

### TERMS OF REFERENCE AND CONDITIONS

Project/Title	<b>SUPPLY, DELIVERY AND INSTALLATION OF DAIRY PROCESSING EQUIPMENT (PCC at LCSF) 1 LOT</b>
Approved Budget for the Contract	<b>Two Million Pesos (PhP 2,000,000.00)</b>
Fund Source	<b>CCDP Fund</b>
Place/Site of delivery	<b>Sagay City, Negros Occidental</b>
Project Focal Person and Contact Information	<b>EVA R. ALVAREZ</b> <i>Center Director, PCC at LCSF</i>
Delivery Period/Terms	120 calendar days upon receipt of Notice to Proceed
Payment	Choose one [x] Progress payment for each delivery of the goods and services covered by the contract  [ ] Upon completion of delivery, installation and final acceptance of the end-user
Definition of Similar Contract	Similar contract refers to supply, delivery and installation of various dairy processing equipment/food processing equipment

Suppliers are preferably Luzon-based and have been tested to have provided satisfactory service to the procuring agency to ensure compliance with delivery schedule as well as provide timely technical assistance during the initial operation and for maintenance purposes.

Item No.	Qty	Unit	Equipment	Unit Cost (PhP)	Total Cost (PhP)
1	1	unit	<b>PASTEURIZER TANK</b>	350,000.00	350,000.00
2	1	unit	<b>HOT WATER BOILER</b>	150,000.00	150,000.00
3	1	unit	<b>HOT WATER BOILER BURNER</b>	105,000.00	105,000.00
4	1	unit	<b>HOT WATER CIRCULATING PUMP</b>	30,000.00	30,000.00
5	1	unit	<b>STAINLESS Y STRAINER</b>	15,000.00	15,000.00
6	1	unit	<b>MILK PUMP</b>	55,000.00	55,000.00
7	1	unit	<b>PLATE HEAT EXCHANGER</b>	65,000.00	65,000.00
8	2	unit	<b>RAW WATER PUMP</b>	15,000.00	30,000.00
9	1	unit	<b>COOLING TOWER</b>	95,000.00	95,000.00
10	1	unit	<b>COOLING TANK</b>	350,000.00	350,000.00
11	1	unit	<b>FRP INSULATED WATER TANK</b>	125,000.00	125,000.00
12	1	unit	<b>CHILLED WATER CIRCULATING PUMP</b>	25,000.00	25,000.00
13	1	unit	<b>INDUSTRIAL WATER CHILLER</b>	160,000.00	160,000.00
14	1	unit	<b>DIESEL GENERATOR</b>	285,000.00	285,000.00
15	1	unit	<b>ELECTRICAL WIRES AND CONTROLS</b>	45,000.00	45,000.00
16	1	lot	<b>PIPES, VALVES, FITTINGS</b>	60,000.00	60,000.00
17	1	lot	<b>DELIVERY AND INSTALLATION</b>	55,000.00	55,000.00
			<b>TOTAL</b>		<b>PhP 2,000,000.00</b>

Note: The project will be awarded by lot. Bidders are required to indicate the unit price of equipment in the proposal/bid form.

#### TECHNICAL SPECIFICATIONS

Item No.	Qty	Unit	Equipment/Description
1	1	unit	<b>PASTEURIZATION TANK WITH BOTTLE FILLER FAUCET</b> <ul style="list-style-type: none"> <li>✓ 150 L Capacity, 3 walled, 304 stainless steel (inner tank only)</li> <li>✓ Inside thickness: 2.5mm, middle tank: 2.5 mm, outside cladding: 1.5 mm with P.U. Installation</li> <li>✓ 25 mm service inlet/outlet for hot water/cooling water</li> <li>✓ mixing motor 0.37kW, 220V, 60Hz, 1P geared motor, slow agitator</li> <li>✓ Temperature indicator 0-120°C</li> <li>✓ 1.5" sanitary butterfly valve product outlet</li> <li>✓ For pasteurizing milk</li> <li>✓ Removable Cover</li> <li>✓ Motor Control</li> <li>✓ The tank must have a maximum height of 1.5m or must eliminate the use of ladder during raw milk loading.</li> </ul>
2	1	unit	<b>HOT WATER BOILER</b> <ul style="list-style-type: none"> <li>✓ Water Capacity: 80L   Size: 570*560*1110mm</li> <li>✓ Reference Heating Area: 250 sq.m</li> <li>✓ Rated Output Power: 0.047 MV/h</li> <li>✓ Temperature indicator 0-85°C</li> <li>✓ Total Output Heat: 40,000 Kcal/h   NW: 165 kg</li> <li>✓ Chimney Dia: DN100   Water Holes Dia: DN32</li> </ul>
3	1	unit	<b>HOT WATER BOILER BURNER (DIESEL)</b> <ul style="list-style-type: none"> <li>✓ Fuel: All kinds of waste oil, diesel oil 105,000.00 105,000.00</li> <li>✓ Oil Consumption: 3-5L/hr 0.75kW, 60Hz</li> <li>✓ Rated Output Power: 30-60 Kw   Total Output Heat: 50,000 kCal</li> <li>✓ Motor Power: 180W   Voltage: 220V</li> <li>✓ Working Pressure: 0.5-1.5 Bar</li> <li>✓ Fuel Tank Capacity: 100 liters   Heating Power: 600w  </li> <li>✓ Diesel Level Gauge   Gas Exhaust Hole   Back Oil Hole</li> <li>✓ Compressor: 40L/Min Displacement   Power: 550W   PSI: 7 mpa</li> <li>✓ Electronic Ignition must be installed for burner. Switch must be installed accessible to the plant operator inside the processing area.</li> <li>✓ Install steel fabricated Fuel tank of 150-200 liters capacity, with level gauge and necessary piping lines.</li> <li>✓ Must be installed outside the processing area and with ample space of 0.6-1.0 meters surrounding the boiler unit for safety and ease of maintenance.</li> </ul>
4	1	unit	<b>HOT WATER CIRCULATING PUMP</b> <ul style="list-style-type: none"> <li>✓ Working Temperature: 0-110 deg C</li> <li>✓ Outer Power: 370W   Voltage: 220 V</li> <li>✓ Total head: 10m   Flow: 10.5 cbm/h</li> <li>✓ Water Circulation Area: &lt;300sq.m</li> <li>✓ Material: Copper Core Motor, Stainless steel wet rotor, cast iron pump head, electric spray paint pump body, sealless component</li> </ul>
5	1	unit	<b>STAINLESS Y STRAINER</b> <ul style="list-style-type: none"> <li>✓ Material: AISI304, Stainless Steel</li> <li>✓ Size: 38mm EDPM gaskets</li> <li>✓ Mesh 80</li> <li>✓ Connection: tri-clamp or SMS connections</li> </ul>
6	1	unit	<b>MILK PUMP</b> <ul style="list-style-type: none"> <li>✓ 1 HP, 220V, 1P</li> <li>✓ SS 304 construction</li> <li>✓ Simple structure, easy cleaning and tear down</li> <li>✓ Highly sealed, low noise, light weight, self-lubrication</li> </ul>

			<ul style="list-style-type: none"> <li>✓ With Phasing Converter Built-In Device from Single Phase to 3-Phase Output w/ variable frequency suitable for 2Hp Pump.</li> </ul>
7	1	unit	<b>PLATE HEAT EXCHANGER</b> <ul style="list-style-type: none"> <li>✓ 500 liters per hour</li> <li>✓ Stainless steel 316, 0.6mm plate</li> <li>✓ 25mm service line outlet/inlet</li> <li>✓ Nitrile rubber gasket</li> </ul>
8	2	unit	<b>RAW WATER PUMP</b> <ul style="list-style-type: none"> <li>✓ 1 HP, 220V, 1P (Cast Iron Pump)</li> </ul>
9	1	unit	<b>COOLING TOWER</b> <ul style="list-style-type: none"> <li>✓ For pre-cooling hot milk packed in pouches before final cooling in chilled water</li> <li>✓ Water pump for water circulation in cooling water</li> <li>✓ Waterflow rate : 32 GPM</li> <li>✓ Height of cooling tower : 56 7/8"</li> <li>✓ Diameter of cooling water : 46"</li> <li>✓ Fan motor : 1/4 hp, 220/1 phase, 60 Hz</li> <li>✓ Filling : PVC cross corrugated fillers (loose rolls)</li> <li>✓ Casing: FRP (Fiberglass reinforced polyester)</li> <li>✓ Metal parts : Hot dip galvanized</li> <li>✓ Motor Control on SS Panel 220V,60Hz,1P</li> </ul>
10	1	unit	<b>COOLING TANK</b> <ul style="list-style-type: none"> <li>✓ 150 liters capacity, 3 walled, 304 stainless steel (inner tank only)</li> <li>✓ Inside thickness: 2.5mm, middle tank: 2.5mm, outside cladding 1.5mm with P.U insulation</li> <li>✓ 25mm service inlet/outlet for hot water/cooling water</li> <li>✓ 0.37kW, 220V, 60Hz, 1P geared motor, slow agitator</li> <li>✓ Temperature indicator 0-120 °C</li> <li>✓ 1.5" sanitary butterfly valve product</li> <li>✓ For keeping pasteurized milk and filling at the same time</li> <li>✓ Removable cover</li> <li>✓ Motor control</li> </ul>
11	1	unit	<b>FRP INSULATED WATER TANK</b> <ul style="list-style-type: none"> <li>✓ 1000 Liters Capacity   Dimensions: 1x1x1 meters (Square)</li> <li>✓ Insulation: 2" Polyeurethane</li> <li>✓ Set of insulated, 1" PPR piping from IBU to PHE/Holding Tank</li> <li>✓ Skid base: 100mm C-channel</li> </ul>
12	1	unit	<b>CHILLED WATER CIRCULATING PUMP</b> <ul style="list-style-type: none"> <li>✓ Rated power: 370 kW, 220V, 1P</li> <li>✓ 7500L/Hr Capacity</li> </ul>
13	1	unit	<b>INDUSTRIAL WATER CHILLER</b> <ul style="list-style-type: none"> <li>✓ 3 HP, 220V,60Hz, 1P Condensing Unit, 2250W</li> <li>✓ Motor control</li> </ul>
14	1	set	<b>DIESEL GENERATOR</b> <ul style="list-style-type: none"> <li>✓ Heavy duty generator, single phase, 25- 50 Kva,</li> <li>✓ Structure Mode: silent type/sound proof</li> <li>✓ DIESEL; Phase: Single Phase;</li> <li>✓ Rated Frequency (Hz): 60Hz;</li> <li>✓ Rated Voltage (V): 220;</li> <li>✓ Rated Output (kva): 13.5; Max. Output (kva): 13;</li> <li>✓ Power Factor (cos): 1; Water-cooled;</li> <li>✓ Engine type: ev80;</li> <li>✓ Full tank capacity :26L;</li> <li>✓ Starting System: Electric Start; Battery Ah: 12V;</li> <li>✓ Protection System: Low Oil Alarm;</li> <li>✓ Noise Level @7m: 75db (A);</li> <li>✓ Excitation Mode: Transistorized Self-excitation and constant voltage AVR;</li> </ul>

			<ul style="list-style-type: none"> <li>✓ 2 years service warranty and 3 months warranty on parts</li> <li>✓ Recommended capacity must be 25- 50 Kva or can accommodate all the electrical load of the whole facility.</li> <li>✓ Must be a brand-new unit with 0-10 hours of indicative operating hours in the PLC monitor.</li> <li>✓ Must be an electronic On /Off system, with oil, temperature short circuit indicators.</li> <li>✓ Manual Transfer Switch (MTS) must be installed together with the unit.</li> <li>✓ Integrated line of fuel supply to the Boiler unit Fuel Tank.</li> <li>✓ Must have a rubber pad as a vibration absorber.</li> <li>✓ With casing and proper sound proofing.</li> <li>✓ Muffler extension must be installed to avoid spreading of smoke in the facility.</li> <li>✓ Must be installed separately or outside the main processing area.</li> <li>✓ Inclusive of tools and accessories, delivery on site, installation, testing, and commissioning</li> </ul>
15	1	unit	<b>ELECTRICAL WIRES AND CONTROLS</b>
16	1	lot	<b>PIPES, VALVES, FITTINGS</b>
17	1	lot	<b>DELIVERY AND INSTALLATION</b> <ul style="list-style-type: none"> <li>✓ For Electrical, all cables, breakers and other devices must conform to the Electrical Code of the Philippines.</li> <li>✓ Appropriate cable trays must be used for easy inspection.</li> <li>✓ Electrical Main Panel must be composed of main switch, and individual circuit breakers for all motors, lighting, outlets fans. Provide 2 available slots, for future additional load. Must be collected accessible to the plant operator.</li> <li>✓ Install proper Hanger-Type Steel Cable Ladder going to each electric motor.</li> <li>✓ For Piping, Stainless materials must be installed including gate valves and necessary fittings.</li> </ul>

The whole set-up should be able to produce at least 6,000 to 6,300 packs of 200 grams pasteurized milk in 12 hours. The whole set-up should also have a Clean-In-Place (CIP) system.

#### **DOCUMENTATION COMPONENTS**

The supplier/contractor shall warrant that they will provide all the necessary documents/manual in English Language relative to the equipment as follows:

- Owner/User Manual
- Operations Manual
- Maintenance Manual
- Spare parts list

### **TRAINING**

Training for the use of equipment shall be administered upon delivery and installation including testing and commissioning of the equipment.

### **WARRANTY COMPONENTS**

All products/equipment have passed through Quality Control and is guaranteed to be free from defects upon delivery. The supplier/contractor shall provide warranty for the equipment covering parts and technical services on the equipment and its accessories for a period of one (1) year from the date of delivery and acceptance (evidence by a Certificate of Final Acceptance issued by the PCC/end-user). During the warranty period, the supplier/contractor shall replace any defective parts of materials and or provide regular check-up, consultation and as needed, maintenance services for the equipment at no cost to PCC.

### **AFTER SALES SERVICE**

Regardless of whether or not a maintenance agreement is entered into by the concerned parties after the expiration of the warranty period, the supplier should guarantee the availability of spare parts and components of the aforementioned equipment at least within the period of five (5) years from the date of acceptance of the equipment.

Prepared by:

  
**EDMUNDO TIO**

CBED Coordinator, PCC at LCSF

Endorsed by:

  
**EVA R. ALVAREZ**

Center Director, PCC at LCSF

Approved by:

  
**DR. CARLO B. SALCES**  
OIC – Executive Director



Department of Agriculture  
**PHILIPPINE CARABAO CENTER**  
CERTIFIED ISO 9001 | ISO 14001 | ISO 45001

## **INVITATION TO BID**

### **ITB/Identification No. PB 2023-162**

#### **(CBIN/PCC-LCSF) SUPPLY, DELIVERY AND INSTALLATION OF DAIRY PROCESSING EQUIPMENT Sagay, Negros Occidental**

1. The **PHILIPPINE CARABAO CENTER**, through the **CCDP Fund** intends to apply the sum of **Two Million Pesos (P 2,000,000.00)** being the ABC to payments under the contract for **(CBIN/PCC- LCSF) SUPPLY, DELIVERY AND INSTALLATION OF DAIRY PROCESSING EQUIPMENT Sagay, Negros Occidental** under **ITB/Identification No. PB 2023-162**. Bids received in excess of the ABC shall be automatically rejected at bid opening.
2. The **PHILIPPINE CARABAO CENTER** now invites bids for the above Procurement Project. Completion of delivery/Works/Services is required within **120 days** as specified in the Schedule of Requirements. Bidders should have completed, within **five (5) years** from the date of submission and receipt of bids, a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders).
3. Bidding will be conducted through open competitive bidding procedures using a non-discretionary "pass/fail" criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.  
  
Bidding is restricted to Filipino citizens/sole proprietorships, partnerships, or organizations with at least sixty percent (60%) interest or outstanding capital stock belonging to citizens of the Philippines, and to citizens or organizations of a country the laws or regulations of which grant similar rights or privileges to Filipino citizens, pursuant to RA No. 5183.
4. Prospective Bidders may obtain further information from **PHILIPPINE CARABAO CENTER** and inspect the Bidding Documents at the address given below during Monday to Friday (8am-5pm) except weekends and holidays.
5. A complete set of Bidding Documents may be acquired by interested Bidders on **October 9-November 6, 2023** from the given address and website(s) below and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of **Three Thousand Five Hundred Pesos (P 3,000.00) non-refundable**. The Procuring Entity shall allow the bidder to present its proof of payment for the fees presented in person, by facsimile, or through electronic means not later than the submission of their bids.

We encourage bidders to download the bidding documents through PhilGEPS or the PCC Website and pay through bank. Please coordinate with the BAC Secretariat Office through the email address and contact number given below for the bank detail procedures.

6. The **PHILIPPINE CARABAO CENTER** will hold a Pre-Bid Conference (via Zoom for bidders) on **October 18, 2023 (10am)** at **EUSEBIO HALL, PHILIPPINE CARABAO CENTER**, National Headquarter and Gene Pool, Science City of Muñoz, Nueva Ecija through web conference platform via Zoom.

A Personal Meeting ID will be sent through email for each participant at least one day before the event. Prospective bidders need to signify their intention to participate by sending an email to [noemi.balais@pcc.gov.ph](mailto:noemi.balais@pcc.gov.ph)

7. Bids must be duly received by the BAC Secretariat through manual submission at the office address indicated below on or before **November 6, 2023 (9am)**. Late bids shall not be accepted.
8. All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 14.
9. Bid opening shall be on **November 6, 2023 (10am)** at the given address below through web conference platform via Zoom (face to face for the BAC).

A Personal Meeting ID will be sent to participants through email who submitted bid proposals.

10. The **PHILIPPINE CARABAO CENTER** reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 revised IRR of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.
11. The **PHILIPPINE CARABAO CENTER** Bids and Awards Committee (BAC) will use a non-discretionary and non-discriminatory measure based on sheer luck or chance, which is "draw lots", in the event that two or more bidders have been post-qualified and determined as the bidder having the Lowest Calculated Responsive Bid (LCRB) to determine the final LCRB (In alphabetical order, the bidders shall pick one rolled paper. The lucky bidder who would pick the paper with "Congratulations" remark shall be declared as the final bidder having LCRB and recommended for award of the contract.)

12. Please refer to the following schedule of activities:

Activity	Date	Remarks
Availability of Bidding documents	October 9- November 6, 2023	Downloadable through PhilGEPS, PCC Website and can be requested through email ( <b>noemi.balais@pcc.gov.ph</b> )
Payment of Bidding Documents (before submission of bid proposals)	October 9- November 6, 2023	<p>Prospective Bidders may pay the bidding documents through bank deposit to:</p> <p>Bank Name/Branch: Land Bank of the Philippines-CLSU Bank Account No. 2962-1020-37 Account Name: PHILIPPINE CARABAO CENTER LBP Branch where the deposit was made:</p> <p>If bidders opted to pay cash, request Statement of Account (SOA) first from PCC Accounting Office before proceeding to the PCC Cashier's Office</p> <p>Prospective Bidders must email the scanned copy of deposit slip to BAC Secretariat Office with the following details:</p> <ul style="list-style-type: none"> <li>▪ Project Title</li> <li>▪ Company Name with Contact Information</li> </ul> <p>BAC Secretariat Office: <b>noemi.balais@pcc.gov.ph</b></p> <p>PCC Cashier's Office will issue Official Receipt after the validation/confirmation of the bank deposit.</p>
Pre-bid Conference (Online for bidders)	October 18, 2023 (10am)	A Personal Meeting ID will be sent through email for each participant at least one day before the event. Prospective bidders need to signify their intention to participate by sending an email to <b>noemi.balais@pcc.gov.ph</b>
Deadline for the submission of bids	November 6, 2023 (9am)	<p>Late bids shall not be accepted.</p> <p>Through personal delivery or through courier at the PCC BAC Secretariat Office</p> <p>Bidders must ensure that the Bid Proposals are properly delivered and received by the BAC Secretariat Office on or before the deadline of submission.</p>
Bid Opening (Online for bidders)	November 6, 2023 (10am)	A Personal Meeting ID will be sent to participants through email who submitted bid proposals on time.

12. The PHILIPPINE CARABAO CENTER (PCC) does not condone any forms of solicitation on any prospective winning and losing bidders by any of our staff/employees or any other party. Any sort of this kind shall be reported immediately to PCC (**pccoed2021@gmail.com**).

13. For further information, please refer to:

**MS. NOEMI V. BALAIS**

Head, BAC Secretariat Office  
PHILIPPINE CARABAO CENTER  
National Headquarters and Gene Pool  
Science City of Munoz, Nueva Ecija  
Email: noemi.balais@pcc.gov.ph  
Contact No.: 0917 824 4374  
Website: www.pcc.gov.ph

**ERIC P. PALACPAC**

Chairperson, Bids and Awards Committee  
October 9, 2023