#### **Tender Notice**

Enquiry No. HOC/MECH/150/72/ Refr.Repair.Boiler/10

June 9, 2010

## Sub: Annual Contract for Refractory Repair Work in Boiler

Sealed tenders are invited from registered contractors with HOCL, Kochi for the Annual Contract for Refractory Repair Work in Boiler.

# Scope of Work

# 1. <u>Refractory Repair Works - Combustion Chamber and its Floor - (Access from inside of Furnace)</u>

This include removal of damaged portion of tiles, bricks, blocks, LRBM and re-insulation with new refractory with mortar at all elevations including the peep door and access doors as per the instruction of Engineer-in-Charge.

#### 2. Refractory Repair on Top of Combustion Chamber below releaser tube

This includes removal of damaged insulating castables/refractory tiles/LRBM and installation of new refractory tiles/insulating castables/LRBM at all elevations as per the instruction of Engineer-in-Charge. It may please be noted that the replacement of anchor bolts will be done by HOCL, if required.

# 3. Refractory Repair of Combustion Chamber (Access through out shell)

This includes removal of LRBM, calcium silicate blocks, refractory tiles/ bricks and anchor washer/nuts at the required area without damaging areas and install with new refractory tiles/bricks by recurring calcium silicate blocks and LRBM at all elevation including peep holes and access doors as per the instruction of Engineer-in-Charge.

# 4. <u>Refractory Repair for Minor Repairs/to arrest gas leaks including at peep holes and access doors</u>

This includes the surface preparation and application of mortar for minor joints/cracks in refractory and to arrest gas leaks in the flue gas path at all elevations and application of mortar over the refractory for pointing and rectification of cracks as per the instruction of Engineer-in-Charge.

#### 5. Repairing of Burners

It includes removal of damaged portion and repair of burner mouth to required profile or casting the same, if required.

# 6. <u>Refractory Repair flue gas baffle above back header tubes (access through man holes near convection tubes)</u>

This includes removal of damaged insulating castables at covers/refractory tiles/calcium silicate blocks, cleaning the area and installation of new refractory tiles/insulating castable (at corners) and laying of calcium silicate blocks at an elevation as per instruction of Engineer-in-Charge.

#### Note:

- 1. The party has to visit the Boiler and study the refractory drawings to assess the nature and job before quoting.
- 2. All debris, refractory waste etc. arising out of the job should be segregated, weighed and dumped to dump yard as per the instruction of Engineer-in-charge.
- 3. Complete details of consumption of materials on the form of reconciliation statement is to be submitted along with the bill. Balance material to be returned to the stores.

#### **HOCL's Scope**

- 1. HOCL shall provide the required refractory materials, anchors, bolts, anchor washers, anchor nuts etc. at free of cost.
- 2. HOCL shall provide necessary steel scaffolding/platforms required for the job.
- 3. HOCL shall arrange all the welding and fabrication prior to the necessary refractory repairs.
- 4. HOCL shall provide power supply, water supply at one point free of cost.

#### Contractor's Scope

The contractor shall provide tools & tackles such as brick/tile cutters, pan mixers, needle vibrators etc. necessary shuttering materials like plywood, steel shutters etc. and transportation of refractory materials from stores and balance materials back to stores for satisfactory completion of the work.

All works are subjected to stage inspection by HOCL Engineer – in - charge

On intimation by HOCL you have to mobilize your people and start the work within 24 hrs.

The contractors responsibility covers the co-ordination and supervision of all the works involved at the site like mobilization and de-mobilization including job activities as per the scope.

#### **Completion Period**

The entire work has to be completed within **5 days** from the date of intimation to start the job.

### **Validity of Contract**

The contract will be valid for a period of one year from the date of issue of work order.

#### **Payment Terms**

- 90% payment will be made on completion of each work and certification by Engineer-in-Charge on pro-rata basis.
- Balance 10% payment will be made after defect liability period of 1 year or on production of Performance Bank Guarantee.

#### Note:

- 1. Total security deposit shall be 10% of contract value/actual value of work.
- 2. 2.5% of the total estimated value would be recovered from the 1<sup>st</sup> Running Account Bill against initial security deposit. Balance 7.5% will be recovered from the 1<sup>st</sup> and subsequent running bills/final bill against security deposit at a rate of 10% of the total actual value of work executed on completion of work is recovered.

#### **Taxes & Duties**

The rate shall be inclusive of all taxes and duties and except service tax. Service Tax will be paid extra if the party give service tax registration details to HOC.

#### **Liquidated Damages**

Liquidated damages @ 0.5 percentage (½%) per week or part thereof to a maximum of 5% of total contract value shall be charged on the contractor in case the delay is attributable to the party.

#### Note:

This tender aims for already enlisted contractors for this work with HOCL Kochi Unit. Any new contractor who wish to empanel for this type of work may submit the credentials as detailed below so that they will be evaluated and pre-qualified and shall be considered for similar future work.

Credentials to be submitted for the pre-qualification.

- 1. Details of the Organization and the works carried out
- 2. Work Order copies of the work executed showing the order value for the last 3 years.
- 3. Man Power Organogram
- 4. Solvency Certificate from a Nationalized Bank
- 5. Annual Turn over for the last 3 Years.

Application should reach the office of the Dy. General Manager (P&A), Hindustan Organic Chemicals Limited, Ambalamugal, PIN – 682 302, Ernakulam on or before 30/06/2010

# **Schedule of Rates**

# Sub: <u>Annual Contract for Refractory Repair in Boiler</u>

SI.No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)
1	Refractory repair works combustion chamber and its floor (Access from inside of furnace) as per the scope of work.	$M^2$	80		
2	Refractory repair on top of combustion chamber below releaser tubes as per the scope of work	M <sup>2</sup>	40		
3	Refractory repair of combustion chamber (access through outer shell) as per the scope of work.	$M^2$	140		
4	Refractory repair for minor repair/to arrest gas leaks including at peep holes and access doors, as per the scope of work.	$M^2$	120		
5	Burner repairs as per the scope of work.	Nos.	8		
6	Refractory repair on flue gas baffle above back header tubes as per scope of work.	M <sup>2</sup>	60		
	TOTAL				

Signature of the Contractor

Name of the Contractor

Date:

### <u>Annexure – A</u>

# ESI, PF, Labour Law etc. – Requirements

#### 1. ESI As per the ESI Act 1948

The Contractor shall enroll all his men deployed for the work in the ESI scheme. Registration for all workmen under ESI scheme is also to be complied with.

#### 2. Safety Regulations and General Conditions of Contract

The Contractor should be strictly abide all the safety regulation of HOC specified in GCC. Contractor should obtain necessary safety work permit from authorised officer before starting the work every day, in every shift.

#### 3. Workmen Compensation

It will be your responsibility to meet all claims for compensation under workmen's Compensation Act 1923. ESI or under any other law in respect of sickness, accidents injury or death suffered by workmen engaged by you for carrying out the work. It shall be the sole responsibility of the contractor to comply with Employee's State Insurance Act 1948. You will also be responsible and liable in respect of claims for damage to property or persons arising from or in the course of execution of the contract work undertaken by you. You hereby agree that you shall keep HOC fully indemnified in respect of claims under the Workmen Compensation Act and all other claims aforesaid and you shall not under any circumstances raise any dispute with regard to the same.

#### 4. Personal Protective Equipments (PPE)

You are requested to use personal protective equipment such as

- 1. Safety Helmet
- 2. Safety belts
- 3. Welder's Personal Protective equipment like goggles, gloves, shoes and face shield
- 4. Goggles and face shield

It is the basic responsibility of the Contractor to provide all the safety gadgets (PPE's) as mentioned above to all their Supervisors/Workers.

And without these PPE's Contractor will not be allowed to carryout any job, which may please be noted.

#### 5. Labour Laws & Provident Fund

You are requested to possess:

1. A Licence from the Labour Dept. under Contract Labour (Regulation and Abolition) Act 1970.

2. A separate PF Code under the Employee PF Act – 1952 and also furnish details of CPF Contribution payment made with the Regional PF Commissioner.

### 6. Guidelines to Contractors/Suppliers for Environmental Protection

- Contractors/suppliers shall ensure that impact due to the environmental aspects of goods and services is minimum.
- Effluent generated during the activity is to be routed to effluent treatment plant as per the instructions given by the Engineer-in-Charge.
- Hazardous waste generated during the activity is to be disposed in accordance with Hazardous Waste (Management & Handling) Rules as per the instructions given by the Engineer-in-Charge.
- All other solid wastes are to be disposed as per the instructions given by the Engineerin-Charge.
- Avoid leaks and spills to minimise the impact on environment. In the case of any leaks/spills immediately inform Engineer-in-Charge to take appropriate corrective action.
- If the item handled falls under hazardous category, please ensure that:
  - a. Product literature including MSDS/TREM Card etc. accompany the consignment.
  - b. Packing and labeling are in accordance with the requirement of Manufacture, Storage & Import of Hazardous Chemicals Rules.

#### 7. Confined Space Entry

If entry into a confined space (like inside entry to columns, heat exchanger shells, vessels, filters, spheres, bullets, boilers etc.) is a part of the work, contractor should register the name and other details in the register kept for the purpose each time. All safety regulation has to be adhered and permit to be obtained before entering into a confined space. Also after coming out from the confined space, the worker/supervisor has to report to the Engineer-in-Charge each time without fail. Any deviation in this register will not be permitted in any case.