EXPRESSION OF INTEREST FOR PACKAGED TYPE SEWAGE TREATMENT PLANT OF CAPACITY 80 KLD AT IISER MOHALI, SECTOR 81-SAS NAGAR, PUNJAB.

- 1.1 The Plants are for above ground installation.
- 1.2 The Plants should be of Mild steel Construction of adequate strength, with FRP lining inside and Epoxy paint to approved colour outside.
- 1.3 The Plants should be capable of continuous operation or batch processing type operation and also suitable for operating on smaller loads and for shutting down and resuming operation after some time, if required.
- 2.1 The process should preferably be bacteria (or other organism) based for minimizing sludge production. The process should have the approval of Central Pollution Control Authorities.
- 2.2 The treated effluent should be suitable for re-cycling for use in flush Tanks and also for landscaping.
- 2.3 The Treated effluent should be free of colour and odour and should conform to the parameters laid down by the Central Pollution Control Authorities for re-cycling for the above uses.
- 2.4 The intending supplier should have minimum 3 Nos. of similar type of plants installed and commissioned such type of plants of approximately similar capacity or more and successfully operated the same (certificate of completion should be attached).
- 3.0 The Institute will provide the following:
- 3.1 Equalization Tank of recommended capacity.
- 3.2 Treated effluent storage tank.
- 3.3 Foundation platform for placing the plant, to suit the loading required.
- 3.4 Power supply as per requirement at a pillar box near the plant.
- 4.0 Other than the above all equipment electrical, mechanical, screens, filters and ladders and anything else required to make the plant complete and workable should all be part of the supply in the scope of the supplier.
- 5.0 Notwithstanding, the approvals of the Institute, the safety and serviceability of the plant is the sole responsibility of the suppliers.
- 6.0 The supplier should unconditionally indemnify the Institute from any legal proceeding by any persons or Body, National or International arising out of any patented process that may be employed in manufacture/supply by this equipment.
- 6.1 The supplier will get the test report with regard to the characteristics of the treated water approved/passed from the State Pollution Board and have to comply with other statutory norms, if required or deemed necessary for the smooth installation/operation of the Plant.
- 7.0 After installation and Commissioning the supplier should undertake to maintain (including spares and consumables, if any) the plant for a period of 1 year, under warranty. During this one year Institute personnel should be trained by the supplier.
- 8.0 Expression of Interest should be submitted in the following manner:
- 8.1 <u>Cover A</u> should contain the Technical particulars of the plant like process, flow diagram physical sizes and weight of the plant, list of electrical and mechanical components, and any other details the supplier would like to include, like time required for installation and commissioning detail of similar plants installed by the supplier should be given.

- 8.2 <u>Cover B</u> should contain the details of the financial offer [including all applicable taxes and levies). Supply and Erection commissioning to be quoted separately.
- Price quoted should include Transport up to the erection site in the Institute campus including unloading, and also transit insurance.
- 8.4 <u>Cover C</u> should contain the earnest money of Rs. 25,000/- in the form of demand draft in favour of Registrar, IISER Mohali, payable at Chandigarh.
- 8.5 All the 3 covers should be placed in our outer cover super scribed "Expression of Interest for 80 KLD packaged Sewage Treatment plant, so as to reach the undersigned on or before 3 pm on 5/08/13"

9. Method of selection:

- 9.1 The technical bids would be scrutinized and evaluated by a committee constituted by Director.
- 9.2 The technically qualified bidders would be invited to make a presentation to the committee and to discuss special conditions if any.
- 9.3 The committee will visit the site where the shortlisted vendors selected as an outcome of the presentation have installed the plant of similar capacity.
- 9.4 Based on the above the vendors will be finally selected for the purpose of opening of financial bids.
- 9.5 The Agency/contractor who are L-1 would be awarded the said work who should sign an agreement with the Institute and undertake the assignment immediately.
- 9.6 The Director IISER Mohali reserves the right to reject any or all the offers based on Technical Evaluation Report.
- 9.7 If the Financial offers of the successful applicant is considered by the Institute committee to be unreasonably high the Institute reserves the right to negotiate for the price to be reduced. If there is no agreement reached, the Institute reserves the right to cancel this invitation for Expression of Interest and decide further course of action by a fresh invitation or otherwise.

10. General Conditions:

- 10.0 Time for supply at the Institute's campus:2 months from the date of order.

 Performance guarantee: 5% of the quoted price to be furnished within 10 days of the placing of the order and must be valid for the time required for completing the work plus 60 days.
- 10.1 Security @ 5% will be deducted and will be released after completion of the defect liability period of one year from the date of handing over of the plant. Other taxes as applicable will be deducted.
- 10.2 The Institute can increase the Quantity as per the requirement.

11. <u>Dispute:</u>

- 11.1 Any dispute arising out of this work would be s referred to the sole Arbitrator to be appointed by the Director of the Institute.
- 11.2. If the dispute remains unresolved even after that, legal remedy may be sought, subject to the jurisdiction of the Hon'ble High Court of Punjab & Haryana, Chandigarh.

LIST OF MACHANICAL & ELECTRICAL WORKS FOR 80KLD PACKAGED STP

MACHANICAL			
Description	Make / Type	Specifications	Quantity
Bar Screen in SS	Coarse Bar	Coarse Screen SS-316	One No.
construction			Offe Ivo.
Submersible Sewage	Grundfos/ Kirloskar/KSB	Flowrate: 3.75 M ³ /hr to 5 M ³ /hr. Head: 10m to	
Transfer Pumps		15m.	Two Nos
-		Phase: 3 Phase, Power: 1 Kw,	(1W+1S)
		Type: Submersible.	
Air Blower	Everest/Kay	Airflow: 140 M ³ /hr, Type: Twinlobe, Presure:	Two Nos
	International /Usha	0.35 Kg/ Cm ² , RPM: 1500,	(1W+1S)
		Fliud Handled: Air	(144 - 13)
Motor for Blower	Kirloskar/ Seimens/ ABB/	Power: 5HP, Squirrel Cage Induction Motor,	Two Nos
	NGEF	Foot Mounted,	(1W+1S)
		Phase: 3 Phase.	(144 - 13)
Diffuser	OTT/ Rehaue	Type: Tube, Membrane:Silicon,	
	(Germany)	Size: 63 mm X 1000 mm,	One Lot
		Ear Clamp: SS304	
Eco Bio Carrier Media	Surface area min. 500	Make: Aqurise/Anose Kaldness/ Small	Required
	m^2/m^3	Boss	Quantity
Tube Settler	In House	FRP Baffle Tray in House with Media –	One Lot
		Hunters Germany	
Filter Feed Pumps	Grundfos/ kirloskar	Flowrate: 3.75 M ³ /hr to 5 M ³ /hr. Head: 20m to	Two Nos (1W+1S)
		25m, Phase: 3 Phase,	
		Power: 1.5Kw, Type: Monobloc	(= ==)
Pressure sand filter with	Pentair/ Aventura	Type: Vertical, MOC: FRP, Type of media:	
valves and media		Pebbles,	One No.
A	D	Coarse sand and fine sand.	
Activated carbon filter	Pentair/Aventura	Type: Vertical, MOC: FRP, Type of media:	One No.
valves and media	Forbes/Marshall/	Activated Carbon Flowrate: 2000 LPH to 50000 LPH	
Electro Magnetic Flow Meter	Endress Hauser	Flowfale: 2000 LPH to 50000 LPH	One No.
Interconnecting Piping,	TATA/Jindal/Astar	PVC, CPVC, MS, GI, SS	
Valves &fittings	TATA/JITIGAI/AStai	F V C, CF V C, IVIS, GI, 55	One Lot
Electrical Control panel	ABB/ L&T	In House	
with cables	ADD/ LQ1	III House	One No.
UV Sterilizer	Goodwin India/Grundfos/	UV Bulbs Quartz: 39 Watts,	
O V Sterinzer	Philips/Good Life	No. of Bulbs: 3, Flowrate: 3500 LPH, MOC:	One No.
	Timips, Good Erre	SS307	one ivo
Package Plant	MSFRP/ In House	MS Thickness: 6mm, FRP: 2.5mm, Paint: 2	
z uchuge z zune		Coats of epoxy paint,	One No.
		Port: MS Coupling required numbers.	
Sludge Bag Filter	Techno Fungi/Eco-P	SS	One No.
Sludge Recirculation	Kirloskar	3m³/hr, Head – 10 m	
Pump			One No.
Aeration Grid for	Tata/Jindal	MSEP	01
Equalization Tank			One lot
Coarse Diffuser	OTT/Rehaue	EPDM/Silicon	One lot
Air Grid for Bio Carrier	Tata/Jindal	MSEP	One lot
Filter Feed Tank	Syntax/Diplast	Capacity 2000 lt.	One no.
Pressure Guage	H. Guru	At Air Blowers and Pumps	As required
Level switches	Minilee	Inside tanks	As required

Note: The above list is only indicative. Any other component or system required to make the plant completely operational should be indicated by the supplier and included in the quotation.