Annexure-II

OIL INDIA LIMITED
(A Government of India Enterprise)
P.O. Duliajan - 786602, Assam, India
FAX: 91-0374-2800533; E-mail : material@oilindia.in

A) OIL INDIA LIMITED invites Indigenous Competitive Bid (e-tenders) through its e-Procurement portal - *https://etender.srm.oilindia.in/irj/portal* for following e-tender :

E-Tender No.	B.C Date	Material Description & Quantity
SDI6852P16 DT: 06.04.2015 (SINGLE STAGE TWO BID SYSTEM)	**04.06.2015**	**BUNK HOUSE – 17 NOS**
SDI6862P16 DT: 08.04.2015 (SINGLE STAGE TWO BID SYSTEM)	**04.06.2015**	**RIM SEAL FIRE PROTECTION SYSTEM – 02 NOS**
SDI6867P16 DT; 08.04.2015 (SINGLE STAGE TWO BID SYSTEM)	**04.06.2015**	**MULTILAYER PLASTIC TARPAULIN – 2,03,750 SQ MTR**

Application showing full address/email address with Tender Fee (Non-refundable) of Rs. 1,000.00 in favour of M/s Oil India Limited and payable at Duliajan is to be sent to Head-Materials, Oil India Limited, P.O. Duliajan, Assam-786602. Application shall be accepted one week prior to Bid Closing date. 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:

(Tender Fee may also be paid online upto one week prior to the bid closing date (or as amended in e-portal).

OIL INDIA LIMITED
(A Government of India Enterprises)
PO : Duliajan – 786602
Assam (India)

TELEPHONE NO. (91-374) 2808719
FAX NO: (91-374) 2800533
Email: ranjanbarman@oilindia.in ; erp_mm@oilindia.in

FORWARDING LETTER

Tender No.	**: SDI6862P16 DT: 08.04.2015**
Tender Fee	**: Rs 1,000.00**
Bid Security Amount	**: Rs 4,20,000.00**
Bidding Type	**: SINGLE STAGE TWO BID SYSTEM**
Bid Closing on	**: As mentioned in the e-portal**
Bid Opening on	**: -do-**
Performance Security	**: Applicable**
Integrity Pact	**: Applicable**

OIL invites Bids for **SUPPLY, INSTALLATION AND COMMISIONING AND AMC OF 02 NOS RIM SEAL FIRE PROTECTION SYSTEM** 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 LCB 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) "General Terms & Conditions" for e-Procurement as per Booklet No. MM/LOCAL/E-01/2005 for E-Procurement LCB Tenders.

b) Technical specifications and Quantity as per **Annexure – 1A**.

c) The prescribed Bid Forms for submission of bids are available in the Technical RFx -> External Area - > Tender Documents.

d) In the event of receipt of only a single offer against the tender within B.C. date, OIL reserves the right to extend the B.C. date as deemed fit by the Company. During the extended period, the bidders who have already submitted the bids on or before the original B.C. date, shall not be permitted to revise their quotation.

e) All corrigenda, addenda, amendments, time extension, clarifications etc. To the tender will be hoisted on OIL's website (www.oil-india.com) and in the e-portal

(https://etenders.srm.oilindia.in/irj/portal) only and no separate notification shall be issued in the press. Prospective bidders are requested to regularly visit the website and e-portal to keep themselves updated.

f) 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).

g) 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.

Special Note:

1.0 General Qualification Criteria:

In addition to the general BRC/BEC, following criteria on Bidders' Experience and their financial capabilities shall be considered (**documentary evidence to be provided along with the bid in Technical RFx -> External Area - > Tender Documents**) as on the Bid Closing Date:

Criteria	**Complied / Not Complied.** **Documentary evidence submitted / not submitted**
a) Annual financial turnover of the firm in any of the last 3 financial years or current financial year should not be less than **Rs.419.75 Lakhs.**	

2.0 Application showing full address/email address with Tender Fee (Non-refundable) of Rs. 1,000.00 in favour of M/s Oil India Limited and payable at Duliajan is to be sent to Head-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:

a) Tender Fee may also be paid online upto one week prior to the bid closing date (or as amended in e-portal).

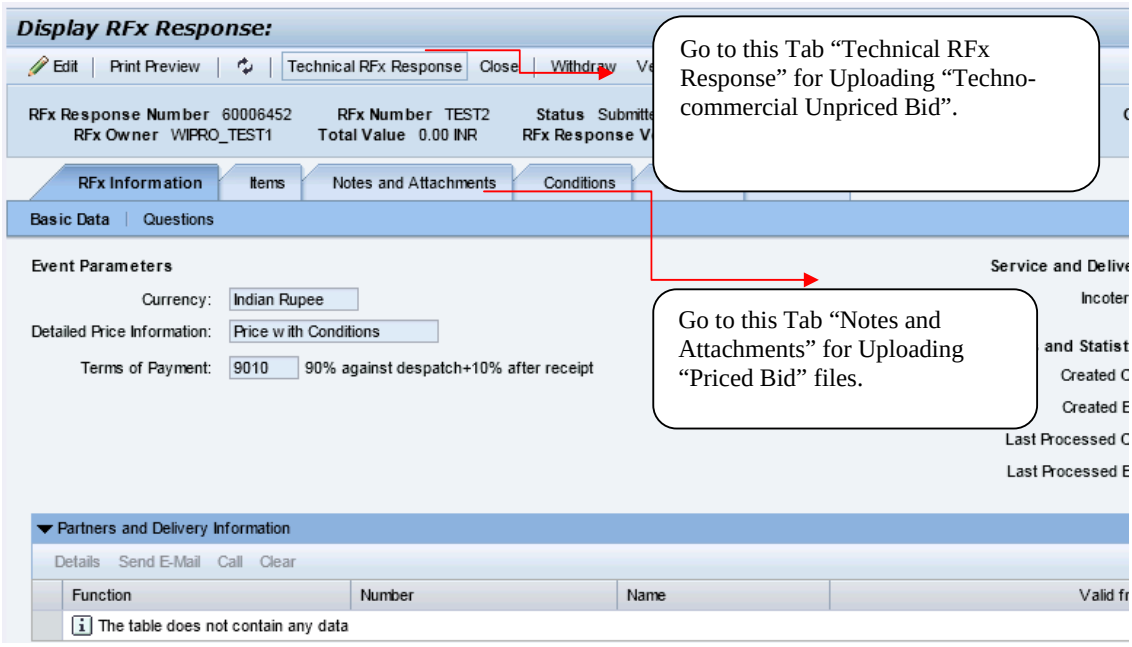
b) PSUs and SSI units are provided tender documents Free of Cost (as per govt guidelines), however they have to apply to OIL's designated office to issue the tender documents before the last date of sale of tender document mentioned in the tender.

3.0 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.

3.1 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**.**

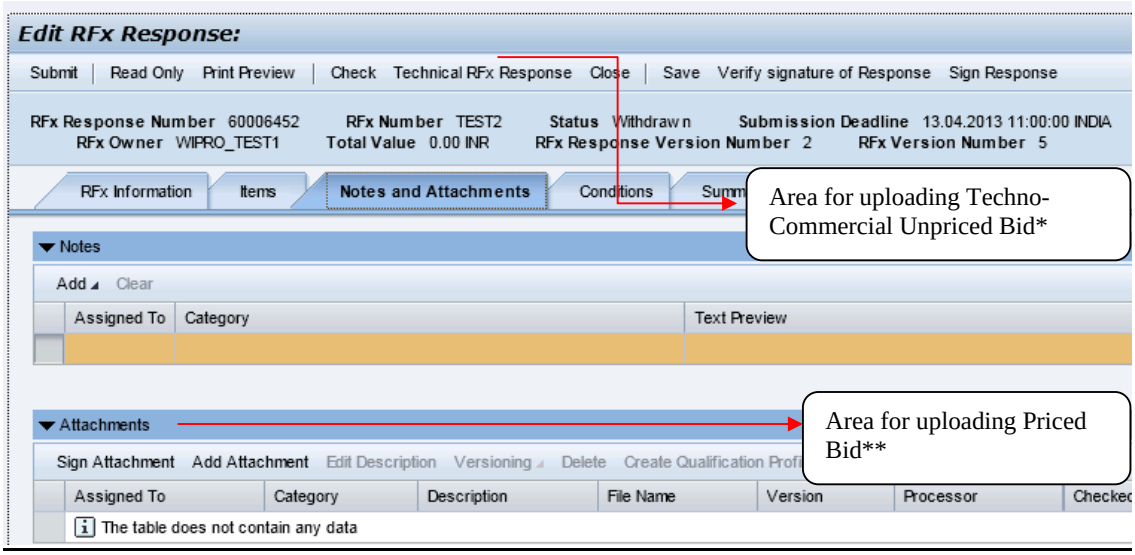
3.2 The "**PRICE BID**" must contain the price schedule and the bidder's commercial terms and conditions.**The prices of the items should be quoted in "Conditions Tab". Details of prices as per Bid format / Commercial bid can be uploaded as Attachment under the attachment option under "Notes & Attachments".**

3.3 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:

Bid on "EDIT" Mode



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.

4.0 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 **Tender no.** and **Due 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.

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 triplicate.

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 RAGHAW SHARAN PANDEY, IAS (Retd.),
Former Secretary, MOP & NG,
e-Mail ID : rspandey_99@yahoo.com

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 / 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 (LCB 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.

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-
(R BARMAN)
SR. MANAGER MATERIALS (IP)
FOR : HEAD-MATERIALS

Annexure - CCC

Tender No & Date: SDI6862P16 DT: 08.04.2015

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 LCB 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.

Criteria	**Complied / Not Complied. (Remarks if any)**
1.0 BID REJECTION CRITERIA (BRC): The bid shall conform generally to the terms and conditions given in this document. Notwithstanding the general conformity of the bids to the stipulated specifications, the following requirements will have to be particularly met by the Bidders without which the same will be considered as non-responsive and rejected. **A) TECHNICAL:** 1.0 BIDDER'S QUALIFICATION: The bidder shall be an Original Equipment Manufacturer (OEM) or an authorized representative / dealer / supplier of the OEM. 2.0 BIDDER'S EXPERIENCE: 2.1 In case, the bidder is an Original Equipment Manufacturer (OEM): 2.1.1 The bidder shall be in the business of manufacturing the materials continuously for the last 3 years as on Bid Closing Date of this tender. The bidder shall have the credential of successfully executing Automatic Rim Seal Fire Protection System for External Floating Roof Storage Tank of the type: PLC based Linear Hollow metallic tube Heat Detection & Foam Suppression System in minimum 02 nos. of hydrocarbon storage tanks. Documentary evidence in support of the bidders past supply shall be submitted along with the bid in the form of Purchase Orders and project completion report with detail Specification of the supplied item. 2.2 In case the bidder is an authorized representative / dealer / supplier, proper valid authorization certificate from the OEM who meets the qualification mentioned in Para 2.1.1 above, shall be submitted along with the offer for bid	

evaluation. Such authority letter should be valid for the entire period of execution of the order. Documentary evidence of the OEM meeting the qualification criteria as in Para 2.1.1 shall be submitted along with the bid.

2.2.1 Additionally, the bidder shall have the credential of successfully executing Automatic Rim Seal Fire Protection System for External Floating Roof Storage Tank of the type: PLC based Linear Hollow metallic tube Heat Detection & Foam Suppression System in minimum 02 nos. of hydrocarbon storage tanks in last 3 years as on bid closing date. Documentary evidence in support of the bidders past supply shall be submitted along with the bid in the form of Purchase Orders and project completion report with detail Specification of the supplied item.

3.0 APPROVAL CRITERIA: Bidder must agree to submit the following approvals along with the material supply and the same needs to be confirmed by them in writing along with the bid for evaluation, failing which the offer will be summarily rejected:
a) UL listing or VDS/FM/LPC approval for the Linear Heat Detector.
b) Valid DGMS approval for the offered electrical and electronic equipment to be used in hazardous area.
c) If the bidder has not obtained the DGMS approval, Field trial permission from DGMS for all the electrical and electronic equipment to be used in hazardous area should be submitted along with the material supply.
d) All field trial permissions should be supported with CIMFR/ERTL or certification from the recognized testing laboratory of the country of origin in case of imported equipment. Part certification will be rejected.
e) UL listing for 3% type AFFF foam to be used.
f) The Foam spray Nozzles shall be UL listed or FM approved.

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 4,20,000.00** in OIL's prescribed format as Bank Guarantee or a Bank Draft/Cashier cheque 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 10 months from Bid closing date. (i.e. upto 04.04.2016).**

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. 8.8 of General Terms and Conditions vide MM/LOCAL/E-01/2005 for E-Procurement LCB Tenders.

The format of Bank Guarantee towards Bid Security (Annexure – VII) has been amended to Annexure – VI2sI (Revised) and bidders should submit Bank Guarantee towards Bid Security as per Annexure – VII (Revised) only.

In case of extension of Bid Closing date against the tender where a bidder has already submitted his bid with requisite bid security validity within the original B.C. Date, such bidders will extend validity of bid security covering the extended period of the bid closing date.

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 LCB Tenders. Any offer not complying with the above shall be rejected straightway.

v). Performance Security:

a) The successful Bidder will have to provide 1st Performance Security @ 10% of total cost of Equipment + Installation & Commissioning + Training. The Performance Security must be valid for one year from the date of successful commissioning of the equipment or 18 months from the date of despatch whichever is earlier.

b) The successful Bidder will have to provide 2nd Performance Security @ 10% of total cost of AMC for 1 year prior to expiry of the 1st Performance Security. The Performance Security must be valid for 1 year.
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.

For exemption for submission of Performance Security, please refer Clause No. 9.12 of General Terms and Conditions vide MM/LOCAL/E-01/2005 for E-Procurement LCB Tenders.

iv). *The Bank Guarantee should be allowed to be encashed at all branches within India.*

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.

xi). Integrity Pact :

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".

xii). 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) Average Annual Turnover of a bidder lower than the average Annual turnover mentioned in the Tender.

2.0 <u>BID EVALUATION CRITERIA (BEC)</u>
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:** 1. The manufactured product should be strictly as per OIL's tender 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). 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 NIT terms and conditions of NIT.

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TECHNICAL SPECIFICATIONS WITH QUANTITY

Tender No & Date: SDI6862P16 DT: 08.04.2015

	Complied / Not Complied. (Remarks if any)
ITEM NO. 10 **Automatic Rim Seal Fire Protection System for External Floating Roof Storage Tank (EFRT) – Qty = 02 NOS** TECHNICAL SPECIFICATIONS: Automatic Rim Seal Fire Protection System for External Floating Roof Storage Tank (EFRT) Details of the Tanks : Type : EFRT Number of Tank : 2 Nos. Capacity of Each Tank : 20000 CUM Diameter of Tank : 50 Metres Height of Each Tank : 12 Metres Type: PLC based Linear Hollow Metallic Tube Automatic Heat Detection & Foam Suppression System. 1.0 Scope The subject item should cover: a) Engineering design & drawing, supply, installation and commissioning of automatic Rim seal fire detection and suppression system of external floating roof tanks (EFRT). The automatic Rim seal fire protection system shall consist of: i) Hollow Metallic tube type Linear Heat Detection system ii) Foam based Fire suppression system and iii) PLC based audio-visual alarm at tank farm in main control room in ITF Tengakhat (site specific) for controlling/monitoring/simulation of the system. iv) Repeater fire alarm panel at Admin building (office of Installation Manager) of ITF Tengakhat v) Option for data transfer from Rim Seal PLC system to Upcoming fire station control room at Duliajan (arrangement of suitable communication media & responsibility for establishing the connection at fire station control room at Duliajan will not be the scope of the Rim seal system vendor. vi) MODBUS TCP/IP/MODBUS RTU protocol connectivity with plant main PLC system in ITF Tengakhat control room Details of the Distances to Tanks : Tank to Tank Dyke : 50 m Tank Dyke to Control Room : 350 m Tank Dyke to Admin Building : 350 m	

Tank Dyke to Fire Control Room : 30 Km Approx.

2.0 Objective

The system must detect and extinguish fire of Rim seal at the incipient stage and simultaneously energize the annunciation module for active participation of plant personnel to control and rescue of man and materials.

3.0 Basic Principle of Operation:

The system shall consist of a microprocessor based, site configurable Hollow Metallic Tube type Linear Heat Detection (LHD) system for monitoring the rim seal peripheral area over the floating roof crude oil tank. The system shall be in energized condition under healthy condition. This shall rapidly detect the fire at its incipient stage, raise an alarm at manned location/s and automatically discharge fire fighting foam over the rim seal area around the entire tank circumference. The system must be capable to extinguish fire at one shot by establishing a vapour suppressing blanket of foam over the rim seal area.

3.0(a) Hardware & Electronics:

The system shall be modular type (fail safe condition) with each module protecting a defined length of rim seal area and all modules shall discharge simultaneously on detection of fire at any location on the rim seal area. The detection system shall have programmable self checking facility with annunciation of status displayed at control room. The system shall be such that after any Rim seal fire event it can be quickly reset by manual/auto mode of operation.

Specific Graphic display panel shall be provided for monitoring of the system in control room. Repeater Instrument Panel for display of FIRE and FAULT including indications/alarm etc. shall be provided at the other manned location depending upon the site requirement. The number & locations of such repeater panel shall be decided based on the specific site conditions.

4.0 Basic components

The system shall consist of following basic critical components:

a) Linear Heat Detection (LHD) System
b) Foam Fire Suppression System.
c) Site specific Graphic console.
d) Main Rim seal Fire Alarm panel & repeater panel.
e) Local junction box (flame proof) with indication of fire outside the tank dyke.
f) Fail Safe Arrangement.

5.0 Linear Heat Detection

5.1 Principle of Operation

The Principle of the system shall be based on a rapid rate of rise in temperature which results in corresponding rise in pressure of gas (air) in a pneumatically sealed metallic sensor tube which is normally non-pressurised. The sensor tube is connected to a microprocessor based evaluation unit. The microprocessor based LHD evaluation unit evaluates this change in pressure inside the sensor tube installed in the rim seal area to:

a) Generate Fire Signal at pre-set levels for actuation of foam based suppression system.
b) Generate alarm at the Rim seal fire alarm panels.

5.2 LHD Mounting

LHD tube shall be securely fixed as close as possible to the highest point of the seal assembly. The maximum distance from the sensor to the top of the seal shall be 150mm. The sensor shall be located on the external face of the primary/secondary seal so that it can be inspected without the need for removal of any seal components.

LHD tube mounts shall be such that they can accommodate tank flexing and movement without causing chafing or other damage to the tube. The Vendor shall supply all necessary fixing brackets, sleeves, clamps or other devices required to install the sensor tube on the tank roof.

5.3 General requirements

a) The sensor (metallic tube) element shall be reusable after exposure to and rapid extinguishment of associated hydrocarbon fires and shall be re-settable after actuation. The detection system shall be restored for service after event occurrence from the Control Room without the need for access to the protected area.

b) The Sensor tube shall be hollow metallic tube, free from glass, fiber, and rubber & plastic for its long and dependable service.

c) The LHD evaluation panel shall be installed on the tank pontoon.

d) Monitoring of the detector as well as hollow metallic tube should be as per suitable technology.

e) The detection system shall provide alarm/fault signals separately for each tank at the rim seal main fire alarm panel at Control Room.

f) The system shall have the capability of storing system specific parameters and event logging for each tank.

g) The Detection system shall be site as well as control room panel configurable for either Rate of Rise or Fixed Temperature or both at two different alarm thresholds. The same should have proven track record of using in hydrocarbon storage tanks. Documentary evidence for the same shall be submitted along with the offer.

h) The Detection system shall be of de-centralized type i.e. individual detection system (sensor tube with evaluation unit) for individual tank shall be independent & shall be mounted on the tank roof itself.

i) The system shall have the facility for interfacing with Laptop for configuration/compilation of loops and setting the parameters of the system.

j) All field junction boxes/instruments/electrical equipment shall be provided with pre-fabricated canopy.

k) License Software for the detection system shall be site specific with authorisation for use of the software for life at a particular facility. The documented authorisation shall accompany the software at the time of supply.

l) The system shall be FAIL safe as per the criteria given in Annexure-BBB.

6.0 Foam Fire Suppression System

6.1 Design

The Rim seal fire suppression system shall include the appropriate number of equally spaced identical modular foam units mounted adjacent to but, outside the containment area of the foam dam so as to protect the entire rim seal area. The foam units shall be charged with pre-mixed foam solution pressurised with nitrogen as an expellant gas. All modules on a tank shall be actuated simultaneously in the event of automatic detection of fire from any detector (in case of more than one linear detector) on the tank roof or by actuation of a manual release station outside the bund. The system shall be designed for a minimum foam application rate of 18 lpm/m2 of rim seal area. An application period of 40 seconds (+10% variation is acceptable) shall be considered.

The system shall be modular in design with each section of foam distribution manifold protecting the equal length of Rim seal area. In order to ensure full foam coverage in the entire rim seal area, the placement of the nozzle shall be such that foam application shall be uniform including the area at the ends of the manifold.

Foam concentrate to be used in the rim seal fire protection system shall be UL listed 3% concentrate aqueous film forming foam (AFFF) or 3% concentrate Film Forming Flouro Protein (FFFP). The type of foam will be confirmed by OIL during detail engineering.

6.2 Foam solution modules

a) Stainless Steel (SS-316) Foam solution storage tank (foam module) shall be designed to meet foam application rate of minimum 18 lpm/m2 of protected rim seal area for an application period of maximum 40 seconds. However, the maximum capacity of each foam solution storage tank shall not exceed 250 litres.

b) Foam solution storage tank shall be manufactured to ASME-VIII, Div-1 requirements.

c) Foam Discharge Manifold and distribution pipe work with semi aspirating foam spray nozzles (expansion ratio 1:3 to 1:6) shall be made of SS-316 and evenly spaced to cover one segment of rim seal up-to maximum length 50 meters.

d) Pneumatically operated Foam Discharge ball valve shall be provided at discharge outlet.

e) Instrumentation Panel containing nitrogen charging port, Distribution Manifold, pressure switch to monitor foam module pressure, etc. shall be installed on each foam module.

f) Canopy shall be provided on each foam module for protection from direct impingement by sunlight & rain water.

g) Clearly legible schematic block diagram and safe operating procedure shall be permanently fixed on each foam module.

h) Suitable sized filling and draining facilities shall be provided for operation and maintenance of modules. A safety relief valve is to be fitted on each foam module.

i) Each foam module shall be fitted with a pressure gauge to manually identify module pressure. Additionally, the signal from the pressure switch shall be terminated into the Local junction box and a common signal for "Module pressure low" shall be transmitted for each tank to the Rim Seal fire alarm panel at the control room.

j) One Test discharge connection with nozzle shall be provided to allow testing of system without discharging foam into Rim seal area.

6.3 Foam system general requirements

a) The discharge nozzles shall be mounted above the Primary seal and aligned such that the discharge pattern shall be directed at the tank shell above the primary seal around the complete circumference of the tank.

b) The suppression system shall be capable of actuation from local indication panel to be installed outside the tank dyke.

c) The foam discharge nozzles shall be UL listed / FM Approved.

d) All the piping coming in contact with foam solution shall be of SS-316.

e) Pipe supports shall be designed and located to effectively sustain the weight and thermal effects of piping system and to prevent its vibration.

f) The piping shall be provided with the required number of valves, bends, and fittings for the efficient functioning of the system.

g) Module Pressure Low signals shall be available from the unit through pressure switch.

h) Module level low signals shall be available from the unit through level switch.

7.0 Alarm & Control Panel

7.1 Local Panel/Junction box:

Explosion proof local panel / Junction Box shall be provided outside the bund against each tank for connecting I/Os & power. Canopy of material SS-316 is to be provided for the junction box.

7.2 Emergency Actuation point:

Manual Actuation point shall be provided on the Local panel/junction box outside the tank dyke

for manual action of foam suppression system.
Manual Actuation Point (MAP) shall be painted & labelled with fluorescent paint clearly indicating the relevant tank numbers. It should require two operations for actuation - e.g. Pull down flap & Push Button.

7.3 Rim Seal Main Fire Alarm Panel at Control Room/Operator Cabin:
Site specific designed Rim seal main Fire Alarm Panel (FAP) shall be provided at the relevant Control Room/operator Cabin for remote indication of the signals from the detection and suppression system.

This panel should have audio-visual alarm with auto/reset facility. An annunciation window shall be provided on the front face of the panel. The following signals shall be available in the panel:
o Fire - Flashing light and sounder
o Detector Fault - Flashing light and sounder
o Cable Fault - Flashing light and sounder
o Module pressure low (common per tank) - Flashing light and sounder
o Total system is healthy -Constantly illuminated green light

Additional Repeater Panel for indication of fire shall be provided at other manned location like Fire Station or any other location - (Admin building/office of IM at ITF Tengakhat).

8.0 Tank Alarm Automation:
One additional Graphic Console (LG/Samsung/Sony/Panasonic make 22 inch touch screen LCD) with software and graphical representation of tanks shall be provided at each Rim seal Main Fire Alarm Panel control room/operator cabin with unique site based layout of tank farm to be protected by the Rim seal system. The console shall have features of tank number with Pop-up, event logging, history and prints. It shall be able to maintain historical data of alarm and faults for minimum 30 days.

9.0 Connection Cables/Junction boxes :
9.1 General requirement:
9.1.1 The connection cable onto and from the tank roof shall:
a) Consist of stranded copper conductor of minimum 1.mm2 according to power requirements.
b) Have a working temperature range of -40°C to +80°C.
c) Have length and mounting suitable for tank roof movement over the entire height.
d) Cables between tank roof to Dyke wall and control room/operator cabin to Dyke wall shall be armoured FRLS.
e) Cable Joints shall not be used for signal and control cables.
f) There shall not be any cable joints for power cables inside the tank dyke.
g) All cable glands shall be provided with PVC shrouds to prevent ingress of moisture and rain water inside the enclosures.

9.1.2 All multi colour core cables having more than three cores shall have a minimum of 20% spare cores / pair.(Preferably 10core)
9.1.3 Power distribution network shall be designed in such a way that single point failure shall not cause tripping of the total system. Each distribution point shall be provided with a separate MCB of power rating for isolation of the system. Each dyke JB should have two redundant power supplies.
9.2 Cable routing onto the tank

Provision shall be made to prevent snagging of the cable. It shall take account of tank roof movement and wind conditions. Routing shall be done along the rolling ladder with necessary arrangement to ensure that the cable does not snag under the ladder wheels.

9.3 Cable routing between tank dyke & main fire alarm panel:
All the above ground cables shall be laid in galvanised perforated G.I cable trays. Underground cables shall be laid in armored HDPE conduits as per ASTM F2160 (Standard Specification for Solid Wall High Density Polyethylene Conduit).

Annexure-BBB

FAIL SAFE REQUIREMENT
The system shall have features that ensure fail-safe operation of the rim seal fire protection system even under abnormal conditions.

To ensure the fail-safe operation of the rim seal fire protection system, the system shall be designed in such a way that in the event of any failure within the system due to any reason like cable damage, power failure, mechanical damage to the system parts or adverse environmental condition, the system shall alert user through alarm. Rim seal fire protection system shall have following features to ensure the fail safe operation:

CASE 1: Power failure from mains to the fire alarm panel in the control room/rim seal protection system:
Power supply to all components of the Rim seal fire protection system including panels shall be taken from Un-interrupted Power Supply (UPS) source. In case of failure of AC Power, UPS should be rated to supply continuous power for minimum 2 hours.
CASE 2: Any hardware/software problem in functioning of fire alarm panel in control room:
System should independently be able to actuate the extinguishing system locally on the tank upon detection of fire without any support from the fire alarm panel in the control room. This feature should be of de-centralized and independent for each tank.

CASE 3: Failure / cut of any or all signal cables communicating to / from tank to control room or vice versa:
The system should have the feature whereby it would still remain functional locally on the tank i.e. detect fire, give alarm (actuation signal) locally and actuate the extinguishing system. Cable fault signal should be displayed on the fire alarm panel in control room.
CASE 4: Failure of detection system installed on the tank
The system should give "detection fault" alarm signal at fire alarm panel.
CASE 5: Leakage / damage in detection Tube:
Fault indication / alarm should be displayed on the fire alarm panel
CASE 6: Pressure in the Foam module low:
Low module pressure indication & alarm should be displayed on the fire alarm panel.
CASE 7: Level in the Foam module low:
Low level indication & alarm should be displayed on the fire alarm panel.

SPECIAL TERMS & CONDITIONS:

1.0 Vendor's Scope of Supply and Work:

a) Design, Engineering, Fabrication and Supply of all the components of Rim seal Fire Protection system as per the specification.

b) Installation of the Rim seal fire protection system on the tank roof deck.
c) Supply & Installation of audio/visual indication panel with manual actuation point outside each tank dyke.
d) Supply and installation of all required signal cables, power cables, interface cables & junction boxes from Rim seal Main Fire Alarm Panel upto the control room/operator cabin covering the local indication panel.
e) Supply and installation of all required signal cables, interface cables & junction boxes from control room to repeater Panel.
f) Provision of potential-free contacts at Rim seal Main Fire Alarm Panel for FIRE and FAULT Signals for each tank for necessary hook up with main fire alarm system at the location.
g) Provision of RS485/RS232 or equivalent communication links up-to Rim Seal Main Fire Alarm Panel at control room/operator cabin for connection with laptop computer.
h) Provision of Uninterrupted power supply (adequately sized UPS to be supplied) at the Rim seal main Fire Alarm panel control room/operator room & repeater panel room for operation of Entire rim seal fire protection system, if not available at site. Power distribution from main fire alarm panel to, Local panel outside the dyke, rim seal fire protection system at tank & repeater panel shall be designed, supplied & installed by the vendor.
i) One Laptop (HP/Dell/Sony/Lenovo/Toshiba make Standard laptop with minimum 300 GB HDD, 4GB RAM, 2.4 GHz Intel processor & 14 inch screen) for the two tanks with unique software along with hardware/software lock from the manufacturer of detection system to be provided for system configuration & diagnosis of detection system supplied by the Vendor. However, handheld configuration & diagnosis of detection system is desirable for maintenance of system.
j) Supply & Installation of One Graphic Console (LG/Samsung/Sony/Panasonic make 22 inch size touch-screen LCD) with software for graphical representation of unique site based layout of tank farm to be protected for each site/tank farm at the control room where rim seal main fire alarm panel is located. The software shall have features of tanks with active pop-up, event logging, history and prints.
k) Provision of system simulation from rim seal main fire alarm panel at the control room.
l) Local common audio-visual alarm for fire near the dyke with range audible upto 200 m radial distance.
m) Portable equipment including Nitrogen filling cylinder, trolley & hose reel to facilitate re-filling the foam modules
n) The Vendor shall provide details of the equipment to be mounted on the tank roof and the total weight with foam solution charge.
o) Supply of Operating and Maintenance Manuals containing procedures, block and P&I drawings, dedicated wiring diagram, technical documents, list of recommended spare parts & approvals in Hard copies & CD form.
p) Supply of all software on CD alongwith required software licenses.
q) Factory acceptance test as per clause no. 5.0 mentioned below.
r) Site acceptance test as per clause no. 6.0 mentioned below.
s) Integration and Commissioning of the entire system.
t) Training of the OIL's personnel on functional, operational & routine maintenance aspects of the system at each site.
u) All civil, mechanical, electrical & instrumentation work required for completion of the job
v) Statutory certification and approval from DGMS for the equipment and instruments supplied for installing at the tank roof. The approval number should be displayed on the body of the equipment.

Any other component and software required for completion and commissioning of Rim seal Fire Protection system shall be supplied & installed by the vendor except the items mentioned

under the Owner's scope in clause 2.0 mentioned below.

2.0 EPC Contractor/Owner Scope
240V/415V (+/- 10%), 50 Hz(+/- 3%) AC Power shall be made available at main fire alarm panel of control room. All control and shut down instruments of Foam module of floating roof shall be operated with 24v D.C. In this regard, vendor shall furnish the design & calculation of power distribution & it's consumption along with their bid. All cables on surface/ground level must be laid underground with cable marking pegs. Redundant power supplies to be considered for 24V DC supply.

3.0 Operating Conditions
The system shall be suitable for operating satisfactorily in humid and corrosive atmospheres found at Duliajan. The system shall be tolerant to environmental influences such as high ambient temperatures, rain, and change in humidity, electromagnetic interference, Radio Frequency Interference (RFI), aggressive or corrosive vapour, UV radiation, and heavy rainfall.

4.0 Approvals: Following approvals shall be required at the time of supply:
a) DGMS, Dhanbad (India). (The approval number should be displayed on the body of the equipment).
b) The Linear Heat Detector shall have UL listing or VdS/FM/LPC approved.
c) The bidder must submit valid DGMS approval for the offered electrical and electronic equipment to be used in hazardous area along with the bid.
d) In case the bidder does not have valid DGMS approval, Field trial permission from DGMS for all the electrical and electronic equipment to be used in hazardous area (Zone1 & Zone2) should be submitted along with the offer. However in such case special DGMS payment terms as approved by our management has to be followed.
e) All field trial permissions should be supported with CIMFR/ERTL or certification from the recognized testing laboratory of the country of origin in case of imported equipment. Part certification will be rejected.
f) All enclosures for electrical equipment shall be suitable for use in Zone 1 & 2 with ingress protection of IP65.
g) UL listing for 3% type AFFF foam to be used.
h) The Foam spray Nozzles shall be UL listed or FM approved.
i) For obtaining DGMS approval procedure please visit: www.dgmsindia.in
j) DGMS approval for Tank top JB, Dyke JB, Pressure & Level switch, Solenoid valve will be mandatory apart from other items that may be used in the hazardous area as per bidder system design.

5.0 Factory Acceptance Testing
Vendor shall arrange following Factory Acceptance Test in presence of OIL's representative by Third Party Inspection (TPI) agency approved by the OIL (viz. M/s Lloyds, M/s Bureu Veritas, M/s IRS, M/s RITES or M/s DNV only). Third party Inspection Charges shall be borne by the vendor. FAT procedure to be submitted by vendor for OIL approval.
a) Positive Material Identification (PMI) tests of 10% material of all piping, vessel and fasteners and other pressure components and witness by TPI.
b) Testing of PLC panel, repeater panel & Graphics at console for ensuring system functionality as per the requirement.
c) Review of approval & certification of DGMS & CIMFR / ERTL Certificates for Electrical Equipment & Enclosure to be mounted in classified hazardous areas.
d) Review of UL listing/FM approval document for the Nozzle.
e) Review of DGMS & UL listing or FM/VdS/LPC approval for linear heat detector.

f) 100% welding joints of pressure vessel and piping shall be radiographed and reports will be reviewed by TPI.
g) Inter granular corrosion test as per ASTM A-262 Practice-E (IGC) sampling and stamping to be done in presence of TPI.
h) Weld joint fit up to 10 % will be witnessed by TPI randomly.
i) Review of WPS (Welding Procedure Specification), WPQ (Welder's Performance Qualification) as per ASME Sec-II - Part-C & ASME-Sec-IX, QAP (Quality assurance plan) and mill test certificate of raw material and test certificate marking.

j) TPI shall witness 100% of the following manufacturing activities of pressure vessel and piping besides other inspection as per applicable codes:
Weld joint hardness test after PWHT if any
Final Visual and dimensional inspection
Air testing of nozzle pads
Hydro testing (Water quality should be monitored and shall not contain more than 25 PPM chlorides)
k) Measurement of expansion ratio of the foam produced from nozzle at 7 Kg/cm2
l) Test for full discharge and actuation of foam module when exposed to an actual fire on Rim seal simulator. This Rim seal simulator shall consist of a tray 300 mm wide and 6 meter long. The detector tube shall be mounted 300 mm above the fire pan and run along the centre line of the pan. The test fuel shall be a liquid hydrocarbon such as motor spirit, or kerosene. The module and discharge Manifold with Nozzles for carrying out the test shall be selected by the owner in presence of Third Party Inspection Agency. On actuation, entire Foam Module should be discharged in approximately 40 seconds and fire should be extinguished.

6.0 Site Acceptance Test:
Vendor shall arrange following Site Acceptance Test in presence of OIL's representative at no extra cost loaded to OIL:
a) Simulation of discharge of all Foam modules on each tank shall be done from the panel at control room. Foam required for the simulation/testing shall be supplied by the vendor. Nitrogen gas has to also to be arranged by the supplier.
b) Actuation of foam discharge ball valve by operation of manual Fire call point outside the dyke.
c) Functioning of All signals at the control panels & Junction box outside the dyke.
d) Demonstration of resetting of Detection system after simulation from control room itself.
e) Demonstration of Site specific graphic console.
f) UL listed 3% type AFFF/FFFP foam suitable for foam nozzles required during testing & commissioning shall be supplied by the owner.
Site Acceptance Test (SAT) as given above shall be conducted for each tank within maximum 15 days of completion of installation.

Based upon the above test requirement, Vendor shall develop detailed Quality Assurance plan (QAP) & submit it to OIL for approval.

7.0 Testing and maintenance during operation
Both the detection and the extinguishing system shall have a manual or /and automatic simulation facility to test system integrity and function during operation. A discharge test nozzle and appropriate valve shall be provided so that the system can be discharged without the need for discharging foam into the seal area.

8.0 Documentation:

The supplier shall provide four sets manuals for the location containing the following documents after commissioning of the system on the tanks:
a) Complete Operating and Maintenance procedures.
b) As built drawings (tank farm) showing the location of systems and associated alarm/control equipment.
c) Data sheets providing technical details of all Major components.
d) DGMS approval Certificates for Electrical & Instrumentation Equipment and Enclosure mounted in classified hazardous areas.
e) UL listing/FM approval document for the Nozzle.
f) UL listing or FM/VdS/LPC approval for linear heat detector.

The entire manual shall be provided in hard bound A4 size folders with clear printed labels on it. In addition to the hard copies following software shall be supplied after the commissioning
a) Soft copies of the documents/drawings placed in the manual.
b) CD for Software to be used with the rim seal fire detection system along-with the authorization.

9.0 Warranty

Vendor shall offer performance guarantee for satisfactory and trouble free operation of the entire Rim seal protection system for a minimum period of 1 year from the date of formal successful commissioning of the system to OIL's satisfaction.

The Vendor shall repair any defect or replace any defective part during the guarantee period within two weeks of receiving such information from the owner.

10.0 Post Warranty Maintenance:
The Vendor/bidder will have to carry out annual post-warranty maintenance:
a) The proposal shall include separate price item and the vendor shall provide comprehensive (including instrumentation, electrical, foam suppression system & piping, valves etc.) maintenance including supply of spares for period of one(1) year after the expiry of the warranty period.
b) The travel, boarding & lodging of service engineer/technician shall be borne by the vendor. The vendor shall also bring their own tools & tackles as required for maintenance of the system.
c) The service under post warranty maintenance shall include :
i. Preventive Maintenance
Preventive maintenance shall involve once in six month, complete checking, site acceptance test as per the specification, repair/replacement of defective part/components and detailed reporting, malfunction

ii. Emergency Maintenance
In the event of any malfunction of the system, experienced service engineer shall be made available at site within two weeks on the receipt of such information from the owner & the system must be brought to the Normal within 24 hrs after reporting at site.

11.0 HSE Requirement :
The following General Health, Safety & Environment (HSE) points will have to be followed by the contractor strictly.
i) It will be solely the Contractor's responsibility to fulfill all the legal formalities with respect to the Health, Safety and Environmental aspects of the entire job (namely; the person employed by him, the equipment, the environment, etc.) under the jurisdiction of the district of that state

where it is operating. . Ensure that all sub-contractors hired by him comply with the same requirement as the contractor himself and shall be liable for ensuring compliance all HSE laws by the sub or sub-sub contractors.

ii) Every person deployed by the contractor in a mine must wear safety gadgets to be provided by the contractor. The Contractor shall provide proper Personnel Protective Equipment as per the hazard identified and risk assessed for the job and conforming to statutory requirement and company PPE schedule. Safety appliances like protective footwear, Safety Helmet and Full Body harness has to be DGMS approved. Necessary supportive document shall have to be submitted as proof. If the Contractor fails to provide the safety items as mentioned above to the working personnel, the Contractor may apply to the Company (OIL) for providing the same. OIL will provide the safety items, if available. But in turn, OIL will recover the actual cost of the items by deducting from Contractor's Bill. However, it will be the Contractor's sole responsibility to ensure that the persons engaged by him in the mines use the proper PPE while at work.

All the safety gears mentioned above are to be provided to the working personnel before commencement of the work.

iii) The Contractor shall prepare written Safe Operating Procedure (SOP) for the work to be carried out, including an assessment of risk, wherever possible and safe methods to deal with it/them. The SOP should clearly state the risk arising to men, machineries & material from the mining operation / operations to be done by the contractor and how it is to be managed.

iv) The contractor shall provide a copy of the SOP to the person designated by the mine owner who shall be supervising the contractor's work.

v) Keep an up to date SOP and provide a copy of changes to a person designated by the Mine Owner/Agent/Manager.

vi) Contractor has to ensure that all work is carried out in accordance with the Statute and SOP and for the purpose he may deploy adequate qualified and competent personnel for the purpose of carrying out the job in a safe manner. For work of a specified scope/nature, he should develop and provide to the mine owner a site specific code of practice in line.

vii) All persons deployed by the contractor for working in a mine must undergo Mines Vocational Training, initial medical examination, PME. They should be issued cards stating the name of the contractor and the work and its validity period, indicating status of MVT, IME & PME.

viii) The contractor shall submit to DGMS monthly returns indicating - Name of his firm, Registration number, Name and address of person heading the firm, Nature of work, type of deployment of work persons, Number of work persons deployed, how many work persons hold VT Certificate, how many work persons undergone IME and type of medical coverage given to the work persons

ix) It will be entirely the responsibility of the Contractor/his Supervisor/representative to ensure strict adherence to all HSE measures and statutory rules during operation in OIL's installations and safety of workers engaged by him. The crew members will not refuse to follow any instruction given by company's Installation Manager / Safety Officer / Engineer / Official / Supervisor/Junior Engineer for safe operation.

x) Any compensation arising out of the job carried out by the Contractor whether related to pollution, Safety or Health will be paid by the contractor only.

xi) Any compensation arising due to accident of the Contractor's personnel while carrying out the job, will be payable by the contractor.

xii) The contractor shall have to report all incidents including near miss to Installation Manager / departmental representative of the concerned department of OIL.

xiii) The contractor has to keep a register of the persons employed by him/her. The contractor's supervisor shall take and maintain attendance of his men every day for the work, punctually.

xiv) If the company arranges any safety class / training for the working personnel at site

(company employee, contractor worker, etc) the contractor will not have any objection to any such training.
xv) The health check up of contractor's personnel is to be done by the contractor in authorized Health Centers as per OIL's requirement & proof of such test(s) is to be submitted to OIL. The frequency of periodic medical examinations should be every five years for the employees below 45 years of age and every three years for employees of 45 years of age and above.
xvi) To arrange daily tool box meeting and regular site safety meetings and maintain records.
xvii) Records of daily attendance, accident report etc. are to be maintained in Form B, E, J (as per Mines Rules 1955) by the contractor.
xviii) A contractor employee must, while at work, take reasonable care for the health and safety of people who are at the employee's place of work and who may be affected by the employee's act or omissions at work.
xix) A contractor employee must, while at work, cooperate with his or her employer or other persons so far as is necessary to enable compliance with any requirement under the act or the regulations that is imposed in the interest of health, safety and welfare of the employee or any other person.
xx) Contractor's arrangements for health and safety management shall be consistent with those for the mine owner.
xxi) In case Contractor is found non-compliant of HSE laws as required company will have the right for directing the contractor to take action to comply with the requirements, and for further non-compliance, the contractor will be penalized prevailing relevant Acts/Rules/Regulations.
xxii) When there is a significant risk to health, environment or safety of a person or place arising because of a non-compliance of HSE Measures Company will have the right to direct the contractor to cease work until the non-compliance is corrected.
xxiii) The contractor should prevent the frequent change of his contractual employees as far as practicable.
xxiv) The contractor should frame a mutually agreed bridging document between OIL & the contractor with roles and responsibilities clearly defined.
xxv) For any HSE matters not specified in the contract document, the contractor will abide the relevant and prevailing Acts/rules/regulations/ pertaining to Health, Safety and Environment.

12.0 Specific Safety measures for the job:
The tank being in the operating Tank Farm, it is obligatory for the contractor to take all necessary safety precautions as per HSE Policy while carrying out the repair work.

It is mandatory for the bidders to visit the site to get them acquainted with the ground realities and assess the actual quantum of works before submission of their bids.

The bidder will have to strictly follow the following norms / guidelines.
1. Necessary cold and hot work permits are to be obtained from the competent person (Installation Manager) through the site engineer before start of the job(s)
2. While carrying out the welding and cutting work, the contractor should strictly enforce the guidelines as stated in OMR-1984 and OIL's SOP VOL-II (Safe Maintenance Procedure for Floating roof crude oil tanks)
3. The oxy acetylene cutting sets will have to be fitted with flash back arrestors in the regulator side as well as nozzle side.
4. Under no circumstances LPG should be used for gas cutting purpose.
5. Utmost care is to be observed in deciding the number of the tripods with chain pulley blocks for handling any job. Also the capacity of the chain pulley blocks must be minimum 1.5 times the weight of the material it is going to lift / lower.
6. After receipt of the work order the contractor shall have to submit authorised list of contract

personnel, who will be engaged for the jobs including name of the Contractor's competent persons and every contact details.
7. Necessary sign board / warning signals like caution hot work in progress, emergency telephone numbers, no entry without permission etc. should be used while working on tanks. The said signals / sign boards shall have to be arranged by the contractor.
8. First aid box is to be arranged by the contractor for each gang working at site and same have to be carried by contractor's personnel to the site while carrying out the job.
9. The contractor shall clear all the rubbish and surplus materials from the site on completion of the work and shall have to leave the site clean and tidy.
10. In addition to the MVT as mentioned in clause vii) of special terms and conditions, the contractor's personnel shall undergo safety training to be given by DSO and to ensure that the same personnel are engaged for the job.
11. The contractor have to ensure complete safety of the personnel engaged by him, and of all the equipment they will handle and must take full responsibility for their safety.
12. The contractor has to ensure the quality and reliability of all the tools, equipment and instruments they use.
13. The attendance register to be kept for daily progress as well as attendance of contractor's personnel and it is to be signed by the contractor or his authorised representative and OIL's site engineer.
14. The contractor have to provide suitable facility such as Drinking Water, Lighting (approved FLP light in hazardous area).
15. The contractor personnel have to take every possible care to keep the environment clean and free from pollution.
16. The contractor personnel should understand the implication of the known hazards related to the work undertaken by them and the necessity of having an emergency plan approved by OIL to counter them, if anything goes wrong.
17. Contractor must own / undertake following Safety equipment required for the work:

Personal Protective Equipment (PPE) - LOT
Fire Screen in two sides of the tank and localised for outside welding.

13.0 Condition of works :
i) Security and responsibility of all Company's materials issued to the contractor will have to be borne by the contractor till completion of the replacement of bottom plate in all respects including hydraulic testing.
ii) No. responsibility of contractor's materials and equipment will be borne by the Company.
iii) All safety regulations will have to be followed by the contractor while executing the job and to supply safety appliances to the labourers engaged for the job.
iv) Experienced supervisor is to be engaged by the contractor to supervise the entire job and liaise with the Department every day.
v) The Company will not provide any accommodation and drinking water to the contractor's personnel. The contractor must have his own arrangements for accommodation, electricity and drinking water while working in the field installations.
vi) Any materials found defective due to bad workmanship will have to be replaced by the contractor at his own cost.
vii) The contractor must work on Sundays and Holidays whenever required.
viii) Party should pay due consideration of Govt. labour wages rate while quoting rates.
ix) The contractor shall not engage minor labourer below eighteen (18) years of age under any circumstances.
x) The contractor shall engage only skilled, capable and competent personnel who are fully

conversant with the job. Before starting the job, the contractor shall submit the list of competent personnel with valid certificates, who will carry out the job. xi) During transportation of any material by road or at site area, the contractor shall take utmost care to prevent any kind of damage to the company's property. Damage, if found to occur by contractor's personnel, contractor will have to pay the amount fixed by the company for such type of damage. xii) While providing the services, the contractor personnel have to follow the procedures and systems taking all control measures in all the stages of works to avoid any untoward incidents/accidents. Contractor shall start execution of the job only on receipt of Work Permit from Installation In-Charge every day before commencement of the job. xiii) For any clarification with regard to the above, the contractor may contact General Manager-Production(Oil)/ChiefEngr-Production(Oil)/Head-Inst/Head-S&E/Head-FieldEngg/ChiefEngr-Fire Service. xiv) The contractor should deploy a competent person throughout the job under whose constant supervision only the job will be carried out. 14.0 Installation requirements: No modification or alterations shall be allowed on the main tank shell. Rim seal fire protection system design shall be suitable in accordance with the individual tank design. It is recognized that installation may be required whilst the tank is in service. In this case the complete system shall be designed such that it can be installed without the need for welding or any kind of hot work on the tank. In case, the installation is required at the tank in service, the following condition shall apply: a) Vendor shall comply fully with all safe working practices and Permit to Work system of the owner. b) No hot work shall be allowed on the tank. c) No work shall be allowed to be performed during receipt and despatch of material from the tank. d) Presence of hydrocarbon vapours shall be checked before starting of any job on tank pontoon with hand held explosimeter. e) Work persons working in tank area must use required personal protective equipment & retractable type fall arrestor system as per safety norms. Bidder shall have to arrange all necessary PPE required as per the site requirement. 15.0 Training: Vendor shall impart training to site personnel for routine operation & maintenance of the rim seal fire protection system. The training shall be imparted at OIL's site for minimum two days immediately after commissioning at each stage.	
ITEM NO. 20 **Installation and commissioning of automatic Rim seal fire detection and suppression system of external floating roof tanks (EFRT) - QTY = 01 AU** 1.0 Scope of Work: i) Installation of the Rim seal fire protection system on the tank roof deck. ii) Installation of audio/visual indication panel with manual actuation point outside each tank dyke. iii) Installation of all required signal cables, power cables, interface cables & junction boxes from Rim seal Main Fire Alarm Panel upto the control room/operator cabin covering the local indication panel. iv) Installation of all required signal cables, interface cables & junction boxes from control room to repeater Panel.	

v) Provision of potential-free contacts at Rim seal Main Fire Alarm Panel for FIRE and FAULT Signals for each tank for necessary hook up with main fire alarm system at the location.
vi) Provision of RS485/RS232 or equivalent communication links up-to Rim Seal Main Fire Alarm Panel at control room/operator cabin for connection with laptop computer.
vii) Provision of Uninterrupted power supply (adequately sized UPS to be supplied) at the Rim seal main Fire Alarm panel control room/operator room & repeater panel room for operation of Entire rim seal fire protection system, if not available at site. Power distribution from main fire alarm panel to, Local panel outside the dyke, rim seal fire protection system at tank & repeater panel shall be designed, supplied & installed by the vendor.
viii) Installation of One Graphic Console (LG/Samsung/Sony/Panasonic make 22 inch size touch-screen LCD) with software for graphical representation of unique site based layout of tank farm to be protected for each site/tank farm at the control room where rim seal main fire alarm panel is located. The software shall have features of tanks with active pop-up, event logging, history and prints.
ix) Provision of system simulation from rim seal main fire alarm panel at the control room.
x) Installation of Local common audio-visual alarm for fire near the dyke with range audible up to 200 m radial distance.
xi)Site acceptance test as per clause no. 2.0 mentioned below.
xii)Integration and Commissioning of the entire system
xiii) Training of the OIL's personnel on functional, operational & routine maintenance aspects of the system at each site.
xiv) All civil, mechanical, electrical & instrumentation work required for completion of the job.
xv) Any other component and software required for completion and commissioning of Rim seal Fire Protection system shall be installed by the vendor.

2.0 Site Acceptance Test:
Vendor shall arrange following Site Acceptance Test in presence of OIL's representative at no extra cost loaded to OIL:
a) Simulation of discharge of all Foam modules on each tank shall be done from the panel at control room. Foam required for the simulation/testing shall be supplied by the vendor. Nitrogen gas has to also to be arranged by the supplier.
b) Actuation of foam discharge ball valve by operation of manual Fire call point outside the dyke.
c) Functioning of All signals at the control panels & Junction box outside the dyke.
d) Demonstration of resetting of Detection system after simulation from control room itself.
e) Demonstration of Site specific graphic console.
f) UL listed 3% type AFFF/FFFP foam suitable for foam nozzles required during testing & commissioning shall be supplied by the owner.
Site Acceptance Test (SAT) as given above shall be conducted for each tank within maximum 15 days of completion of installation.

Based upon the above test requirement, Vendor shall develop detailed Quality Assurance plan (QAP) & submit it to OIL for approval.

3.0 Testing and maintenance during operation
Both the detection and the extinguishing system shall have a manual or /and automatic simulation facility to test system integrity and function during operation. A discharge test nozzle and appropriate valve shall be provided so that the system can be discharged without the need for discharging foam into the seal area.

4.0 Documentation:

The supplier shall provide four sets manuals for the location containing the following documents after commissioning of the system on the tanks:
a) Complete Operating and Maintenance procedures.
b) As built drawings (tank farm) showing the location of systems and associated alarm/control equipment.
c) Data sheets providing technical details of all Major components.
d) DGMS approval Certificates for Electrical & Instrumentation Equipment and Enclosure mounted in classified hazardous areas.
e) UL listing/FM approval document for the Nozzle.
f) UL listing or FM/VdS/LPC approval for linear heat detector.

The entire manual shall be provided in hard bound A4 size folders with clear printed labels on it. In addition to the hard copies following software shall be supplied after the commissioning
a) Soft copies of the documents/drawings placed in the manual.
b) CD for Software to be used with the rim seal fire detection system along-with the authorization.

5.0 Warranty

Vendor shall offer performance guarantee for satisfactory and trouble free operation of the entire Rim seal protection system for a minimum period of 1 year from the date of formal successful commissioning of the system to OIL's satisfaction.
The Vendor shall repair any defect or replace any defective part during the guarantee period within two weeks of receiving such information from the owner.
6.0 HSE Requirement :
The following General Health, Safety & Environment (HSE) points will have to be followed by the contractor strictly.
i) It will be solely the Contractor's responsibility to fulfill all the legal formalities with respect to the Health, Safety and Environmental aspects of the entire job (namely; the person employed by him, the equipment, the environment, etc.) under the jurisdiction of the district of that state where it is operating. . Ensure that all sub-contractors hired by him comply with the same requirement as the contractor himself and shall be liable for ensuring compliance all HSE laws by the sub or sub-sub contractors.
ii) Every person deployed by the contractor in a mine must wear safety gadgets to be provided by the contractor. The Contractor shall provide proper Personnel Protective Equipment as per the hazard identified and risk assessed for the job and conforming to statutory requirement and company PPE schedule. Safety appliances like protective footwear, Safety Helmet and Full Body harness has to be DGMS approved. Necessary supportive document shall have to be submitted as proof. If the Contractor fails to provide the safety items as mentioned above to the working personnel, the Contractor may apply to the Company (OIL) for providing the same. OIL will provide the safety items, if available. But in turn, OIL will recover the actual cost of the items by deducting from Contractor's Bill. However, it will be the Contractor's sole responsibility to ensure that the persons engaged by him in the mines use the proper PPE while at work.
All the safety gears mentioned above are to be provided to the working personnel before commencement of the work.
iii) The Contractor shall prepare written Safe Operating Procedure (SOP) for the work to be carried out, including an assessment of risk, wherever possible and safe methods to deal with it/them. The SOP should clearly state the risk arising to men, machineries & material from the mining operation / operations to be done by the contractor and how it is to be managed.
iv) The contractor shall provide a copy of the SOP to the person designated by the mine owner

who shall be supervising the contractor's work.
v) Keep an up to date SOP and provide a copy of changes to a person designated by the Mine Owner/Agent/Manager.
vi) Contractor has to ensure that all work is carried out in accordance with the Statute and SOP and for the purpose he may deploy adequate qualified and competent personnel for the purpose of carrying out the job in a safe manner. For work of a specified scope/nature, he should develop and provide to the mine owner a site specific code of practice in line.
vii) All persons deployed by the contractor for working in a mine must undergo Mines Vocational Training, initial medical examination, PME. They should be issued cards stating the name of the contractor and the work and its validity period, indicating status of MVT, IME & PME.
viii) The contractor shall submit to DGMS monthly returns indicating - Name of his firm, Registration number, Name and address of person heading the firm, Nature of work, type of deployment of work persons, Number of work persons deployed, how many work persons hold VT Certificate, how many work persons undergone IME and type of medical coverage given to the work persons
ix) It will be entirely the responsibility of the Contractor/his Supervisor/representative to ensure strict adherence to all HSE measures and statutory rules during operation in OIL's installations and safety of workers engaged by him. The crew members will not refuse to follow any instruction given by company's Installation Manager / Safety Officer / Engineer / Official / Supervisor/Junior Engineer for safe operation.
x) Any compensation arising out of the job carried out by the Contractor whether related to pollution, Safety or Health will be paid by the contractor only.
xi) Any compensation arising due to accident of the Contractor's personnel while carrying out the job, will be payable by the contractor.
xii) The contractor shall have to report all incidents including near miss to Installation Manager / departmental representative of the concerned department of OIL.
xiii) The contractor has to keep a register of the persons employed by him/her. The contractor's supervisor shall take and maintain attendance of his men every day for the work, punctually.
xiv) If the company arranges any safety class / training for the working personnel at site (company employee, contractor worker, etc) the contractor will not have any objection to any such training.
xv) The health check up of contractor's personnel is to be done by the contractor in authorized Health Centers as per OIL's requirement & proof of such test(s) is to be submitted to OIL. The frequency of periodic medical examinations should be every five years for the employees below 45 years of age and every three years for employees of 45 years of age and above.
xvi) To arrange daily tool box meeting and regular site safety meetings and maintain records.
xvii) Records of daily attendance, accident report etc. are to be maintained in Form B, E, J (as per Mines Rules 1955) by the contractor.
xviii) A contractor employee must, while at work, take reasonable care for the health and safety of people who are at the employee's place of work and who may be affected by the employee's act or omissions at work.
xix) A contractor employee must, while at work, cooperate with his or her employer or other persons so far as is necessary to enable compliance with any requirement under the act or the regulations that is imposed in the interest of health, safety and welfare of the employee or any other person.
xx) Contractor's arrangements for health and safety management shall be consistent with those for the mine owner.
xxi) In case Contractor is found non-compliant of HSE laws as required company will have the right for directing the contractor to take action to comply with the requirements, and for further non-compliance, the contractor will be penalized prevailing relevant Acts/Rules/Regulations.

xxii) When there is a significant risk to health, environment or safety of a person or place arising because of a non-compliance of HSE Measures Company will have the right to direct the contractor to cease work until the non-compliance is corrected.
xxiii) The contractor should prevent the frequent change of his contractual employees as far as practicable.
xxiv) The contractor should frame a mutually agreed bridging document between OIL & the contractor with roles and responsibilities clearly defined.
xxv) For any HSE matters not specified in the contract document, the contractor will abide the relevant and prevailing Acts/rules/regulations/ pertaining to Health, Safety and Environment.

7.0 Specific Safety measures for the job:
The tank being in the operating Tank Farm, it is obligatory for the contractor to take all necessary safety precautions as per HSE Policy while carrying out the repair work.

It is mandatory for the bidders to visit the site to get them acquainted with the ground realities and assess the actual quantum of works before submission of their bids.

The bidder will have to strictly follow the following norms / guidelines.
1. Necessary cold and hot work permits are to be obtained from the competent person (Installation Manager) through the site engineer before start of the job(s)
2. While carrying out the welding and cutting work, the contractor should strictly enforce the guidelines as stated in OMR-1984 and OIL's SOP VOL-II (Safe Maintenance Procedure for Floating roof crude oil tanks)
3. The oxy acetylene cutting sets will have to be fitted with flash back arrestors in the regulator side as well as nozzle side.
4. Under no circumstances LPG should be used for gas cutting purpose.
5. Utmost care is to be observed in deciding the number of the tripods with chain pulley blocks for handling any job. Also the capacity of the chain pulley blocks must be minimum 1.5 times the weight of the material it is going to lift / lower.
6. After receipt of the work order the contractor shall have to submit authorised list of contract personnel, who will be engaged for the jobs including name of the Contractor's competent persons and every contact details.
7. Necessary sign board / warning signals like caution hot work in progress, emergency telephone numbers, no entry without permission etc. should be used while working on tanks. The said signals / sign boards shall have to be arranged by the contractor.
8. First aid box is to be arranged by the contractor for each gang working at site and same have to be carried by contractor's personnel to the site while carrying out the job.
9. The contractor shall clear all the rubbish and surplus materials from the site on completion of the work and shall have to leave the site clean and tidy.
10. In addition to the MVT as mentioned in clause vii) of special terms and conditions, the contractor's personnel shall undergo safety training to be given by DSO and to ensure that the same personnel are engaged for the job.
11. The contractor have to ensure complete safety of the personnel engaged by him, and of all the equipment they will handle and must take full responsibility for their safety.
12. The contractor has to ensure the quality and reliability of all the tools, equipment and instruments they use.
13. The attendance register to be kept for daily progress as well as attendance of contractor's personnel and it is to be signed by the contractor or his authorised representative and OIL's site engineer.
14. The contractor have to provide suitable facility such as Drinking Water, Lighting (approved FLP light in hazardous area).

15. The contractor personnel have to take every possible care to keep the environment clean and free from pollution.
16. The contractor personnel should understand the implication of the known hazards related to the work undertaken by them and the necessity of having an emergency plan approved by OIL to counter them, if anything goes wrong.
17. Contractor must own / undertake following Safety equipment required for the work:

Personal Protective Equipment (PPE) - LOT
Fire Screen in two sides of the tank and localised for outside welding.

8.0 Condition of works :
i) Security and responsibility of all Company's materials issued to the contractor will have to be borne by the contractor till completion of the replacement of bottom plate in all respects including hydraulic testing.
ii) No. responsibility of contractor's materials and equipment will be borne by the Company.
iii) All safety regulations will have to be followed by the contractor while executing the job and to supply safety appliances to the labourers engaged for the job.
iv) Experienced supervisor is to be engaged by the contractor to supervise the entire job and liaise with the Department every day.
v) The Company will not provide any accommodation and drinking water to the contractor's personnel. The contractor must have his own arrangements for accommodation, electricity and drinking water while working in the field installations.
vi) Any materials found defective due to bad workmanship will have to be replaced by the contractor at his own cost.
vii) The contractor must work on Sundays and Holidays whenever required.
viii) Party should pay due consideration of Govt. labour wages rate while quoting rates.
ix) The contractor shall not engage minor labourer below eighteen (18) years of age under any circumstances.
x) The contractor shall engage only skilled, capable and competent personnel who are fully conversant with the job. Before starting the job, the contractor shall submit the list of competent personnel with valid certificates, who will carry out the job.
xi) During transportation of any material by road or at site area, the contractor shall take utmost care to prevent any kind of damage to the company's property. Damage, if found to occur by contractor's personnel, contractor will have to pay the amount fixed by the company for such type of damage.
xii) While providing the services, the contractor personnel have to follow the procedures and systems taking all control measures in all the stages of works to avoid any untoward incidents/accidents. Contractor shall start execution of the job only on receipt of Work Permit from Installation In-Charge every day before commencement of the job.
xiii) For any clarification with regard to the above, the contractor may contact General Manager-Production(Oil)/ChiefEngr-Production(Oil)/Head-Inst/Head-S&E/Head-FieldEngg/ChiefEngr-Fire Service.
xiv) The contractor should deploy a competent person throughout the job under whose constant supervision only the job will be carried out.

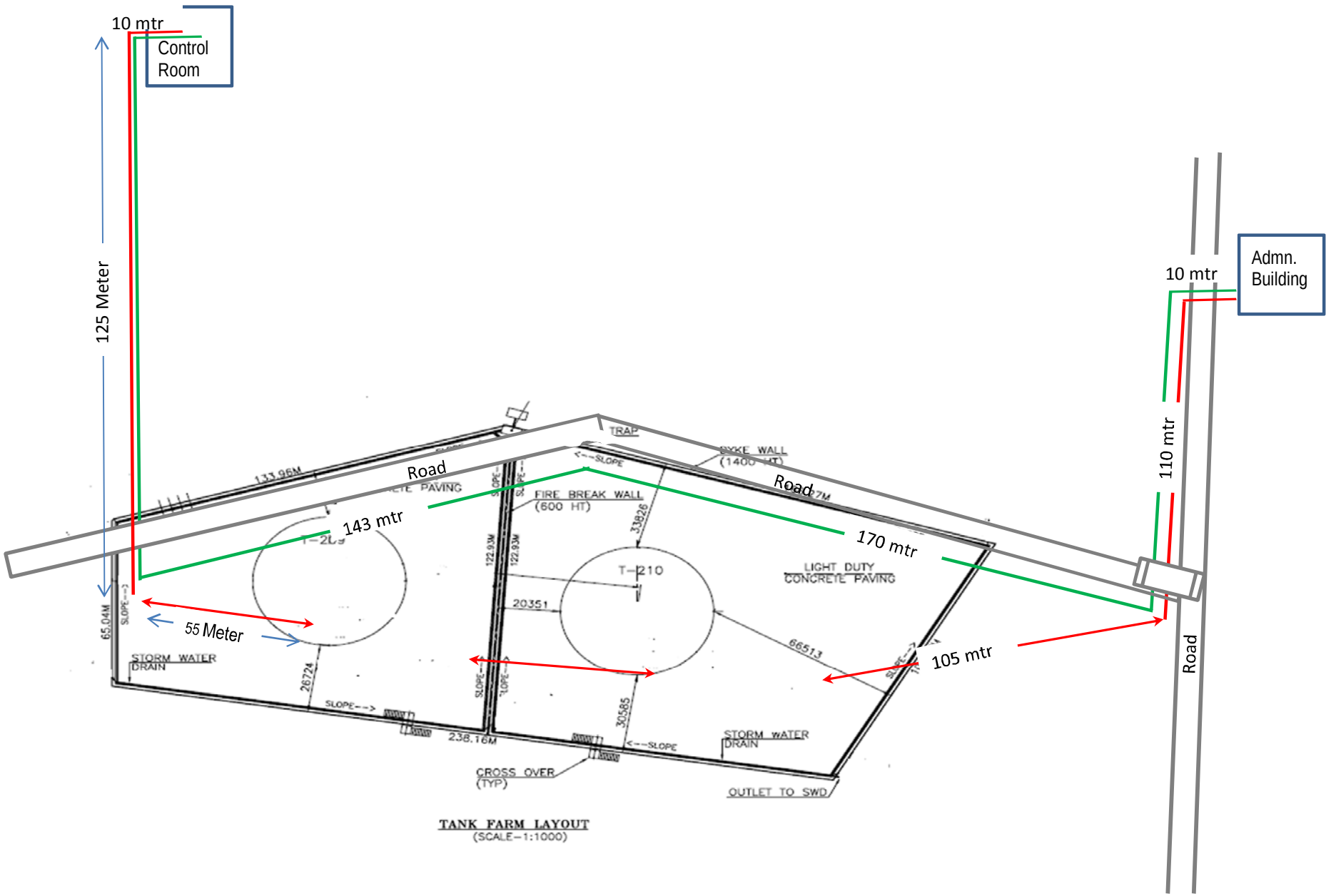
9.0 Installation requirements:
No modification or alterations shall be allowed on the main tank shell. Rim seal fire protection system design shall be suitable in accordance with the individual tank design.

It is recognized that installation may be required whilst the tank is in service. In this case the complete system shall be designed such that it can be installed without the need for welding or

any kind of hot work on the tank. In case, the installation is required at the tank in service, the following condition shall apply: a) Vendor shall comply fully with all safe working practices and Permit to Work system of the owner. b) No hot work shall be allowed on the tank. c) No work shall be allowed to be performed during receipt and despatch of material from the tank. d) Presence of hydrocarbon vapours shall be checked before starting of any job on tank pontoon with hand held explosimeter. e) Work persons working in tank area must use required personal protective equipment & retractable type fall arrestor system as per safety norms. Bidder shall have to arrange all necessary PPE required as per the site requirement. 10.0 Training: Vendor shall impart training to site personnel for routine operation & maintenance of the rim seal fire protection system. The training shall be imparted at OIL's site for minimum two days immediately after commissioning at each site. Cost of training should be included with installation and commissioning cost.	
ITEM NO. 30 **ANNUAL MAINTENANCE CONTRACT (AMC) FOR A PERIOD OF ONE YEAR FOR REAM SEAL FIRE PROTECTION SYSTEM – QTY= 01 AU** **Post Warranty Maintenance:** The Vendor/bidder will have to carry out annual post-warranty maintenance: a) The proposal shall include separate price item and the vendor shall provide comprehensive (including instrumentation, electrical, foam suppression system & piping, valves etc.) maintenance including supply of spares for period of one(1) year after the expiry of the warranty period. b) The travel, boarding & lodging of service engineer/technician shall be borne by the vendor. The vendor shall also bring their own tools & tackles as required for maintenance of the system. c) The bid shall be made year-wise for three years & price validity shall be available for the entire period of the contract. d) The service under post warranty maintenance shall include : i. Preventive Maintenance Preventive maintenance shall involve once in six month, complete checking, site acceptance test as per the specification, repair/replacement of defective part/components and detailed reporting, malfunction ii. Emergency Maintenance In the event of any malfunction of the system, experienced service engineer shall be made available at site within two weeks on the receipt of such information from the owner & the system must be brought to the Normal within 24 hrs after reporting at site.	

NOTE:

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



TANK FARM LAYOUT
(SCALE-1:1000)

/<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. **SDI6862P16** 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 h e/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 contract.

2. 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

1. 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

1. 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)

1. 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.

R BARMAN
SR MANAGER MATERIALS (IP) ----------

For the Principal For the Bidder/Contractor

Place. Duliajan. Witness 1 : .....

Date 09.04.2015 . Witness 2 : .....

Bidders Response Sheet **Annexure-FFF**

Tender No.	
Bidders Name	

Sl No.	Description	Remarks
1	Name of Bidder	
2	Whether tender document purchased from OIL's offices.	
3	Place of Despatch	
4	Whether Freight charges have been included in your quoted prices	
5	Whether Insurance charges have been included in your quoted prices	
6	Make of quoted Product	
7	Offered Validity of Bid as per NIT	
8	Delivery Period in weeks from placement of order	
9	Complied to Standard Payment Terms of OIL or not.	
10	Bid Security Submitted (if applicable)	
11	Details of Bid Security Submitted to OIL (if applicable)	
	a) Bid Security Amount (In Rs):	
	b) Bid Security Valid upto:	
	c) Name and Full Address of Issuing Bank:	
12	Confirm that the Bid Security submitted (In case of Bank Guarantee) is in toto as per format provided in the tender.	
13	Bid Security if Not submitted reasons thereof	
14	Whether you shall submit Performance Security in the event of placement of order on you (if applicable)	
15	Integrity Pact Submitted (if applicable)	
16	Confirm that the Integrity Pact submitted is in toto as per format provided in the tender.	
17	Whether submitted documents in support of General Qualification criteria of NIT	
18	If bidder is Small scale unit whether you have quoted your own product	
19	If bidder is Small scale unit whether you are eligible for purchase preference (as per Govt guideliness)	
20	Whether filled up the bank details for online payment as per Annexure GGG	

NOTE: Please fill up the greyed cells only.

Technical Bid Checklist **Annexure-EEE**

Tender No.	
Bidder's Name :	

		Compliance by Bidder	
SL. NO.	**BEC / TENDER REQUIREMENTS**	Indicate 'Confirmed' / 'Not Confirmed' / Not applicable	Indicate Corresponding page ref. of unpriced bid or Comments
1	**Bidder to confirm that he has not taken any exception/deviations to the bid document .**		
2	**Confirm that the product offered strictly conform to the technical specifications.**		
3	**Confirm that the Offer has been made with Bid Bond / Bank Guarantee / Earnest Money along with the offer (Wherever Applicable) ?**		
4	**Confirm unconditional validity of the bid for 120 days from the date of opening of techno-commercial bid.**		
5	**Confirm that the prices offered are firm and / or without any qualifications?**		
6	**Confirm that all relevant fields in the on-line biding format been filled in by the bidders for the items quoted by them.**		
7	**Confirm that the the price bid is in conformity with OIL's online bidding format ?**		
8	**Confirm that the Bid comply with all the terms & conditions ?**		
9	**Confirm that the offers and all attached documents are digitally signed using digital signatures issued by an acceptable Certifying Authority (CA) as per Indian IT Act 2000.**		
10	**CONFIRM THAT YOU HAVE SUBMITTED THE DULY SIGNED INTEGRITY PACT DOCUMENT (Wherever Applicable)**		
11	**CONFIRM THAT YOU HAVE SHALL SUBMIT PERFORMANCE BANK GUARANTEE AS PER NIT IN THE EVENT OF PLACEMENT OF ORDER ON YOU (Wherever Applicable)**		
12	**CONFIRM THAT YOU HAVE SUBMITTED DOCUMENTS AS PER GENERAL QUALIFICATION CRITERIA**		

NOTE: Please fill up the greyed cells only.

ANNEXURE - GGG

(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	**:……...**

I/We confirm and agree that all payments due to me/us from Oil India Limited can be remitted to our above mentioned account directly and we shall not hold Oil India Limited responsible if the amount due from Oil India Limited is remitted to wrong account due to incorrect details furnished by us.

……
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.**