

# **PUNJAB DYERS ASSOCIATION FOCAL POINT MODULE**

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## **TENDER DOCUMENT FOR**

**“Designing, Providing, Constructing, Erecting and Commissioning of 40 MLD average capacity Common Effluent treatment Plant for Focal point module based on Sequential Batch Reactor Technology (SBR Technology) & ASP Technology on Turnkey basis including Operation and Maintenance for 10 years at Tajpur Road, Ludhiana, Punjab.”**

## **VOLUME – II REVISED FINANCIAL BID**

**PUNJAB DYERS ASSOCIATION, FOCAL POINT MODULE**

**June 2014 – revised**

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## PRICE SCHEDULE

### 1.1 Name of Work

Designing, providing, Constructing, Erecting and Commissioning of 40 MLD average capacity Common Effluent treatment Plant for Focal point module based on Sequential Batch Reactor Technology (SBR Technology) and Activated sludge process technology (ASP) on Turnkey basis including Operation and Maintenance for 10 years at Tajpur Road, Ludhiana, Punjab.

### 1.2 General

The Price Schedule shall be with reference to the Notice Inviting Tender, Instruction to Bidders, Conditions of Contract, Scope of Work and Technical Specifications of the Tender Documents and Minutes of Pre Bid Meeting/Addendum/Corrigendum subsequently issued to the Bidder.

The Price Schedule, Notice Inviting Tender, Instruction to Bidders, Conditions of Contract, and Scope of work and the Technical Specifications for Civil, Mechanical, Electrical, Instrumentation and O&M Works and Minutes of Pre Bid Meeting/Addendum/Corrigendum subsequently issued to the Bidder form an integral part of this Contract and shall be read in Conjunction.

Bidder shall quote his Price for the following works as per Tender and Minutes of Pre Bid Meeting/Addendum/Corrigendum subsequently issued to the Bidder.

1. Capital Cost Construction of 40 MLD Capacity Common Effluent Treatment Plant at Tajpur Road, Ludhiana.
2. O&M of 40 MLD Capacity Common Effluent Treatment Plant at Tajpur Road, Ludhiana for 10 years including manpower, dosing chemicals, consumables, spares, tools and tackles, all complete except power cost.
3. Energy Cost for **10 Years** at 10% discount rate.

The Rates and Prices in the Price Schedule shall be deemed to cover all the contractual obligations under this contract including packing and forwarding, loading and unloading, transportation up to respective Site, insurance, octroi if applicable, all applicable taxes, duties and any other costs required to complete the project as per Tender provisions.

Contractor shall provide the detailed price-break up for the work within 2 weeks of the award of Works by mutual discussions.

### 1.3 Civil Works

The Civil Works shall include all the Works indicated in the Drawings and as specified in the Scope of Work given in Volume I. Any additional item if required from process point of view and for better performance of the plant, shall be considered while quoting Bid.

All Items under Civil Works are inclusive of all excavation in any type of strata at required depth including dewatering of sub-soil water for concreting and other works, refilling the sides of excavation after construction of structure, disposing of surplus soil etc. complete as detailed in Volume I and as directed by the Engineer-in-charge.

All items of Piping Works shall be inclusive of excavation in any type of strata including supply, laying, jointing and testing of all pipelines, specials, valves and construction of sewer appurtenances, valve chambers, pipe supports, pedestals and all types of labour complete in all respect as detailed in Volume I and as directed by the Engineer-in-charge.

**1.4 Mechanical, Electrical and Instrumentation Works**

The Scope of Work under the Contract shall include all the works indicated in the Drawings and as specified in the Scope of Work given in Volume I.

**1.5 Performance Run and Operation & Maintenance Works**

The Scope of Work under the Contract shall include all the works as specified in the Scope of Work given in Volume I.

**1.6 Currency**

The Bidder shall quote all Prices in the Price Schedule in Indian currency in words and in figures both.

**1.7 Validity of Offer**

The Offer shall be valid for a period of 120 days from the date of submission of the Bid and till the Bidder withdraws his Offer in writing beyond 120 days.

**1.8 Taxes**

Income Tax, Works Contract Tax, any surcharge or any other Tax as applicable from time to time will be deducted from the payments of the Contractor, at source, as applicable.

The Bidder shall include in his Price Bid, Trade Tax, Income Tax, Works Contract Tax, any surcharge, Sales Tax and all other Central Govt. and State Govt. Taxes and Duties as applicable. Payment will be reimbursed for any new Tax/duties or any increase in Tax/duties during execution of the Works.

**1.9 Terms of Payments**

As per Attachment – I to Price Schedules.

**1.10 Price Variation**

No price variation is payable during construction, commissioning and O&M period under this contract.

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Company Seal

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Signature of the Bidder

**I. SUMMARY OF BID VALUE -**

SR NO	WORK	AMOUNT Rs.	
		SBR TECHNOLOGY	ASP TECHNOLOGY
A	Designing, providing, constructing, Erecting and Commissioning of 40 MLD average capacity Common Effluent treatment Plant for Focal point module based on Sequential Batch Reactor Technology (SBR Technology) and ASP Technology on Turnkey basis at Tajpur Road, Ludhiana, Punjab.		
B	O&M of 40 MLD Capacity Common Effluent Treatment Plant at Tajpur Road, Ludhiana based on Sequential Batch Reactor (SBR) technology and ASP Technology for 10 years including supply of all material, chemicals & consumables, sludge disposal, labour & T&P, etc. complete excluding cost of Power & Diesel for DG Set.		
	TOTAL....(A+B)		
	Amount in Words in Rs.		

**Note:**

1. The Price quoted by the Bidder above are inclusive of Packing and Forwarding, Loading and Unloading, Transportation up to respective Site, Insurance, Entry tax, if applicable, Trade Tax, Income Tax, Works Contract Tax, any Surcharge, Sales Tax and all other Central Govt. and State Govt. Taxes and Duties as applicable and any other Cost required to complete the project as per Tender provisions.
2. The Price quoted by the Bidder above is final and binding to the Bidder.

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Company Seal

Signature of the Bidder

**II. SUMMARY OF BID EVALUATION-**

SR NO	WORK	AMOUNT Rs.	
		SBR Technology	ASP Technology
<b>A</b>	<b>Design, Construction, Supply, Installation, Testing and Commissioning of 40 MLD Capacity Common Effluent Treatment Plant at Tajpur Road, Ludhiana based on Sequential Batch Reactor (SBR) technology and ASP Technology including supply of all Material, Labour &amp; T&amp;P etc. complete</b>		
<b>B</b>	<b>O&amp;M of 40 MLD Capacity Common Effluent Treatment Plant at Tajpur Road, Ludhiana based on Sequential Batch Reactor (SBR) technology and ASP technology for 10 years including supply of all material, chemicals &amp; consumables, sludge disposal, labour &amp; T&amp;P, etc. all complete, excluding cost of Power &amp; Diesel for DG Set.</b>		
<b>C</b>	<b>Capitalized Energy Cost</b>		
a.	Guaranteed Power Consumption for CETP including main raw effluent pumping station, plant area and building lighting at Rated (Design) Capacity and Influent parameters, kWh/d		
b.	Cost of Power per day calculated @ [(a)*7.00]		
c.	Cr = Annual Cost of Power, [365*(b)]		
d.	<b>Cc = Discounted net Power Cost for 10 Years at 10% discount rate (Cr*6.14)</b>		
	<b>GRAND TOTAL.....(A+B+C)</b>		

**Amount in words**

1. For SBR Technology (A+B+C): Rs.....
2. For ASP technology: (A+B+C) :Rs.....

**Note:**

1. The Price quoted by the Bidder above are inclusive of Packing and Forwarding, Loading and Unloading, Transportation up to respective Site, Insurance, Octroi if applicable, Trade Tax, Income Tax, Works Contract Tax, any Surcharge, Sales Tax and all other Central Govt. and State Govt. Taxes and Duties as applicable and any other Cost required to complete the project as per Tender provisions.
2. The Price quoted by the Bidder above is final and binding to the Bidder and same shall be considered for Bid Evaluation. However, the job will be awarded on actual value quoted by the bidder in Schedule I: Summary of Bid Value.
3. Being L1 is not the criteria for award of the work.

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Signature of the Bidder with company seal



**III. Operation & Maintenance cost breakup**

Sr. No.	Year	Cost per month in Rs. (I)		Month (II)	Amount per year in Rs. (I x II)	
		SBR	ASP		SBR	ASP
1	1 <sup>st</sup> year			12		
2	2 <sup>nd</sup> year			12		
3	3 <sup>rd</sup> year			12		
4	4 <sup>th</sup> year			12		
5	5 <sup>th</sup> year			12		
6	6 <sup>th</sup> Year			12		
7	7 <sup>th</sup> year			12		
8	8 <sup>th</sup> year			12		
9	9 <sup>th</sup> Year			12		
10	10 year			12		
<b>TOTAL CARRIED FORWARD TO SUMMARY OF BID &amp; BID EVALUATION SHEET (B)</b>						

### Operation & Maintenance cost Break up for payment purpose

Sr. No.	Year	Month	O&M- FIXED COSTS in Rs.				O&M- VARIABLE COSTS in Rs.						
			Fixed cost Rs. / month in Lakh		Total Fixed cost Rs./ year in Lakh		Flow in m3/day	Variable cost in Rs. per m3 of effluent treated		Variable cost per day in Rs. (Lakh)		Variable Cost per year in Rs. (Lakh)	
			SBR	ASP	SBR	ASP		SBR	ASP	SBR	ASP	SBR	ASP
		a	b	c	= a x b	= a x c	d	e	f	$g = d \times e / 10^5$	$h = d \times f / 10^5$	= g x 365	= h x 365
1	1 <sup>st</sup> year	12					40000						
2	2 <sup>nd</sup> year	12					40000						
3	3 <sup>rd</sup> year	12					40000						
4	4 <sup>th</sup> year	12					40000						
5	5 <sup>th</sup> year	12					40000						
6	6 <sup>th</sup> Year	12					40000						
7	7 <sup>th</sup> year	12					40000						
8	8 <sup>th</sup> year	12					40000						
9	9 <sup>th</sup> Year	12					40000						

			O&M- FIXED COSTS in Rs.				O&M- VARIABLE COSTS in Rs.							
Sr. No.	Year	Month	Fixed cost Rs. / month in Lakh		Total Fixed cost Rs./ year in Lakh		Flow in m3/day	Variable cost in Rs. per m3 of effluent treated		Variable cost per day in Rs. (Lakh)		Variable Cost per year in Rs. (Lakh)		
			SBR	ASP	SBR	ASP			SBR	ASP	SBR	ASP	SBR	ASP
		a	b	c	= a x b	= a x c	d	e	f	g= d x e / 10 <sup>5</sup>	h =d x f / 10 <sup>5</sup>	= g x 365	= h x 365	
10	10 <sup>th</sup> year	12					40000							

**Note:** Based on above fixed and variable cost, O&M payments will be made to the contractors as per terms of payment. **Fixed cost** means, cost payable irrespective of any flow conditions, which will include manpower, plant maintenance, texting/laboratory expenses and any other fixed expenses which will not affect due to flow variations).

**Variable cost** means, cost payable based on m3 of effluent treated which includes, cost of dosing chemicals, sludge handling and disposal and any other expenses which will vary due to changes in effluent quantity. Please note that fixed cost will be paid irrespective of the flow variations. Variable cost will be paid based on actual effluent quantity treated on Rs./ m3 basis. Bidder should provide necessary facility and log book to measure the flows on daily basis. This shall be counter signed by the authorised representative of the PDA. Power cost and Diesel charges will be paid extra at actuals by the PDA subject to the tender conditions.

**ATTACHMENT – I****TERMS OF PAYMENTS**

The payments will be released as per following Payment Terms. The total amount of payments to be made shall not exceed the quoted Price. The Employer and Contractor shall make necessary adjustments on payments to be released as the work proceeds based on the actual progress of the works. Tenders with any deviation on payment terms will be considered as non-responsive and will be summarily rejected. Successful bidder shall submit the detailed payment break up after award of the work.

- **Mobilization Advance: No mobilization advance is payable under this contract.**
- **Retention Amount:** Retention @ 2% will be deducted from every running bill. This retention will be released on completion of commissioning and trial run period & obtaining consent to operate. However, there will not be any retention on O&M cost.

**I. Payment against Works (against Monthly Running Bills)**

<b>Sr. No.</b>	<b>Items</b>	<b>Release of Payments</b>
<b>1.0</b>	<b>Approval of Drawings and Documentation</b>	<b>Shall not exceed 5% of the Total Contract Value excluding O &amp; M</b>
	Approval of Basic Engineering Package including preparation of DPR & obtaining consent to establishment	40 %
	Approval of Detailed Engineering Package	60 %
<b>2.0</b>	<b>Civil Works</b>	<b>Shall not exceed 45% of the contract value excluding O&amp;M</b>
<b>2.1</b>	<b>Liquid Retaining Structures</b>	
	On Completion of Excavation	5%
	On completion of bottom raft on pro-rata basis against monthly running bills	30%
	On completion of Side wall up to half of the height on pro-rata basis against monthly running bills	30%

Sr. No.	Items	Release of Payments
	On completion of Side wall up to full height on pro-rata basis against monthly running bills	20%
	On completion of water proofing and tightness test on pro-rata basis against monthly running bills	5%
	On completion of balance work on pro-rata basis against monthly running bills	5%
	On completion of commissioning and after 30 days of issuance of taking over certificate	5%
<b>2.3</b>	<b>Various Buildings / Sheds</b>	
	On Completion of Excavation	5%
	On completion of on foundation on pro-rata basis against monthly running bills	25%
	On completion of Superstructure including roof slab on pro-rata basis against monthly running bills	30%
	On completion of brick work/block work on pro-rata basis against monthly running bills	20%
	On completion of Internal and External Plaster on pro-rata basis against monthly running bills	5%
	On completion of Painting on pro-rata basis against monthly running bills	5%
	On completion of erection works	5%
	On completion of commissioning and after 30 days of issuance of taking over certificate & obtaining consent to operate	5%
<b>3.0</b>	<b>Supply, Installation and Commissioning of mechanical, electrical, instrumentation equipments (both outside and within country) and other Services</b>	<b>Shall not exceed 50% of the contract value excluding O&amp;M</b>
	On supply of Machinery / Equipment at site on pro-rata basis against monthly running bills	90%
	On completion of Erection Works	5%
	On completion of commissioning and trial run period & obtaining consent to operate	5%

## II. Payment against O & M Works

Sr. No.	Items	Release of Payments
1.0	Against Quarterly Running Bills	100% of Running Bill Value as per cost breakup.

Signature of the bidder with company seal