

## ANNEXURE-I

**OIL INDIA LIMITED**  
(A Government of India Enterprise)  
P.O. Duliajan-786602, Assam, India  
E-mail: [material@oilindia.in](mailto: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 & QTY.
SDI3130P17/P3	05.01.2017	TRANSFORMER, Qty. – 2 Nos.
SDI3158P17/P3	19.01.2017	FIRE FIGHTING SYSTEM, Qty. – 1 No.
SDI3159P17/P3	19.01.2017	CRUDE OIL TANKER, Qty. – 4 Nos.
SSI3105P17/P1	05.01.2017	SPOTTING FLUID, Qty. – 20,000 Ltrs.
SDI3161P17/P4	05.01.2017	CABLES.

Tender fee (Non-refundable): Rs 1,000.00; Bid Closing/Opening Time: **(11 Hrs.) IST/(14 Hrs.) IST**; Period of sale of documents: **Till one week prior to bid closing date**. The complete bid documents and details for purchasing bid documents, participation in 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](http://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.** : SDI3159P17 DT: 01.12.2016

**Tender Fee** : Rs 1,000.00

**Bid Security** : Applicable

**Bidding Type** : SINGLE STAGE TWO BID SYSTEM

**Tender Type** : Open Tender

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

**Performance Security** : Applicable

**Integrity Pact** : Applicable

OIL invites Bids for **Procurement of 9 KL Crude Oil Tanker – 04 Nos** through its e-Procurement site under **SINGLE STAGE TWO BID SYSTEM**. The bidding documents and other terms and conditions are available at Booklet No. MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders. The prescribed Bid Forms for submission of bids are available in the Technical RFx -> External Area -> Tender Documents

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

**The tender will be governed by:**

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

- b) OIL's office timings are as below:

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

Vendors should contact OIL officials at above timings only.

**OIL Bank Details :**

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

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

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

**Vendors who do not have OIL’s User ID & password, may generate User ID & password online by the Vendor by using the link for supplier enlistment given in OIL’s e-tender**

portal and then pay Tender Fee on-line through OIL's electronic Payment Gateway upto one week prior to the Bid closing date (or as amended in e-portal).

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

**NOTE:**

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

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

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

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

**2.3** **A screen shot in this regard is given below.** Offer not complying with above submission procedure will be rejected as per Bid Rejection Criteria mentioned in [Annexure-CCC](#).

**Display RFx Response:**

Edit | Print Preview | **Technical RFx Response** | Close | Withdraw

RFx Response Number 60006452    RFx Number TEST2    Status Submitted  
 RFx Owner WIPRO\_TEST1    Total Value 0.00 INR    RFx Response Version 1

RFx Information | Items | Notes and Attachments | Conditions

Basic Data | Questions

Event Parameters

Currency: Indian Rupee

Detailed Price Information: Price with Conditions

Terms of Payment: 9010 90% against despatch+10% after receipt

Service and Delivery Information

Incoterms and Statistics

Created By  
Created Date  
Last Processed By  
Last Processed Date

▼ Partners and Delivery Information

Details | Send E-Mail | Call | Clear

Function	Number	Name	Valid from
The table does not contain any data			

Go to this Tab “Technical RFx Response” for Uploading “Techno-commercial Unpriced Bid”.

Go to this Tab “Notes and Attachments” for Uploading “Priced Bid” files.

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

**Edit RFx Response:**

Submit | Read Only | Print Preview | Check | **Technical RFx Response** | Close | Save | Verify signature

RFx Response Number 60006452    RFx Number TEST2    Status Withdrawn    Submission Deadline 13.04.2013 11:00:00 INDIA  
 RFx Owner WIPRO\_TEST1    Total Value 0.00 INR    RFx Response Version Number 2    RFx Version Number 5

RFx Information | Items | **Notes and Attachments** | Conditions | Summary

▼ Notes

Add | Clear

Assigned To	Category	Text Preview
The table does not contain any data		

▼ Attachments

Sign Attachment | Add Attachment | Edit Description | Versioning | Delete | Create Qualification Profile

Assigned To	Category	Description	File Name	Version	Processor	Checked
The table does not contain any data						

Bid on “EDIT” Mode

Area for uploading Techno-Commercial Unpriced Bid\*

Area for uploading Priced Bid\*\*

### **Note :**

\* The “Techno-Commercial Unpriced Bid” shall contain all techno-commercial details **except the prices.**

\*\* The “Price bid” must contain the price schedule and the bidder’s commercial terms and conditions. For uploading Price Bid, first click on Sign Attachment, a browser window will open, select the file from the PC and click on Sign to sign the Sign. On Signing a new file with extension .SSIG will be created. Close that window. Next click on Add Attachment, a browser window will open, select the .SSIG signed file from the PC and name the file under Description, Assigned to General Data and click on OK to save the File.

3.0 Please note that all tender forms and supporting documents are to be submitted through OIL’s e-Procurement site only except following documents which are to be submitted

manually in sealed envelope super scribed with **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 a) **The Integrity Pact is applicable against this tender. Therefore, please submit the Integrity Pact document duly signed along with your quotation as per BRC. OIL shall be entering into an Integrity Pact with the bidders as per format enclosed vide Annexure DDD of the tender document. This Integrity Pact proforma has been duly signed digitally by OIL's competent signatory. The proforma has to be submitted by the bidder (along with the technical bid) duly signed (digitally) by the same signatory who signed the bid, i.e., who is duly authorized to sign the bid. Uploading the Integrity Pact with digital signature will be construed that all pages of the Integrity Pact has been signed by the bidder's authorized signatory who sign the Bid. If any bidder refuses to sign Integrity Pact or declines to submit Integrity Pact with the offer, their bid shall be rejected straightway.**

b) **The name of the OIL's Independent External Monitors at present are as under:**

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

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

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

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

**NOTE:**

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

**Yours Faithfully**

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

**Tender No & Date: SDI3159P17 DT: 01.12.2016****BID REJECTION CRITERIA (BRC) / BID EVALUATION CRITERIA (BEC)**

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

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

<b><u>Criteria</u></b>	<b>Complied / Not Complied. (Remarks if any)</b>
<p><b>1.0 BID REJECTION CRITERIA (BRC):</b></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><b>A) TECHNICAL</b></p> <p><b>1. BIDDERS ELIGIBILITY:</b></p> <p>A. In case the Bidder is an authorized POL tanker manufacturer, the following criteria shall be met by the Bidder:</p> <p>a. Bidder must be an authorized POL tanker manufacturer &amp; must possess valid licence from Petroleum and Explosives Safety Organization (PESO).</p> <p>b. Bidder must be in the POL tank manufacturing business for not less than 5 (five) years as on original bid closing date of this tender.</p> <p>c. Bidder must have the experience of manufacturing at least 02 (two) POL tankers, in single order, during last 5 (Five) years as on original bid closing date of this tender.</p> <p>OR</p> <p>B. In case the Bidder is an authorized dealer/distributor of Chassis Manufacturer (OEM) of "POL/Crude Oil tanker", the following criteria shall be met by the Bidder:</p> <p>a. Bidder shall enclose a Certificate/undertaking in support of authorization of dealership/distributorship with back up Warranty &amp; Guarantee from the "Chassis Manufacturer of POL/Crude Oil Tanker (OEM)" to quote for this tender. The</p>	



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

b. Bidder shall submit the following qualification requirements of POL Tanker Manufacturer where he proposes to build the Tank Body:

i) Must be an authorized POL tanker manufacturer & must possess valid licence from Petroleum and Explosives Safety Organization (PESO).

ii) Must be in the POL tank manufacturing business for not less than 5 (five) years as on original bid closing date of this tender.

iii) Must have the experience of manufacturing at least 02 (two) POL tankers, in single order, during last 5 (five) years as on original bid closing date of this tender.

OR

C. In case the bidder is Chassis Manufacturer (OEM) of "POL/Crude Oil tanker", the bidder shall submit the following qualification requirement of the POL Tanker Manufacturer where he proposes to build the Tank Body:

i) Must be an authorized POL tanker manufacturer & must possess valid licence from Petroleum and Explosives Safety Organization (PESO).

ii) Must be in the POL tank manufacturing business for not less than 5 (five) years as on original bid closing date of this tender.

iii) Must have the experience of manufacturing at least 02 (two) POL tankers, in single order, during last 5 (five) years as on original bid closing date of this tender.

2. Net carrying capacity of the tank shall be 9KL & it shall be of 3 compartments of equal size.

3. GVW of the truck chassis shall not be less than 16,000 Kg.

4. Main Transmission Gearbox of the truck shall have suitable inbuilt factory fitted window to mount PTO gearbox.

5. Right hand drive truck with power assisted steering.

6. Offer must be for full quantity i.e. 4 (four) units of Crude Oil tankers; part offer shall be outright rejected.

7. Bidder shall arrange Calibration Certificates and Explosive Licence for carrying Crude Oil from the competent authorities.

### **FINANCIAL CRITERIA**

1 **Annual Turnover**: The bidder shall have an annual financial turnover of minimum Rs. 45.46 Lakhs. during any of the

preceding 03 (three) financial years reckoned from the original bid closing date of the tender.

1.1 "Net Worth" of the bidder should be positive for the preceding financial/accounting year.

2 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:

a) 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.

OR

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

b) In case the bidder is a Central Govt. Organization/PSU/State Govt. Organization/Semi-State Govt. Organization or any other Central/State Govt. Undertaking, where the auditor is appointed only after the approval of Comptroller and Auditor General of India and the Central Government, their certificates may be accepted even though FRN is not available. However, bidder to provide documentary evidence for the same.

3 In case the Audited Balance Sheet and Profit & Loss Account submitted along with the bid are in currencies other than INR, the bidder shall have to convert the figures in equivalent INR considering the prevailing conversion rate on the date of Balance Sheet and Profit & Loss Account. A CA certificate is to be submitted by the bidder regarding converted figures in equivalent INR.

## **B) COMMERCIAL:**

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

ii) Bid security:

The bid must be accompanied by Bid Security of **Rs 1,82,000.00** in OIL's prescribed format as Bank Guarantee or a Cashier's cheque or Demand Draft in favour of OIL. The Bid Security may be submitted manually in sealed envelope

superscribed with Tender no. and Bid Closing date to Head Materials, Materials Department, Oil India Limited, Duliajan- 786602, Assam on or before the Bid Closing Date and Time mentioned in the Tender. **The Bank Guarantee towards Bid Security shall be valid for 7 months from Bid closing date. (i.e. upto 19.08.2017).** Cashier's cheque or Demand Draft shall be valid for minimum 90 days or as per RBI's guidelines, drawn on "Oil India Limited" and payable at Duliajan, Assam

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

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

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

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

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

iv) Performance Security:

The successful bidder shall submit Performance Security @ 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 any one of the following forms :

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

(b) A Cashier's cheque or Demand Draft with validity of minimum 90 days or as per RBI's guidelines, drawn on "Oil India Limited" and payable at Duliajan, Assam.

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

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

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

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

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

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

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

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

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

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

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

**(d) In case the Party refuses to sign Integrity Pact.**

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

**(f) Delivery: Within 10 Months from the receipt of purchase order (for all 4 units)**

## **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: SDI3159P17 DT: 01.12.2016**

	<b>Complied / Not Complied. (Remarks if any)</b>
<p>ITEM NO. 10</p> <p>1.0 REQUIREMENT:</p> <p>4 (FOUR) NUMBERS BRAND NEW 9 (NINE) KL CAPACITY CRUDE OIL TANKERS BUILT ON FULL FORWARD CONTROL SUITABLE TRUCK CHASSIS AS PER SPECIFICATIONS, FITMENTS &amp; ACCESSORIES, TERMS &amp; CONDITIONS, ETC., DETAILED HEREUNDER. THESE TANKERS WILL BE PRIMARILY USED FOR TRANSPORTATION OF CRUDE OIL.</p> <p>1.1 SCOPE OF SUPPLY:</p> <p>i) Procurement of 4 (four) Nos. brand new Full Forward Control (FFC) Truck Chassis (as per the technical specification given below) in the name of OIL INDIA LIMITED.</p> <p>ii) Fabrication of driver's cabin, fresh tank body etc. (as per the specification given below).</p> <p>iii) To arrange Calibration certificate &amp; Explosive Licence for transportation of Crude Oil from the competent authority.</p> <p>2.0 BIDDERS ELIGIBILITY:</p> <p>A. In case the Bidder is an authorized POL tanker manufacturer, the following criteria shall be met by the Bidder:</p> <p>i. Bidder must be a reputed authorized POL tanker manufacturer &amp; must possess valid licence from Petroleum and Explosives Safety Organization (PESO).</p> <p>ii. Bidder must be in the POL tank manufacturing business for not less than 5 (five) years as on original bid closing date of this tender.</p> <p>iii. Bidder must have the experience of manufacturing at least 02 (two) POL tankers, in single order, during last 5(five) years as on original bid closing date of this tender.</p> <p>OR</p> <p>B. In case the Bidder is an authorized dealer/distributor of Chassis Manufacturer (OEM) of "POL/Crude Oil tanker", the following criteria shall be met by the Bidder:</p> <p>i. Bidder shall enclose a Certificate/undertaking in support of authorization of dealership/distributorship with back up Warranty &amp; Guarantee from the "Chassis Manufacturer of POL/Crude Oil Tanker (OEM)" to quote for this tender. The bid shall be rejected in case of any change of the proposed OEM after submission of the bid.</p>	

ii. Bidder shall submit the qualification requirements of POL Tanker Manufacturer as stipulated under clauses 2.0-A above.

### 3.0 THE CHASSIS SPECIFICATIONS, TANK SPECIFICATIONS AND OTHER SALIENT FEATURES OF THE TANKER UNITS:

Brand New 4x2 drive Truck Chassis of TATA, Ashok Leyland or equivalent make 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 Crude oil tanker considering the unit's application in rough terrain and typical oilfield roads. The Chassis specifications, tank specifications and other salient features of the tanker units are detailed at para 3.1 through 3.4 below:

#### 3.1 CHASSIS SPECIFICATIONS:

Tank as defined under Clause 3.2 below shall be built on a suitable Full Forward Control Truck Chassis, meeting specifications as under:

- a. Make: TATA, Ashok Leyland or Equivalent make.
- b. Drive : 4 x 2 drive
- c. GVW : Not less than 16,000 Kg
- d. Wheel Base: Within 4000 mm to 4500 mm.
- e. Length : Within 7750 mm.
- f. Engine: Suitable water cooled diesel engine of adequate power in the range of 120 to 180 HP at rated RPM meeting emission norms as applicable in the state of Assam at the time of delivery of the vehicles.
- g. Transmission, Transfer Case and PTO: Minimum 5 forward & 1 reverse speed gearbox. Transfer Case & PTO as per design. In case of PTO drive from main gearbox, the gearbox must have factory built provision for mounting PTO. However, we prefer to have chassis fitted with PTO gearbox provided by the chassis manufacturer. Cutting window in the gearbox to mount PTO is not acceptable.
- h. Axles: As per design.
- i. Steering: Suitable Power assisted steering. Steering on Right Hand side of unit i.e. Right Hand Drive unit. Left Hand Drive unit is not acceptable.
- j. Suspension: Multi-leaf suspension system for both front & rear with suitable shock absorbers.
- k. Brakes: Multi circuit "S" / "Z"-cam pneumatic service & parking brakes. Brake servos with suitable screw mechanism to release the brakes in the event of low/ no air pressure.
- l. Wheels & Tyres: 6 Nos. of min. size: 10.00 x 20 - 16 PR. Additional one complete spare wheel (Tyre, Tube, Flap and Wheel Rim) with suitable arrangement for mounting it below the chassis.
- m. Driver's Cabin: Ergonomically designed all steel construction. Full Forward Control Dual

Cab Driver's cabin complete with comfortable Driver Seat, Co-Passenger Seat for 1 person on the opposite side of driver's seat and one bench type seat at rear to accommodate 2 to 3 persons.

n. Toolbox: Rugged steel construction toolbox of adequate size at suitable place on the truck chassis for storing jack, crawl bars and other accessories, etc.

o. OTHER FITTINGS & ACCESSORIES:

a. All standard lightings, fittings, & accessories as per Indian Motor Vehicle Act.

b. Two large rear view mirrors, toeing hook, lockable fuel tank, first aid box, fire extinguisher, reversing alarm, sufficient side marker reflectors/florescent markers, hazard light flashers, etc. Two flood lights at rear top of driver's cabin for night operation.

c. Standard painting colour shade as per manufacturer's design. However, in case of different colour shade available, same shall be indicated in the bid along with leaflet for selection.

d. Standard tool kit, wheel wrench, 1 (one) No. min. 30MT capacity hydraulic jack with handle of reputed make.

3.2 TANK SPECIFICATIONS:

Salient features of the fresh /newly fabricated tanks are as given below. For detailed design, the Oil Industry Safety Directorate (OISD) Standard OISD-RP-167 on "POL Tank Lorry Design & Safety" is to be followed. A copy of the same is enclosed. The detailed standard OISD-RP-167 can be obtained/procured through OISD website <http://oisd.nic.in>.

A. Oval shaped tank of net capacity 9 KL (9000 litres) with three compartments of equal size.

B. Compartments shall be designed in such a way that the maximum net carrying capacity of 3 KL (3000 litres) of each compartment is 97 percent of its gross carrying capacity i.e. maximum carrying capacity of each compartment shall be 3 percent more than the rated capacity of 3 KL. This is to comply with Petroleum Act 1934.

C. Tank partitions shall be of disc type & the distance between two adjacent partitions shall not be more than 2500mm.

D. Baffles shall be continuously welded and shall conform to IS 814 standard.

E. Tank shall be fabricated out of Carbon Steel material of minimum yield strength of 30Kg/mm<sup>2</sup>.

F. Each compartment shall be able to withstand a minimum hydrostatic pressure of 0.316 Kg/cm<sup>2</sup>.

G. Suitably designed Emergency Valve at the exit of each tank. Secondary control mechanism with suitable fusible link for operating the Emergency Valves.

H. Suitably designed Manhole of not less than 450 mm in diameter and with Dome Cover for each compartment. The Manhole shall be closed off with a mild steel (minimum 5.0mm thick) base plate assembly. The base cover shall be provided with properly designed Dip Pipe, Fill Pipe, Emergency Valve and Pressure- Vacuum Valve.



I. Suitable tank top protection to prevent any damage of the top fittings in the event of rollover accident of the unit.

J. Suitable Catwalk of minimum 600mm width on both sides of the manholes throughout the length & between the manholes.

K. Suitable side guard throughout the length of the tank on each side of the tank.

L. Suitable ladder with railing at the rear of the tank.

M. There shall be two provisions in the tank to offload crude oil from the tank:

i. Provision No.- 1 - Offloading with the help of an inbuilt pump system of the tanker driven by PTO gearbox and suitable driveline with spiders (UJ cross) arrangement. Pump suction connected to the common delivery faucet of the tanker with isolation provision by suitable valve. The inbuilt system shall have rotary pump of make "Tushaco" or equivalent with following specifications:

a. Discharge Capacity : 200 to 400LPM at engine idle speed of 500 to 700RPM.

b. Head : 10m with 2 inch delivery line.

c. Suction : Gravity flow.

Note : The inbuilt pump shall be driven by a PTO gearbox mounted on the main gearbox of the vehicle. Suitable truck chassis with gearbox having provision to mount PTO (built in window for PTO gearbox) is to be selected. However, we prefer to have chassis fitted with PTO gearbox provided by the chassis manufacturer. Cutting window in the gearbox to mount PTO is not acceptable.

ii. Provision No.- 2 - Offloading through the common delivery faucet of the tanker by gravity flow as well as with the help of External Pump system (external pump not a part of the tanker). The common delivery faucet shall have 3 inch API size nominal bore outlet nipple with inside thread arrangement for connecting suction hose (male type end) of external pump. A thread protection cover shall be provided for the outlet.

### 3.3 OTHERS:

a. Calibration Certificate of the tank along with Dipstick properly calibrated & certified by Govt. Agency is to be provided.

b. Suitable fire screen in between the driver's cabin & tank.

c. Suitable protection (earthing arrangement) against static electricity.

d. Suitable spark arrester.

e. A gap of minimum 250 mm in between driver's cabin and tank unit.

f. Audio Visual reversing alarm in the vehicle.

g. Robust bumper at the rear of the vehicle to prevent collision stress in the event of an accident.

h. Side Under-run Protection Device (SUPD) should be provided at suitable places on both sides of the tankers to prevent other road users from entering into the bottom of the tanker when it is in motion.

i. A 20 meters long & 2 inch diameter good quality high pressure flexible PVC pipe is to be fitted at the delivery end of the inbuilt pump. Suitable bearing mounted coiling drum, to coil the delivery line, is to be mounted at the rear end or at a suitable place at any other location of the

tanker.

j. Painting :

Driver's Cabin: Cherry or equivalent automotive paint.

Tank Body: Grey- automotive paint.

Rear Mudguard: Black

Undercoat: Anti rust paint.

Legends: Printing of various legends should be made as per rules of regulatory authority-MV act & Explosive act.

k. Approval from Petroleum and Explosives Safety Organisation (PESO) on detailed constructional drawing of the tank shall be obtained by the party of their own after necessary checking/scrutiny of the same by OIL.

l. Calibration certificates of the tank as well as dipstick & Explosive Licence for carrying crude oil by each tanker unit shall be arranged by the supplier for onward handover to OIL.

### 3.4 WEIGHT & DIMENSIONS OF COMPLETE UNIT:

a. Overall length : Approx. 7750 mm

b. Overall height : Approx. 3000 mm

c. Maximum width of the tank shall be less (minimum 400mm) than the overall width of the driver's cabin of the truck unit as well as less than the overall width of the outer edges of the truck tyres.

d. Overall weight (without crude oil): Preferably within 5500 Kg.

### 4.0 MANUALS & CATALOGUES:

Following manuals & catalogues shall be supplied against each tanker unit:

a. Operator's manual for the truck unit.

b. Workshop manual for the truck unit.

c. Parts Catalogue for the truck unit.

### 5.0 INSPECTION:

Notwithstanding any clause/s mentioned elsewhere in this tender document, supplier shall facilitate inspection/testing of all 4(four) units by OIL's engineers at their works in three stages as under. Demonstration & arrangement for all necessary tests shall be the responsibility of the supplier at their cost.

a. Stage-1 - On procurement of the chassis as per para. 3.1 above.

b. Stage-2- Intermediate inspection: This inspection will be carried out during fabrication of the tanker. Thickness of tank material, Baffle size etc. will be checked during this inspection.

c. Stage-3 - Inspection of the fully built tankers prior to dispatch (15 days prior intimation by the supplier). Amongst others, hydraulic testing & calibration of the tanks shall also be carried out during this inspection. Any minor modifications suggested by OIL's inspector shall be carried out at no additional cost.

### 6.0 DELIVERY:

Notwithstanding any clause/s on delivery mentioned elsewhere in this tender document, all the 4(four) units are to be delivered to OIL's premises at Duliajan, Assam within 10 (ten) months from the date of placement of firm order.

#### 7.0 COMMISSIONING:

All the crude oil tankers (both tank part & truck chassis part) shall be commissioned by the supplier at Duliajan, Assam. Supplier shall depute experienced personnel to OIL at Duliajan for such commissioning.

Commissioning shall be completed within 3(three) weeks from receipt of the units at site at Duliajan. The supplier will be held responsible for delay in completion of any such commissioning and in case of default; the Liquidated Damage clause shall be made applicable.

#### 8.0 GUARANTEE / WARRANTY:

Notwithstanding any Guarantee/Warranty clause/s mentioned elsewhere in this tender document, each individual tanker unit shall be under onsite guarantee/warranty by the supplier for a minimum period of 1(one) year from the date of successful commissioning of each individual unit at site at Duliajan, Assam.

OIL reserves the right to inspect, test and if necessary, reject any part/parts after arrival of the units 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 units have been inspected, tested and passed by OIL prior to dispatch as per para. 5.0 above.

In order to keep the units fully operational, any item/sub-item failed during the warranty/guarantee period is to be arranged and replaced/repared the same at site by the supplier or their authorized dealer/agent at their own cost within 15(fifteen) days from the date of failure and warranty for such items shall be extended accordingly.

#### 9.0 IMPORTANT POINTS TO NOTE:

- a. Make, model & design of all the 4(Four) units must be same & identical.
- b. THE TRUCK CHASSIS SHALL BE PROCURED BY SUPPLIER IN SUCH A MANNER THAT THEY CAN BE REGISTERED DIRECTLY IN THE NAME OF OIL INDIA LIMITED. CHASSIS PROCURED IN THE NAME OF SUPPLIER AND SUBSEQUENTLY CHANGE IN OWNERSHIP IN THE NAME OF OIL INDIA LIMITED (CONSIDERED AS SECOND-HAND UNIT) SHALL NOT BE ACCEPTED.
- c. Following documents/certificates shall be submitted along with each tanker unit:
  - a. Warranty / guarantee certificate.
  - b. Explosive Licence for carrying crude oil, Calibration certificates, etc.
  - c. Detailed drawing of the tanker unit with constructional details of the tank as approved by "Petroleum and Explosives Safety Organization (PESO)".
  - d. Emission / EURO norms compliant certificate for engine(s).
  - e. Sale Letters in Form 21 & 22(A), etc. as required under Motor Vehicle Act, India for onward registration of the tanker units in the name of OIL INDIA LIMITED.
  - f. All manuals & catalogues as detailed elsewhere in this tender document.

g. Any other documents/literatures/drawings mentioned elsewhere in this tender document.

#### 10.0 BID SUBMISSION & DOCUMENTATION:

- a. Any item/specification not included above but necessary for efficient & effective operation of the unit shall be indicated in the bid.
- b. Prior to obtaining necessary approval from "Petroleum and Explosives Safety Organization (PESO)", the detailed constructional drawing of the tank shall be submitted for acceptance within 1(one) month of placement of firm order. Any changes/modifications suggested by OIL for operational requirement shall be incorporated.
- c. Offer must be for complete ready to use unit i.e. offer must be for complete Truck mounted Crude Oil tanker as a single ready to use unit; part offer shall be outright rejected.
- d. Offer must be for full quantity i.e. 04(four) units of Tanker; part offer shall be outright rejected.
- e. The offered Make & Model of the truck chassis must be an existing one and same must be in production & available in market for last minimum 1(one) year as on the last day of the month preceding Bid Closing Date failing which the offer will be outright rejected.
- f. Bids with qualifying conditions like "the product is under development and would be supplied at the time of .... etc." will be summarily rejected.
- g. Deviation/s from Tender requirements shall be clearly indicated in the bid under separate heading and must be supplemented by proper justification.
- h. Checklist as per enclosed format provided vide ANNEXURE-(A)-I shall be furnished along with the bid. In case of any contradicting specification provided elsewhere in the bid, the specifications provided in the said checklist shall only be considered for bid evaluation.
- i. All offered specifications, features, etc must clearly be indicated in the bid; submission of Technical Leaflet alone is not sufficient. Similarly, bidder's response to technical details, documents, etc. as stipulated should clearly be defined. Response like – "As per Tender Specifications/ Technical Leaflet", "Noted", "Accepted" or in any similar fashion will not be accepted.

11.0 Amongst others, the following documents/literatures shall be submitted along with the bid for bid evaluation [refer Part B of Checklist under Annexure-(A)-I]

- a. Mounting details/drawing of tank on truck chassis.
- b. Technical literature /brochures of truck chassis offered.
- c. Detailed dimensional drawing of complete unit with tank.
- d. A list of customer(s) with detailed address to whom 02(two) units of tanker were supplied during last 5(five) years as on the last day of the month preceding Bid Closing Date.
- e. Any other documents/literatures/drawings mentioned elsewhere in this tender document.

.....X.....

#### 12.0 TECHNICAL CHECKLIST- PART-A : ANNEXURE-(A)-I

Srl. No. Parameters / Requirements: Bidder's Offer (to Indicate Details or Yes/No, As Applicable) Remarks, if any

A TRUCK CHASSIS:

1 Make & Model of Chassis

2 Gross Vehicle Weight 3 Drive 4 Wheelbase 5 Ground Clearance 6 Laden Weight (Total weight of the unit) 7 Length 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 Factory built provision in gearbox for PTO mounting Yes/No 12 (i) Make & Model of PTO (ii)Truck chassis fitted with PTO gearbox provided by the chassis manufacturer. Yes/No 13 Make, Model & Type of Steering System 14 Minimum Turning Circle Radius (MTCR) 15 Type of Front Suspension 16 Type of Rear Suspension 17 Axle Capacity a Front b Rear 18 Type, Size of Wheel & Tyre a Front b Rear 19 Type of Service Brake (S/Z-cam or not) 20 Type of Wheel Brake Servos(screw type manual release or not) a Front b Rear 21 Fuel Tank capacity 22 Reversing Alarm with Blinker Lights 23 Provision of Air Dryer in truck's pneumatic system. 24 Driver's Cabin: Seating Capacity of Driver's Cabin 25 Size of Truck platform 26 Spare wheel B TANK UNIT: 1 Number of units offered( must be four) 2 Net carrying capacity in KL 3 Number of compartments 4 Make & Model of inbuilt crude oil dispatch Pump to offload Crude Oil from tanker. 5 Capacity of inbuilt crude oil dispatch Pump 6 Catwalk of minimum 600 mm width on both sides of the manholes throughout the length & between the manholes. 7 Provision for offloading Crude Oil from the tanker through external pump. 8 20 metres long & 2 inch diameter good quality high pressure flexible PVC delivery pipe. C Complete Crude Oil Tanker Unit 1 Overall Length 2 Overall Height 3 Total Weight	
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D Safety & Other Special Features

- 1 Fire extinguisher
- 2 Spark Arrester
- 3 Suitable protection (earthing arrangement) against static electricity.
- 4 Explosive licence will be arranged by the supplier.
- 5 Side Under-run Protection Device (SUPD) Yes/No

PART B : TECHNICAL CHECKLIST - DOCUMENTATIONS

Amongst others, the following documents/literatures should be submitted along with the bid for bid evaluation:

Srl.

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 with tank illustrating Driver's Cabin and all major items/ components.
- 3 Mounting details/drawing of tank on truck chassis.
- 4 List of tools that shall be supplied under Standard Tool Kit for general maintenance of the truck.
- 5 Checklist as per enclosed format shall be furnished along with the bid. In case of any contradicting specification provided elsewhere in the bid, the specifications provided in the said checklist shall only be considered for bid evaluation.
- 6 A list of customer(s) with detailed address to whom 02(two) units of tanker were supplied during last 5(five) years as on the last day of the month preceding Bid Closing Date.

OISD-RP-167 STANDARD:

OISD RP 167

POL TANKLORRY DESIGN & SAFETY

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## INTRODUCTION

In the wake of NGL tanklorry overturning and subsequent fire which occurred near Mendhwan Village in Thane District in November 1991 claiming a number of lives, a technical committee comprising of senior executives from Oil Companies, Oil Industry Safety Directorate and Chief Controller of Explosives (CCOE) was constituted to investigate into the cause of the incident and recommend the measures for avoidance of such incidents. The committee recommended several measures based on the directly attributable causes of the incident as well as with regard to deficiencies in tanklorry design and inspection practices of the fabricators. The recommendations include development of engineering standard covering all facets of design, minimum inspection and tests for soundness of the tank, protection of tank against lateral & longitudinal impact during overturning of a tanklorry, colour scheme of tanklorries carrying POL products, etc.

This Standard has been prepared keeping in view the above recommendations and to standardise the tanklorries carrying POL products in India.

## SECTION NO. 2

### SCOPE

This Standard lays down minimum requirements of design, inspection and quality assurance for tank-lorry used for transportation of POL products other than Excluded Petroleum (such as LSHS, bitumen (asphalt), wax, etc., as defined under Petroleum Act, 1934, and Petroleum Rules, 1976. The scope of this Standard includes tanklorries of capacities up to 18 kl on rigid chassis.

## SECTION NO. 3

### SALIENT FEATURES

Salient features of a tanklorry constructed as per this Standard vis-a-vis existing tanklorries are as under :

- Tank sheet material having higher tensile strength, yield strength and impact resistance has

been recommended.

b. Roll over design is adopted giving protection to top fittings vulnerable to damage during overturning of a tanklorry.

c. Bottom loading provision has been included.

d. Colour scheme to identify tanklorries carrying POL products.

e. Protection for tank body against lateral and longitudinal impact during overturning.

#### SECTION NO. 4

##### ENGINE

##### LOCATION

The engine shall be in front of the rear line of the cab or be otherwise protected so that any spillage or leakage of flammable liquid cannot impinge on the heated surfaces of the engine.

##### TYPE

Engine shall be an internal combustion engine (diesel driven). Engine power shall be adequate for the intended terrain operation.

##### AIR INDUCTION SYSTEM

The air induction system shall be located and/or protected so as to minimise the possibility of induction of flammable vapour from any spillage of flammable liquid or from any release from a safety relief device on the cargo tank. The air intake shall be fitted with an effective flame arrestor capable of preventing emission of flame from the side of the engine in the event of backfiring.

##### EXHAUST SYSTEM

The exhaust system shall be located in such a way that any spillage or leakage of the flammable tank contents cannot normally impinge on the heated surfaces of the system. The exhaust pipe shall be fitted with Spark Arrestor procured from CCOE approved manufacturer. The muffler or silencer shall not be cut off from the exhaust system. The Spark Arrestor shall be firmly attached to the exhaust pipe by a proper bolting system.

##### Fuel system

The vehicle fuel tank shall be positioned so that leaking or spilled fuel can drain directly to the ground without impinging on the engine or its exhaust system. Additionally, it shall be located on the side opposite to the tanklorry discharge faucets.

The fuel tank shall be protected by stout steel guards, and shall have provision for locking.

Alteration/addition to the originally designed fuel tank (supplied by the vehicle manufacturer) shall not be carried out.



## SECTION NO. 5

### TANK MATERIAL SPECIFICATIONS

Tank shall be fabricated out of carbon steel material meeting the following minimum requirements:

Thickness : 3.15mm (10 BWG)

Yield strength : 30kg/mm<sup>2</sup>(300 Mpa)

Ultimate tensile strength : 44-56 kg/mm<sup>2</sup>(440-560 MPa)

Minimum elongation : 21%

Impact strength (Charpy V-notch) : 40 Joules at 0 deg. C.

Bend test (Mandrel Dia.) : 3 times thickness

SAILMA 300 HI of Steel Authority of India meets the above requirements. However, steel sheet from any other reputed manufacturer with equivalent or better characteristics may also be used after testing.

## SECTION No. 6

### TANK DESIGN

1. Tanklorry shall be designed and constructed ensuring correct structural relationship between the cargo tank, the propulsion equipment and supporting members, its ruggedness, safe road performance and braking power.

2. Tanklorry shall comply with the Motor Vehicles Act, 1988, and the rules framed thereunder.

3. Tanklorry shall comply with the Petroleum Act, 1934, and the rules framed thereunder. The maximum net carrying capacity of a tank shall be 97 percent of its gross carrying capacity in the case of petroleum Class A and B and 98 percent in the case of petroleum Class C. In case the tank is likely to be used for all Classes, then the provision required for Class A shall apply.

4. Registered laden weight (RLW) of the vehicle shall not exceed the authorised registered weight of the vehicle by concerned transport authority or manufacturer, whichever is less. The weight product filled plus the unladen weight shall not exceed RLW or the licenced capacity as permitted by statutory authority.

5. Each tank or compartment of the tank shall be constructed with a manhole on the top to provide access to enable the interior to be examined. The manhole shall be not less than 450 mm in diameter.

6. Maximum width of the tank shall be less than the overall width of the cabin of the vehicle on which it is mounted, and also less than the overall width of the outer edges of the vehicle tyres.

7. A tank having a net capacity exceeding 5000 litres shall be divided into compartments by oil-tight partitions. No compartment shall have net capacity exceeding 5000 litres.

8. Tank ends and the partitions shall be dished. The depth of dish excluding the flange shall not be less than 8% of the minor axis of the tank cross-section subject to a minimum of 100 mm.

9. The distance between two partitions, and any adjacent tank end and a partition, shall not exceed 2500 mm.

10. Baffles shall be continuously welded to the shell.

11. All joints shall be welded conforming to IS 814. This shall include attention to the following :

i. Weld joint preparation.

ii. Welding procedure.

iii. Weld thickness.

iv. Acceptable limits of welding defects considering the fact that the welds are to be accepted without radiographic test.

v. Proper fabrication plan shall be prepared indicating the actual positions of weld joints. It shall be ensured that three plate joints do not occur at intervals closer than 500 mm.

vi. Welding electrodes shall be of reputed make and conform to E - 6013 grade.

All weld inside and outside the tank shall be ground smooth prior to painting.

12. Every compartment shall be tested by hydrostatic pressure of minimum 0.316 kg/sq.cm. g. gauged at the top of the compartment. This can be achieved by means of a 3160 mm high pipe fitted on top of the tank and filled up to the brim with water. The pressure shall be maintained for a period of not less than one hour. During testing, all the closures shall be in place and the operating relief devices shall be clamped, plugged or otherwise rendered inoperative. The compartment under test shall not show any leakage or drop of pressure during the test. Two adjoining compartments shall not be tested or filled with water simultaneously. Tanks failing to pass this test shall be suitably repaired and the above test shall be continued until no leak is detected.

13. Center of gravity of fully loaded tank lorry shall not be higher than that recommended by the chassis manufacturer. Sample Design and Stability Calculations are given as Annexure I.

## SECTION NO. 7

### TANK BOTTOM FITTINGS

Bottom draw-off/loading systems shall conform to the following requirements:

1. Tank shall be designed to ensure the complete drainage of the contents of each compartment via an internal stop valve (Emergency Valve) and an external discharge faucet.

2. The Emergency Valve shall be of the type fitted with a suitable means for preventing

development of dangerous static charge inside the tank during bottom loading. This can be achieved either by the design of the valve or by fitting a suitable deflector plate.

3. The operating mechanism (Termed Bottom Operator) for the Emergency Valves shall be provided with a secondary control (Emergency Release) in an easily accessible position remote from all fill openings and the discharge faucets.

4. The Bottom Operator shall incorporate a fusible link which will permit automatic closing of all the Emergency Valves in the event of fire. One end of the fusible link shall be anchored to the body of the Bottom Operator and the other end attached to the Bottom Operator spring release mechanism in such a way that all open Emergency Valves are closed at the same time. The link shall be capable of withstanding a minimum load of 35 kgs and the two halves shall not separate during normal handling of the valve but shall separate only when the fusible alloy melts at 93 degrees C. in the event of a fire. Fusible link shall be procured from CCOE approved manufacturer.

5. The Emergency Valve shall incorporate a shear section designed to break when subjected to excessive strain. This shall be located on the discharge side of the valve seat as close as possible to the valve seal.

6. All tank valves, fittings, pipework and ancillary fittings shall be so fitted and protected as to minimise the risk of damage and leakage of contents in the event of the vehicle being involved in an accident.

7. Tank valves, sealing caps and other fittings, including joint seals and sealants, shall be manufactured from materials which are suitable for handling refined petroleum products including presently known additives.

8. Provision shall be made to prevent damage to pipework due to vibration by the incorporation of Flexible Bellow connections within pipework runs.

## SECTION NO. 8

### TANK TOP FITTINGS

The manhole mentioned in Section No. 6 shall be closed off with a mild steel (minimum 5 mm thick) base plate assembly fitted with a 24 bolt airtight fixing all around and a 3 mm thick compressed nitrile cork gasket.

The Manhole shall be enclosed in a dome cover having a hinge joint at one end and a spring loaded sealing arrangement at the other end. (Refer to Diagram in Annexure II). The dome cover shall not restrict the emergency venting capability of the vapour or liquid emergency vent.

Following fittings shall be provided within each manhole plate:

#### FILL PIPE:

1. Fill pipe shall be of Mild Steel of size 100 mm nominal bore and flange mounted to the manhole base plate. Internally the pipe shall be extended till almost bottom of the compartment leaving a clearance of 25 mm. The fill pipe should not be slotted, however, it should have an

opening in the wall not greater than 13mm in diameter which should be above the maximum level of the tank contents in order to provide a pressure balance.

2. The inner end of the fill pipe shall be provided with a splash deflector arrangement (45 degree angular cut).

3. Top open end of the fill pipe shall be externally threaded and fitted with an oil-tight locker cap. The cap shall be fine finished from the inside and provided with a compressed nitrile cork gasket.

4. The top of the internal pipe is to have a gauzed opening of 140 Sq. mm minimum located above the maximum level of the contents to provide pressure balance. The stainless steel gauze shall be manufactured from wire with a diameter not less than 0.3 mm forming apertures of not more than 0.5 mm x 0.5 mm.

5.

#### DIP PIPE:

1. Dip pipe of nominal bore of 75 mm shall be of mild steel with a longitudinal opening along its full internal length covered by gauze. The Dip Pipe shall be flange-mounted to the manhole base plate at the geometrical center of the compartment. It shall be extended to the bottom of the tank and shall be supported against vibration. The bottom end of the pipe shall be sealed. The pipe shall be truly vertical when the bottom of the tank is horizontal.

2. Internally, the pipe shall be provided with 5mm dia holes throughout its length and circumference, including at a level above the maximum level of the contents, the number of holes being minimum 5 nos. in minimum 5 rows. The openings shall be covered with 2 layers of wire gauze having not less than 11 meshes per centimeter.

3. The Dip pipe shall be projected from the manhole plate and it shall be at least 15 mm below the tank shell in case of Alternative I mentioned in Section 11.

4. Top open end of dip pipe shall be externally threaded and fitted with an oil-tight locker cap. The cap shall be fine finished from the inside and provided with compressed nitrile cork gasket.

5. A datum plate of size 100 x 100 mm and thickness not exceeding 5 mm shall be provided exactly below the dip pipe.

#### PRESSURE-VACUUM VALVE:

1. Pressure Vacuum valve procured from CCOE approved manufacturer shall be mounted on the manhole cover base plate. Specimen drawing is enclosed as Annexure III.

2. P/V valve shall be of the double spring type, one for pressure and one for vacuum and shall incorporate an anti-roll over device which will not allow leakage of contents in the event of vehicle upset.

3. The settings of the P/V valve shall be :

Pressure : 210 cm of water gauge

Vacuum : 5 cm of water gauge

4. P/V valve shall provide a minimum flow venting area of 300 sq.mm., the opening being covered with 2 layers of wire gauze having not less than 11 meshes per centimeter.

#### EMERGENCY VENT:

1. An emergency vent procured from CCOE approved manufacturer shall be mounted on the manhole cover base plate. Specimen drawing is enclosed as Annexure IV.

2. The emergency vent shall be of fusible type to melt at 93 degrees Centigrade.

3. The vent shall provide a minimum opening having a net area in sq. cms. equal to 8 plus 4.3 times the gross capacity of the compartment in kilolitres.

#### SECTION NO. 9

##### TANK MOUNTINGS

Tank (including its supports and attachments) shall be so fitted that if under the maximum permissible load it is subjected to an acceleration of 2 g in the direction of travel, 1 g at right angles to the direction of travel, 1 g vertically upwards or 2 g vertically downwards, the maximum stress in any part thereof shall not exceed 75% of the yield proof stress of the material of construction. Where it is foreseeable that the tanker may be subjected to higher loading conditions, e.g. where it may be used over rough terrain, appropriate loads shall be established.

The tank shall be securely attached to the vehicle in accordance with the following conditions:

1) Mounting structures shall be designed to prevent excessive movement of the tank in relation to the chassis. This would include the use of flexible mountings as well.

2) The design of mounting structures shall take into account the loadings referred above.

3) Where the mounting structures are designed as an integral attachment to the shell, each attachment shall be designed to meet the requirements of the maximum stress referred above.

4) Anchors shall not allow any movement between the tank and the vehicle during starting, stopping and turning.

5) All anchors shall be installed in a manner so as to be easily accessible for inspection and maintenance.

6) Special care shall be taken on the location of bolting of the tank to the chassis frame. It shall be as per recommendation of chassis manufacturer.

7) Packing shall be provided between saddle plate and the chassis as per recommendation of chassis manufacturer.

8) U-bolts for securing the tank shall be tightened to the specified torque level, and number of

bolts shall not exceed the number recommended by the chassis manufacturer.

## SECTION NO. 10

### CATWALK

- a) Catwalks shall be minimum 600 mm wide and provided on both sides of the manholes throughout the length of the tank and between the manholes. (Refer Annexure V).
- b) Catwalk shall be made of chequered plates or gratings.
- c) Catwalk supports shall not be welded directly to the tank shell but welded with a padding of 5mm thick plate of size 100x 100 mm.
- d) In case of Alternative II mentioned in Section No. 11, catwalk shall be above the level of the fittings and capable of withstanding the weight of the loaded tanklorry.
- e) 1 No. ladder shall be provided at the rear of the tank.

## SECTION NO. 11

### TANK OVERTURN PROTECTION

- a) All top fittings shall be protected against damage from roll over accidents. This can be achieved by any of the two alternatives below:

Alternative I Manholes shall be recessed within the contour of the tank shell and all fittings protruding above the manhole base plate shall be at least 15 mm below the top of the tank shell. (Refer Annexure VI.)

Alternative II Manholes shall be flushed with the top of the tank shell and all fittings on the manhole base plate shall project above the shell only to the minimum extent necessary. Catwalk shall be as mentioned in item 4 of Section No. 10.

- b) All the fittings shall be provided within the manhole cover base plate.
- c) Manhole cover lids as specified in Section No. 8 shall be provided.
- d) The gross volume of the tank compartment shall be calculated as the net liquid load volume plus 2 to 3% of the volume and the level shall be never less than 75 mm below the top of the tank shell.
- e) The center of gravity of the fully loaded vehicle shall not be higher than that recommended by the chassis manufacturer.
- f) Saddle plates shall be extended on both the sides up to at least half the height of the tank, for bearing the impact in the event of vehicle overturn.

## SECTION NO. 12

### REAR-END PROTECTION

The vehicle shall be provided with a rear robust steel bumper so that collision stresses will be transmitted to the frame of the vehicle and thus protect the tank and its fittings in the event of a rear-end collision. The bumper shall be so located that its inside face is never less than 100 mm from the rear of the tank shell or its fittings. The bumper shall be extended on each side of the tank to at least the maximum width of the vehicle.

## SECTION NO. 13

### ELECTRICAL SYSTEM

The electrical system shall be designed, installed and adequately protected so as to minimise mechanical damage and the risk of electrical fires. In particular, the system shall conform to the following requirements:

- a) The nominal circuit voltage on the vehicle shall not exceed 24 volts.
- b) Batteries shall be effectively protected against contact with any spillage of flammable liquid, and be fitted with an insulator cover to protect against inadvertent contact by objects which could cause a spark.
- c) All cables shall be secured on the vehicle so that they are protected against mechanical damage and heat.
- d) All control switches shall be in the feed side of the circuit.
- e) All cables shall be armoured and protected from mechanical/ chemical damages.
- f) Except for cables to the starter motor, the current rating of any cable shall be chosen so that the conductor temperature will not exceed 70 deg. C when it is carrying full load continuously.
- g) Junction boxes, connectors and all electrical equipment shall be adequately protected and shielded from the ingress of moisture or flammable liquid.
- h) Either an insulated return circuit shall be used or every item of electrical apparatus on the vehicle shall be individually bonded by cable either to the chassis or structural members attached to the chassis.
- i) To enable electrical circuits to be isolated (including any open circuit of alternator field windings), a multipole master switch shall be fitted as close to the battery as possible and shall comply with the following provisions :
  - i. Master switch shall include double pole switching to isolate outgoing circuits from both poles of the battery;
  - ii. Master switch control shall be readily accessible to persons outside the vehicle and its location shall be indicated by a clearly visible, legible and durable notice.

iii. Visual means shall be provided to indicate clearly when the master switch is in the "ON" or "OFF" position.

iv. Means shall be provided for the driver to put off the master switch without leaving the driver's seat.

#### VEHICLE ELECTRICAL CIRCUIT PROTECTION

The following steps shall be taken to ensure protection of the electrical circuits:

a) All circuits, with the exception of the main battery supply and the starter and alternator circuits, shall be protected with fuses or circuit breakers.

b) All circuit protective devices, with the exception of any barrier device for a tachograph or other intrinsically safe device, shall be mounted forward of the rear of the cab.

c) Fuses or circuit breakers shall be fitted within an enclosed unit. Fuse holders shall be permanently marked with the maximum fuse rating.

d) Number of circuits connected to any protective device shall not exceed four, and the rating of the device shall be compatible with the smallest conductor in any of these circuits.

e) Grouping of circuits shall be so arranged that the failure of any minor circuit does not render a major or obligatory circuit inoperative.

#### PROTECTION AGAINST STATIC ELECTRICITY

The vehicle shall be provided with a connector for connecting an external earthing lead during loading/unloading. The tank, its associated pipework and fittings, both internal and external, and the metal structure of the carrying vehicle shall all be in good electrical contact with each other and the external earth lead connector. The maximum electrical resistance of all such connections shall not exceed 10 ohms. All discharge hoses shall be electrically conducting. The electrical resistance from the external earth lead connector of the vehicle to the ground through the tyres shall not exceed 10 ohms.

#### SECTION NO. 14

##### DRIVER'S CABIN

a) The height of the vehicle cabin shall be more than that of the tank.

b) Cabin shall be fabricated out of steel plate material.

c) Its rear window, if provided, shall be fully covered with toughened glass.

d) 1 kg ISI approved DCP/CO2 fire extinguisher and a fully equipped first aid box shall be provided inside the cabin.

e) A 10 kg. ISI approved DCP fire extinguisher shall be carried on the vehicle in an easily



accessible position and away from the discharge faucets.

## SECTION NO. 15

### SPARK ARRESTOR

- a) Spark Arrestor procured from CCOE approved manufacturer shall be fitted at outlet of exhaust pipe of the vehicle to avoid emission of sparks. (Specimen drawing enclosed as Annexure VII).
- b) Its inlet end with swirling blade assembly shall be fitted with the outlet end of the vehicle exhaust pipe by a proper bolting system.
- c) The carbon of engine exhaust comes out through swirling blade and is deposited in the soot box of the spark arrestor assembly.
- d) The carbon deposits shall be cleared regularly.

## SECTION NO. 16

### THIRD PARTY INSPECTION

Inspection at every stage of fabrication of a POL Tanklorry is necessary to ensure that right materials as per the specification are used and fabrication is carried out exactly as per the drawings and other technical details.

### INSPECTION AGENCY

Inspection shall be carried out by a competent party approved by CCOE.

### ROLE OF INSPECTION AGENCY

- a) To check the design, drawings and technical specifications.
- b) Inspection/verification/checking of all the materials to ensure that correct material is used.
- c) Inspection of MS plates/sheets for thickness and any surface defects.
- d) Testing of welders for welder's qualification as per relevant IS code.
- e) Welding procedures as per codes and as per the fabrication drawings.
- f) To ensure that welding is being done as per predetermined welding sequence using approved electrodes.
- g) Inspection of workmanship
- h) Final pre-commissioning tests (Hydrotesting, etc.) after completion of fabrication work.

i) Review and certification of records and test certificates pertaining to welding material, MS plates, P.V. Vent, Master Valve etc.

#### VARIOUS STAGES OF INSPECTION

1st stage:

- a) Verification of all the Manufacturer's test certificates ensuring material to be of the correct specification.
- b) Check for thickness and its uniformity: Mechanical/ Ultrasonic test.
- c) Visual inspection for any surface defects, cracks or lamination.
- d) Approval of welding procedures, welding equipment and welder's qualification in accordance with relevant IS code.

2nd stage:

- a) Ensuring that welding is being carried out as per predetermined sequence and procedures, by approved welders with specified electrodes.
- b) Inspection of weld joints :
- c) Dye penetration test of external weld joints not subjected to hydrotesting.
- d) Ensuring repairs of the defective welds, if any, before giving clearance for hydrostatic testing.
- e) Inspection during fabrication shall be carried out as per the requirement of applicable codes, specifications, approved drawings etc.
- f) To ensure installation of all the fittings as per drawing.

3rd stage:

(Shall be carried out as pre-commissioning checks after completion of the entire fabrication work).

- a) Check for physical dimensions (as per drawings).
- b) Visual inspection for workmanship and quality of work.
- c) To ensure that quality of welding meets the requirement of 2nd stage Inspection.
- d) Hydrotesting of the tank as specified in tank design.
- e) Check for installation and working of all the safety and other fittings.

f) Tank capacity to be checked physically using IS approved water meter.

g) To ensure proper surface preparation and painting.

h) Check for external and internal painting.

i) Issue of Inspection certificate after the final inspection.

4th stage:

(Shall be carried out every 5 years from the date of commissioning).

a) Check for physical dimensions as per drawings).

b) Visible signs of tank damage.

c) Check for external painting.

d) Condition of all fittings.

e) Hydrotesting of the tank as specified in tank design.

f) Condition of fire extinguisher and first aid box.

g) Issue of fitness certificate.

## SECTION No. 17

### COLOUR SCHEME

a) POL tanklorries shall be painted as per RTO and other applicable regulations.

b) Emblem of the oil company shall be painted only on tanklorries owned by them. Transport contractors shall not paint oil companies' emblems on their tank lorries.

c) Every tanklorry shall have an Emergency Information Panel painted on the three sides of the tank and two hazard class labels, one in front of the engine and one on top of the cabin, as laid down in the Motor Vehicles Act, 1988 and Motor Vehicle Rules, 1989.

d) "ML" and "Highly Inflammable" shall be indicated as laid down in Petroleum Rules, 1976.

## SECTION No. 18

### REFERENCES

a) Petroleum Act, 1934 & Petroleum Rules, 1976.

b) Motor Vehicles Act, 1988.

c) Approved Code of Practice (1992 edition) for Design And Construction of Vented, Non-

pressure Road Tankers Used For The Carriage Of Flammable Liquids, issued by Health And Safety Commission, U.K.

d) Code No. API 650 for fabrication of tanks.

e) IS Code No. 814 - Covered Electrodes For Manual Metal Arc Welding Of Carbon Steel And Carbon Manganese Steel.

## ANEXURE I

### TANK LORRY DESIGN SAMPLE CALCULATIONS

MODEL : ALCO COMET 3/1

CAPACITY : 12 KL

#### TANK DIMENSIONS:

MAJOR AXIS(a) 230.00 cm

MINOR AXIS (b) 145.00 cm

SHELL LENGTH (l) 466.00 cm

DISHED END DEPTH (d) 13.00 cm

TOTAL TANK LENGTH 492.00 cm

TANK SUPPORT HEIGHT 22.00 cm

#### CHASSIS DIMENSIONS:

FRAME HEIGHT 1015.00 cm

WHEEL BASE 447.00 cm

FRONT OVERHANG 111.80 cm

REAR OVERHANG 167.80 cm

OVERALL LENGTH 726.40 cm

#### DESIGN CALCULATION:

CABIN LENGTH 180.00 cm

PLATE THICKNESS (t) 0.32 cm

SHELL VOLUME  $1.06 \times 3.14 \times a \times b \times l / 4000000$  12938.31 lts

DISH END VOLUME  $4 \times 3.14 \times a \times b \times d / 12000$  454.01 lts

TOTAL TANK VOLUME 13392.32 lts

FILLING RATIO (MAXM. PERMISSIBLE=0.97) 0.90

PRODUCT VOLUME 12000.00 lts

PRODUCT DENSITY 0.85 gm/cu./cm

PRODUCT WEIGHT 10200.00 kg

STEEL DENSITY (G) 7.85 gm/cu.cm

TANK SHELL WEIGHT  $22/7 \times \text{SQRT}(a^2 + b^2/2) \times l \times G \times t$  707.03 kg

DISH END WEIGHT  $1.4 \times 22/7 \times a \times b^2 \times g \times t$  184.23 kg

PARTITION NOS. 3.00

NO. OF PARTITION PLATES 2.00

WEIGHT OF EACH PARTITION PLATE 65.80 kg

TOTAL WEIGHT OF PARTITION PLATES 131.60 kg.

TOTAL TANK WEIGHT 1022.85 kg

MOUNTING WEIGHT 350.00 kg

WEIGHT OF GUARD AT TOP 60.00 kg

TANK + MOUNTING WEIGHT 1432.85 kg

PRODUCT + TANK + MOUNTING WEIGHT 11632.85 kg

REACTION AT REAR AXLE = Rr

GAP BETWEEN CABIN AND TANK SHELL (e) 15.00 cm

GAP AT REAR END (f) 39.40 cm		
TANK C.G. DISTANCE FROM FRONT AXLE 329.20 cm		
Rr (FULL) 8567.19 kg		
Rr (EMPTY) 3065.66 kg		
TANKLORRY STABILITY CALCULATIONS (SAMPLE)		
WEIGHT DISTRIBUTION		
DESCRIPTION FRONT AXLE(KG) REAR AXLE(KG)		
AXLE+SUSPENSION WEIGHT 400.00 900.00		
ENGINE+TRANSN+CHASSIS 1395.00 665.00		
CABIN WEIGHT 400.00		
CREW WEIGHT 130.00		
PRODUCT+TANK+MOUNT WEIGHT 3065.00 8567.19		
TOTAL 5390.66 10132.19		
AXLE RATING 5675.00 10200.00		
STABILITY CALCULATIONS		
C.G TABLE		
ITEM	LOAD ON	C.G HEIGHT FROM
GROUND LEVEL		
FRONT AXLE		
KG. FRONT AXLE		
KG. TOTAL		
KG. UNLADEN LADEN		
CHASSIS FRAME 300.00 500.00 800.00 1015.00 960.00		
ENGINE& TRANS. 1095.00 165.00 1260.00 1315.00 1260.00		
CREW WEIGHT 130.00 130.00 1860.00 1805.00		
CABIN WEIGHT 400.00 400.00 1860.00 1805.00		
F.A+SUSPENSION WT 400.00 400.00 450.00 435.00		
R.A+SUSPENSION WT. 900.00 900.00 498.00 483.00		
PRODUCT WEIGHT 2685.05 7511.95 10200.00 1835.00		
TANK+MOUNTING WT 377.61 1055.25 1432.85 1905.00 1850.00		
TOTAL WEIGHT 5390.66 10132.19 15522.85		
STABILITY RATIO		
UNLADEN WEIGHT WU 5322.85		
LADEN WEIGHT WL 15522.85		
DISTANCE BETWEEN REAR END TYRES X 2105.00		
HEIGHT OF C.G. (UNLADDEN) YU 1279.86		
STABILITY RATIO YU/X 0.61		
HEIFGHT OF C.G. (LADEN) YL 1629.13		
STABILITY RATIO YL/X 0.77		

**NOTE:**

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

**Annexure- DDD**

**INTEGRITY PACT**

Between

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

And

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

**Preamble :**

The Principal intends to award, under laid down organizational procedures, contract/s for Tender No. **SDI3159P17** The Principal values full compliance with all relevant laws and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder/s and Contractor/s.

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

**Section 1 - Commitments of the Principal**

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

## **Section 2 - Commitments of the Bidder/Contractor**

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

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

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

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

amount of the damage. The exclusion will be imposed for a minimum of 6 months and maximum of 3 years.

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

#### **Section 4 - Compensation for Damages**

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

#### **Section 5 - Previous transgression**

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

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

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



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

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

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

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

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

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

### **Section 9 - Pact Duration**

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

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

### **Section 10 - Other provisions**

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

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

-----  
For the Principal

-----  
For the Bidder/Contractor

Place. Duliagan.

Witness 1 : .....

Date 02.12.2016.

Witness 2 : .....|

**Technical Bid Checklist****Annexure-EEE**

Tender No.			
Bidder's Name :			
		<b>Compliance by Bidder</b>	
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.