	Sample databook, illustrative of what would be included (not limited to):
	• Manufacturer's declaration of conformity
	• 3rd party (e.g., Notified Body for PED) certificate of conformity and test reports, certificates for safety valves
	• Commissioning, operations, and maintenance manual
	• Detailed stress / loading calculations
	Export license
Warranty	3 years minimum
	The supplier must ensure the availability of spare parts beyond the duration of the warranty
Regulatory	PED 2014/68/EU (indicate NB) Or ASME "U" stamp
QMS	ISO 9001: Quality Management Systems – Requirements

General design guidance (or equivalent)	ASME BPVC SECTION VIII Div 1 or EN 13458-1
Installation, Testing, and Commissioning	See tab 2
Process or component specific standards (or equivalent)	EIGA 200/17: The Safe Design, Manufacture, Installation, Operation and Maintenance of Valves Used in Liquid Oxygen and Cold Gaseous Oxygen Systems
	ISO 8501-1: Preparation of steel substrates before application of pains and related products – Visual assessment of surface cleanliness – Part 1: Rust grades and preparation grades of uncoated steel substrates and of steel substrates after overall removal of previous coatings
	ISO 8504-2: Preparation of steel substrates before application of paints and related products – Surface preparation methods – part 2: abrasive blast-cleaning
	ISO 12944-4: Paints and varnishes – Corrosion protection of steel structures by protective paint systems – Part 4: Types of surface and surface preparation
	ISO 12944-5: Paints and varnishes – Corrosion protection of steel structures by protective paint systems – Part 5: Protective paint systems

MICROBULK INSTALLATION

Component	Specification
Overview	The installation, testing, and commissioning shall be performed at the designated sites [Provide GPS coordinates and insert schematic indicating designated sites]
	Activities shall include:
	• Installation, testing, and commissioning of microbulk tank and pressure reducing system including tie-in to medical gas pipeline
	• Third party inspection by Authorized Inspection Authority (AIA), testing, and commissioning [specify details of the inspection agency, authorizing membership with AIA or other relevant organization(s)]
Technical Requirements	The installation and commissioning shall be carried out per manufacturer and site-specific requirements
	Microbulk tank must be unloaded by a forklift suitable for withstanding load of tank to enable smoothly and safe offloading
	The VIE systems components shall be placed in a flat, steady surface that can withstand loading of 3,000L microbulk tank
	Tie-in the VIE system to the León Becerra Hospital medical gas pipeline system
	· Medical grade copper pipes, fittings, and accessories
	· Liquid lines are rated for cryogenic service
	Placement of system component labels and safety warning signage (Restricted access, no parking, safety, no smoking)
Installation, testing, and commissioning	To be verified and validated by design engineers as per system-specific configurations.
	On-site: Inspection by authorized inspection authority (AIA), testing and commissioning shall be done before handover.
	Provision of:
	· Third party inspection report for installation and commissioning
	· Testing report
	· Commissioning report & certificate
Documentation	Site assessment plan including a checklist of requirements to be confirmed during visit
	Safety processes and quality control procedures to be followed
	CVs of Lead Engineer and installation team.
	Proposed work plan
	References and Projects contracted in Ecuador (3 of each, from current year or within the past 3 years)
Product Performance Standards (or equivalent)	ISO 21009-2: Cryogenic Vessels – Static Vacuum Insulated Vessels Part 2: Operational Requirements
	EIGA DOC 224/20: Static Vacuum Insulated Cryogenic Vessels Operation and Inspection

APPLICATION TO THE PROJECT

Based on the national COVID-19 response, through the Oxygen Technical Assistance Program, CHAI assessed priority facilities and determined where new equipment and services could be placed. Assessments have included an assessment of the current infrastructure, the types of care offered and the capacity of the staff. Considerations for oxygen availability, such as network design and optimization for oxygen supply, have been incorporated at this stage. Proposals are valid for 20 days and questions may be received until February 24.

To apply to this RFP, applicants must provide (1) a completed application form (Sections 1 and 2); and (2) a complete budget template (collectively “Materials”). (3) Technical and regulatory and quality documentation outlined in the scope of work referencing the technical specification.

Completed applications will be reviewed and after the March 1, 2023 submission date. Proposed budgets should not exceed US$60,000 and proposed delivery timelines should not take more than 2 months to implement.

SECTION 1: BENEFICIARY INFORMATION

1. **Name of the beneficiary organization:**

2. **Contact information (include contact name, address, phone number, and email):**

3. **Total budget requested:**

4. **Commercial references:**

5. **Provide a brief description of the organization.**

6. **Provide information on experiences related to the work area.**

SECTION 2: PROJECT INFORMATION

1. **Description of the project and deliverables**

2. **Major activities with due dates and deliverable schedule (make sure the activities shown here match the activities shown in the budget template):**

Activity(s) / Deliverables	Description	Estimated date of completion

3. **How will this project contribute to the optimization of oxygen delivery to patients in the country or to what extent will it contribute to improving it?**

4. **How will you carry out the project within the indicated time frame? If the project is urgent (for example, funding must be ready before the XX date to achieve the proposed results), please indicate it here.**

OFFER ELIGIBILITY AND QUALIFICATION

ELIGIBILITY

The RFP is open to companies that meet the technical specifications previously outlined and the following criteria:

Certificate

- ISO9001:2015
- NFPA-99 (National Fire Protection Association)
- NITC (Inspection Test Certification).
- ASSE (American Society for Sanitary Engineering).
- DOT (Department of Transportation) of the United States of America
- ASTM (American Society for Mechanical Engineering)
- ASSE 6020 (Inspectors of Medical Gas Systems) endorsed by NFPA and NITC.
- ASSE 6010, (Medical Gas Systems Welder and Installer) endorsed by NFPA and NITC,
- ASSE 6035 Bulk Medical Gas/Cryogenic Fluid Central Supply Systems Verifiers
- CGA M-1 & ASSE 6015 Dual Certification for Bulk Compressed Medical Gas Supply System Installers

Suppliers will agree to establish a temporary project team structure that includes the participation of CHAI, as well as arrange regular meetings (in person or via telecommunications) and on-site when necessary.

QUALIFICATION OF OFFERS

Bid qualification criteria:

a. The determination of the qualifications for the selection of the winning offer will be made according to the criteria described in the following table:

CRITERIA	POINTS
Delivery	10
Technnical Support	20
Warranty	30
Price	40

DELIVERY TIME

The offer that presents the shortest delivery time in business days for Installation and delivery of accessories will automatically obtain ten (10) points; the other offers will have a rating inversely proportional to the first one, according to the value of its offer. For which the following formula should be taken:

$$\frac{\text{Shortest delivery time offered X 10}}{\text{N-value}}$$

Value N = Delivery period of the offers to qualify (in business days).

TECHNICAL SUPPORT:

Documents that prove the technical skills of the personnel that will execute the installation, binding certifications, including curriculum, photocopies of diplomas, certificates and / or certifications that endorse the competence in this type of service, in the last 10 years to the date of presentation. of the offers.

For the qualification, the BOARD will assign twenty (20) points according to the documents that support the competence of the technicians presented by the BIDDER, according to the following formula:

$$\frac{\text{NX value 20}}{\text{Largest number of records}}$$

Value N = Evidence to qualify.

WARRANTY:

The offer that presents the highest guarantee will automatically obtain thirty (30) points; the other offers will have a rating inversely proportional to the first one, according to the value of its offer. For which the following formula should be taken:

$$\frac{\text{Extended warranty offered X 30}}{\text{N-value}}$$

Value N = Offer price to qualify.

PRICE:

The offer with the lowest price will automatically obtain forty (40) points; the other offers will have a rating inversely proportional to the first one, according to the value of its offer. For which the following formula should be taken:

$$\frac{\text{Lowest Price Offered X 40}}{\text{N-value}}$$

Value N = Offer price to qualify.

OTHER INFORMATION

Failure to provide all information required by the RFP or submitting a bid that does not respond to the RFP in all respects will be the responsibility of the bidder and may result in bid rejection or disqualification.

CHAI shall have the right to seek any additional information or documents from the Bidder in the manner it deems appropriate in its sole and absolute discretion.

The offer prepared by the bidder, as well as all correspondence and documents related to the offer exchanged between the bidder and CHAI will be written only in Spanish. However, in case the bidder chooses to attach certain supporting documents in any language other than Spanish, the bidder must also attach certified/true translated copies thereof in English. Any document that is not translated into Spanish will not be considered and the offer will be considered incomplete and therefore subject to disqualification.

All prices quoted in the offer will be quoted in US dollars.

CHAI will review bids to determine if they are complete, meet all RFP conditions, and if documents have been properly signed and bids are generally in order. If there is a discrepancy between words and figures, the amount in figures may be used as the prevailing amount.

Disclaimer

Distribution of this document does not mean that CHAI is committing to award a contract or fund an applicant.

CHAI will not reimburse or assume any costs associated with this RFP regardless of whether an organization is selected to supply.

Please note that there is no fee required for the submission of these applications.

CHAI makes no representation or warranty and will not incur any liability under any law as to the accuracy, reliability or completeness of the information contained in the RFP.

Confidentiality

Information that the respondent considers proprietary must be clearly marked as such. All such information will be treated confidentially and used by the CHAI team for evaluation purposes only.