Company: Galoya Plantations (Pvt) Ltd.

Reg. address: No. 481, T.B. Jayah Mawatha, Colombo -10, Sri Lanka.

Site address: Factory complex, Hingurana, Ampara, Sri Lanka.

Job: Supply, Installation & Commissioning of a 10 KLPD Absolute Alcohol

Dehydration Plant

## **Invitation for Proposals**



# Supply, Installation & Commissioning of a 10 KLPD Absolute Alcohol Dehydration Plant

Galoya Plantations (Pvt) Ltd., Hingurana, invites sealed proposals from local and international eligible and qualified suppliers for the supply, installation, and commissioning of a 10 KLPD absolute alcohol dehydration plant.

The proposals must be submitted via post under registered cover to the following address on or before 11<sup>th</sup> of October 2024. Detailed documents can be downloaded from the following website.

Head of Procurement Galoya Plantations (Pvt) Ltd., Hingurana, Ampara.

Website: www.galoya.lk

#### **Contact Information:**

Procurement Details: Pradeep – 076 8238 205 Technical Details: Chathuranga – 076 8238 121

Kalhara – 076 8238 145

## **RTO 30828: Ethanol Dehydration Plant**

## Gal-Oya Plantation (PVT) Ltd

## 1. Introduction

Gal-Oya Plantation (PVT) Ltd invites qualified and experienced contractors to submit tenders for the design, supply, erection, and commissioning of an Ethanol Dehydration Plant. The plant is designed to produce Pharma Grade and Lab Grade Ethanol from Extra Neutral Alcohol (ENA) with a capacity of 10 KLPD.

## 2. Technical Specifications

#### 2.1 Design Basis

Sr. No	Particulars	Description
1	Capacity	10 KLPD Pharma and Lab Grade Ethanol
2	Feedstock	Extra Neutral Alcohol (ENA) with 96.4% v/v
3	Output Purity	Pharma Grade Ethanol ≥ 99.9%, Lab Grade Ethanol ≥ 99.9%

### 2.2 Input Specification (ENA)

Test	Results
Acidity	0.1 mL
Alcohol by volume	96.4%
Aldehydes (as acetaldehyde)	7 grams per 100 liters of absolute alcohol
Esters (as ethyl acetate)	9 grams per 100 liters of absolute alcohol
Higher alcohols (as amyl alcohol)	13 grams per 100 liters of absolute alcohol
Methyl alcohol	Satisfy the test
Nonvolatile matters	0.001% (m/V)
Relative density	0.8072

## 2.3 Output Specification (Pharma & Lab Grade Ethanol)

Description	Output	
Purity (GC)	≥ 99.9 %	
2- Propanol (GC)	≤ 0.01 %	
Acetone (GC)	≤ 0.001 %	
Evaporation residue	≤ 0.001 %	
Volatile impurities (GC) (Methanol)	≤ 0.1 %	
Water	≤ 0.2 %	
<b>Density (20/20)</b>	0.790 - 0.793	

## **2.4 Equipment Specifications**

SR.	EQUIPMENT	MOC	Remarks
1	Column	S.S. 304	
2	Pre- heater	S.S. 304	
3	Re-boiler	Shell - S.S. 304, Tube- SS 316	
4	Condenser	S.S. 304	
5	Super Heater	S.S. 304	
6	Molecular Sieve Unit	S.S. 304	
7	Cooler	S.S. 304	
8	Drum	S.S 304	
9	Pump with Flame proof	Wetted Parts SS 304	
	motor + Mechanical seal		
10	Vacuum Pump with proof	Wetted Parts SS 304	
	motor		
11	Tanks	S.S 304	
12	Piping	Alcohol: SS 304, Steam: MS SCH-40,	
		Water: SS 304, Instrument Air: GI	
13	Valves	Alcohol: SS 304 internal, Steam: CI/	
		CS, Water: CI/ CS, Instrument Air:	
		Brass	

#### 3. Design and Engineering

The scope includes detailed engineering services covering:

- 1. Plot plan
- 2. Floor-wise layout and elevation drawings
- 3. Load data for structural works
- 4. Technical data sheets and general arrangement drawings
- 5. Electrical single-line diagram
- 6. General arrangement drawings of MCC/PCC
- 7. Instrumentation work with mimic panel for the dehydration plant

#### 4. Seller's Scope

#### 1. Design and Engineering Services:

- Detailed engineering services including plot plans, layout drawings, load data for structural works, technical data sheets, and general arrangement drawings.
- o Providing technical data sheets for all bought-out equipment.
- Generating electrical single-line diagrams and general arrangement drawings for MCC and PCC.

#### 2. Supply Erection & Commissioning of Equipment:

- Providing and installing equipment such as Columns, Re-boilers, Molecular Sieve Units, Pumps, and more as specified.
- Supplying instruments, electrical panels, and other necessary components for the operation of the dehydration plant.

#### **5. Battery Limits**

The supplier will be responsible for defining and providing all necessary boundaries within the battery limits of the project. This includes managing feed spirit, steam, cooling water, product delivery, electricity, and power for instruments. Please note that Gal-Oya Plantation (PVT) Ltd will not be supplying cooling water or instrument air. Therefore, the supplier is required to include a compatible cooling tower and compressor for instrument air as part of their proposal. We appreciate your attention to these requirements to ensure a seamless and efficient integration into our existing operations.

### 6. Client's Scope

#### 6.1 Civil and Structural Works:

• Timely completion of foundations and plinth levels according to the agreed schedule.

#### **6.2 Structural Works:**

• Execution of all civil and structural works including plant buildings, masonry works, and infrastructure installation.

#### 6.3 Infrastructure:

- Provision of utilities, power supply, water management, lighting, and lightning protection.
- Storage tank fabrication related to feed tanks, receiver tanks, and storage tanks.

#### 7. Submission Details

All vendors are requested to submit competitive price quotations along with a comprehensive project proposal and CIF prices for Colombo Fort. The deadline for submission is 30<sup>th</sup> September 2024. Your prompt and detailed responses are important for the evaluation and selection process. Thank you for your attention to this bid, and we look forward to receiving your submissions.

#### **Contact Information:**

• Registered Address: # 481, T.B. Jayah Mawatha, Colombo 10, Sri Lanka.

• Factory Address: Hingurana Site, Hingurana, Sri Lanka.

• **Telephone:** +94(63)312 8 312 / +94(63)205 3 205

• **Fax:** +94(63)2240199

• **Email:** info@galoya.lk

#### For further details or clarifications, please contact:

• Mr. Nuwan Chathuranga (Chief Manager - Distillery): +94(76)823 8 121

• Mr. Anushanka Kalhara (Senior Production Executive - Distillery): +94(76)823 8 145

• Mr. Isuru Bandara (Mechanical Engineer - Distillery): +94(76)823 8 157

#### **Quotation Requisition** Galoya Plantations (Pvt) Ltd. Factory Complex, RTO - 30828 Hingurana. Gal-Oya Phone: 063 3128 343 / 380 Plantations (Pvt) Date: 26.09.2024 :063 2240 361 Fax **Unit Price** S/ No. **Item Description UOM** Qty. **Brand/Offer** (USD. / LKR.) Design, Supply and Commission of 10KLPD **Ethanol Purification and Dehydration Plant.** Input: Extra Neutral Alcohol 01 01 Nos. Output: Pharma grade Ethanol Capacity: 10 KLPD (an information sheet has been attached)

Special Note - We request that you always submit the lowest possible price as we will only contact the supplier who submitted the lowest price for price negotiations.

#### Notes:

- If you are a VAT supplier, please provide VAT quotation and mention the VAT separately in the quotation.
- lacktriangle We are issue the advance payment against bank guarantee or advance guarantee only.
- If you have not submitted technical details or photos, please note that such quotes are not considered for evaluations.
- Please be good enough to send by completing following details.

Quotation Validity	
Payment Term	
TAX / VAT	
Delivery Period / Duration	
Country of Origin	
Warranty	
Stock Availability	
Remarks	