

OIL INDIA LIMITED

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

INVITATION FOR BID
NATIONAL COMPETITIVE BID

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

E-Tender No.	Bid Closing / Opening Date	Item
SDI6041P18	07.12.2017	FABRICATION, SUPPLY, INSTALLATION, COMMISSIONING & TRAINING OF DCP FIRE TENDER – QTY = 01 NO
SDI6042P18	30.11.2017	TEST SIMULATION SERVER FOR E&P DATA BANK - QTY = 02 NOS
SDI5995P18	30.11.2017	LT PANEL QTY = 03NOS
SDI5647P18	30.11.2017	PRINTER QTY = 85 NOS
SDI6045P18	30.11.2017	SCANNER QTY = 32 NOS
SDI6046P18	30.11.2017	PRINTER QTY = 14 NOS
SDI5799P18	30.11.2017	STEAM CLEANER & H.P WASHER QTY = 13 NOS
SSI6049P18	30.11.2017	CABLES QTY=3000 MTRS.
SDI5389P18	30.11.2017	MASTIC COATING QTY=1,500 M2
SDI6059P18	30.11.2017	DENTAL CHAIR AND CABINET QTY = 01 NO
SDI6060P18	07.12.2017	BACKUP SERVER QTY = 01 NO

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

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



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. : SDI6041P18 DT: 16.10.2017

Tender Fee : Rs 1,000.00

Bid Security : Applicable

Bidding Type : SINGLE STAGE TWO BID SYSTEM

Tender Type : Open Tender

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

Performance Security : Applicable

Integrity Pact : Applicable

"The items covered by this enquiry shall be used by Oil India Limited in the PEL/ML areas which are issued/renewed after 01/04/99 and hence Nil Customs Duty during import will be applicable. However, concessional rate of GST @5% against Essentiality Certificate for invoice value 10 Lakh and above will be applicable.

In the event of order, OIL will issue Project Authority Certificate (PAC), where import content is declared by the bidder for availing Custom Duty benefit on the import content. Supplier shall affect dispatch only on receipt of these certificates from OIL, failing which all related liabilities shall be to Supplier's account".

OIL invites Bids for **SUPPLY, FABRICATION, INSTALLATION & COMMISSIONING DCP FIRE TENDER REQUIRED FOR OIL FIRE SERVICE, DULIAJAN.- QTY = 01 NO** through its e-Procurement site under **SINGLE STAGE TWO BID SYSTEM**. The bidding documents and other terms and conditions are available at Booklet No. MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders. The prescribed Bid Forms for submission of bids are available in the Technical RFx -> External Area - > Tender Documents

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

The tender will be governed by:

- a) For technical support on various matters viz. Online registration of vendors, Resetting of Passwords, submission of online bids etc, vendors should contact OIL's

b) OIL's office timings are as below:

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

Vendors should contact OIL officials at above timings only.

OIL Bank Details :

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

- c) “General Terms & Conditions” for e-Procurement as per Booklet No. MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders.
- d) Technical specifications and Quantity as per **Annexure – 1A**.
- e) The prescribed Bid Forms for submission of bids are available in the Technical RFx -> External Area -> Tender Documents.
- f) Amendments to the NIT after its issue will be published on OIL's website only. Revision, clarification, addendum, corrigendum, time extension etc. to the tender will be hosted on OIL website only. No separate notification shall be issued in the press. Prospective bidders are requested to visit website regularly to keep themselves updated.
- g) Any sum of money due and payable to the contractor (including Security Deposit refundable to them) under this or any other contract may be appropriated by Oil India Limited and set-off against any claim of Oil India Limited (or such other person or persons contracting through Oil India Limited) for payment of sum of money arising out of this contract or under any other contract made by the contractor with Oil India Limited (or such other person or persons contracting through Oil India Limited).

- h) Bidder are advised to fill up the Technical bid check list ([Annexure EEE](#)) and Response sheet ([Annexure FFF](#)) given in MS excel format in Technical RFx -> External Area -> Tender Documents. The above filled up document to be uploaded in the **Technical Attachment. For details please refer “Vendor User Manual” / “NEW INSTRUCTIONS”**

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1.0 Vendors having OIL’s User ID & password may pay Tender Fee on-line through OIL’s electronic Payment Gateway upto one week prior to the Bid closing date (or as amended in e-portal).

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

No physical tender documents will be provided. Details of NIT can be viewed using “Guest Login” provided in the e-Procurement portal. The link to e-Procurement portal has been also provided through OIL’s web site www.oil-india.com.

NOTE:

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

2.0 The tender is invited under SINGLE STAGE-TWO BID SYSTEM. The bidders are required to submit both the “TECHNO-COMMERCIAL UNPRICED BID” and “PRICED BID” through electronic format in the OIL’s e-Tender portal within the Bid Closing Date and Time stipulated in the e-Tender.

2.1 Please ensure that Technical Bid / all technical related documents related to the tender are uploaded in the RFx Information > Technical Attachment only. The “TECHNO-COMMERCIAL UNPRICED BID**” shall contain all techno-commercial details **except the prices. Please note that no price details should be uploaded in** Technical RFx Response.**

2.2 The “PRICE BID**” must contain the price schedule and the bidder’s commercial terms and conditions. **For price upload area , please refer “NEW INSTRUCTIONS” Please refer Annex-BB for price schedule.****

2.3 Offer not complying with above submission procedure will be rejected as per Bid Rejection Criteria mentioned in [Annexure-CCC](#).

3.0 Please note that all tender forms and supporting documents are to be submitted through OIL’s e-Procurement site only except following documents which are to be submitted manually in sealed envelope super scribed with Tender no. and Due date to DGM-Materials, Materials Department, Oil India Limited, Duliajan - 786602, Assam on or before the Bid Closing Date and Time mentioned in the Tender.

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

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

4.0 Benefits to Micro & Small Enterprises (MSEs) as per OIL's Public Procurement Policy for Micro and Small Enterprises (MSEs) shall be given. Bidders are requested to go through ANNEXURE – I of MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders for more details. MSE bidders are exempted from submission of Tender Fees and Bid Security/Earnest Money provided they are registered for the items they intend to quote.

5.0 Bidders are requested to examine all instructions, forms, terms and specifications in the bid. Failure to furnish all information required as per the NIT or submission of offers not substantially responsive to the bid in every respect will be at the bidders risk and may result in rejection of its offer without seeking any clarifications.

6.0 Bidders must ensure that their bid is uploaded in the system before the tender closing date and time. Also, they must ensure that above documents which are to be submitted in a sealed envelope are also submitted at the above mentioned address before the bid closing date and time failing which the offer shall be rejected.

7.0 Bid must be submitted electronically only through OIL's e-procurement portal. Bid submitted in any other form will be rejected.

8.0 **SINGLE STAGE TWO BID SYSTEM** shall be followed for this tender and only the PRICED-BIDS of the bidders whose offers are commercially and technically acceptable shall be opened for further evaluation.

9.0 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 of Indigenous Tenders elsewhere, those in the BEC / BRC shall prevail.**

10.0 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.

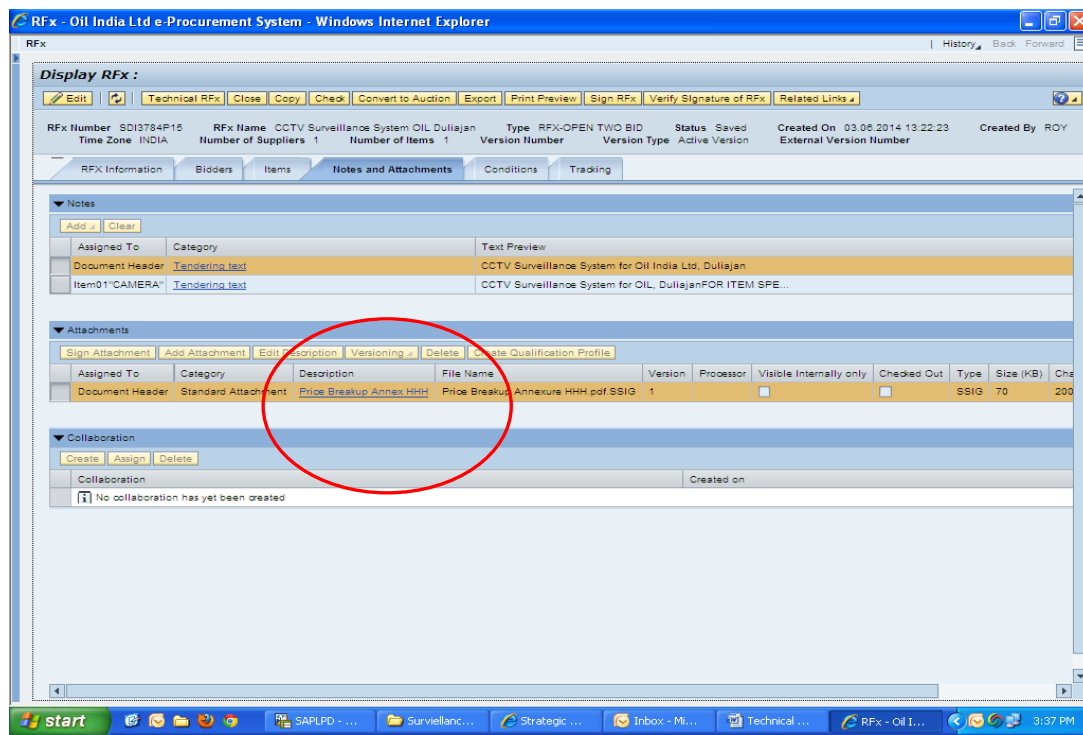
11.0 Please do refer the User Manual provided on the portal on the procedure How to create Response for submitting offer.

12.0 If Bank Guarantee is submitted towards 'Bid Security', then bidders have to ensure that the Bank Guarantee issuing bank indicate the name and detailed address (including e-mail) of their higher office from where confirmation towards genuineness of the Bank Guarantee can be obtained.

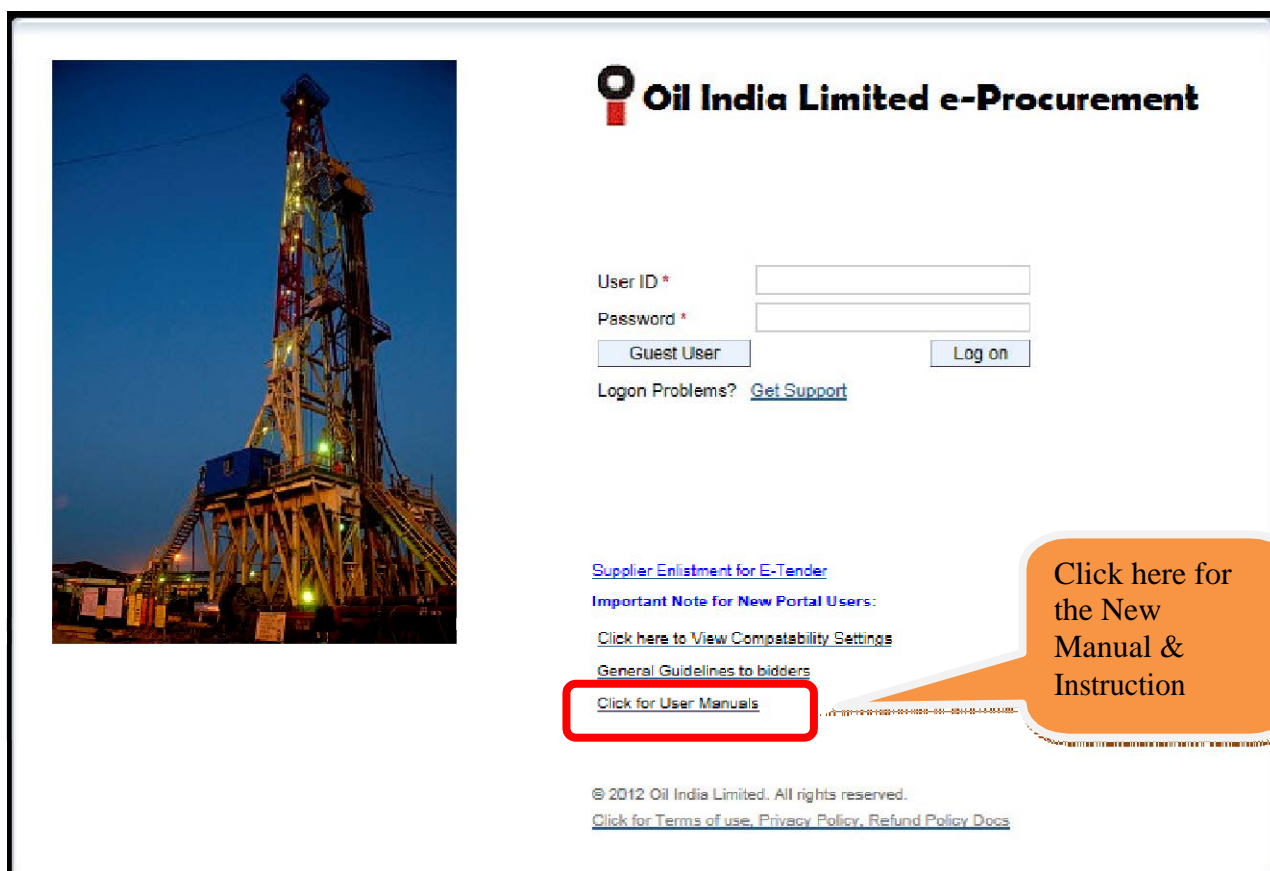
13.0 Price Breakup:

Bidders should submit the price breakup of all the items as per "Annexure HHH" which has been uploaded under "Notes & Attachments" > "Attachments" as shown below. The price breakup "Annexure HHH" should be filled up, signed and uploaded under "Notes & Attachments" > "Attachments" only. **The filled up price breakup of all the items should**

not be uploaded in Technical Attachment.



Please do refer “**NEW INSTRUCTION TO BIDDER FOR SUBMISSION**” for the above two points and also please refer “**New Vendor Manual (effective 12.0.2017)**” available in the login Page of the OIL’s E-tender Portal.



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)
SMM (IP)
FOR : DGM-MATERIALS**

Tender No & Date: SDI6041P18 DT: 16.10.2017**BID REJECTION CRITERIA (BRC) / BID EVALUATION CRITERIA (BEC)**

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

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

<u>Criteria</u>	Complied / Not Complied. (Remarks if any)
<p>1.0 BID REJECTION CRITERIA (BRC):</p> <p>The bid shall conform generally to the specifications, 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.</p> <p>A) TECHNICAL</p> <p>1. The Bidder shall have experience of manufacturing/ fabricating / assembling and supply of Fire Tenders (on minimum 16 tonne Chassis) in previous 5 (five) years from the original stipulated bid closing date of the tender. In this regard, the bidder should submit the following documents along with the bid:-</p> <p class="list-item-l1">a. Copy of certificate specifying the nature of business of the firm shall be furnished.</p> <p class="list-item-l1">b. Copy of Purchase Order(s) and Proof of Supply/ Commissioning Report(s)/ Performance Report(s).</p> <p>2. The bidder shall have the manufacturing /fabricating / assembling facilities and adequate testing /quality assurance facilities of Fire Tenders. In this regard, the bidder should submit the list of the necessary machinery / equipment for manufacturing/ fabricating / assembling & testing of Fire Tenders along with bid.</p> <p>3. The bidder shall have Experience of manufacturing/ fabricating / assembling and successful execution of supply of at least 1 (one) similar Order in preceding 5(five) years from the original stipulated bid closing date of the tender.</p>	

In this regard, the bidder should submit the copy of Purchase Order(s) and Proof of Supply/ Commissioning Report(s)/ Performance Report(s) along with bid.

Similar Order means:-

Supply of at least 01(One) No. DCP Tender of minimum 2000 Kg on minimum 16 tonne Chassis.

B) FINANCIAL:

a) Annual Financial Turnover of the bidder during any of preceding 03 (three) financial / accounting years from the original bid closing date should be at least **Rs. 27.00 Lakhs.**

b) Net Worth of the firm should be Positive for preceding financial / Accounting year **(FY: 2016-2017).**

Note -For (a) & (b):

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

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

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

OR

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

C) COMMERCIAL:

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

ii) Bid security:

The bid must be accompanied by Bid Security of **Rs 1,08,000.00** in OIL's prescribed format as Bank Guarantee in favour of OIL. The Bid Security may be submitted manually in sealed envelope superscribed with Tender no. and Bid Closing date to Head Materials, Materials Department, Oil India Limited, Duliajan- 786602, Assam on or before the Bid Closing Date and Time mentioned in the Tender. **The Bank Guarantee towards Bid Security shall be valid for 7 months from Bid closing date. (i.e. upto 07.07.2018).**

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

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

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

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

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

iv) Performance Security:

The successful bidder shall submit Performance Security as given below:

The successful bidder shall submit Performance Security @ 10% of PO value within 30 days of receipt of the formal purchase order failing which OIL reserves the right to cancel the order and forfeit the Bid Security. Bidders should undertake in their bids to submit Performance Security as stated above.

The Performance Security shall be in the following form :

A Bank Guarantee in the prescribed OIL’s format valid for 3(three) months beyond the Warranty period indicated in the Purchase Order /contract agreement.

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

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

v) The prices offered will have to be firm through delivery and not subject to variation on any account. A bid submitted with an adjustable price will be treated as non-responsive and rejected.

vi) Bids received after the bid closing date and time will be rejected. Similarly, modifications to bids received after the bid closing date & time will not be considered.

vii) All the Bids must be Digitally Signed using “Class 3” digital certificate with Organisation’s name (*e-commerce application*) as per Indian IT Act obtained from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India. The bid signed using other than “Class 3 with Organisation’s Name” digital certificate, will be rejected.

viii) Technical RFx Response folder is meant for Technical bid only. Therefore, No price should be given in Technical RFx Response folder, otherwise the offer will be rejected.

ix) Price should be maintained in the “online price schedule” only. The price submitted other than the “online price schedule” shall not be considered.

ix) A bid shall be rejected straightway if it does not conform to any one of the following clauses:

(a) Validity of bid shorter than the validity indicated in the Tender.

(b) Original Bid Security not received within the stipulated date & time mentioned in the Tender.

(c) Bid Security with (i) Validity shorter than the validity indicated in Tender and/or (ii) Bid Security amount lesser than the amount indicated in the Tender.

(d) Annual Turnover of a bidder lower than the Annual turnover mentioned in the Tender.

(e) If the Bidder refuses to sign the Integrity pact

x) Maximum Delivery Period: Maximum allowable delivery period - 30 weeks after receipt of PO.

NOTE: FOR CLAUSE NOS. C(ii) & C(iv) OF BID SECURITY/EMD AND PBG.

The bidders/successful bidders are requested to advise the Bank Guarantee issuing bank to comply with the following and ensure to submit, the receipt of the copy of SFMS message as sent by the issuing bank branch, along with the original bank guarantee in Oil's tender issuing office:

The bank guarantee issued by the bank must be routed through SFMS platform as per following details:

(i) "MT 760 / MT 760 COV for issuance of bank guarantee.

(ii) "MT 760 / MT 767 COV for amendment of bank guarantee

The above message/intimation shall be sent through SFMS by the BG issuing bank branch to Axis Bank, Duliajan Branch, IFS Code - UTIB0001129, Branch Address - AXIS Bank Ltd, Duliajan Branch, Daily Bazar, Jyotinagar, Duliajan,

2.0 BID EVALUATION CRITERIA (BEC)

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

A) TECHNICAL:

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

B) COMMERCIAL:

i) To evaluate the inter-se-ranking of the offers, Assam Entry Tax on purchase value will be loaded as per prevailing Govt. of Assam guidelines as applicable on bid closing date. Bidders may check this with the appropriate authority while submitting their offer.

ii) Priced bids of only those bidders will be opened whose offers are found technically acceptable. The technically acceptable bidders will be informed before opening of the "priced bid".

iii) A job executed by a bidder for its own organization / subsidiary cannot be considered as experience for the purpose of meeting BEC.

iv) To ascertain the substantial responsiveness of the bid OIL reserves the right to ask the bidder for clarification in respect of clauses covered under BRC also and such clarifications fulfilling the BRC clauses in toto must be received on or before the deadline given by the company, failing which the offer will be summarily rejected.

NOTE:

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

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TECHNICAL SPECIFICATIONS WITH QUANTITY**Tender No & Date: SDI6041P18 DT: 16.10.2017**

	Complied / Not Complied. (Remarks if any)
<u>ITEM NO. 10</u> <u>Chassis for DCP Fire Tender as per details Part "A" attached in attachment list. – QTY = 01 NOS</u>	
<u>ITEM NO. 20</u> <u>Fabrication of DCP Fire Tender as per details Part "B" attached herewith in attachment list. - QTY = 01 NOS</u>	
<u>ITEM NO. 30</u> <u>INSTALLATION & COMMISSIONING– 01 AU</u> <u>Installation and Commissioning & Training of "DCP Fire Tender" at Fire Service, Duliajan, Assam by the supplier's representative.</u> <u>1AU MEANS INSTALLATION AND COMMISSIONING OF 01 NO OF DCP FIRE TENDERS.</u>	

NOTE:

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

PART – “A” CHASSIS FOR “DCP FIRE TENDER”

Brand new 4x2 drive chassis of TATA, Ashok Leyland or Equivalent make manufactured not prior to six months from the date of issuance of Letter of Intent (LOI). The bidder shall take special care in selecting and designing the Multi-Purpose Fire Tender considering the unit's application in rough terrain and typical oilfield roads. The offered model shall be latest and conforming to international quality standard norms, having specifications, fittings, accessories, etc. as under:

1. CHASSIS:

a	Drive &Cowl	4 x 2 Drive & Full Forward Control Cowl.
b	Engine	Min. 6 cylinder Water-cooled diesel engine.
c	Max. Output Power	Not less than 160 HP at rated rpm.
d	Max. Output Torque	Not less than 400NM at rated rpm.
e	Emission	Emission Norms: Euro IV or BS IV
f	Steering	Hydraulic Power Assisted Steering (Right Hand Steering).
g	Gearbox	Minimum 5 forward speed & 1 reverse speed.
h	Wheelbase	In the range of 4600 mm. to 5200mm.
i	GVW	Not less than 16000 Kg.
j	Brake	Full air or Hydraulic power assisted Dual Circuit Service Brake and suitable Parking Brake.
k	Axles	Front - 1, Rear - 1(Drive axle).
l	Suspension	Semi elliptical leaf spring suspension.
m	Wheels & Tyres	Front- 2, Rear - 4 & Spare - 1, Tyre .Size - preferably 10.00 x 20 of adequate ply rating

2. DRIVER'S CABIN:

Details of driver's cabin should be as mentioned elsewhere in the tender.

3. DIMENSIONS:

Full Unit:

- Overall Length – Approx. 8500mm.
- Max. Width – 2600 mm.
- Max. Height – Not more than 3000mm (Unladen).

4. ADDITIONAL/OTHER FITMENTS & ACCESSORIES:

- a. All standard gauges and meters, Horn, Reversing Alarm, Lightings, Reflectors, Roof Lamps, Windscreen wipers, Sun shade, Glove box, Lockable fuel tank, Standard Tool Kit, 30T Capacity Hydraulic Jack with handle & wheel wrench, Mud flaps/guards, etc.
- b. Rear View Mirror- 2 Nos.
- c. Well-covered Battery Box, Tool box. Suitable storage box at suitable location.
- d. Suitable Jaw & Pint type rear Towing Hook, mounting arrangement for spare wheel.
- e. First Aid Box, Fire Extinguisher, Licence Holder at suitable locations and other fittings required as per MV Act.

5. DOCUMENTATION:

A. The following documents/literatures are to be submitted along with the bid:

- a. Technical leaflet, to support the specifications provided in the bid. (All specifications, as desired, as well as Make, MODEL NAME/ ,CODE, Type of the offered Truck Fire Tender Chassis shall clearly be defined in the bid. Submission of Technical Leaflet is not sufficient).
- b. A detailed Dimensional Drawing of the fire tender, showing among others overhang, seat size, leg space & sitting arrangement etc. as applicable.

B. The following documents /literatures are to be submitted along with the supply:

- a. Temporary Registration, Insurance, Road Tax, Sale Letter in Form 21 & 22/22(A), etc. in the name of M/s OIL INDIA LIMITED, Duliajan, Assam as required under MV act for onward registration of the Trucks fire tender in Assam.
- b. Checklist as per enclosed format (CHECKLIST FOR THE FIRE TENDER CHASSIS) shall be furnished along with the bid. In case of any contradicting specification provided elsewhere in the bid, the specification provided in the said checklist shall be considered for the bid evaluation.

6. TECHNICAL CHECK LIST:

Part A TECHNICAL				
A 1.1 (FIRE TENDER CHASIS)				
Sl. No.	PARAMETERS / REQUIREMENTS		BIDDER'S OFFER (To indicate details or yes/no, as applicable)	REMARKS, IF ANY
1	Make & Model of Fire Tender Chassis			
2	Gross Vehicle Weight (GVWR)			
3	Drive:			
4	Wheelbase:			
5	Overall Dimensions (Width, Height & Length) of complete unit:			
6	Ground Clearance:			
7	Laden Weight (Total weight of the unit)			
8	Engine	a	Make & Model	
		b	Max. Output Power	
		c	Max. Output Torque	
		d	Naturally Aspirated or Turbo Charged	
		e	Emission Norms	
		f	Control System (Electronic)	
9	Transmission (Main)	a	Make & Model	
		b	No. of gears	
10	Make & Model of Transfer Case, if any			
11	Total number of PTO in operation			
12	Make, Model & Type of Steering System			
13	Minimum Turning Circle Radius (MTCR)			
14	Type of Front Suspension			

15	Type of Rear Suspension				
16	Axle Capacity	a	Front		
		b	Rear		
17	Type, Size of Wheel & Tyre	a	Front		
		b	Rear		
18	Type of Service Brake (S/Z-cam or not)				
19	Type of Wheel Brake Servos(screw type manual release or not)	a	Front		
		b	Rear		
20	Fuel Tank capacity				
	Reversing Alarm with Blinker Lights				
21	Provision of Air Dryer in truck's pneumatic system.				

Part B DOCUMENTATIONS
B1.1 FIRE TENDER

Sl. No.	DESCRIPTIONS	DOCUMENT ENCLOSED (Yes or No)	REMARKS, IF ANY
1	Technical leaflets with detailed specifications, Make & Model of chassis, engine, transmission, transfer case (if any), PTOs, suspension, axle, steering, wheel & rim, brake, etc.		
2	Detailed dimensional layout drawing illustrating Driver's Cabin and all major items/ components.		
3	List of tools that shall be supplied under Standard Tool Kit for general maintenance of the Fire Tender.		
4.	Checklist for fire tender as per enclosed format.		

7. WARRANTY/GUARANTEE:

Notwithstanding the Guarantee/Warranty clause(s) mentioned elsewhere in the NIT, complete units shall be under guarantee/warranty by the supplier for a minimum period of 1(one) year from the date of successful commissioning at site.

OIL reserves the right to inspect, test and if necessary, reject the truck or any part/parts after delivery at site, only if the said rejection is attributed to be the responsibility of the supplier. It shall, in no way be limited or waived by the reason that the fire tender was being previously inspected, tested and passed by OIL.

8. DEVIATIONS FROM THE SPECIFICATIONS:

The bidder shall enclose comprehensive list of intended deviations from the technical specifications, of any clearly highlighting the reasons thereof, along with the bid. Deviations from the Technical specifications are intended, the same shall be confirmed in the offer. However, OIL reserves the right for acceptance or rejection of the deviation(s).

PART – B Fabrication OF “DCP Fire Tender” With Accessories

1.0 SCOPE :

- 1.1 This specification covers the requirements regarding design, procurement, fabrication, testing and supply of “DCP Fire Tender” to be used for fire fighting. The scope of supply shall be inclusive of, but not limited to the following.

- 1.1.1 Chassis
- 1.1.2 Two Nos. Dry Chemical Powder Vessel **1500 Kg** Capacity
(The minimum water capacity of the Vessel should be 1500 Ltrs. and design to accommodate the Dry Chemical powder with apparent density 1 ± 0.15)
- 1.1.3 DCP monitor
- 1.1.4 Hose Reels – 04 Nos.
- 1.1.5 Body Fabrication/ Works
- 1.1.6 Control Panel
- 1.1.7 Accessories and spares
- 1.1.8 Piping, necessary controls etc. Complete

- 1.2 The chassis for the “DCP Fire Tender” shall be procured & supplied by the Successful Bidder. The Successful Bidder shall be responsible for supplying all equipment / accessories and properly fixing them on the chassis as described in this specification. Other details and requirements which are not covered under this specification, but may be necessary to complete the “**DCP FIRE TENDER**” and/or to fulfil the operation/performance requirement shall be provided by the Successful Bidder, who will be responsible for the design and construction of the complete Unit to the full satisfaction of M/s Oil India Ltd.

2.0 GENERAL REQUIREMENTS:

- 2.1 The “**DCP FIRE TENDER**” including all accessories shall be designed, manufactured, tested etc. as per relevant Indian, International Standards, wherever applicable and as per sound engineering practice.
- 2.2 All the equipment and accessories shall be fixed on the Unit in a compact and neat manner and shall be so placed that each part is easily and readily accessible for use and maintenance. The centre of gravity shall be kept as low as possible.
- 2.3 The controls on control panel shall be so arranged that one man can operate all the controls.
- 2.4 The Successful Bidder shall provide a detailed description of the “**DCP FIRE TENDER**”, a list of equipment to be furnished, and other construction and performance details to which the “**DCP FIRE TENDER**” shall conform.
- 2.5 The detailed description of the “**DCP FIRE TENDER**” shall include, but shall not be limited to, estimated weight, wheelbase, turning clearance radius, principal dimensions, transmission, and axle ratios.
- 2.6 Responsibility for the “**DCP FIRE TENDER**” and equipment shall remain with the Successful Bidder until they are accepted by the OIL.
- 2.7 On initial delivery of the “**DCP FIRE TENDER**”, the fuel in the fuel tank shall be full.
- 2.8 The Successful Bidder shall supply a qualified representative to demonstrate the “**DCP FIRE TENDER**” and provide initial instructions to representatives of the OIL regarding the operation, care, and maintenance of the “**DCP FIRE TENDER**” and equipment supplied.

2.9 INSPECTION & TESTING :

- 2.9.1 Third Party Certification of Test Results:-The results of tests to be certified by OIL's Approved third party certification organization.
- 2.9.2 Prior to dispatch of Unit from Successful Bidder's shop, Stage inspection & testing shall be carried out by the Successful Bidder to the complete satisfaction of third party inspection agency as mentioned below :-

Stage	Scope of Inspection (But not limited to)
First stage	<p>Chassis & Materials Inspection: The successful bidder shall facilitate inspection of chassis by OIL's Engineers along with Third Party Inspection Agency for inspection of the Chassis & other materials to be used for fabrication of the DCP FIRE TENDER.</p> <ul style="list-style-type: none"> (i) Chassis Identification & physical verification of chassis No., engine No. etc. (ii) Verification of all document related to chassis procurement. (iii) Verification of all Documents related to Quality of material of DCP Vessels. (iv) Thickness measurement of DCP Vessels plates and distinct marking of each material by ultrasonic thickness gauge. (v) Physical Identification of material of Super structure, under structure etc. (vi) Physical Identification of Components / sub-assemblies identification, before fabrication. (vii) Cutting & marking of material sample for laboratory test (Chemical & Physical). (viii) Verification of all manufacturers/ fabricators document including documents of imported items. (ix) Calibration checking and documents of testing instruments, gauges, tools, accessories etc. (x) Positioning of Tanks & vessels on the chassis.
Second stage	<p><u>After completion of under structure:</u></p> <ul style="list-style-type: none"> (i) Hydro testing of DCP vessels. (ii) Dye penetration test of all weld joints of Tanks (iii) Verification of laboratory test (Chemical & Physical) material Test Certificates (MTC) (iv) Positive Material Identification (PMI) of material (v) Construction of under- structure & super structure (vi) Documents related to Quality of material of vessels and thickness of vessel's plates, radiography inspection report and stamped by recognised third party inspector. (vii) Dimensions check of under structure on chassis, fabricated components as per specifications & approved drawings. (viii) Location for Placement of vessels, fittings, lockers, quality of fabrication. (ix) Calibration checking of testing instruments, gauges, tools, accessories etc.

Final stage	<u>After completion of panelling, fitment after final painting:</u> <ul style="list-style-type: none"> (i) Review of observations of First & Second stage inspections. (i) Stability checking of the unit after mounting all equipment and accessories. It should be free from undue rattling and vibration. (ii) Check proper functioning of all types of signal lights, alarms, Bell etc. (iii) Check quality of workmanship. (iv) Check calibration of instruments, gauges, tools, accessories etc. (v) Check operation of various levers, locks, caps, fitment of tanks, linkages, Markings and plumbing work. (vi) Performance test of all the systems, DCP, load & stability test of DCP FIRE TENDER, (vii) Testing of equipment / tools & Unit (viii) Checking of all relevant documents etc.
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- 2.9.3 **Hydraulic Testing:** All the piping will be subjected to hydraulic test pressure at 1.5 times the design pressure and pressure shall be held for 2 hours..
- 2.9.4 **Shower Test:** After completion of the fabrication, the Unit will be subjected to shower test as per the norms laid down under BIS. The Unit will not show any signs of leakages during this test.
- 2.9.5 **Road Test:** Unit will be tested for braking, acceleration & top speed by the inspecting officers.
After full laden of fire Tender.
- (i) Max. Speed attained.
 - (ii) Any rattling or abnormal sound.
- Stability test under fully equipped & loaded condition.
Hand Brake- Fully laden on 1 in 4 gradients in neutral gear.
- 2.9.6 All consumable (e.g. diesel fuel, engine lube oil etc.) shall be arranged by Successful Bidder at his own cost. Successful Bidder shall arrange all facilities to carry out inspection & testing.
- 2.9.7 OIL representatives shall have access at all reasonable times to Successful Bidder's works where the Unit or its accessories are being fabricated and tested.
- 2.9.8 Drawings (i.e. Skelton Structure, DCP Vessel, DCP System drawing, General layout drawing, Load distribution chart, Electric circuit diagram etc.) & Quality assurance Plan (QAP) shall be approved by the Oil India Ltd. No supply shall be accepted unless drawings & Quality assurance Plan (QAP) are finally approved by the Oil India Ltd.
- 2.9.9 Third party Inspection agency shall carryout the Inspection based on approved drawings & approved QAP.
- 2.9.10 The inspection release note of Third part Inspection agency shall clearly stipulate that Material /equipment have been inspected as per approved drawings & approved QAP.
- 2.9.11 All the tests/inspection for Unit shall be witnessed by Oil India Ltd. representatives along with third party inspection agency.
- 2.9.12 For Piping :**
- 2.9.12.1 Review of mill test certificates and co-relation of raw materials (for pipes, fittings, valves etc) before start of fabrication.
 - 2.9.12.2 DP test of butt welds and final run.
 - 2.9.12.3 DP test of all flanges to pipe welds.
 - 2.9.12.4 Radiographic examination of 10% butt welds (selected at random).
 - 2.9.12.5 Hydraulic test of piping installation on chassis.
 - 2.9.12.6 Visual and dimensional check.

NOTE: Third party inspection agency shall review the documents for the tests carried out by the manufacturer.

2.9.13 For DCP Monitor :

- 2.9.13.1 Availability of the specified flow and pressure of DCP
- 2.9.13.2 Review of mill certificates for material.
- 2.9.13.3 Hydro-testing of monitor
- 2.9.13.4 Horizontal & vertical movements of monitor.
- 2.9.13.5 Different flow rate of DCP throw the monitor.
- 2.9.13.6 Workmanship & painting.

2.9.14 For DCP Vessels:

- 2.9.14.1 Review of mill test certificates and co-relation of raw materials before start of fabrication.
- 2.9.14.2 DP test of root run and completed weld for all seams of vessels.
- 2.9.14.3 DP test of all nozzles to shell joints (i.e. reinforcement pads)
- 2.9.14.4 100% Radiographic examination of all welds of the vessels.
- 2.9.14.5 Hydrostatic test of vessel
- 2.9.14.6 Visual and dimensional check of vessels before mounting on chassis.

2.9.15 For DCP Piping

- 2.9.15.1 Review of mill test certificate and co-relation of raw materials (For pipes, fittings, valves etc.) before start of fabrication.
- 2.9.15.2 DP test of root run and final run of all butt welds DP test of all socket welds.
- 2.9.15.3 Radiographic examination of 10% butt welds (selected at random)
- 2.9.15.4 Hydraulic test of piping before installation of chassis.
- 2.9.15.5 Visual and dimensional check.

2.9.16 For “DCP Fire Tender” (During Fabrication & Assembly) :

- 2.9.16.1 Review of mill test certificates and co-relation of raw materials used for structure & body fabrication before start of fabrication.
- 2.9.16.2 Inspection of framework for soundness of welding and fitment of chassis and dimensional check.
- 2.9.16.3 Inspection for proper installation of DCP vessels, piping with supports and their dimensional checks.
- 2.9.16.4 Inspection for proper installation of DCP vessels, piping with supporting etc. and dimensional check.
- 2.9.16.5 Visual inspection of raw materials for framework, cladding, flooring etc.

2.9.17 For Completed Unit :

- 2.9.17.1 All consumables (DCP, Nitrogen gas in cylinders, fuel, engine lube oil etc.) required during inspection & testing shall be arranged by Successful Bidder at his own cost. Successful Bidder shall arrange all facilities to carry out inspection & testing.
- 2.9.17.2 Determination of actual payload on the chassis so as to confirm payload given by Successful Bidder in the bid. For determining actual laden weight, all tanks shall be full, all removable accessories will be on Unit with a crew of six.

- 2.9.17.3 For determining actual payload all Tanks & vessel shall be charged to rated capacity, charged nitrogen cylinders on board, all removable accessories will be on Unit with crew of six.
- 2.9.17.4 Static stability of the fully laden Unit shall be checked to ensure that no overturning occurs till Unit attains tilting of 35 ± 1 degrees from horizontal.
- 2.9.17.5 Road test of the fully laden Unit shall be carried out to ensure the maximum speed, acceleration, turning radius, breaking ability as specified by chassis manufacture.
- 2.9.17.6 Dimensional check of completed Unit. The overall height shall be measured both when Unit is laden with full payload and un-laden.
- 2.9.17.7 Test to confirm functional capability of the “**DCP FIRE TENDER**” shall be carried out:
 - 2.9.17.7.1 Functional testing of each hose reel) individually and in combination.
 - 2.9.17.7.2 Performance tests of DCP monitor.

2.10 Personnel Protection:

- 2.10.1 Electrical insulation or isolation shall be provided where necessary in order to prevent electrical shock from onboard electrical systems.
- 2.10.2 Workmanship shall ensure an operating environment free of accessible sharp projections and edges.
- 2.10.3 Safety-related (caution, warning, danger) signs shall meet the requirements of job.

2.11 Controls and Instructions :

- 2.11.1 Illumination shall be provided for controls, switches, instruction plates, gauges, and instruments necessary for the operation of the “**DCP FIRE TENDER**” and the equipment provided on it.
- 2.11.2 All required signs, plates, and labels shall be permanent in nature and securely attached
- 2.11.3 No gauge or visual display shall be more than 84 in. (2.1 m) above the level where the operator stands to read the instrument.

2.12 Weight Distribution :

- 2.12.1 When the “**DCP FIRE TENDER**” is loaded to its maximum in-service weight, the front-to-rear weight distribution of the “**DCP FIRE TENDER**” as defined shall be within the limits set by the chassis manufacturer.
- 2.12.2 The axle loads shall not be more than the axle loads specified by the chassis manufacturer under full load and all other loading conditions.
- 2.12.3 Using the information supplied by the OIL, the “**DCP FIRE TENDER**” manufacturer shall calculate the load distribution for the “**DCP FIRE TENDER**”.
- 2.12.4 The manufacturer shall engineer the “**DCP FIRE TENDER**” to comply with the gross axle weight ratings (GAWR), the overall gross Unit weight rating (GVWR), and the chassis manufacturer's load balance guidelines.
- 2.12.5 The total laden weight of the unit should not exceed the permissible GVW of Unit.**

2.13 DCP FIRE TENDER Performance :

- 2.13.1 The DCP FIRE TENDER shall meet all the requirements while stationary on a grade of 6 percent in any direction.

2.14 Serviceability :

- 2.14.1 Where special tools are required for routine service on any component of the DCP FIRE TENDER, such tools shall be provided with the DCP FIRE TENDER.

2.15 Road Tests :

- 2.15.1 Road tests shall be conducted in accordance with this section to verify that the completed DCP FIRE TENDER is capable of compliance roadability.

2.16 INFORMATION / DOCUMENTS REQUIRED FROM SUCCESSFUL BIDDER :

- 2.16.1 Any documentation provided with the DCP FIRE TENDER shall be permitted to be in printed format, electronic format, audiovisual format or a combination thereof.
- 2.16.2 All drawings & literature shall be kept in Proper folders.
- 2.16.3 All literature shall be on A-4 size paper and shall be properly laminated.
- 2.16.4 Each drawing shall be kept in separate pockets in folder. Contents in each pocket shall be labelled properly.

2.16.4.1 AFTER PLACEMENT OF ORDER :

The following documents are required to be submitted in 2 sets and to be approved prior to start of fabrication:

- 2.16.4.1.1 Flow diagram showing all piping, valves etc.
- 2.16.4.1.2 GA & cross sectional drawings and other details for DCP Vessel.
- 2.16.4.1.3 Other technical details.
- 2.16.4.1.4 Details for DCP monitor.
- 2.16.4.1.5 Fabrication drawings & data for DCP vessel.
- 2.16.4.1.6 Line diagram for electrical circuits.
- 2.16.4.1.7 Drawings showing layout of all equipment, lockers, cabin etc.
- 2.16.4.1.8 QAP incorporating the stipulated inspection and testing requirements.

2.16.4.2 AFTER COMPLETION OF ORDER (4 SETS) :

The manufacturer's record of DCP FIRE TENDER construction details, including the following Information:

- 2.16.4.2.1 DCP FIRE TENDER manufacturer, model, and serial number
- 2.16.4.2.2 Chassis make, model, and serial number.
- 2.16.4.2.3 Front tire size and total rated capacity in pounds (kilograms)
- 2.16.4.2.4 Rear tire size and total rated capacity in pounds (kilograms)
- 2.16.4.2.5 Chassis weight distribution in pounds (kilograms) with DCP & manufacturer mounted equipment (front and rear)
- 2.16.4.2.6 Engine make, model, serial number, rated horsepower and related speed, and governed speed
- 2.16.4.2.7 Fuel tank capacity
- 2.16.4.2.8 Battery make, model, and capacity in cold cranking amps (CCA)
- 2.16.4.2.9 Chassis transmission make, model, and serial number
- 2.16.4.2.10 Paint manufacturer and paint number(s)
- 2.16.4.2.11 As built drawings of DCP FIRE TENDER
- 2.16.4.2.12 As built drawings for vessels.
- 2.16.4.2.13 Flow diagram.
- 2.16.4.2.14 As built Line diagram for electrical circuits.
- 2.16.4.2.15 All inspection and testing records for DCP Vessel, piping, valves, monitor etc.
- 2.16.4.2.16 Operating and instruction manual for the DCP FIRE TENDER. This should also contain adequate information for all bought out items also.
- 2.16.4.2.17 Weight documents showing actual loading of "DCP FIRE TENDER" (with the full extinguishing media but without personnel, equipment, and hose).
- 2.16.4.2.18 Operations and Service Documentation :

- 2.16.4.2.18.1 The Successful Bidder shall supply operation and service documentation covering the completed DCP FIRE TENDER as delivered and accepted.
- 2.16.4.2.18.2 The documentation shall address at least the inspection, service, and operations of the “DCP FIRE TENDER” and all major components thereof.

3.0 DCP FIRE TENDER EQUIPMENT:

3.1 Equipment Storage :

- 3.1.1 Enclosed weather-resistant compartmentation meeting the requirements for the storage of equipment.

3.2 Minor Equipment :

- 3.2.1 Brackets or compartments shall be furnished so as to organize and mount the specified equipment.

3.2.2 Following equipment shall be supplied:

- 3.2.2.1 One first aid kit
- 3.2.2.2 Four Nos. wheel chocks with chain link, mounted in readily accessible locations, each designed to hold the DCP FIRE TENDER.
- 3.2.2.3 Fog lamps powered by the battery of the Unit- 2 Nos. (Fitted on front of DCP FIRE TENDER. Switch in cabin).
- 3.2.2.4 A trickle charger 250 V AC supply for self-charging of battery along with a red pilot light to indicate the battery being charged. It shall be fitted in the drivers cabin.
- 3.2.2.5 Reversing lights-2 Nos. (At rear of chassis)
- 3.2.2.6 Strong Reversing siren connected with reverse gear of the Unit-1 set (Mounted on roof)
- 3.2.2.7 Search light with 100M length of cable with tripod etc. completes powered from main batteries - 1 set (mounted on roof)
- 3.2.2.8 All tools required for normal / routine maintenance of the Unit, which are not included with the kit of chassis -1 Set (In tool box under rear seat in cabin).
- 3.2.2.9 PESO/CCE approved removable spark arrestor (If chassis manufacturer not provided) fitted to the exhaust of the engine - 1 No.
- 3.2.2.10 Crow bar (IS: 704-1984)- 1 No. (In locker)
- 3.2.2.11 Ceiling Fire hook as per IS:927:1981-2007 or latest - 1 No.
- 3.2.2.12 One 6 lb (2.7 kg) flathead or pick head axe mounted in a bracket fastened to the Tender
- 3.2.2.13 Door Breaker-01 No.
- 3.2.2.14 Portable Pressure gauge for checking of Tyre Air Pressure.
- 3.2.2.15 Hydraulic Jack (Floor Type)) – 15 to 20 Ton capacity.

4.0 CHASSIS AND UNIT COMPONENTS :

- 4.1 Welding and drilling on frame work of chassis are not allowed.
- 4.2 An angle of approach and an angle of departure of at least 8 degrees shall be maintained at the front and the rear of the Unit when it is loaded.
- 4.3 The drag hook or eye of adequate strength and design shall be provided at the rear of the chassis.

4.4 **FOR OTHER WORK ON CHASSIS:**

- 4.4.1 No part of the bodywork shall reduce ground clearance of Unit to less than 36cm. & not increase the overall width to more than 2.60M. The highest part of the Unit with the monitor mounted on it shall not exceed 3.60M from the ground level. The construction of super-structure shall not reduce the angles of approach below 30 degree.
- 4.4.2 3M/Hi-tech/ Zenith make anti-vibration rubber mats shall be provided while mounting the tanks etc. on the chassis.
- 4.4.3 Reflective stripe(s) shall be affixed to the perimeter of the unit as per MVA.
- 4.4.4 Arrangement shall be made on Dashboard opposite to the fire officers' seat to fix a Motorola mobile wireless set of 25W capacity. Power supply shall be provided from Unit battery. M/s Oil India Ltd. shall fit wireless set later.

4.5 **Optical Warning Devices :**

- 4.5.1 DCP FIRE TENDER shall have a system of optical warning devices
- 4.5.2 The optical warning system shall consist of an upper and a lower warning level.
- 4.5.3 The four zones shall be designated A, B, C, and D in a clockwise direction with zone A to the front of the DCP FIRE TENDER in accordance with Figure 4.8.3.2.

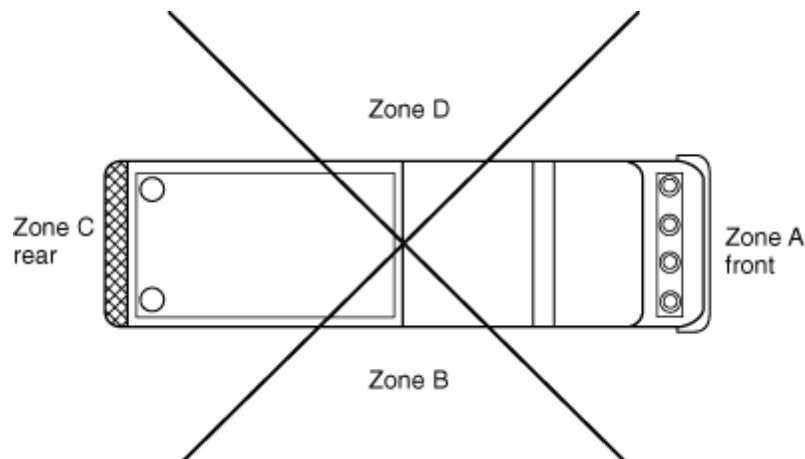


FIGURE: Warning Zones for Optical Warning Devices

- 4.5.4 Each optical warning device shall be installed on the DCP FIRE TENDER and connected to the DCP FIRE TENDER's electrical system in accordance with the requirements
- 4.5.5 A master optical warning device switch that energizes all of the optical warning devices shall be provided in driver's cabin.
- 4.5.6 The optical warning system on the "DCP FIRE TENDER" shall be capable of two separate signaling modes during emergency operations.
- 4.5.7 The optical warning devices shall be constructed or arranged so as to avoid the projection of light, either directly or through mirrors, into any driving or crew compartment(s).
- 4.5.8 The front optical warning devices shall be placed so as to maintain the maximum possible separation from the headlights.
- 4.5.9 The optical sources on each level shall be of sufficient number and arranged so that failure of a single optical source does not create a measurement point, in any zone on the same level as the failed optical source, without a warning signal at a distance of 100 ft (30 m) from the geometric center of the DCP FIRE TENDER.
- 4.5.10 Flash Rate.

- 4.5.10.1 The minimum flash rate of any optical source shall be 75 flashes per minute, and the minimum number of flashes at any measurement point shall be 150 flashes per minute.
- 4.5.11 Color of Warning Lights.
- 4.5.11.1 Permissible colors or combinations of colors in each zone, within the constraints imposed by applicable laws and regulations, shall be as shown in Table.

Table Zone Colors		
Color	Calling for Right-of-Way	Blocking Right-of-Way
Red	Any zone	Any zone
Blue	Any zone	Any zone
Yellow	Any zone except A	Any zone
White	Any zone except C	Not permitted

4.5.12 Audible Warning Devices :

- 4.5.12.1 Audible warning equipment in the form of at least one automotive traffic horn and one electric or electronic siren shall be provided.
- 4.5.12.2 A means shall be provided to allow the activation of the siren within convenient reach of the driver.

4.6 Work Lighting :

4.6.1 Ground Lighting :

- 4.6.1.1 The work area immediately behind the Unit shall be illuminated
- 4.6.1.2 The “DCP FIRE TENDER” shall be equipped with lighting that is capable of providing illumination on ground areas within 30 in. (800 mm) of the edge of the DCP FIRE TENDER in areas designed for personnel to climb onto the DCP FIRE TENDER or descend from the DCP FIRE TENDER to the ground level.
- 4.6.1.3 All other ground area lighting shall be switchable.
- 4.6.1.4 Surface Lighting: The DCP FIRE TENDER shall have sufficient lighting on all work surfaces, steps, and walkways.
- 4.6.1.5 Interior Lighting: The DCP FIRE TENDER shall have sufficient lighting to provide in the driving and crew compartments.
- 4.6.1.6 Compartment Lighting: Each compartment/ locker shall have a light.
- 4.6.1.7 Each enclosed tool and equipment compartment greater than 4 ft³ (0.1 m³) in volume and having an opening greater than 144 in.² (0.9 m²) shall have an average minimum level of lighting.
- 4.6.1.8 Switches for all work lighting shall be readily accessible.
- 4.6.1.9 The lights shall be arranged or protected to minimize accidental breakage.

4.6.2 Backup Alarm (Reverse Horn) :

- 4.6.2.1 An electric or electronic backup alarm (Reverse Horn) with light indication shall be provided that meets the Type D (87 dBA) requirements.
- 4.6.3 The DCP FIRE TENDER shall be equipped with all legally required stop, tail, and directional lights.

- 4.6.4 Directional lights shall be visible from the front, sides, and rear of the DCP FIRE TENDER.
- 4.6.5 Equipment shall not be mounted in a manner that obscures the stop, tail, or directional lights.

5.0 DRIVING AND CREW AREAS:

5.1 General :

- 5.1.1 Each crew riding position shall be within a fully enclosed personnel area.
- 5.1.2 All interior crew and driving compartment door handles shall be designed and installed to protect against accidental or inadvertent opening.

5.1.3 Means of Escape :

- 5.1.3.1 Any interior area to be occupied by personnel shall have a minimum of two means of escape.
- 5.1.3.2 Each opening shall be large enough for a person to escape through the opening.

5.1.4 Instrumentation and Controls : All the standard instrumentation and controls shall be mounted in the driving compartment and shall be identified and visible to the driver while seated.

- 5.1.5 Controls and switches that are expected to be operated by the driver while the DCP FIRE TENDER is in motion shall be within convenient reach for the driver.
- 5.1.6 There shall be two doors in the cabin, sized generously with proper arrangement for embarking and disembarking of crewmembers. The doors shall open outwards and hung forward and shall have levers for unlatching from outside and inside. The doors shall be provided with shatterproof safety glasses which can be raised / lowered by winding type mechanism.
- 5.1.7 First aid box made of fiber glass/ aluminum suitable for 10 persons shall be provided in the cabin. First aid box shall be suitably mounted in the cabin at easily accessible location.
- 5.1.8 Non slip type steps & grab rails shall be provided in the cabin to assist the crew members to get in & out. Front side of the cabin shall have glass paneling so that the crew can have an all-round view.
- 5.1.9 The cabin structure shall be so designed so as to avoid any vibration / rattling / deformation in the intended usage of the Unit. The entire floor of the cabin shall be provided with 3M make vinyl matting of minimum 6MM thickness with anti-skid features.
- 5.1.10 Battery shall be placed in totally enclosed box with spark proof gland for cable entry with battery cut-Off switch. Installed battery shall have a charging faculty from external source at its location itself.
- 5.1.11 The controls on control panel shall be so arranged that one man can operate all the controls.

5.2 Seating arrangement

- 5.2.1 Seating arrangement for 6 persons shall be provided in cabin.
- 5.2.2 For Driver & Officer In-charge each - "HO Bostrom, USA / Ziamatic/ USSC Valor, USA make"
- 5.2.3 For Crew (04 Nos.) - "HO Bostrom, USA / Ziamatic/ USSC Valor, USA make"

6.0 BODY, COMPARTMENTS AND EQUIPMENT MOUNTING:

6.1 STRUCTURE / FRAME WORK :

- 6.1.1 The structure/frame work on chassis & crew cabin shall be of welded construction and made from 30 mm X 30 mm X 1.6 mm hollow square section of **SS-316L** and distance between each horizontal and vertical square shall be maximum 400 mm. Cross supporting members of the panelling shall be made of SS-316L channels of 75 mm X 5 mm thickness
- 6.1.2 The entire roof of the Unit including the crew cabin top, entire rear, crew cabin floor, locker floor and sides shall be made from minimum 2 MM of Aluminium sheets suitably treated for slippage and these shall be bolted to the frame for ease in removal of the tank for repairs. The roof of the cabins should be rigid enough to take the weight of two persons without deforming the roof sheeting.
- 6.1.3 Area around the monitors operation shall be provided with 16 SWG anodized Aluminium-checker plate (in addition to the 2 mm Aluminium sheets) and shall be bolted to the frame.
- 6.1.4 Proper access ladder with Grab rails and non-skid steps shall be provided to give access to the roof for approaching to the manholes for tank and monitor etc.
- 6.1.5 Access handrails shall be provided at each entrance to a driving or crew compartment and at each position where steps or ladders for climbing are located. Access handrails shall be constructed of, or covered with, a slip-resistant, non-corrosive material. Handrails shall be between 1 in. and 1-5/8 in. (25 mm and 41 mm) in diameter and have a minimum clearance between the handrails and any surface of at least 2 in. (51 mm).
- 6.1.6 All handrails shall be designed and mounted to reduce the possibility of hand slippage and to avoid snagging of hose, equipment, or clothing.
- 6.1.7 Single Roller type Sun Shade Screen Assembly and long arm outside fitting rear view mirrors shall be fitted to cabin.
- 6.1.8 Proper draining arrangements shall be provided on the entire roof, crew cabin and inside the lockers.

6.2 LOCKERS :

- 6.2.1 Size and number of locker shall be decided that necessary equipment may be accommodated. Sufficient numbers of lockers shall be provided to accommodate all the equipment/accessories in an easily accessible manner.
- 6.2.2 All lockers shall be provided with Roller type shutter doors. The shutters shall have smooth operation. The aluminium shutters shall be dust & water proof of **M/s. MCD, France** imported make only made of extruded aluminium & duly hard anodized.
- 6.2.3 Roller shutters shall be of hollow rectangular shaped & made from aluminium interchangeable links connected by means of plastic profiles.
- 6.2.4 Sealing of roller shutter shall be watertight when closed.
- 6.2.5 Roller shutters shall be inward rolling type and shall be provided with guide rails over entire length on both sides to make them torsion free.
- 6.2.6 When shutters are rolled, unobstructed access should be available to the equipment & hoses.
- 6.2.7 Shutters should open in all positions of the Unit even in rough terrains.
- 6.2.8 Roller shutters shall have locking arrangement to prevent accidental opening during movement of the Unit.

6.2.9 Spare lock – 10 Nos. shall be provided.

6.2.10 All the lockers shall be illuminated by **MCD make LED lightning system.**

6.2.11 All the lockers shall be fitted with internal lighting, which shall be capable of being automatically switched, 'ON' and 'OFF' by the opening of shutters. A master switch for isolating the locker lighting circuit shall also be fitted in the driver's cabin.

6.2.12 Lockers shall have arrangement for self-draining of any water entering inside

6.2.13 Sufficient number of lockers shall be provided for storage of all accessories listed. Lockers shall also be provided to accommodate 4 nos., 10 kg DCP extinguishers.

6.2.14 Lockers shall be accessible from ground level by a man of average height (1.67M). All the Lockers shall be provided with 3M make, 4MM thick, vulcanized synthetic rubber mat at bottom and up-to 12 inch on three sides.

6.2.15 The bottom shall be made of removable sections fabricated from noncorrosive materials.

6.2.16 The interior shall be smooth and free from all projections, such as nuts, sharp angles, or brackets that might cause damage to the hose.

6.2.17 All electrical junctions or wiring within compartments/lockers shall be protected from mechanical damage resulting from equipment stored in the compartment.

6.3 Stepping, Standing and Walking Surfaces :

6.3.1 Steps, platforms, or permanently attached ladders shall be provided so that fire fighters have access to all working and storage areas of the DCP FIRE TENDER.

6.3.2 The maximum stepping height shall not exceed 18 in. (460 mm), with the exception of the ground to first step, which shall not exceed 24 in. (610 mm).

6.3.3 All ladders shall have at least 7 in. (175 mm) of clearance between any rung and the body or other obstruction.

6.3.4 All steps, platforms, or ladders shall sustain a minimum static load of 500 lb (227 kg) without deformation.

6.4 All materials used for exterior surfaces designated as stepping, standing, and walking areas and all interior steps shall have slip resistance.

6.5 All materials used for interior floors shall have slip resistance.

6.6 Access Handrails :

6.6.1 Access handrails shall be provided at each entrance to a driving or crew compartment and at each position where steps or ladders for climbing are located.

6.6.2 Access handrails shall be constructed of, or covered with, a slip-resistant, noncorrosive material i.e. Aluminium / SS.

6.6.3 Handrails shall be between 1 in. and 1 in. (25 mm and 42 mm) in diameter and have a minimum clearance between the handrails and any surface of at least 2 in. (52 mm).

6.6.4 All handrails shall be designed and mounted to reduce the possibility of hand slippage and to avoid snagging of hose, equipment, or clothing.

6.7 PAINTING AND MARKING :

6.7.1 Paint shall be of Asian/Burger/Akzonoble/3M make only.

6.7.2 Unit and monitor should be painted with 2 coats of zinc phosphate epoxy primer each of 50 microns DFT and two coats of polyurethane finished **Yellow** paint each coat of 50 microns DFT.

6.7.3 All the lockers / cabins shall be provided with Stainless steel Name Plates with letters itched/ embossed on it boldly indicating the content.

6.7.4 The inside of the DCP vessels shall be provided with anti-corrosion treatment by Epoxy paint over surface, which has been suitably blasted to near white finish. The DFT shall be minimum 0.12 mm. Epoxy painting shall be done after hydraulic testing.

6.7.5 The external surface of the DCP vessel shall be given two coats of zinc chromate primer over a well cleaned surface. Primer shall be applied only after hydro test.

- 6.7.6 M/s Oil India Ltd. emblem in original colour together with name (in Hindi and English) shall be written in golden yellow colour on both sides of the Unit.
- 6.7.7 On the front of the Unit "DCP FIRE TENDER" shall be written IN ENGLISH.
- 6.7.8 The inside of lockers shall be painted in pale Cream colour.
- 6.7.9 The chassis frame shall be painted black and wheel arch shall be painted white.
- 6.7.10 Mud flappers of sufficient length and width shall be provided at wheels.
- 6.7.11 Under frame of Chassis shall be painted with chlorinated rubber paint.
- 6.7.12 The Unit shall be clearly having the following marks at suitable locations.
 - (a) Manufacturer's name & trade mark.
 - (b) Year of manufacture
 - (c) Engine and chassis number.
 - (d) All instrument control & valves shall be identified with properly itched metallic Name plates.
 - (e) All valves and inlet and outlet shall also be identified by suitable metallic Nameplates.
- 6.7.13 All exposed ferrous metal surfaces that are not plated or stainless steel shall be cleaned and prepared and shall be painted or coated.
- 6.7.14 The paint or coating, including any primer, shall be applied in accordance with the paint or coating manufacturer's recommendation.
- 6.7.15 A reflective stripe(s) shall be affixed to the perimeter of the DCP FIRE TENDER.
- 6.7.16 The stripe or combination of stripes shall be a minimum of 4 in. (100 mm) in total width and shall conform the requirements.
- 6.7.17 At least 50 percent of the cab and body length on each side, at least 50 percent of the width of the rear, and at least 25 percent of the width of the front of the DCP FIRE TENDER shall have the reflective material affixed to it.

7.0 DCP SYSTEM:

- 7.1 Two nos. DCP vessels of 1500 Kg capacity each shall be provided.
- 7.2 Each of the 02 DCP storage vessels shall be spherical/cylindrical in shape and shall be hermetically seating type cap with easy means for removing for the purpose of re-filling dry chemical powder.
- 7.3 Placement & location of both vessel shall be such that load over the chassis is equally distributed & centre of gravity will be as low as possible.
- 7.4 The DCP vessel will be designed & fabricated as per ASME Code VIII Division I, code of unfired pressure vessel.
- 7.5 The material for vessel will be as per ASME codes.
- 7.6 The max. Corrosion allowance for shell & dish end will be within 2.5mm.
- 7.7 The vessel will be designed for
 - a) Working Pressure-14 Kg/cm²
 - b) Hydro test pressure - 24 Kg/cm² .
- 7.8 Material of construction : SA 516 Gr 70
- 7.9 Corrosion allowance : 2 mm
- 7.10 Joint efficiency : 1.0
- 7.11 Minimum metal temperature : (-) 0.7 deg C
- 7.12 Vessel will be provided with filling aperture with flanged cover at top and drain hole of sufficient diameter at bottom with flanged cover.
- 7.13 Vessels shall be so sized as to have 10% of inside height as free space after filling the specified quantity of powder.
- 7.14 Vessel will be fitted with Safety valve pressure gauge, pressure reducing device.
- 7.15 Isolation valve, charging valve fitted at suitable location.

- 7.16 Vessel will be provided with a blow valve or similar device on top to discharge N2 gas in the atmosphere without discharging powder.
- 7.17 Two Nos. Safety valve will be installed on the top of vessel at suitable location & the setting of safety valve will be at 16 Kg/cm.
- 7.18 Suitable lifting lugs shall be provided on the shell of the vessels to enable them to be lifted off the vehicle for repair/replacement as necessary. Lifting lugs shall not be directly attached to the vessels.
- 7.19 To ensure proper fluidity of the powder appropriate nos. of diffuser nozzle will be provided at the bottom of vessel & suitable arrangement will be made to ensure that diffuser nozzle are not blocked under any circumstances.
- 7.20 The diffuser nozzles should be fitted with synthesized filters DCP system will have N2 as an expelling agent.

8.0 Expellant System:

- 8.1 Nitrogen gas shall be used as the expelling medium for discharging the DCP.
- 8.2 Vessel will have suitable Nos. of N2 cylinders (Min. 68 Ltrs. water capacity) to ensure that 90% powder is discharged.
- 8.3 The expellant system shall be used to discharge the DCP from :
 - (a) DCP monitor, or
 - (b) All 04 Nos. hose reels at a time or from any one hose reel
- 8.4 The expellant system should be capable of providing the required gas so as to ensure the specified discharges from monitor and / or hose reel(s).
- 8.5 The nitrogen cylinders shall not be manufactured two years earlier than supply of the DCP tender.
- 8.6 One battery of cylinders shall face the right side of the tender while the other shall face the left side.
- 8.7 Nitrogen cylinders shall be fitted with back flow valves to prevent return of N2.
- 8.8 Each DCP vessel shall be provided with a battery of cylinders to provide expellant gas to ensure the required discharge of DCP. The number of cylinders required shall be decided by the vendor. However, each DCP vessel shall be provided with a battery of four (2 working and 2 spare) cylinders minimum.
- 8.9 Nitrogen cylinders shall be provided with quick operating valve & the cylinders with valves must be of approved type by PESO/CCOE Nagpur. Certificates of the same shall be submitted to the OIL at the time of supply.
- 8.10 The expellant system shall have a working pressure of 14.0 kg/Cm² each expellant system shall have an independent and suitable pressure reduction station.
- 8.11 Each DCP storage vessel shall have an independent expellant gas system.
- 8.12 All valves, nozzle, pressure gauge, etc. will be of best quality and material of construction would be of non-corrosion, non-reactive material compatible with DCP.
- 8.13 Free charge of Dry Chemical Powder – 1500 X 2 = 3000 Kg. is in Successful Bidder's scope. Dry Chemical Powder to be provided separately in sealed drum as per detailed specification of "Annexure – B".
- 8.14 Efficient means shall be provided for flushing the monitor, hose reels and piping etc, after use, with the expellant gas. Sufficient amount of the expellant gas shall be available in the cylinders for this purpose. Arrangements shall be made to prevent back flow of the expellant gas.
- 8.15 Arrangements to be provided for flushing the system thro following:-
 - 8.15.1 Compressed gas (Pr. 15 Kgf/cm²)
 - 8.15.2 Co2 Gas (Pr. 55 Kgf/cm²)
 - 8.15.3 BA Cylinder (Pr. 300 Kgf/cm²)

- 8.16 Arrangement shall be made to check the pressure of each N2 cylinder without removing the cylinder and connecting pipes.

9.0 DCP MONITOR:

- 9.1 One No. DCP monitor shall be mounted on suitable and independent platform just behind the driver's cabin.
- 9.2 The discharge through the monitor shall be adjustable at 15, 25 and 40 kg/Sec. at operating pressure. The throw through the monitor shall not be less than 40m horizontally and 30m vertically in still air.
- 9.3 Suitable controls/ Flow control lever shall be provided near the grip of the handle to facilitate the operator to control and regulate the discharge of the powder.
- 9.4 Pneumatic operated valve with manual over ride needs to be provided.
- 9.5 The monitor shall be provided in a manner so as to enable the operator to move it easily. It shall be capable to work on any angle up to 360 deg. horizontally and 100 deg. (+ 90deg. to -10 deg.) vertically.
- 9.6 The platform shall be adequate strengthened to avoid any vibration while the monitor is in use. There shall be proper and sufficient moving space around the platform for movement of the operator.
- 9.7 The monitor shall rest on a clamp, properly secure, while not in use.

10.0 HOSE REELS

- 10.1 Each vessel shall have two hose reels for discharge of DCP. Two hose reel to be provided on each side of the tender.
- 10.2 The throw of the powder shall not be less than 10m horizontally and 8m vertically while working with both the hose reels simultaneously. Each hose reel shall be capable of discharging DCP @ 5kg/sec.
- 10.3 Each hose reel shall be provided with 25 mm x 30/40 m long high pressure hose (30 bar working pressure) fitted Variable Flow Hydo Chem Nozzle with nozzle. Hose shall be Parker make.
- 10.4 The hose reels shall be provided an easily accessible location so as to facilitate quick withdrawal.
- 10.5 The reels shall be provided with friction brakes to prevent over-run of tubing without affecting easy run of the reel. It shall be possible to de-clutch the brake for rewinding. Design shall be reliable and permit adjustment for wear and friction force to suit end use.
- 10.6 The hose reel shall be quick rolling type with ball bearing with external flushing connection.
- 10.7 The hose reels shall be of non-kinking type.
- 10.8 Hydro-Chem/ DCP Variable Flow Nozzle shall be M/s. Williamsfire, USA/ ElkhartBrass, USA/ Task Force Tips (TFT), USA/ Akron Brass.

11.0 PIPING

- 11.1 All piping shall be sized so as to have minimum pressure drop and achieve the required pressure and flow at various locations.
- 11.2 All piping shall be of carbon steel and seamless to A 106 Gr. B. Piping shall be designed for 10% over the maximum pressure encountered in the pipe.
- 11.3 The piping shall be flanged for ease of maintenance. However, flange joints to be kept minimum.
- 11.4 All valves in the circuit shall be full-bore ball type. Body to be carbon steel with SS-304 trims and Teflon seats. Valves of less than 1.5" size shall be forged with 100mm long nipples at both ends. Valves more than 2" size shall be flanged and can be of cast

- construction. Valves shall be provided at suitable locations ensuring quick and easy operation.
- 11.5 All lines shall be hydraulically tested at 1.5 times the design pressure and pressure shall be held for 2 hours. However, in no case shall the lines be hydraulically tested below 25 kg/cm².
 - 11.6 All lines shall be suitably supported so as to provide rigidity and avoid vibrations.
 - 11.7 All lines less than 1.5" NB size can be socket welded to matching fittings (3000 lbs. rating minimum). All lines above 2" NB size shall be butt welded with full penetration welds.
 - 11.8 All gaskets shall be spiral wound with SS-304 asbestos filler.

12.0 CONTROL PANEL

- 12.1 Adequately illuminated control panels shall be provided at easily accessible position to operate the dry powder system.
- 12.2 Each vessel shall have a separate control panel located at side of the tender close to the cylinder bank.
- 12.3 The control panels shall include the following.
 - a. Pressure gauge for expellant gas cylinders at manifold.
 - b. Pressure gauge to indicate operating pressure of DCP vessel in charged condition.
 - c. Operating levers for
 - d. Expellant gas valve
 - e. Monitor valve
 - f. Valves for hose reels
 - g. Pressure release valve
 - h. Flushing valve for flushing the system using expellant gas.
 - i. Flushing connection with valves for flushing the system with external air.
 - j. Switches for lighting
 - k. System schematic diagram, etched on brass plate
 - l. Operating instruction plate and flushing out instruction plate (both etched on brass plate)
- 12.4 In addition to the items mentioned above, vendor shall provide any other items that he may find essential. Any of these items which are also required in the driver's cabin shall be provided at suitable locations in the driver's cabin. Each lever, switch, valve, gauge, outlet/inlet etc. shall have identification made on brass plate and duly riveted.

13.0 SPARES

- 13.1 The following spares shall be supplied by the vendor.
 - 13.1.1 DCP Hose reel – 01 Nos. (as mentioned in 9.0)
 - 13.1.2 DCP Hose reel Nozzle – 02 Nos.
 - 13.1.3 Spare Nitrogen cylinder each of 68 liters capacity filled with gas at 130-140 kg/Cm² pressure: 04 Nos. (in addition to spare battery bank mounted on tender)
 - 13.1.4 Wrenches for opening/closing cylinder valves : 04 Nos.
 - 13.1.5 Spanner for Opening Main Cover of DCP Vessel : 04 Nos.
 - 13.1.6 Nitrogen pressure reading/testing devices : 02 Nos.
 - 13.1.7 Flexible hose/steel tubing with end fittings for connecting between cylinder and manifold: 10 Nos.
 - 13.1.8 Valve for Nitrogen line: 05 Nos.
 - 13.1.9 Flexible Hose for Air Line: 10 Mtrs.

13.1.10 Connectors for Air Line : 06 (Straight & T - Type)

14.0 PERFORMANCE GUARANTEE :

14.1.1 The manufacturer shall guarantee the design, material, workmanship and the performance of the unit for a period of 18 months from the date of the supply of completed Unit. The Successful Bidder, at M/s Oil India Ltd. premises, shall rectify any mechanical defect, faulty workmanship or operational defects found during this period within reasonable time without any extra cost.

15.0 TRAINING :

After supply of the Unit, the Successful Bidder shall provide two days training on operation & maintenance of fire Unit including chassis at M/s Oil India Ltd. site and charges for the same shall be included in the price.

Abbreviation:

Unit - Complete DCP Fire Tender

MVA - Motor Vehicle Act

RPM - Revolutions per Minute

LED - Light-Emitting Diode

PSV - Pressure Safety Valve

Annexure – A

See Clause for GVW

S. No.	Item	Numbers
1	Dry Chemical Powder Vassal (Wt. Approx. 4000 Kg)	02
2	Chassis (Wt. Approx. 4300 Kg)	01
3	Fabrication & Piping (Wt. Approx. 1200 Kg)	01
4	Weight of crew members (weight 420 Kg)	06
5	SCBA Sets	2
6	Fire suits	2
7	Safety Helmets	10
8	Gum boots	10

Dry Chemical Powder Potassium Urea Based

1. General: The Powder shall be Potassium Allophonate / Carbonate based dry chemical powder, a reaction product of Potassium Bicarbonate – Urea suitable for large scale high intensity flammable oil & gas fire. The product should be UL Approved.

2. Physical & Chemical Parameters:

- a. Appearance : Off-White free flowing powder
- b. Particle Size : 50 – 70 microns
- c. Apparent density : 0.5 - 0.7 gm/cc
- d. Water Repellency : 1.5% Max
- e. Moisture content : less than 0.25%(m/m)
- f. Temperature stability : $\pm 60^{\circ}\text{C}$

3. Performance Test: Shall able to extinguish a 20B / 144B Hydrocarbon tray fire by filling 3.5 kg (max) Powder in 5 kg extinguisher.

4. Physiological Effect:

- a. The DCP shall not have harmful ingredients
- b. It should be environmental friendly & nontoxic to humans and animals.
- c. Should submit certificates of 1) Non-Toxicity 2) Non-Skin Irritation Test

5. Compatibility:

The DCP shall be compatible with all type of fire fighting foams.

6. Approvals:

The Dry Chemical Powder (DCP) should be Listed/Approved by UL as per UL-299C on fire extinguishing Dry Chemical for special application.

The dry powder should follow the latest Oil Industries Safety Directorate norms (OISD-116), as mentioned in Section 12, Page No. 24.

7. Packing:

The DCP shall be packed in 25kg good quality HDPE drums which should be hermetically sealed.

8. Shelf Life: DCP shall have minimum shelf life of 05 years without any degrading of chemical & physical properties.

9. Documents:

- a. Must submit valid UL: 229C Certificate along with offer and supply.
- b. Thermal Gravimetric Analysis (TGA) with decomposition between 215°C and 260°C should be submitted of a reputed Lab along with the supply, IR analysis report as conducted by UL to be also to be submitted along with the supply.
- c. The bidder should submit ISO 9001:2008, ISO 14001: 2004 & OHSAS 18001:2007 certificate copies along with supply.
- d. Warrantee / guarantee Certificate for the DCP along with supply.
- e. MSDS of the material along with supply.
- f. Original manufacturer test report along with supply.
- g. Disposal Procedure for the material along with supply.

- h. If the powder is imported the latest Bill of Lading is to be produced along with supply.
- i. OIL reserves the right to send the sample from the supplied powder for further testing to any authorized national laboratory in India.

10. MARKING:

Each container/drum containing Dry Chemical Powder shall be labelled with the following information:

- (a) Manufacturer's name or trade mark.
- (b) Quantity of the Powder, in Kg (Net and Gross weight)
- (c) Type of the Powder and Foam Compatible.
- (d) Date of manufacture/Batch No.
- (e) UL Marking.

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 **SDI6041P18** 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 Organization "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.

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3. The Principal will exclude from the process all known prejudiced persons.

(2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the relevant Anti-Corruption Laws of India, or if there be a Page 2 of 6 substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section: 2 -Commitments of the Bidder/Contractor

(1) The Bidder/Contractor commits itself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

1. The Bidder/Contractor will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or immaterial benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the 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 cartelization 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.

(3) The Bidder/Contractor signing Integrity Pact shall not approach the Courts while representing the matters to IEMs and he/she will await their decision in the matter.

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.
4. A transgression is considered to have occurred if in light of available evidence no reasonable doubt is possible.
5. Integrity Pact, in respect of a particular contract, shall be operative from the date Integrity Pact is signed by both the parties till the final completion of the contract **or as mentioned in Section 9- Pact Duration whichever is later**. Any violation of the same would entail disqualification of the bidders and exclusion from future business dealings

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 Earnest Money Deposit / Bid Security.

(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 Security Deposit / Performance Bank Guarantee.

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 Principal will enter into Pacts on identical terms with all bidders and contractors.

2. The Bidder / Contractor undertake(s) to procure from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the provisions laid down in this agreement/Pact by any of its sub-contractors/sub-vendors.

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

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. However, the Independent External Monitor shall give an opportunity to the bidder / contractor to present its case before making its recommendations to the Principal.
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

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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. The Arbitration clause provided in the main tender document / contract shall not be applicable for any issue / dispute arising under Integrity Pact.

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 intentions.

R BARMAN
CHIEF MANAGER MATERIALS (IP)

.....
For the Principal

.....
For the Bidder/Contractor

Witness 1:

Witness 2:

Place. DULIAJAN
Date . 17.10.2017

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	Confirm that validity has been offered as per NIT.		
2	Confirm that Bid Security / Earnest Money has been submitted as per NIT (Wherever Applicable) ?		
3	Confirm that you shall submit Performance security (in the event of placement of order) (Wherever Applicable) ?		
4	Confirm that duly signed Integrity Pact has been submitted as per NIT (Wherever Applicable) ?		
5	Confirm that you have submitted documentary evidence of successfully executing one Purchase order as stipulated in NIT in any of the preceding 5 financial years (*)		
6	Confirm that you have submitted Balance Sheet and Profit and Loss Account of any of the preceding 3 financial years certified by a chartered accountant.		
7	Confirm that the bid has been signed using Class 3 digital certificate with Organisation's Name as per NIT.		
8	Confirm that you have not taken any exception/deviations to the NIT .		

NOTE: Please fill up the greyed cells only.

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

Response Sheet**Annexure-FFF**

Tender No.
Bidders Name

Bidders Response Sheet

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

NOTE: Please fill up the greyed cells only.

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

**(TO BE FILLED UP BY ALL THE VENDOR IN THEIR OWN LETTER 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.