

संदर्भ सं: भाविप्रा/बि बि एसआर/इंजी(सि)/एसटीपी/का.आ.-01/2021-22/  
Ref: AAI/BBSR/Engg(C)/STP/W.O-01/2021-22/ 6982-90

दिनांक: 27.04.2021  
Date: 27.04.2021

To,

श्री केम-इको इंजीनियरस/ M/s. Chem-Eco Engineers,  
206, शिव कृपा एंक्लेव प्लॉट no.-3/ 206, Shiv Kripa Enclave Plot No.3  
कॉम 1/27 आवास विकास अंबेडकरपुरम/ com 1/27 Awas Vikas Ambedkarpuram,  
कल्याणपुर/ Kalyanpur, कानपुर/ Kanpur,  
उत्तर प्रदेश-208017/Uttar Pradesh-208017.

विषय: बिजू पटनायक अंतरराष्ट्रीय हवाई अड्डा, भुवनेश्वर पर एसटीपी का संचालन एवं रखरखाव ।

Sub: Operation and Maintenance of STP at B.P.I Airport, Bhubaneswar.

संदर्भ: आपका निविदा दिनांक 09.04.2021को खोली गई ।

Ref. : Your Tender opened on 09.04.2021.

महोदय / Sir (s),

1. उपरोक्त कार्य के लिए आपका ई-निविदा अध्यक्ष, भारतीय विमानपत्तन प्राधिकरण की ओर से आप के द्वारा उद्धृत मद दर जिसकी कुल राशि 28,43,040.00 (रुपया अट्ठाईस लाख तैंतालीस हजार चालिश मात्र) (जीएसटी अतिरिक्त) जो कि निविदा की लागत रु. 36,47,660.00 से 22.06% कम है, स्वीकृत किया जाता है।

Your E-Tender for the work mentioned above is hereby accepted on behalf of Chairman, Airports Authority of India, at the item rates quoted by you totaling to Rs. 28,43,040.00.00 (Rupees Twenty Eight Lakhs Forty-three Thousand Forty only) (GST extra) which is 22.06% below the estimated cost put to tender of Rs. 36,47,660.00.

2. संयुक्त महा प्रबंधक (अभि.-सिविल), भारतीय विमानपत्तन प्राधिकरण, बि.पि.आइ. हवाई अड्डा, भुवनेश्वर इस कार्य के इंजीनियर प्रभारी होंगे। आपसे अनुरोध है कि आप संविदा करार पर हस्ताक्षर करने एवं उसे पूरा करने हेतु इस पत्र के जारी किए जाने के 10 (दस) दिनों के भीतर संयुक्त महा प्रबंधक (अभि.-सिविल), भारतीय विमानपत्तन प्राधिकरण, बि.पि.आइ. हवाई अड्डा के कार्यालय में उपस्थित हों। संविदा करार रु 100/- (सौ रुपये मात्र) के न्यायिकेतर (नॉन ज्युडिशियल) स्टाम्प पेपर पर बनाया जाएगा और स्टाम्प पेपर की लागत आपको वहन करनी होगी।

Jt. General Manager Engg (C), AAI, B.P.I. Airport, Bhubaneswar shall be the Engineer-in-Charge of the work. You are requested to attend office of Jt. General Manager Engg (C), AAI, B.P.I. Airport within 10 (ten) days from the date of issue of this letter, to sign and complete the contract agreement. The contract agreement shall be executed on a non-judicial stamp paper of value Rs. 100/- (Rupees One Hundred only) and the cost of the stamp paper shall be borne by you.

3. कृपया इस पत्र के जारी होने के 10 दिन में सुरक्षा जमा के लिए रु 2,84,304.00 (रुपया दो लाख चौरासी हजार तीन सौ चार मात्र) जमा करवा दें, ऐसा नहीं करने पर उक्त रकम संविदा दस्तावेज के पृष्ठ 16 पर दी गई शर्त 1A के अनुसार आपके रनिंग बिल से काट ली जाएगी।

Please deposit Rs. 2,84,304.00 (Rupees Two Lakh Eighty-four Thousand Three Hundred four only) towards Security Deposit within 10 (Ten) days from the date of issue of this letter, failing which, the same will be deducted as per condition of Clause no. 1A on page 16 of the Contract document.

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27/4/2021

4. आपसे अनुरोध है कि संविदा श्रमिक (विनियमन एवं समापन) अधिनियम 1970 और संविदा श्रमिक (विनियमन एवं समापन) केन्द्रीय नियमावली 1971, अधिन, केन्द्रीय और राज्य सरकार के न्यूनतम मजदूरी अधिनियम और ई.पी.एफ.एक्ट, 1952 एवं ई. एस. आई. एक्ट नियमों का पालन करें।  
You are requested to comply with provision of Contract Labour (Regulation and Abolition) Act of 1970 and contract (Regulation and Abolition) Central rules 1971, Minimum Wages Act & Rules, EPF Act, 1952 and ESI act thereof Central & State Governments.
5. आपको निर्देश दिए जाते हैं कि आप कनिष्ठ कार्यकारी (अभि. - सिविल)-I, भारतीय विमानपत्तन प्राधिकरण, बि.पि.आइ. हवाई अड्डा से तत्काल सम्पर्क करें जो कि आपको कार्यस्थल सुपर्द करने की व्यवस्था करेंगे।  
You are also directed to contact Jr. Executive (Engg - C)-I, AAI, B.P.I. Airport immediately who will arrange to hand over the site to you.
6. कृपया ध्यान दें कि कार्य को करने के लिए अनुमत समय 24 (चौबीस) महीने होगा जो की इस पत्र के जारी होने के बाद 10 वें दिन से शुरू हो जाएगा या जो भी पहले हो, वास्तविक तिथि।  
Please note that the time allowed for carrying out the work shall be 24 (Twenty-four) months and the same shall be reckoned from the 10<sup>th</sup> day after issue of this letter or actual date of start whichever is earlier.
7. संविदा के संबंध में आगे किया जाने वाला पत्राचार समान्यतः इंजीनियर प्रभारी से किया जाए।  
Any further correspondence in connection with the contract should normally be addressed to the Engineer-in-Charge.
8. कृपया इस पत्र की पावती भेजें तथा साथ में संलग्न इस पत्र की दूसरी प्रति पर स्वीकारोक्ति के रूप विधिवत हस्ताक्षर करके हमें वापस भेजें।  
Please acknowledge the receipt and return the duplicate copy of this letter enclosed herewith after duly signing it to the undersigned as a token of acceptance.
9. यदि कोई विसंगति पाई जाती है तो अंग्रेजी भाषा ही मान्य होगी।  
In case any discrepancy is found, then English version will be taken as correct.

धन्यवाद/ Thanking you.

भवदीय / Yours faithfully,



(रवि शंकर) / (Ravi Shankar)

सहायक महा प्रबंधक (अभि. - सिविल)-III

Asst. General Manager Engg (C)-III

भा.वि.प्रा., बि.पि.आइ. हवाई अड्डा, भुवनेश्वर

AAI, B.P.I. Airport, Bhubaneswar

संलग्न / Encl: 1. Bill of Quantity  
2. VII /Form- III & VII.

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## AIRPORTS AUTHORITY OF INDIA

## BILL OF QUANTITY

Name of Work: Operation and maintenance of STP at B.P.I.Airport, Bhubanewar(2020-21 &amp; 2021-22)

| Sl. No. | Description of Work / Item(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Units | Qty   | Rate     | Amount     |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|----------|------------|
| 1       | Operation, up keeping and maintenance of 165 KLD MBBR-Type STP comprising of all machinery equipment and accessories installed inside the STP Plant including, Filter Feed pumps, Treated Water Transfer Pump, Tube Settler, DMF, Softner, Air Compressors, Air Blowers, Electrical Panels, Diffusers of Equilization Tank, Inter Connecting pipes and Valves, dosing systems including supply of chemicals such as Hypochlorite(min. 100 kg per month), Nutrients for healthy bacteria culture such as Urea(min. 5 kg), DAP(min. 5 kg), Jaggery(min. 15 kg) as per requiremt and Brine NaCl for Softner regeneration (min. 1350 kg per month) as per requirement (Separate payment shall be made for supply of Hypochlorite, Urea, DAP, Jaggery, Brine NaCl) checking and cleaning of filter media, bio-media, softner resin as per schedule or once in a month.Submission of inlet and outlet water quality parameters on quartely basis from 3rd party laboratory. Maintenance and submission of records relating to operation of STP on daily basis. The above mentioned services shall include operations, minor repair and maintenance, ensuring serviceability/satisfactory working condition of the system by deploying 3 Nos. Operators(Semi-Skilled)(1 in each shift of 8 Hours per day ) and 2 Nos. helper for 2 shifts(Unskilled)(1 in each shift of 8 hours per day) on all days including Sundays and Holidays of the month complete as per direction of Engineer-in-charge. | Month | 24.00 | 83400.00 | 2001600.00 |
| 2       | Repair and maintenance of Feed water Transfer Pump (3 HP, 10 m3/hr) by Lifting the pump, dismantling the pipe line and further arrangements for standby pump operation, dismantling of pump motor, checking ,adjustment, repair of Shaft, seal, winding of motor, reassembling, testing and arrangements for placement in tank and operationalizing the pump as and when required complete as per direction of Engineer-in -Charge.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Each  | 2.00  | 5000.00  | 10000.00   |
| 3       | Repair and maintenance of Air Blower by dismantling of Air Blower (4 HP, 120 m3, 2500 mm WC), Checking and repairing/replacement of lobes, gears, filter, bearings, repair of Shaft, seal, winding of motor,lubrication of system and reinstalling all the components to opertionalize the Air Blower as and when required complete as per the direction of Engineer-in-Charge.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Each  | 2.00  | 10000.00 | 20000.00   |
| 4       | Repair and maintenance of Filter feed pump (3 HP, 15 m3/hr) by Lifting the pump , dismantling the pipe line and further arrangements for standby pump operation, dismantling of pump motor, checking ,adjustment, repair of Shaft, seal, winding of motor, reassembling, testing and arrangements for placement in tank and operationalizing the pump as and when required complete as per direction of Engineer-in -Charge.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Each  | 2.00  | 9000.00  | 18000.00   |
| 5       | Repair and maintenance of Treated water transfer pump (4 HP, 15 m3/hr) by Lifting the pump, dismantling of pipe line and further arrangements for standby pump operation, dismantling of pump motor, checking, adjustment, repair of Shaft, seal, winding of motor, reassembling, testing and arrangements for placement in tank and operationalizing the pump as and when required complete as per direction of Engineer-in -Charge.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Each  | 2.00  | 7500.00  | 15000.00   |
| 6       | Supply and filling up of Bio-Media by checking the Bio Media Level and top up with new bio media against fluidised losses as and when required complete as per direction of Engineer-in -Charge.(Payment shall be made for minimum 20% replacement of total volume)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Each  | 2.00  | 25000.00 | 50000.00   |
| 7       | Supply and filling up of Filter Media by checking the Filter media (Sand, pebble, gravels, GAC) and top up with new filter media against attrition & fluidised losses as and when required complete as per direction of Engineer-in -Charge.(Payment shall be made for minimum 15% replacement of total volume)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Each  | 2.00  | 15000.00 | 30000.00   |
| 8       | Supply and filling up of Softner Resin by checking resin volume as per design, ensuring top up with new resin( Na 42) against attrition & fluidised losses as and when required complete as per direction of Engineer-in -Charge.(Payment shall be made for minimum 15% replacement of total volume)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Each  | 2.00  | 25000.00 | 50000.00   |
| 9       | Checking and replacement of Faulty Electrical Main Control Centre(MCC) Parts Including Contactors, Relays, MCB, LPBS, Transmitters, switches,Indicators,etc. as and when required complete as per direction of Engineer-in -Charge.(Payment for this item shall be made only in case of major or multiple components failure requiring major maintenance.No payment shall be made for single faulty component replacement. Payment for single faulty component is covered in Item No.1).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Job   | 2.00  | 15000.00 | 30000.00   |
| 10      | Checking and replacement of Faulty Valves, NRVs and pipe( of various dia.) network to ensure free flow of filtered and unfiltered water throughout the STP and peripheral area as and when required complete as per the direction of Engineer-in-Charge.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Each  | 4.00  | 10000.00 | 40000.00   |

20/12/2021

| Sl. No. | Description of Work / Item(s)                                                                                                                                                                                                                                                                  | Units | Qty      | Rate     | Amount            |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|----------|----------|-------------------|
| 11      | Checking and replacement of Coarse diffusers & Fine diffusers in Equilization Tank and MBBR Tank to ensure free flow of filtered and unfiltered water as and when required complete as per the direction of Engineer-in-Charge.                                                                | Job   | 2.00     | 20000.00 | 40000.00          |
| 12      | Providing and deploying Special Category Manpower (minimum 3 nos. of manpower) with Tools, required safety PPE kit and Tackles for cleaning of choked sewerage network, Manhole chambers, Attached Pit, Collection Tanks as and when required complete as per direction of Engineer-in-charge. | Each  | 4.00     | 7500.00  | 30000.00          |
| 13      | Supply of Hypochlorite (Conforming to IS 11673) in packed condition at site as per the direction of Engineer-in-charge.                                                                                                                                                                        | kg    | 2400.00  | 20.00    | 48000.00          |
| 14      | Supply of Nutrients such as DAP in packed condition at site as per the direction of Engineer-in-charge.                                                                                                                                                                                        | kg    | 120.00   | 20.00    | 2400.00           |
| 15      | Supply of Nutrients such as Urea in packed condition at site as per the direction of Engineer-in-charge.                                                                                                                                                                                       | kg    | 120.00   | 7.00     | 840.00            |
| 16      | Supply of Nutrients such as Liquid Jaggery in packed condition at site as per the direction of Engineer-in-charge.                                                                                                                                                                             | kg    | 360.00   | 550.00   | 198000.00         |
| 17      | Supply of Brine NaCl(Industrial Grade) for Softener regeneration in packed condition at site as per the direction of Engineer-in-charge.                                                                                                                                                       | kg    | 32400.00 | 8.00     | 259200.00         |
|         |                                                                                                                                                                                                                                                                                                |       |          |          | <b>2843040.00</b> |

**(Rupees Twenty-eight Lakh Forty-three Thousand Forty only)**

**N.B: The rates are exclusive of applicable GST.**

*रवि शंकर*  
*27/4/2021*

(Ravi Shankar)  
Asst. General Manager (Engg.Civil)-III  
AAI, B.P.I. Airport, Bhubaneswar

**Signature Not Verified**

Digitally signed by RAVI SHANKAR  
Date: 2021.04.27 17:13:10 IST  
Location: eProcurement System for Central PSUs