OIL INDIA LIMITED

(A Government of India Enterprise) P.O. Duliajan-786602, Assam, India E-mail: material@oilindia.in

INVITATION FOR BID NATIONAL COMPETITIVE BID

OIL INDIA LIMITED invites National Competitive Bid (NCB) through its e-procurement portal https://etender.srm.oilindia.in/irj/portal for the following items:

Tender No	Bid Closing/ Opening Date	• •	
SDI3039P17/P4	29.12.2016	Crew Cabin, Qty = 05 Nos	
SDI3020P17/P3	29.12.2016	Triangular Lattice Tower, Qty. – 05 Nos	
SDI3064P17/P3	29.12.2016	Transformer, Qty. – 02 Nos	
SDI3065P17/P4	29.12.2016	Wide Format Plotter, Qty. – 1 No	
SDI3078P17/P6	05.01.2017	Supply, Installation & Commissioning Of Ambient Air Quality Monitoring System, Qty. – 1 No.	

Tender fee (Non-refundable): Rs 1,000.00; Bid Closing/Opening Time: (11 Hrs.) IST/(14 Hrs.) IST; Period of sale of documents till One week prior to bid closing date.. The complete bid documents and details for purchasing bid documents, participation in Etenders are available on OIL's e-procurement portal https://etender.srm.oilindia.in/irj/portal as well as OIL's website www.oil-india.com.

NOTE: All addenda, Corrigenda, time extension etc. to the tenders will be hosted on above website and e- portal only and no separate notification shall be issued in the press. Bidders should regularly visit above website and e-portal to keep themselves updated.

9

OIL INDIA LIMITED

(A Government of India Enterprises) PO: Duliajan – 786602

Assam (India)

TELEPHONE NO. (91-374) 2808719

FAX NO: (91-374) 2800533

 $Email: sristi_jallan@oilindia.in \ ; erp_mm@oilindia.in$

FORWARDING LETTER

Tender No. : SDI3078P17 DT: 22.11.2016

Tender Fee : Rs 1,000.00

Bid Security : Applicable

Bidding Type : SINGLE STAGE TWO BID SYSTEM

Tender Type : Open Tender

Bid Closing / Opening on : As mentioned in the e-portal

Performance Security : Applicable

Integrity Pact : Applicable

OIL invites Bids for <u>SUPPLY</u>, <u>INSTALLATION & COMMISSIONING OF AIR OYALITY MONITORING SYSTEM – 1AU</u> through its e-Procurement site under **SINGLE STAGE TWO BID SYSTEM**. The bidding documents and other terms and conditions are available at Booklet No. MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders. The prescribed Bid Forms for submission of bids are available in the Technical RFx -> External Area -> Tender Documents

The general details of tender can be viewed by opening the RFx [Tender] under RFx and Auctions. The details of items tendered can be found in the Item Data and details uploaded under Technical RFX.

The tender will be governed by:

a) For technical support on various matters viz. Online registration of vendors, Resetting of Passwords, submission of online bids etc, vendors should contact OIL's ERP MM Deptt at following: Tel Nos = 0374-2807178, 0374-2807171, 0374-2807192. Email id = erp_mm@oilindia.in.

b) OIL's office timings are as below:

	Time (in IST)
Monday – Friday	07.00 AM to 11.00 AM; 12.30 PM to 03.30
	PM
Saturday	07.00 AM to 11.00 AM
Sunday and Holidays	Closed

Vendors should contact OIL officials at above timings only.

OIL Bank Details:

		Bank Details of Beneficiary
a	Bank Name	STAE BANK OF INDIA
b	Branch Name	Duliajan
с	Branch Address	Duliajan, Dist-Dibrugarh
d	Banker Account No.	10494832599
e	Type of Account	Current Account
f	IFSC Code	SBIN0002053
g	MICR Code	786002302
h	SWIFT Code	SBININBB479
i	Contact No.	9435554859
j	Contact Person Name	Mr. K.L.K.Banik, AGM
k	Fax No.	0374-2802729
1	Email Id	sbi.02053@sbi.co.in

- c) "General Terms & Conditions" for e-Procurement as per Booklet No. MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders.
- d) Technical specifications and Quantity as per **Annexure 1A**.
- e) The prescribed Bid Forms for submission of bids are available in the Technical RFx -> External Area > Tender Documents.
- f) Amendments to the NIT after its issue will be published on OIL's website only. Revision, clarification, addendum, corrigendum, time extension etc. to the tender will be hosted on OIL website only. No separate notification shall be issued in the press. Prospective bidders are requested to visit website regularly to keep themselves updated.
- g) Any sum of money due and payable to the contractor (including Security Deposit refundable to them) under this or any other contract may be appropriated by Oil India Limited and set-off against any claim of Oil India Limited (or such other person or persons contracting through Oil India Limited) for payment of sum of money arising out of this contract or under any other contract made by the contractor with Oil India Limited (or such other person or persons contracting through Oil India Limited).
- h) Bidder are advised to fill up the Technical bid check list (**Annexure EEE**) and Response sheet (**Annexure FFF**) given in MS excel format in Technical RFx -> External Area -> Tender Documents. The above filled up document to be uploaded in the Technical RFX Response.
- 1.0 Vendors having OIL's User ID & password may pay Tender Fee on-line through OIL's electronic Payment Gateway upto one week prior to the Bid closing date (or as amended in e-portal).

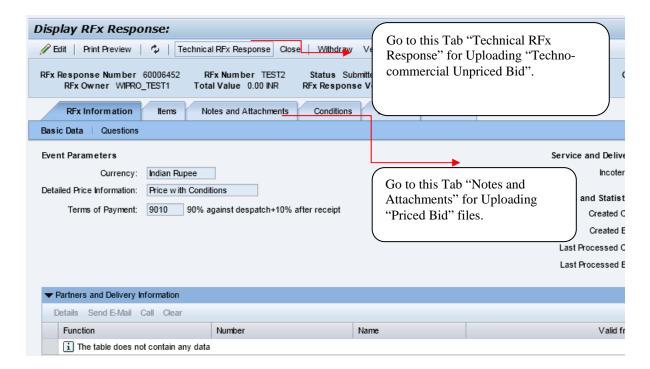
Vendors who do not have OIL's User ID & password, may generate User ID & password online by the Vendor by using the link for supplier enlistment given in OIL's e-tender portal and then pay Tender Fee on-line through OIL's electronic Payment Gateway upto one week prior to the Bid closing date (or as amended in e-portal).

Alternatively application showing full address/email address with Tender Fee (Non-refundable) of Rs. 1,000.00 in the form of crossed "Payee Account only "Bank Draft/Bankers' Cheque drawn by Bank and valid for 90 days from the date of issue of the same or in the form of Indian Postal Orders payable to the OIL is to be sent to DGM-Materials, Oil India Limited, P.O. Duliajan, Assam-786602. Application shall be accepted only upto one week prior to the Bid closing date (or as amended in e-portal). The envelope containing the application for participation should clearly indicate "REQUEST FOR ISSUE OF USER ID AND PASSWORD FOR E TENDER NO ..." for easy identification and timely issue of user ID and password. On receipt of requisite tender fee, USER_ID and initial PASSWORD will be communicated to the bidder (through e-mail) and will be allowed to participate in the tender through OIL's e- Procurement portal. No physical tender documents will be provided. Details of NIT can be viewed using "Guest Login" provided in the e-Procurement portal. The link to e-Procurement portal has been also provided through OIL's web site www.oil-india.com.

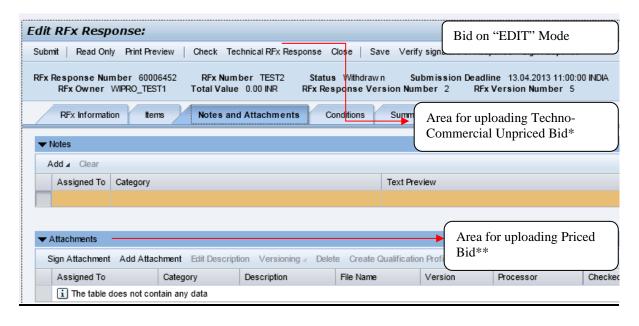
NOTE:

In case of MSE/PSUs/ Govt. Bodies / eligible institutions etc., they shall apply to DGM-Materials, Oil India Limited, P.O. Duliajan, Assam-786602 for waiver of Tender Fee upto one week prior to the Bid closing date (or as amended in e-portal).

- 2.0 The tender is invited under SINGLE STAGE-TWO BID SYSTEM. The bidders are required to submit both the "TECHNO-COMMERCIAL UNPRICED BID" and "PRICED BID" through electronic format in the OIL's e-Tender portal within the Bid Closing Date and Time stipulated in the e-Tender.
- 2.1 Please ensure that Technical Bid / all technical related documents related to the tender are uploaded in the Technical RFx Response-> User > Technical Bid only. The "TECHNO-COMMERCIAL UNPRICED BID" shall contain all techno-commercial details except the prices. Please note that no price details should be uploaded in Technical RFx Response.
- 2.2 The "PRICE BID" must contain the price schedule and the bidder's commercial terms and conditions. The prices of the items should be quoted in "Conditions Tab". Details of prices as per Bid format / Commercial bid can be uploaded as Attachment under the attachment option under "Notes & Attachments".
- 2.3 A screen shot in this regard is given below. Offer not complying with above submission procedure will be rejected as per Bid Rejection Criteria mentioned in Annexure-CCC.



On "EDIT" Mode- The following screen will appear. Bidders are advised to Upload "Techno-Commercial Unpriced Bid" and "Priced Bid" in the places as indicated above:



Note:

- * The "Techno-Commercial Unpriced Bid" shall contain all techno-commercial details **except the prices**.
- ** The "Price bid" must contain the price schedule and the bidder's commercial terms and conditions. For uploading Price Bid, first click on Sign Attachment, a browser window will open, select the file from the PC and click on Sign to sign the Sign. On Signing a new file with extension .SSIG will be created. Close that window. Next click on Add Atachment, a browser window will open, select the .SSIG signed file from the PC and name the file under Description, Assigned to General Data and clock on OK to save the File.
- 3.0 Please note that all tender forms and supporting documents are to be submitted through OIL's e-Procurement site only except following documents which are to be submitted

manually in sealed envelope super scribed with <u>Tender no.</u> and <u>Due date</u> to **DGM-Materials, Materials Department, Oil India Limited, Duliajan - 786602, Assam on or before the Bid Closing Date and Time mentioned in the Tender.**

- a) Original Bid Security
- b) Detailed Catalogue (if any)
- c) Any other document required to be submitted in original as per tender requirement

All documents submitted in physical form should be signed on all pages by the authorised signatory of the bidder and to be submitted in Duplicate.

- 4.0 Benefits to Micro & Small Enterprises (MSEs) as per OIL's Public Procurement Policy for Micro and Small Enterprises (MSEs) shall be given. Bidders are requested to go though ANNEXURE I of MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders for more details. MSE bidders are exempted from submission of Tender Fees and Bid Security/Earnest Money provided they are registered for the items they intend to quote.
- 5.0 Bidders are requested to examine all instructions, forms, terms and specifications in the bid. Failure to furnish all information required as per the NIT or submission of offers not substantially responsive to the bid in every respect will be at the bidders risk and may result in rejection of its offer without seeking any clarifications.
- 6.0 Bidders must ensure that their bid is uploaded in the system before the tender closing date and time. Also, they must ensure that above documents which are to be submitted in a sealed envelope are also submitted at the above mentioned address before the bid closing date and time failing which the offer shall be rejected.
- 7.0 Bid must be submitted electronically only through OIL's e-procurement portal. Bid submitted in any other form will be rejected.
- 8.0 **SINGLE STAGE TWO BID SYSTEM** shall be followed for this tender and only the PRICED-BIDS of the bidders whose offers are commercially and technically acceptable shall be opened for further evaluation.
- 9.0 a) The Integrity Pact is applicable against this tender. Therefore, please submit the Integrity Pact document duly signed along with your quotation as per BRC. OIL shall be entering into an Integrity Pact with the bidders as per format enclosed vide Annexure DDD of the tender document. This Integrity Pact proforma has been duly signed digitally by OIL's competent signatory. The proforma has to be submitted by the bidder (along with the technical bid) duly signed (digitally) by the same signatory who signed the bid, i.e., who is duly authorized to sign the bid. Uploading the Integrity Pact with digital signature will be construed that all pages of the Integrity Pact has been signed by the bidder's authorized signatory who sign the Bid. If any bidder refuses to sign Integrity Pact or declines to submit Integrity Pact with the offer, their bid shall be rejected straightway.
 - b) The name of the OIL's Independent External Monitors at present are as under:

SHRI RAJIV MATHUR, IPS (Retd.) Former Director, IB, Govt. of India, e-Mail ID: rajivmathur23@gmail.com

10.0 The tender shall be governed by the Bid Rejection & Bid Evaluation Criteria given in enclosed **Annexure-CCC**. However, if any of the Clauses of the Bid Rejection Criteria / Page 5 of 6

Bid Evaluation Criteria (as per **Annexure-CCC**) contradict the Clauses of the tender and / or "General Terms & Conditions" as per Booklet No. MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders elsewhere, those in the BEC / BRC shall prevail.

- 11.0 To ascertain the substantial responsiveness of the bid OIL reserves the right to ask the bidder for clarification in respect of clauses covered under BRC also and such clarifications fulfilling the BRC clauses in toto must be received on or before the deadline given by the company, failing which the offer will be summarily rejected.
- 12.0 Please do refer the User Manual provided on the portal on the procedure How to create Response for submitting offer.
- 13.0 If Bank Guarantee is submitted towards 'Bid Security', then bidders have to ensure that the Bank Guarantee issuing bank indicate the name and detailed address (including e-mail) of their higher office from where confirmation towards genuineness of the Bank Guarantee can be obtained.

NOTE:

Bidders should submit their bids (preferably in tabular form) explicitly mentioning compliance / non compliance to all the NIT terms and conditions of NIT.

Yours Faithfully

Sd-(S JALLAN) PO (IP) FOR: HEAD-MATERIALS Tender No & Date: SDI3078P17 DT: 22.11.2016

BID REJECTION CRITERIA (BRC) / BID EVALUATION CRITERIA (BEC)

The following BRC/BEC will govern the evaluation of the bids received against this tender. Bids that do not comply with stipulated BRC/BEC in full will be treated as non responsive and such bids shall prima-facie be rejected. Bid evaluation will be done only for those bids that pass through the "Bid Rejection Criteria" as stipulated in this document.

Other terms and conditions of the enquiry shall be as per General Terms and Conditions vide MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders. However, if any of the Clauses of the Bid Rejection Criteria / Bid Evaluation Criteria (BRC / BEC) contradict the Clauses of the tender or MM/LOCAL/E-01/2005 elsewhere, those in the BRC / BEC shall prevail.

<u>Criteria</u>		Complied Not	/
		Complied.	•
		(Remarks any)	if
1.0 BID REJECTION CRITERIA (BRC):		uny)	
The bid shall conform generally to the specifications, terms and in this document. Notwithstanding the general conformity of stipulated specifications, the following requirements will have met by the Bidders without which the same will be considered and rejected.	f the bids to the to be particularly		
A) FINANCIAL CRITERIA			
1.0 Technical and Financial Criteria:			
In addition to the general BRC/BEC, following Technical and shall be considered as on the original Bid Closing Date evidence to be provided along with the bid in Technical Area -> Tender Documents failing which the offer shall be	e. (Documentary RFx -> External		
Criteria	Complied /		
	Not Complied.		
	Documentary evidence submitted / not submitted		
a) Bidder should have experience of successfully executing at least 1 (one) similar order for Rs. 43.25 Lakh in preceding			
5 (five) years. "Similar Work" will be defined as successful completion of			
Design, Supply, Installation and commissioning of			
Continuous Ambient Air Quality Monitoring as			
per Air (Prevention and Control of Pollution) Act 1981, National Ambient Air Quality Standards (NAAQS),			

Guidelines for Ambient Air Quality Monitoring by	
CENTRAL POLLUTION CONTROL BOARD MINISTRY	
OF ENVIRONMENT & FORESTS, Govt. of India and as	
per TECHNICAL SPECIFICATIONS FOR CONTINUOUS	
AMBIENT AIR QUALITY MONITORING (CAAQM)	
STATION (REAL TIME) by Central Pollution Control	
Board, Govt. of India.	
b) Annual Financial Turnover of the bidder during any of	
preceding 03 (three) financial / accounting years from	
the original bid closing date should be at least Rs. 43.25	
Lakhs	
c) Net Worth of the firm should be Positive for preceding	
financial /	
Accounting year.	

Note -For (a): Documentary evidence in respect of the above should be submitted in the form of copies of relevant Purchase Orders along with copies of any of the documents in respect of satisfactory execution of each of those Purchase Orders, such as – (i) Satisfactory Inspection Report (OR) (ii) Satisfactory Supply Completion / Installation Report (OR) (iii) Consignee Receipted Delivery Challans (OR) (iv) Central Excise Gate Pass / Tax, Invoices issued under relevant rules of Central Excise / VAT (OR) (v) any other documentary evidence that can substantiate the satisfactory execution of each of the purchase orders cited above.

Note -For (b) & (c): Considering the time required for preparation of Financial Statements, if the last date of preceding financial / accounting year falls within the preceding six months reckoned from the original bid closing date and the Financial Statements of the preceding financial / accounting year are not available with the bidder, then the financial turnover of the previous three financial / accounting years excluding the preceding financial / accounting year will be considered. In such cases, the Net worth of the previous financial / accounting year excluding the preceding financial / accounting year will be considered. However, the bidder has to submit an affidavit/undertaking certifying that 'the balance sheet/Financial Statements for the financial year................................ (As the case may be) has actually not been audited so far'.

Note: For proof of Annual Turnover & Net worth any one of the following document must be submitted along with the bid:-

i) A certificate issued by a practicing Chartered Cost Accountant (with Membership Number and Firm Registration Number), certifying the Annual turnover & Net worth as per format prescribed in ANNEXURE-II.

OR

ii) Audited Balance Sheet along with Profit & Loss account."

B) COMMERCIAL:

i) Validity of the bid shall be minimum 120 days from the Bid Closing Date.

ii) Bid security:

The bid must be accompanied by Bid Security of **Rs 1,73,000.00** in OIL's prescribed format as Bank Guarantee or a Cashier's cheque or Demand Draft in favour of OIL. The Bid Security may be submitted manually in sealed envelope superscribed with Tender no. and Bid Closing date to Head Materials, Materials Department, Oil India Limited, Duliajan- 786602, Assam on or before the Bid Closing Date and Time mentioned in the Tender. **The Bank Guarantee towards Bid Security shall be valid for 7 months from Bid closing date.** (i.e. upto 05.08.2017). Cashier's cheque or Demand Draft shall be valid for minimum 90 days or as per RBI's guidelines, drawn on "Oil India Limited" and payable at Duliajan, Assam

Bid Security may also be paid online on or before the Bid Closing Date and Time mentioned in the Tender.

If bid security in ORIGINAL of above mentioned Amount and Validity is not received or paid online within bid closing date and time, the bid submitted through electronic form will be rejected without any further consideration.

For exemption for submission of Bid Security, please refer Clause No. 8.16 of General Terms and Conditions vide MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders.

The format of Bank Guarantee towards Bid Security (Annexure – VII) has been amended to Annexure – VII (Revised) and bidders should submit Bank Guarantee towards Bid Security as per Annexure – VII (Revised) only.

iii) Bids are invited under "Single Stage Two Bid System". Bidders have to submit both the "Techno-commercial Unpriced Bids" and "Priced Bids" through electronic form in the OIL's e-Tender portal within the bid Closing date and time stipulated in the e-tender. The Techno-commercial Unpriced bid is to be submitted as per scope of works and Technical specification of the tender and the priced bid as per the online Commercial bid format. For details of submission procedure, please refer relevant para of General Terms and Conditions vide MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders. Any offer not complying with the above shall be rejected straightway.

iv) Performance Security:

The successful bidder shall submit Performance Security as given below:

- a) 1st Performance Security @ 10% of PO value (for Supply + Installation & Commissioning charges) shall be submitted within 30 days of receipt of the formal purchase order failing which OIL reserves the right to cancel the order and forfeit the Bid Security. The Performance Security shall be valid for the entire period of Warranty of 1 year from the date of successful installation & commissioning plus 3(three) months.
- b) 2nd Performance Security @ 10% of 3 years PWMC value shall be submitted

before expiry of 1st Performance Security. The Performance Security shall be valid for the entire PWMC period of 3 years plus 3(three) months.

Bidders should undertake in their bids to submit Performance Security as stated above.

The Performance Security shall be in any one of the following forms:

- (a) A Bank Guarantee in the prescribed OIL's format valid for 3(three) months beyond the Warranty period indicated in the Purchase Order /contract agreement.
- (b) A Cashier's cheque or Demand Draft with validity of minimum 90 days or as per RBI's guidelines, drawn on "Oil India Limited" and payable at Duliajan, Assam.

The Performance Security for capital nature items like plant and machinery etc. shall be valid for 12 months from the date of commissioning plus 3(three) months or 18 months from the date of shipment/despatch plus 3(three) months whichever concludes earlier. However, for consumables like chemicals, cement, tubular etc. the Performance Security shall be valid for 12 months from the date of shipment/despatch plus 3(three) months.

The validity requirement of Performance Security is assuming despatch within stipulated delivery period and confirmation to all terms and conditions of order. In case of any delay in despatch or non-confirmation to all terms and conditions of order, validity of the Performance Security is to be extended suitably as advised by OIL.

- v) The prices offered will have to be firm through delivery and not subject to variation on any account. A bid submitted with an adjustable price will be treated as non-responsive and rejected.
- vi) Bids received after the bid closing date and time will be rejected. Similarly, modifications to bids received after the bid closing date & time will not be considered.
- vii) All the Bids must be Digitally Signed using "Class 3" digital certificate with Organisation's name (*e-commerce application*) as per Indian IT Act obtained from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India. The bid signed using other than "Class 3 with Organisation's Name" digital certificate, will be rejected.
- viii) Technical RFx Response folder is meant for Technical bid only. Therefore, No price should be given in Technical RFx Response folder, otherwise the offer will be rejected.
- ix) Price should be maintained in the "online price schedule" only. The price submitted other than the "online price schedule" shall not be considered.
- ix). A bid shall be rejected straightway if it does not conform to any one of

the following clauses:

- (a) Validity of bid shorter than the validity indicated in the Tender.
- (b) Original Bid Security not received within the stipulated date & time mentioned in the Tender.
- (c) Bid Security with (i) Validity shorter than the validity indicated in Tender and/or (ii) Bid Security amount lesser than the amount indicated in the Tender.
- (d) In case the Party refuses to sign Integrity Pact.
- (e) Annual Turnover of a bidder lower than the Annual turnover mentioned in the Tender.
- (f) Delivery: Maximum acceptable delivery of the material is 08 months from the placement of order.

INSTALLATION & COMMISSIONING: Within 02 months after receipt of clearance of site.

2.0 BID EVALUATION CRITERIA (BEC)

The bids conforming to the terms and conditions stipulated in the tender and considered to be responsive after subjecting to the Bid Rejection Criteria as well as verification of original of any or all documents/ documentary evidences pertaining to BRC, will be considered for further evaluation as per the Bid Evaluation Criteria given below.

A) TECHNICAL:

i) The bids will be evaluated as per NIT specification.

B) COMMERCIAL:

- i). To evaluate the inter-se-ranking of the offers, Assam Entry Tax on purchase value will be loaded as per prevailing Govt. of Assam guidelines as applicable on bid closing date. Bidders may check this with the appropriate authority while submitting their offer.
- ii) Priced bids of only those bidders will be opened whose offers are found technically acceptable. The technically acceptable bidders will be informed before opening of the "priced bid".
- iii) A job executed by a bidder for its own organization / subsidiary cannot be considered as experience for the purpose of meeting BEC.
- iv) To ascertain the substantial responsiveness of the bid OIL reserves the right to ask the bidder for clarification in respect of clauses covered under BRC also and such clarifications fulfilling the BRC clauses in toto must be received on or before the deadline given by the company, failing which the offer will be summarily rejected.

NOTE:

Bidders should submit their bids (preferably in tabular form) explicitly mentioning compliance / non compliance to all the terms and conditions of NIT.

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TECHNICAL SPECIFICATIONS WITH QUANTITY

Tender No & Date: SDI3078P17 DT: 22.11.2016

any)	
(Remarks if	
Complied. (Remarks if	
Not	
Complied /	

ITEM NO. 10

PROCUREMENT OF AMBIENT AIR QUALITY MONITORING SYSTEM as per Air (Prevention and Control of Pollution) Act 1981, National Ambient Air Quality Standards (NAAQS), Guidelines for Ambient Air Quality Monitoring by CENTRAL POLLUTION CONTROL BOARD MINISTRY OF ENVIRONMENT & FORESTS, Govt. of India and as per TECHNICAL SPECIFICATIONS FOR CONTINUOUS AMBIENT AIR QUALITY MONITORING (CAAQM) STATION (REAL TIME) by Central Pollution Control Board, Govt. of India for CGGS Madhuban – (QTY = 01 NO)

Item Description:

A. SCOPE OF WORK:

Supply, Installation, Commissioning and Annual Maintenance of Continuous Ambient Air Quality Monitoring System (AAQMS)as per Air (Prevention and Control of Pollution) Act 1981, National Ambient Air Quality Standards (NAAQS), Guidelines for Ambient Air Quality Monitoring by CENTRAL POLLUTION CONTROL BOARD MINISTRY OF ENVIRONMENT & FORESTS, Govt. of India and as per TECHNICAL SPECIFICATIONS FOR CONTINUOUS AMBIENT AIR QUALITY MONITORING (AAQM) STATION (REAL TIME) by Central Pollution Control Board, Govt. of India in CGGS&OTP-Madhuban.

Monitoring system shall be capable of continuous monitoring of SO2, H2S, NO2, NOx, PM 10, PM 2.5, HC (Methane and Non-Methane) CO, VOC, Benzene etc..

B. TECHNICAL SPECIFICATION:

The Continuous Ambient Air Quality Monitoring System (AAQMS) will consist of the following items –

- 1) AAQMS
- i. SO2 & H2S Analyser: 1 No.
- ii. NOX & NH3 Analyser: 1 No.
- iii. CO & CO2 Analyser: 1 No.
- iv. O3 Analyser: 1 No.
- v. VOC / BTEX Analyser: 1 No.
- vi. HC Analyser (Methane & Non Methane): 1 No.
- vii. SPM Analyser (for continuous measurement of PM-2.5): 1 No.
- viii.SPM Analyser (for continuous measurement of PM-10): 1 No.
- ix. Sampling Handling System for above analysers: 1 No.
- x. Multigas Calibration System for above Analysers (with Calibration Gas Cylinders, Regulators & Valves (1 Cylinder for each Gas): 1 No.

Page 1 of 13

- xi. Zero Air Generator: 1 No.
- xii. Local Data Acquisition System with PC, Printer and Data Acquisition System Software : 1 Set.
- xiii.Interconnecting power supply & signal grounding cables : 1 Lot.
- xiv.Uninterrupted Power Supply (UPS): 1 Set.
- xv. Central Data Acquisition System with PC, Printer and Data Acquisition System Software : 1 Set.
- xvi. Rack Cabinet with Telescopic slides, Overload protection, Power Distribution box, Cooling fans, Dust filters etc for mounting above Analyzers, Calibrators & Accessories on as required basis: 1 Set.
- 2) Meteorological Sensor
- i. Wind Speed: 1 Set.
- ii. Wind Direction: 1 Set.
- iii. Ambient Air Temperature: 1 Set.
- iv. Relative Humidity Sensor: 1 Set.
- v. Solar Radiation: 1 Set.
- vi. Rain Gauge: 1 Set.
- vii. Meteorological Mast: 1 Set.
- 3) Analyzer Shelter: 1 No.
- 4) Weather Proof Outdoor Digital Data Display Board: 1 No.
- 5) OFC communication devices and cable between Local Data Acquisition System & Central Data Acquisition System (Distance around 100m) and between Local Data Acquisition System and Display Board (Distance around 30m).

The AAQM System and the Vendor will have facility for transfer of Real Time Data from the measurement Point to State Pollution Control Board & Central Pollution Control Board through internet / GPRS link in future.

The AAQMS should comply with all the relevant national and international standards.

The AAQMS will be placed in a non hazardous area.

Any Civil job at site like construction of Foundation / Platform for placement of the Analyser Shelter and Structure for mounting the display Board etc. shall be carried out by the vendor.

C. VENDOR'S SCOPE OF SUPPLY INSTALLATION AND COMMISSIONING WORK WILL INCLUDE:

- (i) Shop testing and calibration, Factory acceptance Test of the complete system.
- (ii) Packing, forwarding and transportation of complete System.
- (iii) Installation (including laying of data communication cable, civil Jobs etc.), field testing, calibration and commissioning of the complete system including sample & calibration tubing and items loose supplied during transportation.
- (iv) Vendor shall provide all installation material including consumables to install the Analysers, sample conditioning systems and all other accessories to permit adjustments, calibration and maintenance.

- (v) Supply and installation of calibration gas cylinders along with their manifolds.
- (vi) Documentation, training of customer personnel and post sales warranty.
- (vii) Supply of special tools and equipments required for testing, calibration and maintenance of the system.
- (viii) Any other item/ activity required to complete in all respect for successful operation for Ambient Air Quality Monitoring stations.
- (ix) Vendor will have to supply for all analysers:

Sufficient consumable and replaceable spare parts for at least two years trouble free operation.

(x) Any other job not specifically mentioned here but required for Supply, Installation, Commissioning and trouble free operation of the AAQMS.

D. FUNCTIONAL REQUIREMENTS:

1. Sampling System:

The sampling system shall consist of all the necessary components, including sample probe, sample filters, pressure reducers, safety relief valves, moisture separators, flow regulators, flow meters, isolation valves etc. necessary to prepare the sample for proper analysis. Separate sample collection apparatus shall be used for collecting the samples for suspended particles and analysis of other gases in the atmosphere.

- (i) All components shall be sized and coupled so as to keep the sample volume to a minimum.
- (ii) Calibration zero and span gas connections shall be provided for each analyser.
- (iii) Sampling manifold shall be provided for each station.
- (iv) The sampling systems shall have various sub-assemblies as required.
- (v) Analysers shall be vented to the atmosphere individually or through a common vent system.

2. Piping and Tubing:

- (i) All tubing runs shall be either horizontal or vertical, with 90 deg tubing bends. Tubing shall be SS316L minimum. The tubing shall be run and arranged such that quick visual tracing is possible. All valves, gauges and flowmeters must be visible and accessible.
- (ii) Vent tubing, piping, fittings, valves, rotatmeters and other components shall be SS316 as a minimum.
- (iii) All tube fittings used shall be of SS316 as a minimum and shall be non-flare type "Swagelok/ Parker".

3. Calibration Equipment:

- (i) 2 no. of multi-gas calibrator shall be provided in each fixed AAQMS. This calibrator shall have the facility for automatic zero/ span calibration of all the analysers through permeation tubes and gas cylinders. These calibrators shall also provide automatic multipoint calibration of all analysers once a week. The calibrators shall be provided with permeation bench, tubes and two additional channels for the analysers.
- (ii) Calibration gas cylinders with auxiliaries like adapters, regulators, pressure gauge etc.shall be supplied for span and zero calibration of the analysers.
- (iii) Quantity of analyser calibration gas shall be calculated based on following:

Calibration gas cylinder shall be supplied for calibration of Analysers for minimum six month operation after warranty period and for startup and commissioning considering recommended calibration frequency by vendor for supplied analysers & calibration times required for each analysers or minimum calibration of all analysers at least thrice per year whichever is higher.

- (iv) Due importance shall be given to calibration during initial commissioning which requires more quantity of calibration. Calibration gas cylinders shall be supplied in two sets. One set of these cylinders shall be connected to the analyser and other set of cylinder shall be kept in the store or sent for filling.
- (v) All tubing between the cylinders and the analysers shall be complete and easily removable from either end.

4. Local Data Acquisition System:

Will comprise of PC, Printer and Data Acquisition System Software.

5. Central Data Acquisition System:

Will comprise of PC, Printer (laser printer) and Data Acquisition System Software for displaying real time data & average data over a period of ½, 1, 4, 8, 24 hours and report generation on an hourly/daily/weekly/monthly/yearly basis.

The PCs for LDAS & CDAS will be of reputed, well established make and will have the following minimum configuration -

i5 Processor, 5 GB RAM, 500 GB HDD, CD/DVD Drive, 19" LED/ LCD Monitor, 2 Serial, 1 Parallel ports, 4 USB Ports, HDMI Port, latest software.

6. Analysers:

Analysers should have LED / LCD Display, Built In storage for minimum 2 months or equivalent data, Built-in serial interface (RS 232 / RS 422), USB & TCP/IP connectivity and facility for auto ranging and auto calibration.

Analyzers shall be based on various Internationally approved and accepted measurement techniques,

The analysers should comply with relevant ISO / EN / RoHS / Indian standards and should be approved by USEPA / TUV / Relevant Indian Authorities.

In case of any deviation, the same need to be is clearly indicated in Proforma for Deviation.

6.1 SO2 Analyser:

- (i) Unless specified otherwise, the analyser measurement principle shall be based on UV fluorescence.
- (ii) Special filters shall be offered to minimise the interference of background components, which are of least interest in process stream.

6.2 Nitrogen Oxide Analysers:

- (i) Unless otherwise specified, the NO, No2 & NOX analyser measurement principle shall be Chemiluminescence type.
- (ii) Special filters shall be offered to minimise the interference of background components,

which are of least interest in process stream.

- 6.3 Carbon Monoxide Analyser:
- (i) Unless specified otherwise, the CO analyser shall be based on Non Dispersive IR Principle.
- (i) Filters, as required, will be provided.

6.4 HC Analyser:

- (i) Unless specified otherwise, the analyser measurement principle shall be based on the Flame Ionisation Detection (FID) for HC Analysers (For Methane and non-Methane Hydrocarbons).
- (ii) Probe & Filter material shall be selected to suit the process condition.

6.5 VOC / BTEX Analyser:

Unless a better system is adopted, the analyser measurement principle shall be based on Chromatographic separation of the measured components in gaseous phase coupled with detection of these components by a photo ionization detector.

6.6 Ozone (O3) Analyser:

Shall preferably be based on UV Photometry Principle.

- 7. Accessories to be provided for all Analysers:
- (i) Accessories will be provided by the vendor as per requirement for trouble free functioning of the complete ambient air quality monitoring system.
- (ii) Sufficient consumable and replaceable spare parts for at least two years trouble free operation.
- (i) The necessary tubes and tube fittings as per requirement for sampling to be provided.

8. Analyzer Shelter:

Analyzers of AAQMS shall be housed in an analyser shelter. The shelter shall house, all analysers along with all accessories, sampling and calibration equipment, power supply distribution system with UPS, local data logger, air conditioners (as per requirement), furniture etc. Size of the Analyzer Shelter will be adequate to house all the equipments. The analyzer shelter will be insulated with efficient insulation material. External and Internal Walls of the Shelter should preferably be of SS Sheet and GI Sheet respectively. Floor should have anti slip sheet. Adequate lighting arrangement should be made for the shelter.

Uninterrupted power supply (UPS) with battery backup of minimum 1 hour shall be provided by vendor which will provide power supply to the Analyzers, Accessories and Data Acquisition System in case of power failure. UPS is not required to cater to the air conditioners.

9. Digital Display Board:

The Digital Display Board should be LED based / LCD with LED backlighting and should be housed inside weatherproof casing which can cope with the local conditions. It should have wide viewing angle, high resolution, should be reliable, durable and the letters should be bright and clear.

Minimum specification of the display board is given below -

- (i) Minimum Size of display Board: 360cm x 120cm,
- (ii) Display of colour elements: Three Colour / Multi Colour,
- (iii) Minimum life span of the system: 10 Years,
- (iv) Ingress Protection Class: IP65 / IP66 (to provide adequate weather protection as per requirement based on site condition),
- (v) Minimum Viewing Angle: 140oH / 110oV,
- (vi) Visibility Range: 100m.

The display board should also have the facility to display messages, environmental picture etc. for public awareness.

E. POWER SUPPLY:

Oil India Limited (OIL) shall provide 415V / 240 V AC +/- 10%, 50 Hz +/-5% power supply at a convenient point or as recommended by the vendor. Converter, if required, to convert to any other operating voltage shall be in bidder's scope.

F. SITE CONDITIONS:

Ambient temperature (Max//min): 40 oC / 7 oC Maximum Relative Humidity: 93% (approx.)

Annual Rainfall: ranges from 2300 mm to 3800 mm.

The AAQMS shall be suitable for the same.

G. CONSUMABLES:

Minimum consumables required for ambient air monitoring stations are given below. This list is not exhaustive, but indicative only. Vendor to supply any other consumable, if required.

Chemical Reagents - Required for 6 months usage.

Filter Papers - Required for 6 months usage.

Calibration gas - Required for 6 months usage.

Printer paper - Required for 3 months usage.

Printer cartridge - Required for 3 months usage.

Printer ink - Required for 3 months usage.

H. INSPECTION AND TESTING:

Vendor shall submit the following test certificates and test reports for review for each of the

analysers:

- (i) Dimensional verification certificate for each analyser.
- (ii) Material test report for all wetted parts.
- (iii) Manufacturer's test reports for various bought out components.
- (iv) Leak test report for complete analyser system including sample handling system using Nitrogen or instrument air at 1.5 times the maximum working pressure.
- (v) Calibration report for each analyser.
- (vi) Repeatability test for each analyser.
- (vii) Power supply variation check.
- (viii)Test certificates for zero, span, carrier and fuel gases as applicable.
- (ix) Certificates from statutory bodies as applicable.

I. ANALYSER CALIBRATION:

Analyser along with sample handling system shall be calibrated using zero and span calibration gas samples.

J. WITNESS INSPECTION:

All the analysers shall be offered for pre-dispatch inspection by the purchaser at vendor works. Following tests/ checks shall be carried out on each analyser as a minimum:

- a) Physical dimensional verification and workmanship.
- b) Bill of material check for each analyser system including sample handling system.
- c) Leakage testing of complete system using nitrogen or instrument air.
- d) Calibration checks.
- e) Repeatability checks.
- f) Power supply variation check. Analyser must function satisfactorily on specified variation of power supply voltage.
- g) Review of all test certificates and test reports.

In the event when the witness inspection is not carried out by purchaser, the tests shall any way be completed by the vendor and documents for same shall be submitted to purchaser for scrutiny.

K. WARRANTY:

Vendor to provide warranty for troublefree performane of the whole system for a minimum period of 12 months from the date of Commissioning or 18 months from the date of supply. In case of any defect or non performance of the system or a component during this guarantee / warranty period, the same will be replaced / repaired free of cost by the vendor.

During warranty period, vendor shall carry out regular and breakdown maintenance services including software maintenance services without any extra cost. All breakdown maintenance jobs will have to be attended by the vendor within 72 hours of receipt of report (oral or written) from OIL.

Moreover, the original equipment manufacturer (OEM) / Vendor should confirm in writing that the spares for the quoted system including all its equipments and accessories will be available for a minimum period of ten years from the date of installation of the AAQMS.

L. TRAINING:

The supplier's service / installation engineer must demonstrate the performance of the system as guaranteed in the offer and also must provide extensive training to OIL's two technical / scientific staff for 5 days for the operation, application and trouble shooting of the system after installation. Basic instrumentation drawings/ configuration, manuals are to be supplied along with the unit for ready reference of OIL.

M. MAINTENANCE:

The Vendor shall provide offer for Comprehensive Post Warranty Maintenance Contract (PWMC) for a period of 3 (three) years. The offer for PWMC shall be considered in the evaluation of the offer. The offer for PWMC shall be valid for three years from date of expiry of the warranty period and year wise quote shall be provided. Offer without PWMC will not be accepted.

Vendor shall provide total maintenance of the system including all hardware / software, workstations, networking equipment and any related accessories, peripherals etc. supplied by the vendor including all bought out items for AAQMS system. AAQMS system vendor shall also make necessary arrangement with OEM for all bought out items.

Following jobs will broadly be covered under the PWMC-

i. The PWMC includes complete servicing, preventive maintenance, shutdown maintenance and breakdown maintenance whenever required for the complete analyser system. This also includes supply of all the maintenance spares, spares parts which require routine replacement like filters, SOVs, UV / IR lamps, and all consumables & reagent, chemicals etc. required for repair or replacement of all the items supplied including bought out items.

ii. Visits:

a) Preventive Maintenance Visits: The Vendor Certified Field Service Engineer(s) shall visit the site once in three months for routine maintenance, hardware / software checks, inspections, full system checkouts, preventive maintenance adjustments and carry out corrective actions for the complete system. The software check shall include minor modifications to improve existing application performance, backup operations and software updates (latest releases).

The routine visit shall also include:

- Calibration of analysers as required.
- Servicing analyser including sample handling system.
- Regular replacement / replenishment of analyser consumables (including cylinders & reagents).
- b) Scheduled Shutdown Visits: The Vendor Certified Field Service Engineer(s) shall visit once in a year for Maintenance of the complete system with prior intimation. The engineer shall carryout as a minimum complete overhaul of the system, inspection of hardware and software, fault prediction, inspection of power supply quality, environmental and operating condition

checks, calibration checks, major repairs / replacement and detailed reporting.

- c) Breakdown Maintenance / Emergency Visits: The Vendor Certified Field Service Engineer(s) shall report to site within 48 hours after receipt of intimation (written or oral) call from OIL for restoring the system. The engineers deputed shall be well qualified and experienced.
- iii. The vendor shall explicitly define in PWMC offer, the various checks to be carried out by the engineer for the above listed items during various visits listed herein. Also a standard document consisting of standard procedures and formats for carrying out various activities of Annual Maintenance Contact shall be furnished. These lists of checks are subject to OIL's approval.
- iv. Spares required will be supplied by the vendor under this maintenance contract after due approval from OIL. Recommended Operational and Maintenance Spares lists need to provided by the Vendor and same will be replaced by the vendor as required without any extra cost. Stock of necessary spares will be maintained by the vendor for emergency requirement.
- v. Proper documentation of all maintenance activities carried out will be done and maintained by the vendor.
- vi. Necessary tools and tackles will be brought by the service engineers.
- vii. Travelling, boarding, lodging and medical facilities for service engineers shall be arranged by the vendor.

ITEM NO. 20

Installation and Commissioning Ambient Air Quality Monitoring System (AAQMS) shall be as per Air (Prevention and Control of Pollution) Act 1981, National Ambient Air Quality Standards (NAAQS), Guidelines for Ambient Air Quality Monitoring by CENTRAL POLLUTION CONTROL BOARD MINISTRY OF ENVIRONMENT & FORESTS, Govt. of India and as per TECHNICAL SPECIFICATIONS FOR CONTINUOUS AMBIENT AIR QUALITY MONITORING (AAQM) STATION (REAL TIME) by Central Pollution Control Board, Govt. of India in CGGS&OTP-Madhuban. – (Qty = 1AU)

ITEM NO. 30

The supplier shall quote separately for the cost of comprehensive Post Warranty Maintenance Contract(PWMC) for a period of three years effective after warranty period of minimum 12 months from the date of Commissioning or 18 months from the date of supply. – (QTY=01 AU)

The Vendor shall provide offer for Comprehensive Post Warranty Maintenance Contract (PWMC) for a period of 3 (three) years. The offer for PWMC shall be considered in the evaluation of the offer. The offer for PWMC shall be valid for three years from date of expiry of the warranty period and year wise quote shall be provided. Offer without PWMC will not be accepted.

Vendor shall provide total maintenance of the system including all hardware / software, workstations, networking equipment and any related accessories, peripherals etc.

supplied by the vendor including all bought out items for AAQMS system. AAQMS system vendor shall also make necessary arrangement with OEM for all bought out items.

Vendor's PWMC Claims/biling will be against actual jobs carried out at site.Cost break up of such PWMC jobs/activities per annum must be submitted at the time of submission of offer. In addition,the PWMC claims/biling must include the cost break up of such actual jobs/activities only which are approved by OIL.

Following jobs will broadly be covered under the PWMC-

i. The PWMC includes complete servicing, preventive maintenance, shutdown maintenance and breakdown maintenance whenever required for the complete analyser system. This also includes supply of all the maintenance spares, spares parts which require routine replacement like filters, SOVs, UV / IR lamps, and all consumables & reagent, chemicals etc. required for repair or replacement of all the items supplied including bought out items.

ii. Visits:

a) Preventive Maintenance Visits: The Vendor Certified Field Service Engineer(s) shall visit the site once in three months for routine maintenance, hardware / software checks, inspections, full system checkouts, preventive maintenance adjustments and carry out corrective actions for the complete system. The software check shall include minor modifications to improve existing application performance, backup operations and software updates (latest releases).

The routine visit shall also include:

- Calibration of analysers as required.
- Servicing analyser including sample handling system.
- Regular replacement / replenishment of analyser consumables (including cylinders & reagents).
- b) Scheduled Shutdown Visits: The Vendor Certified Field Service Engineer(s) shall visit once in a year for Maintenance of the complete system with prior intimation. The engineer shall carryout as a minimum complete overhaul of the system, inspection of hardware and software, fault prediction, inspection of power supply quality, environmental and operating condition checks, calibration checks, major repairs / replacement and detailed reporting.
- c) Breakdown Maintenance / Emergency Visits: The Vendor Certified Field Service Engineer(s) shall report to site within 48 hours after receipt of intimation (written or oral) call from OIL for restoring the system. The engineers deputed shall be well qualified and experienced.
- iii. The vendor shall explicitly define in PWMC offer, the various checks to be carried out by the engineer for the above listed items during various visits listed herein. Also a standard document consisting of standard procedures and formats for carrying out various activities of Annual Maintenance Contact shall be furnished. These lists of checks are subject to OIL's approval.

iv. Spares required will be supplied by the vendor under this maintenance contract after due approval from OIL. Recommended Operational and Maintenance Spares lists need to provided by the Vendor and same will be replaced by the vendor as required without any extra cost.

Stock of necessary spares will be maintained by the vendor for emergency requirement.

- v. Proper documentation of all maintenance activities carried out will be done and maintained by the vendor.
- vi. Necessary tools and tackles will be brought by the service engineers.
- vii. Travelling, boarding, lodging and medical facilities for service engineers shall be arranged by the vendor.

SPECIAL TERMS AND CONDITIONS:

- 1) Supply, Installation, Commissioning and Post Warranty Maintenance Contract (PWMC) for Continuous Ambient Air Quality Monitoring System (AAQMS) as per Air (Prevention and Control of Pollution) Act 1981, National Ambient Air Quality Standards (NAAQS), Guidelines for Ambient Air Quality Monitoring by CENTRAL POLLUTION CONTROL BOARD MINISTRY OF ENVIRONMENT & FORESTS, Govt. of India and as per TECHNICAL SPECIFICATIONS FOR CONTINUOUS AMBIENT AIR QUALITY MONITORING (AAQM) STATION (REAL TIME) by Central Pollution Control Board, Govt. of India in CGGS&OTP-Madhuban.
- 2) Total package for supply, installation, commissioning, Post Warranty Maintenance Contract(PWMC) inclusive of consumables, spares, calibration for 3 years for AAQMS (Continuous Ambient Air Quality Monitoring Station) with AC shelter, UPS has to be offered.
- 3) Monitoring system shall be capable of continuous monitoring of SO2, H2S, NO2, NOx, PM 10, PM 2.5, HC (Methane and Non-Methane) CO, VOC, Benzene etc.The data acquisition is continuous over the entire study area (CGGS Madhuban), automatic by DOAS principle (not much manual attention required)
- 4) Supplier has to mention & ensure the Data Availability of min 90% and better for the technology /Analysers for CAAQMS monitoring.
- 5) All Measuring instruments/equipments shall be approved by US EPA/TUV/Equivalent Indian Standards.
- 6) Supplier has to mention the Span Drift per week & frequency of Calibration required for the Analysers.
- 7) Warrantee on the system required: for a minimum period of 12 months from the date of Commissioning or 18 months from the date of supply.
- 8) The original equipment manufacturer (OEM) should confirm in writing that the spares for the quoted model will be available for a period of ten years from the date of installation of the instrument.
- 9) The supplier's service / installation engineer must demonstrate the performance of the system as guaranteed in the offer and also must provide extensive training to OIL's two technical/scientific staff for 5 days for the operation, application and trouble shooting of the system after installation. Basic instrumentation drawings/configuration, manuals are to be supplied along with unit for ready reference of Instrumentation Department of OIL.
- 10) The Vendor shall provide offer for Comprehensive Post Warranty Maintenance Contract (PWMC) for a period of 3 (three) years. The offer for PWMC shall be considered in the evaluation of the offer. The offer for

PWMC shall be valid for three years from date of expiry of the warranty period and year wise quote shall be provided. Offer without PWMC will not be accepted.

Vendor shall provide total maintenance of the system including all hardware / software, workstations, networking equipment and any related accessories, peripherals etc. supplied by the vendor including all bought out items for AAQMS system. AAQMS system vendor shall also make necessary arrangement with OEM for all bought out items.

Following jobs will broadly be covered under the PWMC-

i. The PWMC includes complete servicing, preventive maintenance, shutdown maintenance and breakdown maintenance whenever required for the complete analyser system. This also includes supply of all the maintenance spares, spares parts which require routine replacement like filters, SOVs, UV / IR lamps, and all consumables & reagent, chemicals etc. required for repair or replacement of all the items supplied including bought out items.

ii. Visits:

a) Preventive Maintenance Visits: The Vendor Certified Field Service Engineer(s) shall visit the site once in three months for routine maintenance, hardware / software checks, inspections, full system checkouts, preventive maintenance adjustments and carry out corrective actions for the complete system. The software check shall include minor modifications to improve existing application performance, backup operations and software updates (latest releases).

The routine visit shall also include:

- Calibration of analysers as required.
- Servicing analyser including sample handling system.
- Regular replacement / replenishment of analyser consumables (including cylinders & reagents).
- b) Scheduled Shutdown Visits: The Vendor Certified Field Service Engineer(s) shall visit once in a year for Maintenance of the complete system with prior intimation. The engineer shall carryout as a minimum complete overhaul of the system, inspection of hardware and software, fault prediction, inspection of power supply quality, environmental and operating condition checks, calibration checks, major repairs / replacement and detailed reporting.
- c) Breakdown Maintenance / Emergency Visits: The Vendor Certified Field Service Engineer(s) shall report to site within 48 hours after receipt of intimation (written or oral) call from OIL for restoring the system. The engineers deputed shall be well qualified and experienced.
- iii. The vendor shall explicitly define in PWMC offer, the various checks to be carried out by the engineer for the above listed items during various visits listed herein. Also a standard document consisting of standard procedures and formats for carrying out various activities of Annual Maintenance Contact shall be furnished. These lists of checks are subject to OIL's approval.
- iv. Spares required will be supplied by the vendor under this maintenance contract after due approval from OIL.Recommended Operational and Maintenance Spares lists need to provided by the Vendor and same will be replaced by the vendor as required without any extra cost. Stock of necessary spares will be maintained by the vendor for emergency requirement.

- v. Proper documentation of all maintenance activities carried out will be done and maintained by the vendor.
- vi. Necessary tools and tackles will be brought by the service engineers.
- vii. Travelling, boarding, lodging and medical facilities for service engineers shall be arranged by the vendor.
- 11. The Bidder must be the OEM (Original Equipment Manufacturer) or its authorized dealer of AAQMS with authorized service support base in India.

Authorized dealers must submit valid authorization certificate from the Original Equipment Manufacturer (OEM) with back up Warranty & Guarantee from the Original Equipment Manufacturer (OEM) along with the quotation, otherwise offer will not be considered.

The bid shall be rejected in case of any change of the proposed OEM after submission of the bid.

- 12. Bid should be submitted for the full scope of work. Bid for part of the job will not be accepted.
- 13. Conditional offer will not be accepted.
- 14. The bids and the accompanied technical documentation must be in English language only. The bids in other than English language must have an English version.
- 15. Bidder has to provide written assurance to carry out 3 (three) years annual maintenance under the AMC provisions as specified in the tender.
- 16. The bidder shall have single point responsibility for the complete package.

NOTE:

<u>Bidders should submit their bids (preferably in tabular form) explicitly mentioning compliance / non</u> compliance to all the NIT terms and conditions of NIT.

Annexure- DDD

INTEGRITY PACT

Between

Oil India Limited (OIL) hereinafter referred to as "The Principal"

And

(Name of the bidder).....hereinafter referred to as "The Bidder/Contractor"

Preamble:

The Principal intends to award, under laid down organizational procedures, contract/s for Tender No. **SDI3078P17** The Principal values full compliance with all relevant laws and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder/s and Contractor/s.

In order to achieve these goals, the Principal cooperates with the renowned international Non-Governmental Organisation "Transparency International" (TI). Following TI's national and international experience, the Principal will appoint an external independent Monitor who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1 - Commitments of the Principal

- (1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-
 - 1. No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for him/herself or third person, any material or immaterial benefit which he/she is not legally entitled to.
 - 2. The Principal will, during the tender process treat all Bidders with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidders the same information and will not provide to any Bidder confidential/additional information through which the Bidder could obtain an advantage in relation to the tender process or the contract execution.
 - 3. The Principal will exclude from the process all known prejudiced persons.
- (2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the relevant Anti-Corruption Laws of India, or if there be a Page 2 of 6 substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section 2 - Commitments of the Bidder/Contractor

- (1) The Bidder/Contractor commits itself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
 - 1. The Bidder/Contractor will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or immaterial benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the
 - The Bidder/Contractor will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, Subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelisation in the bidding process.
 - 3. The Bidder/Contractor will not commit any offence under the relevant Anticorruption Laws of India; further the Bidder/Contractor will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
 - 4. The Bidder/Contractor will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- (2) The Bidder/Contractor will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 - Disqualification from tender process and exclusion from future Contracts

If the Bidder, before contract award has committed a transgression through a violation of Section 2 or in any other form such as to put his reliability or risibility as Bidder into question, the Principal is entitled to disqualify the Bidder from the tender process or to terminate the contract, if already signed, for such reason.

1. If the Bidder/Contractor has committed a transgression through a violation of Section 2 such as to put his reliability or credibility into question, the Principal is entitled also to exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressions within the company hierarchy of the Bidder and the

- amount of the damage. The exclusion will be imposed for a minimum of 6 months and maximum of 3 years.
- 2. The Bidder accepts and undertakes to respect and uphold the Principal's Absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken. This undertaking is given freely and after obtaining independent legal advice.
- 3. If the Bidder/Contractor can prove that he has restored/recouped the Damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the exclusion prematurely.
- 1. A transgression is considered to have occurred if in light of available evidence no reasonable doubt is possible.

Section 4 - Compensation for Damages

- If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover from the Bidder liquidated damages equivalent to 3 % of the value of the offer or the amount equivalent to Earnest Money Deposit/Bid Security, whichever is higher.
- 2. If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages equivalent to 5% of the contract value or the amount equivalent to Security Deposit/Performance Bank Guarantee, whichever is higher.
- 3. The bidder agrees and undertakes to pay the said amounts without protest or demur subject only to condition that if the Bidder/Contractor can prove and establish that the exclusion of the Bidder from the tender process or the termination of the contract after the contract award has caused no damage or less damage than the amount or the liquidated damages, the Bidder/Contractor shall compensate the Principal only to the extent of the damage in the amount proved.

Section 5 - Previous transgression

- The Bidder declares that no previous transgression occurred in the last 3 years with any other Company in any country conforming to the TI approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.
- 2. If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Section 6 - Equal treatment of all Bidders/Contractor/Subcontractors

1. The Bidder/Contractor undertakes to demand form all subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.

- 2. The Principal will enter into agreements with identical conditions as this one with all Bidders, Contractors and Subcontractors.
- 3. The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section 7 - Criminal charges against violating Bidders/Contractors/ Subcontractors

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor, which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section 8 - External Independent Monitor/Monitors (three in number depending on the size of the contract) (to be decided by the Chairperson of the Principal)

- The Principal appoints competent and credible external independent Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- 2. The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Chairperson of the Board of the Principal.
- 3. The Contractor accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder/Contractor/Subcontractor with confidentiality.
- 4. The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
- 5. As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or heal the violation, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
- 6. The Monitor will submit a written report to the Chairperson of the Board of the Principal within 8 to 10 weeks from the date of reference or intimation to him by the 'Principal' and, should the occasion arise, submit proposals for correcting problematic situations.

- 7. If the Monitor has reported to the Chairperson of the Board a substantiated suspicion of an offence under relevant Anti-Corruption Laws of India, and the Chairperson has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
- 8. The word 'Monitor' would include both singular and plural.

Section 9 - Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the respective contract, and for all other Bidders 6 months after the contract has been awarded.

If any claim is made/ lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/determined by Chairperson of the Principal.

Section 10 - Other provisions

- 1. This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal, i.e. New Delhi.
- 2. Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- 3. If the Contractor is a partnership or a consortium, this agreement must be, signed by all partners or consortium members.
- 4. Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intensions.

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S JALLAN PO (IP)	
For the Principal	For the Bidder/Contractor
Place. Duliajan.	Witness 1:
Date 23.11.2016 .	Witness 2 :

Checklist:

Sl.No	Description	Remarks
1	AMBIENT AIR QUALITY MONITORING SYSTEM as per Air	YES/NO
	(Prevention and Control of Pollution) Act 1981, National Ambient Air	
	Quality Standards (NAAQS), Guidelines for Ambient Air Quality	
	Monitoring by CENTRAL POLLUTION CONTROL BOARD	
	MINISTRY OF ENVIRONMENT & FORESTS, Govt. of India and as	
	per TECHNICAL SPECIFICATIONS FOR CONTINUOUS AMBIENT	
	AIR QUALITY MONITORING (CAAQM) STATION (REAL TIME)	
	by Central Pollution Control Board, Govt. of India.	
2	Experience certificate submitted as per BEC.	YES/NO
3	Authorisation certificate of dealership of OEM, if required.	YES/NO
4	Declaration of compliance 11 th Conference on Mines Safety, OISD and	YES/NO
	applicable other statutory, sate Govt. And Central Govt.	
	Regulations/Acts/Rules.	
5	decleration of no change of OEM after submission of bid.	YES/NO
6	Technical specification with relevant technical catalogues submitted.	YES/NO
7	Guidelines and proposed plans for sensor location submitted.	YES/NO
8	Confirmation to carry out the installation and commissioning job in the	YES/NO
	event of supply.	
9	Declaration of accepting single point responsibility submitted.	YES/NO
10	Guarantee/ Warrantee certificate from OEM submitted.	YES/NO
11	Certificate from OEM for spares support for next 10 years submitted.	YES/NO
12	Declaration for carrying out AMC submitted.	YES/NO
13	Installation & commissioning cost is inclusive of supply of all other	YES/NO
	materials like cable trays, casings etc. required for the system.	
14	Approval of installation shall be subject to satisfying the requirements of	YES/NO
	Air (Prevention and Control of Pollution) Act 1981, National Ambient	
	Air Quality Standards (NAAQS), Guidelines for Ambient Air Quality	
	Monitoring by CENTRAL POLLUTION CONTROL BOARD	
	MINISTRY OF ENVIRONMENT & FORESTS, Govt. of India and as	
	per TECHNICAL SPECIFICATIONS FOR CONTINUOUS AMBIENT	
	AIR QUALITY MONITORING (CAAQM) STATION (REAL TIME) by Central Pollution Control Board, Govt. of India.	
17	Quality assurance as described in Scope of work.	YES/NO
18	Testing as described in Scope of work.	YES/NO
19	Documentation.	YES/NO
20	Commissioning Spares.	YES/NO
21	Recommended Operational and Maintenance Spares lists which will be	YES/NO
²¹	replaced by the vendor as required without any extra cost	1 EB/INO
22	·	VEC/NO
22	Whether quoted any deviation?	YES/NO
23	In case of any deviation whether the deviation is clearly indicated in	YES/NO
	Proforma for Deviation?	

PROFORMA FOR STATEMENT OF DEVIATION / NON-COMPLIANCE

(Only exceptions/deviations to be submitted)

The Bidder shall furnish detailed statement of **exceptions/deviations**, if any, to the tender stipulations, terms and conditions in respect of each Section of Bid Document in the following format:

Section Clause No. No. (Page No.)		Non-Compliance / Deviation	Reason for Deviation

Authorised Person's Signature:				
Name:				
Designation:				
Seal of the Bidder:				

NOTE: OIL INDIA LIMITED expects the bidders to fully accept the terms and conditions of the bid document. However, should the bidders still envisage some minor exceptions/deviations to the terms and conditions of the bid document, the same should be indicated as per above format and submitted along with their bids. If the "**Statement of Non-Compliance**" in the above Proforma is left blank (or not submitted along with the technical bid), then it would be construed that the bidder has not taken any exception/deviation to the tender requirements.

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Annexure-EEE

Tende	r No.				
Bidde	's Name :				
		Complianc	Compliance by Bidder		
SL.	BEC / TENDER REQUIREMENTS		Indicate Corresponding		
NO.			page ref. of unpriced bid or		
1	Confirm that validity has been affored as nor NIT	Confirmed' / Not applicable	Comments		
	Confirm that validity has been offered as per NIT.				
2	Confirm that Bid Security / Earnest Money has been submitted				
	as per NIT (Wherever Applicable) ?				
3	Confirm that you shall submit Performance security (in the				
	event of placement of order) (Wherever Applicable)?				
4	Confirm that duly signed Integrity Pact has been submitted as				
	per NIT (Wherever Applicable) ?				
5	Confirm that you have submitted documentary evidence of				
	successfully executing one Purchase order as stipulated in NIT in				
	any of the preceding 5 financial years (*)				
6	Confirm that you have submitted Balance Sheet and Profit and				
	Loss Account of any of the preceding 3 financial years certified				
	by a chartered accountant.				
7	Confirm that the bid has been signed using Class 3 digital				
	certificate with Organisation's Name as per NIT.				
8	Confirm that you have not taken any exception/deviations to				
	the NIT.				

NOTE: Please fill up the greyed cells only.

(*) Purchase Orders along with copies of any of the documents in respect of satisfactory execution of the Purchase Orders should be submitted – (i) Satisfactory Inspection Report (OR) (ii) Satisfactory Supply Completion / Installation Report (OR) (iii) Consignee Receipted Delivery Challans (OR) (iv) Central Excise Gate Pass / Tax , Invoices issued under relevant rules of Central Excise / VAT (OR) (v) any other documentary evidence that can substantiate the satisfactory execution of the purchase order cited above.

Response Sheet Annexure-FFF

Tender No.	
Bidders Name	

Bidders Response Sheet

SI No.	Description	Remarks
1	Place of Despatch	
2	Whether Freight charges have been included in your quoted prices	
3	Whether Insurance charges have been included in your quoted prices	
4	Make of quoted Product	
5	Offered Validity of Bid as per NIT	
6	Bid Security Submitted (if applicable)	
6	Details of Bid Security Submitted to OIL (if applicable)	
	a) Bid Security Amount (In Rs):	
	b) Bid Security Valid upto:	
7	Whether you shall submit Performance Security in the event of placement of	
	order on you (if applicable)	
8	Integrity Pact Submitted (if applicable)	
9	Whether you have submitted documentary evidence of successfully executing	
	one Purchase order as stipulated in NIT in any of the preceding 5 financial	
	years (*)	
10	Whether you have submitted Balance Sheet and Profit and Loss Account of	
	any of the preceding 3 financial years certified by a chartered accountant.	
11	Delivery Period in weeks from placement of order	
12	Complied to Payment terms of NIT (if applicable) otherwise to Standard	
	Payment Terms of OIL or not.	
13	If bidder is MSE whether you have quoted your own product	
14	If Bid security submitted as Bank Guarantee, Name and Full Address of Issuing	
	Bank including Telephone, Fax Nos and Email id of branch manager	

NOTE: Please fill up the greyed cells only.

(*) Purchase Orders along with copies of any of the documents in respect of satisfactory execution of the Purchase Orders should be submitted – (i) Satisfactory Inspection Report (OR) (ii) Satisfactory Supply Completion / Installation Report (OR) (iii) Consignee Receipted Delivery Challans (OR) (iv) Central Excise Gate Pass / Tax , Invoices issued under relevant rules of Central Excise / VAT (OR) (v) any other documentary evidence that can substantiate the satisfactory

(TO BE FILLED UP BY ALL THE VENDOR IN THEIR OWN LETER HEAD) (ALL FIELDS ARE MANDATORY)

Tender No.	:	
Name of Beneficiary	:M/s	
Vendor Code	:	•••••••••••
Address	:	
Phone No. (Land Line)	:	
Mobile No.	:	
E-mail address	:	
Bank Account No. (Minimum		
Eleven Digit No.)	:	
Bank Name	:	
Branch	:	
Complete Address of your	:	
Bank	:	
IFSC Code of your Bank		
a) RTGS	:	
b) NEFT	:	
PAN	:	
VAT Registration No.	:	
CST Registration No.	:	
Service Tax Registration No.	:	
Provident Fund Registration	:	
our above mentioned accoun	nt directly and we shall not hold	Oil India Limited can be remitted to Oil India Limited responsible if the ount due to incorrect details furnished
	Office Seal	Signature of Vendor

Counter Signed by Banker: Seal of Bank:

Enclosure: Self attested photocopies of the following documents-

- 1) PAN Card
- 2) VAT Registration Certificate
- 3) Service Tax Registration
- 4) CST Registration
- 5) Provident Registration Certificate
- 6) Cancelled cheque of the bank account mentioned above (in original).
- 7) Bank Statement not older than 15 days on the date of submission.