

Name of Work "Construction of 100 KLD Sewage Treatment Plant at INST Campus at Sector-81, Knowledge City, Mohali (Punjab)-140306" - reply/clarification to vendor's queries .				
S. No	Description	Reference	Observation	Clarifications
1	Retention time for FAB/ MBBR Tank	Part B,Page 49	It is given as 10-12 hours which is very large. The retention time for FAB tank should be approx. 3.5 to 4 hours	FAB tank is designed considering BOD as 350 PPM with media loading rate as 10 gm/m ² /day. Surface area of media is considered as 400m ² /m ³ of media. The tank capacity adopted as 3 times the volume of media which gives capacity of tank as 26.25m ³ . We have taken 30m ³ FAB tank which in our opinion is correct. Please go as per tender.
2	Recirculation of Sludge	Part B, Page 49	Sludge should be recirculated from Tube Settler Tank to Anoxic tank	OK noted. Please go ahead.
3	Capacity of Sludge recirculation pump	Part B, Page 50	Capacity given as 12 m ³ /hr which is too large. Sludge removal pump of 5 m ³ /hr can be used to recirculate the sludge to anoxic tank and to FAB tank.	Sludge re-circulation pump is designed with 4 times the capacity of average flow into the aeration tank. Considering 20 hours operation time capacity of average flow comes out to be 5m ³ /hr. Capacity of circulation pump will be 5m ³ /hr x 4 = 20m ³ /hr. Go as per capacities given in the tender for better performance of the plant
4	Chlorine Contact Tank	Part B, Page 51	Filter Feed Tank can be used as the Chlorine Contact Tank. There is no need to construct additional tank.	Not clear to us. There is no Chlorine contact tank in our scheme. Please refer layout drawings.
5	MOC of Pressure Dual Filter and Activated Carbon Filter	Part B, Page 51	MSEP (MS Epoxy Painted) or MSFRP (Fiber Reinforced Plastic) filter should be used to avoid the any type of corrosion	We have taken MSRL filter. Go as per tender.
6	Hypo Dosing System	Part C, Page No.10	flow rate for dosing pump is given as 12000 lph. It should be 12 lph	Please read the item carefully. It is written chlorine dosing pump should be suitable for 12000 lph flow. Please quote for chlorinator pump accordingly.
7	Flow rate for Tertiary Treatment	Part B, Page No. 51	It is given as 12 m ³ /hr (8 hours operation), whereas it should be atleast 5 m ³ /hr (20 hours operation)	Go as per tender with 8 hour operation of filtration plant.
8	Sludge Recirculation Pumps from FAB-2 tank to Anoxic Tank	Page No. 50, Part-B, 3.1.2.4(d)	Recirculation of sludge should be maximum 50% of average flow; hence the capacity of pump should not be more than 6.3 m ³ /hr @ 10mtr head.	Reply same for Sl. No. 3.
9	Filter Feed Pumps (1W+1S) each of capacity 12 m ³ /hr @ 25m head.	Page No. 50, Part-B, 3.1.2.4(f)	The average flow of incoming sewage is 4.2 m ³ /hr, hence for synchronization of plant filter feed pump should be design for 22hrs; therefore filter feed pump capacity will be 5m ³ /hr @ 25m head.	Filter feed tank, treated water tank & ultra-filtration tank of total capacity 90m ³ has been provided to maintain synchronizing of the plant. Go as per capacity given in the tender document
10	Design flow rate for DMF, ACF & UV reactor is 12 m ³ / hr	Page no.51, Part- B, 3.1.2.4(i), (j), (l)	In reference to above S. No.2; Item no.i, j, l will be design for 5 m ³ /hr	Go as per tender.

S. No	Description	Reference	Observation	Clarifications
11	Submersible mixer suitable for 10.0 m ³ Anoxic tank	Page no. 51, Part-B, 3.1.2.4 (k)	For such small capacity of plant submersible mixer is not required	Anoxic mixer is needed for proper nitrification. Go as per tender.
12	Chlorinator Suitable flow rate 12000 LPH	Page No. 10, Part-C, 1.13 (a)	Suitable flow rate 5000 LPH	Go as per tender. Chlorinator should be suitable for 12000 lph flow rate.
13	Ground water level	General	We came to know that the level of ground water is very high and in tender there is no provision of dewatering the water required during excavation	Mentioned in Serial No. 1.1.80 (Part - B, Page 17) of the Special Conditions
14	Ultra Filtration Integrator	Page no. 55 Sl.no 25	As it is only single make and leading to monopoly plz consider our make OPEL too, we have done very similar installation	OK noted. Go ahead.
15	Three similar works each of value not less than ₹78.00 lakh or two similar work of aggregate value not less than ₹ 117.00 lakh or one similar work of value not less than ₹.156.00 lakh in last 7 years ending upto Previous day of last date of submission of tender. Similar works means the work of Sewage Treatment plant including Sewer lines".		Definition of similar work should be changed as "sewage treatment plant" . As there is no sewerage work as per BOQ"	(i) Similar works means the work of Sewage Treatment plant including Sewer lines". To be read as similar works means the work of Sewage Treatment plant". or (ii) Yes agreed Similar works means the work of Sewage Treatment plant "
16	Financial qualification of bidder is not mentioned in tender		Kindly add	Please refer Annexure- III (Attached)
17	FACTORY ASSEMBLED HPN System Make - EBARA PUMPS/GRUNDFOS		there are only 2 makes, Xylem amke should also be added	Go as per tender.
18	DO METER/EM FLOW METER/INSTRUMENTATION Makes		RIASA does not manufacture these equipments, RIASA is OEM of STP	Please go with other makes of these items given in list of approved makes.
19	ULTRA FILTRATION INTEGRATOR		No need of this item's make, it is a kind of installation. So it should be deleted, RIASA is company who deals in Sewage treatment plants and has a presence in market since one year only, if department wants the make of this item then please add premier-tech,Brisanzia,Wastech,Hydrocon,Essel Enviro, SBS Enviro etc.	OK noted. Go ahead with Premier-tech, Brisanzia, Wastech or OEPL make.
20	Dewatering is required at site what will be costing?			Mentioned in Serial No. 1.1.80 (Part - B, Page 17) of the Special Conditions
21	When will O&M start as the plant will complete as on 2020			The item is very clear. Go as per item description. Refer Suhead-B, item no. 1.26.

Annexure- III

ELIGIBILITY CRITERIA (TECHNICAL / FINANCIAL ELIGIBILITY OF BIDDER)

Contractors/ bidders who fulfill the following minimum criteria shall be eligible to apply. Joint ventures / Consortium are not accepted.

a) Should have satisfactorily completed the works as mentioned below during the last seven years ending previous day of last date of submission of bids

i) Three similar completed works each costing not less than Rs.
78.00 lakh or

Two similar completed works, each costing not less than Rs.
117.00 lakh.

Or

One similar completed work of aggregate cost not less than Rs. 156.00 lakh.

Similar works means the work of "Sewage Treatment plant"

The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum; calculated from the date of completion to previous day of last date of submission for bids.

b) Should have had average annual financial turnover of at least Rs. 100.00 lakh. On Civil/Electrical/STP construction works during the immediate last three consecutive financial years, balance sheets duly audited by Chartered Accountant, ending 31st March 2018. Year in which no turnover is shown, will also be considered for working out the average. No enhancement in the value of turnover for the past years shall be made for bringing them to current turnover level.

c) Should not have incurred any loss (profit after tax should be positive) during the immediate last two consecutive financial years, ending 31st March 2018, balance sheets, duly certified and audited by the Chartered Accountant.

d) Should have a solvency of Rs. 80.0 lakh. The Solvency certificate shall not be more than 90 days old.

For the purpose, "Cost of work" shall mean gross value of the completed work. This should be certified by an officer not below the rank of Executive Engineer / Project Manager or equivalent.