OIL INDIA LIMITED
(A Govt. of India Enterprise)
4, India Exchange Place,
Kolkata – 700 001.
E-mail : oilcalmn@oilindia.in/ oilcalmn@dataone.in
INVITATION FOR BID
LOCAL COMPETITIVE BID

OIL INDIA LIMITED invites local competitive bid (LCB) through its e-procurement portal – https://etender.srm.oilindia.in/irj/portal for the following items :-

Tender No.	Bid Closing Date	ITEM
SKI 3431P17	31.01.2017	Water Flow Meter.
SKI 3432P17	31.01.2017	Generating Set
SKI 3433P17	31.01.2017	JIB Crane.
SKI 3434P17	31.01.2017	Tool Box
SKI 3435P17	31.01.2017	Foam Nurser
SKI 3444P17	31.01.2017	Desktop PC's

Tender fee (Non – Refundable) :Rs.1,000.00; Bid Closing / Opening Time : **(11 Hrs.)IST/(14 Hrs.) IST**; Period of sale of documents: **29.12.2016 to one week prior to bid closing date**. The complete bid documents and details for purchasing bid documents, participation in E-Tenders are available on OIL's e-procurement portal https://etender.srm.oilindia.in/irj/portal as well as OIL's website www.oil-india.com.

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

* * *

OIL INDIA LIMITED
(A Government of India Enterprises)
4, India Exchange Place
Kolkata -700001

TELEPHONE NO. (033) 22301657
FAX NO: (033) 22302596
Email: kolpur1@oilindia.in

FORWARDING LETTER

Tender No & Date	:	**SKI3435P17 Date: 26.12.2016**
Tender Fee	:	**Rs 1,000.00**
Bid Security Amount	:	**Rs 1, 33, 100.00**
Bidding Type	:	**Single Stage Two Bid**
Bid Closing on	:	As mentioned in the Basic Data of e-portal
Bid Opening on	:	As mentioned in the Basic Data of e-portal
Performance Guarantee	:	Applicable
Integrity Pact	:	Applicable
Delivery Required	:	**At DULIAJAN, ASSAM**

OIL invites Bids for **Chassis and Fabrication for Foam Nurser –1 no. along with Installation & Commissioning** through its E-Procurement site. The bidding documents and other terms and conditions are available at Booklet No. MM/CALCUTTA/E-01/2016. The prescribed Bid Forms for submission of bids are available in the Technical RFx -> External Area - > Tender Documents.

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

The tender will be governed by:

a) "General Terms & Conditions" for e-Procurement as per Booklet NO. MM/CALCUTTA/E-01/2016 for E-procurement (LCB Tenders).

b) Technical specifications with Quantity and BEC/BRC as per **ANNEXURE II and ANNEXURE I** respectively .

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

d) 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).

e) Bidder are advised to fill up the **Integrity Pact (Annexure DDD), Technical bid check list (Annexure EEE) , Response sheet (Annexure FFF) and Bank Details (Annexure GGG)** given in this bidding document uploaded in Technical RFx -> External Area - > Tender Documents. The above filled up documents to be uploaded in the Technical RFX Response.

Special Note:

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-Calcutta Branch, Oil India Limited, 4, India Exchange Place, Kolkata - 700 001**. **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.

In case of MSE/PSUs/ Govt. Bodies / eligible institutions etc., they shall apply to DGM-Calcutta Branch, Oil India Limited, 4, India Exchange Place, Kolkata - 700 001 for waiver of Tender Fee upto one week prior to the Bid closing date (or as amended in e-portal). For exemption for tender fee, please refer Clause No. 3.3 (Section A) of "General Terms & Conditions" for e-Procurement as per Booklet No. MM/CALCUTTA/E-01/2016 for E-procurement (LCB Tenders).

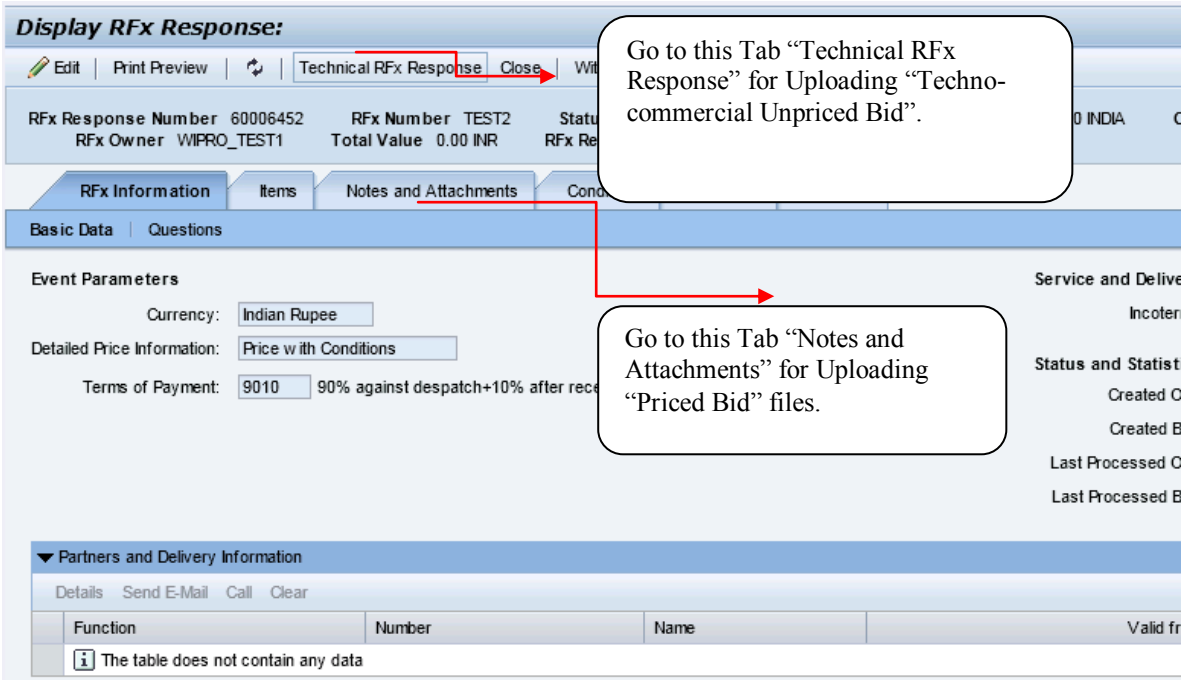
2.0 The tender is invited under SINGLE STAGE- TWO BID SYSTEM. The bidders are required to submit both the "TECHNO-COMMERCIAL UNPRICED BID" and "PRICED BID" separately as shown below in designated place through electronic format in the OIL's e-Tender portal within the Bid Closing Date and Time stipulated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

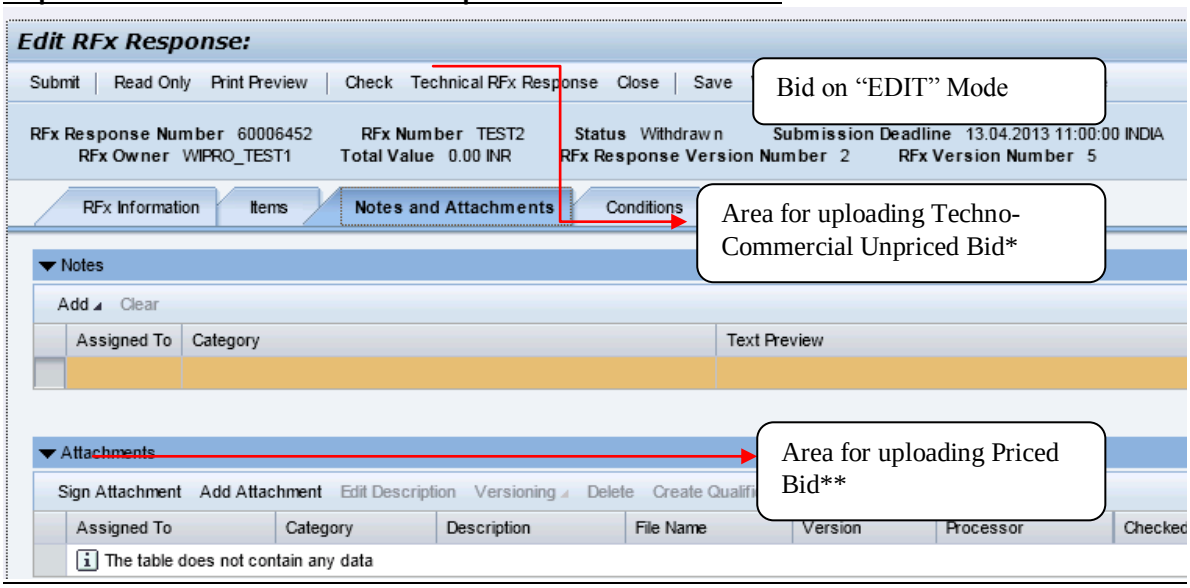
2.2 The "Techno-commercial Unpriced Bid" shall contain all technical and commercial details **except the prices which shall be kept blank. Details of prices as per Bid format / Commercial bid to be uploaded as attachment in the Attachment Tab "Notes and Attachments".**

A screen shot in this regard is given below.

Any offer not complying with above submission procedure will be rejected as per Bid Rejection Criteria mentioned in the tender.



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



Note :

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

** The "Price bid" must contain the price schedule and the bidder's commercial terms and conditions. For uploading Price Bid, first click on Sign Attachment, a browser window will open, select the file from the PC and click on Sign to sign the file. On Signing a new file with extension .SSIG will be created. Close that window. Next click on Add Atachment, a browser window will open, select the .SSIG signed file from the PC and name the file under Description, Assigned to General Data and 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-Calcutta Branch, Oil India Limited, 4, India Exchange Place, Kolkata – 700 001** only on or before the Bid Closing Date and Time mentioned in the Tender.

a) Original Bid Security except online payment.

b) Detailed Catalogue (if any)

c) Any other document required to be submitted in original as per tender requirement

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

4.0 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.

5.0 All the Bids must be Digitally Signed using "Class 3" digital certificate (e-commerce application) with Organisation name 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.

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 **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**

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

10. Bidders should submit their bids explicitly mentioning compliance / non compliance to all the NIT terms and conditions.

11. 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.

12. The tender shall be governed by the Bid Rejection & Bid Evaluation Criteria given in enclosed **Annexure-I**. However, if any of the Clauses of the Bid Rejection Criteria / Bid Evaluation Criteria (as per **Annexure-I**) contradict the Clauses of the tender and / or "General Terms & Conditions" as per Booklet No. MM/CALCUTTA/E-01/2016 for E- Procurement of Indigenous Tenders elsewhere, those in the BEC / BRC shall prevail.

Yours Faithfully,

Sd-
(Panchali Thakuria)
DMM(P)
For DGM-Calcutta Branch

ANNEXURE-II

Tender No& Date : SKI3435P17 DATED 26.12.2016

OIL INDIA LIMITED invites Indigenous tenders for items detailed below:

TECHNICAL SPECIFICATIONS WITH QUANTITY

SLNO& MATERIAL CODE .	MATERIAL DESCRIPTION.	QUANTITY	UNIT	Please confirm if clause by clause Complied/ Not Complied, reasons, if any.
10 ---------- **0C000198**	**CHASSIS FOR FOAM NURSER** **(AS PER DETAILS IN PART-A OF ANNEXURE-AAA BELOW)**	1	NO.	
20 ---------- **0C000198**	**FABRICATION OF FOAM NURSER** **(AS PER DETAILS IN PART-B OF ANNEXURE-AAA BELOW)**	1	NO.	
30	**INSTALLATION & COMMISSIONING** Installation and Commissioning of "Foam Nurser" at Fire Service,Duliajan, Assam by the supplier's representative.	1	AU	

Annexure-AAA

PART – "A" CHASSIS FOR "Foam Nurser"

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

1. CHASSIS:

a	Drive &Cowl	4 x 2 Drive & Full Forward Control Cowl.
b	Engine	Min. 6 cylinder Water-cooled diesel engine.
c	Max. Output Power	Not less than 130 HP at rated rpm.
d	Max. Output Torque	Not less than 400NM at rated rpm.
e	Emission	Euro-III/BS-III or as applicable in the state of Assam at the time of delivery of the vehicle.
f	Steering	Hydraulic Power Assisted Steering (Right Hand Steering).
g	Gearbox	Minimum 5 forward speed & 1 reverse speed.
h	PTO(as applicable)	Side PTO (Chassis should be attached with PTO) for driving the Foam Pump. It should be suitable to match engine and pump characteristic. It should engaged by separate lever in main cabin. Necessary support for PTO unit, shaft etc. should be provided. The drive assembly shall be dynamically balance.
i	Wheelbase	In the range of 4200 mm. to 5200mm.
j	GVW	Not less than 16000 Kg.
k	Brake	Full air or Hydraulic power assisted Dual Circuit Service Brake and suitable Parking Brake.
l	Axles	Front - 1, Rear - 1(Drive axle).
m	Suspension	Semi elliptical leaf spring suspension.
n	Wheels & Tyres	Front- 2, Rear - 4 & Spare - 1, Tyre .Size - preferably 10.00 x 20 of adequate ply rating

2. DRIVER'S CABIN:

Details of Driver's cabin as mentioned in part-B.

3. DIMENSIONS:

Full Unit:

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

4. ADDITIONAL/OTHER FITMENTS & ACCESSORIES:

a. All standard gauges and meters, Horn, Reversing Alarm, Lightings, Reflectors, Roof Lamps, Windscreen wipers, Sun shade, Glove box, Lockable fuel tank, Standard Tool Kit, 30T Capacity Hydraulic Jack with handle & wheel wrench, Mud flaps/guards, etc.

b. Rear View Mirror- 2 Nos.

c. Well-covered Battery Box, Tool box. Suitable storage box at suitable location.

d. Suitable Jaw & Pint type rear Towing Hook, mounting arrangement for spare wheel.

e. First Aid Box, Fire Extinguisher, Licence Holder at suitable locations and other fittings required as per MV Act.

5. DOCUMENTATION:

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

a. Technical leaflet, to support the specifications provided in the bid. (All specifications, as desired, as well as MODEL NAME/CODE of the offered Truck shall clearly be defined in the bid. Submission of Technical Leaflet is not sufficient).

b. A detailed Dimensional Drawing of the fire tender, showing among others overhang, seat size, leg space & sitting arrangement etc. as applicable.

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

a. Temporary Registration, Insurance, Road Tax, Sale Letter in Form 21 & 22/22(A), etc. in the name of M/s OIL INDIA LIMITED, Duliajan as required under MV act for onward registration of the Trucks in Assam.

6. TECHNICAL CHECK LIST:

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

Part B DOCUMENTATIONS
B1.1 TRUCK

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

7. WARRANTY/GUARANTEE:

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

OIL reserves the right to inspect, test and if necessary, reject the truck or any part/parts after delivery at site, only if the said rejection is attributed to be the responsibility of the supplier. It shall, in no way be limited or waived by the reason that the truck was being previously inspected, tested and passed by OIL as per Para- 6 above.

8. DEVIATIONS FROM THE SPECIFICATIONS:

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

PART – B Fabrication OF "Foam Nurser" With Accessories

1.0 SCOPE :

1.1 This specification covers the requirements regarding design, procurement, fabrication, testing and supply of "Foam Nurser" to be used for fire fighting. The scope of supply shall be inclusive of, but not limited to the following.

1.1.1 Chassis
1.1.2 A foam compound gear/transfer pump of **500** LPM discharge capacity at 12 kg/ cm^2
1.1.3 Foam Tank of capacity **3000 Ltrs.+ 3000 Ltrs.** capacity
1.1.4 Water cum Foam monitor (Discharge from **300 to 1000** GPM)
1.1.5 Body Fabrication/ Works
1.1.6 Control Panel
1.1.7 Accessories and spares
1.1.8 Piping, necessary controls etc.

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

2.0 GENERAL REQUIREMENTS:

2.1 The **"FOAM NURSER"** including all accessories shall be designed, manufactured, tested etc. as per relevant Indian, International Standards, wherever applicable and as per sound engineering practice.

2.2 All the equipment and accessories shall be fixed on the Unit in a compact and neat manner and shall be so placed that each part is easily and readily accessible for use and maintenance. The centre of gravity shall be kept as low as possible.

2.3 The controls on control panel shall be so arranged that one man can operate all the controls.

2.4 The Successful Bidder shall provide a detailed description of the "**FOAM NURSER**", a list of equipment to be furnished, and other construction and performance details to which the "FOAM NURSER" shall conform.

2.5 The detailed description of the **"FOAM NURSER"** shall include, but shall not be limited to, estimated weight, wheelbase, turning clearance radius, principal dimensions, transmission, and axle ratios.

2.6 Responsibility for the "**FOAM NURSER**" and equipment shall remain with the Successful Bidder until they are accepted by the OIL.

2.7 On initial delivery of the "**FOAM NURSER**", the Successful Bidder shall supply a qualified representative to demonstrate the "**FOAM NURSER**" and provide initial instructions to representatives of the OIL regarding the operation, care, and maintenance of the "**FOAM NURSER**" and equipment supplied.

2.8 **INSPECTION & TESTING:**

2.8.1 Third-Party Certification of Test Results:-The results of tests to be certified by OIL's approved third-party certification organization.

2.8.2 Prior to dispatch of Unit from Successful Bidder's shop, Stage inspection & testing shall be carried out by the Successful Bidder to the complete satisfaction of third party inspection agency as mentioned below :-

Stage	Scope of Inspection (But not limited to)
First stage	**Chassis & Materials Inspection:** The Successful Bidder shall facilitate inspection of chassis by OIL's Engineers along with Third Party Inspection Agency for inspection of the Chassis & other materials to be used for fabrication of the FOAM NURSER. (i) Chassis Identification & physical verification of chassis No., engine No. etc. (ii) Verification of all document related to chassis procurement. (iii) Verification of all Documents related to Quality of material of tanks.

	(iv) Thickness measurement of Tank and distinct marking of each material by ultrasonic thickness gauge. (v) Physical Identification of material of Tank, Super structure, under structure etc. (vi) Physical Identification of Components / sub-assemblies identification, before fabrication. (vii) Cutting & marking of material sample for laboratory test (Chemical & Physical). (viii) Verification of all manufacturers/ fabricators document including documents of imported items. (ix) Calibration checking and documents of testing instruments, gauges, tools, accessories etc. (x) Positioning of Tank on the chassis.
Second stage	**<u>After completion of under structure:</u>** (i) Hydro testing of Foam Tanks (ii) Dye penetration test of all weld joints of Tank (iii) Verification of laboratory test (Chemical & Physical) material Test Certificates (MTC) (iv) Positive Material Identification (PMI) of material (v) Construction of under- structure & super structure (vi) Condition of Foam tank (vii) Documents related to Quality of material of Tank and thickness of tank's plates, radiography inspection report and stamped by recognised third party inspector. (viii) Dimensions check of under structure on chassis, fabricated components as per specifications & approved drawings. (ix) Location for Placement of tank, fittings, lockers, pump, quality of fabrication. (x) Calibration checking of testing instruments, gauges, tools, accessories etc.
Final stage	**<u>After completion of panelling, fitment after final painting:</u>** (i) Review of observations of First & Second stage inspections. (ii) Stability checking of the unit after mounting all equipment and accessories. It should be free from undue rattling and vibration. (iii) Check proper functioning of all types of signal lights, alarms, Bell etc. (iv) Check quality of workmanship. (v) Check calibration of instruments, gauges, tools, accessories etc. (vi) Check operation of various levers, locks, caps, fitment of Tank, linkages, Markings and plumbing work. (vii) Performance test of all the systems, Pump, load & stability test of **FOAM NURSER** (viii) Testing of equipment / tools & Unit (ix) Checking of all relevant documents etc.

2.8.3 **<u>Endurance Test:</u>** The pump will be tested for a continuous period as specified by the OEM and foam will not be replenished during this test, engine will not show signs of overheating. During this test, the temperature of engine should not exceed the rated temperature and that of lubricating oil 79 degree C.

2.8.4 **<u>Hydraulic Testing</u>**: All the pipings will be subjected to hydraulic test pressure of 18 Kg/cm2 for a period of 2 hrs. The pump casing will be subjected to a hydraulic test pressure of a minimum 21 Kg/cm2.

2.8.5 **<u>Shower Test:</u>** After completion of the fabrication, the Unit will be subjected to shower test as per the norms laid down under BIS. The Unit will not show any signs of leakages during this test.

2.8.6 **<u>Road Test:</u>** Unit will be tested for braking, acceleration & top speed by the inspecting officers.
After full laden of fire Tender.

(i) Max. Speed attained.
(ii) Any rattling or abnormal sound.

Stability test under fully equipped & loaded condition.
Hand Brake- Fully laden on 1 in 4 gradients in neutral gear.

2.8.7 OIL representatives shall have access at all reasonable times to Successful Bidder's works where the Unit or its accessories are being fabricated and tested.

2.8.8 Drawings (i.e. Skelton Structure, Foam Tank drawing, General layout drawing, Load distribution chart, Electric circuit diagram etc.) & Quality assurance Plan (QAP) shall be approved by the Oil India Ltd. No supply shall be accepted unless drawings & Quality assurance Plan (QAP) are finally approved by the Oil India Ltd.

2.8.9 Third party Inspection agency shall carryout the Inspection based on approved drawings & approved QAP.

2.8.10 The inspection release note of Third part Inspection agency shall clearly stipulate that Material /equipment have been inspected as per approved drawings & approved QAP.

2.8.11 All the tests/inspection for Unit shall be witnessed by Oil India Ltd. representatives along with third party inspection agency.

2.8.12 **For Foam Tanks:**

2.8.12.1 Review of mill test certificates and Co-relation of raw materials before start of fabrication.

2.8.12.2 DP test of all welds of Foam Tanks.

2.8.12.3 DP test of all nozzles to shell (reinforcement pads) for Foam Tanks.

2.8.12.4 Visual and dimensional check of Foam Tank before mounting on chassis.

2.8.12.5 Hydraulic test of completed Foam Tanks. Hydraulic test shall be carried out at 0.5 KG/CM2 (G) at top of Tanks. Pressure shall be held for the duration to permit complete inspection.

2.8.13 **For Piping :**

2.8.13.1 Review of mill test certificates and co-relation of raw materials (for pipes, fittings, valves etc) before start of fabrication.

2.8.13.2 DP test of butt welds and final run.

2.8.13.3 DP test of all flanges to pipe welds.

2.8.13.4 Radiographic examination of 10% butt welds (selected at random).

2.8.13.5 Hydraulic test of piping installation on chassis.

2.8.13.6 Visual and dimensional check.

2.8.14 **FOR FOAM PUMP :**

2.8.14.1 Review of mill certificates for material of casing, gears and shaft.

2.8.14.2 Dynamic testing of casing.

2.8.14.3 Performance testing of pump to establish the performance curve and power absorbed at rated conditions. Parameters at maximum & minimum allowable speeds shall also be evaluated.

2.8.14.4 Power input at rated conditions

2.8.14.5 Mechanical run test shall be carried out.

2.8.14.6 Performance test shall be done on test bench with shop driver.

2.8.14.7 Run test at rated conditions for verifying satisfactory performance.

2.8.14.8 NPSH test.

2.8.14.9 Dismantle inspection of close running parts after performance test.

2.8.14.10 Visual and dimensional check.

NOTE: The above inspections & tests shall be carried out manufacturer's shop prior to dispatch. Third party inspection agency shall review the documents for the tests carried out by the manufacturer.

2.8.15 **For Foam Cum Water Monitor :**

2.8.15.1 Availability of the specified flow and pressure of water and Foam solution at the base flange for the monitor.

2.8.15.2 Review of mill certificates for material.

2.8.15.3 Hydro-testing of monitor at 25 KG/CM2 pressure

2.8.15.4 Horizontal & vertical movements of monitor.

2.8.15.5 Spray/jet pattern of the monitor.

2.8.15.6 Foam expansion ratio of monitor.

2.8.15.7 Foam throws.

2.8.15.8 Workmanship & painting.

2.8.16 **For "Foam Nurser" (During Fabrication & Assembly) :**

2.8.16.1 Review of mill test certificates and co-relation of raw materials used for structure & body fabrication before start of fabrication.

2.8.16.2 Inspection of framework for soundness of welding and fitment of chassis and dimensional check.

2.8.16.3 Inspection for proper installation of pump, Tank, piping with supports and their dimensional checks.

2.8.16.4 Inspection for proper installation of piping with supporting etc. and dimensional check.

2.8.16.5 Visual inspection of raw materials for framework, cladding, flooring etc.

2.8.17 **For Completed Unit :**

2.8.17.1 All consumables (Foam, fuel, engine lube oil, Water etc.) required during inspection & testing shall be arranged by Successful Bidder at his own cost. Successful Bidder shall arrange all facilities to carry out inspection & testing.

2.8.17.2 Determination of actual payload on the chassis so as to confirm payload given by Successful Bidder in the bid. For determining actual laden weight all Tank shall be full, all removable accessories will be on Unit with a crew of six.

2.8.17.3 Static stability of the fully laden Unit shall be checked to ensure that no overturning occurs till Unit attains tilting of 35 ± 1 degrees from horizontal.

2.8.17.4 Road test of the fully laden Unit shall be carried out to ensure the maximum speed, acceleration, turning radius, breaking ability as specified by chassis manufacture.

2.8.17.5 Dimensional check of completed Unit. The overall height shall be measured both when Unit is laden with full payload and un-laden.

2.8.17.6 Test to confirm functional capability of the "**FOAM NURSER**" shall be carried out:

2.8.17.6.1 Running of Foam pump at rated conditions while discharging Foam through various outlets individually and in combination.

2.8.17.6.2 The pump shall be run for minimum 4 hours continuously at rated conditions.

2.8.17.6.3 Functional testing of each Foam outlet (hose point / hose reel) individually and in combination

2.8.17.6.4 Performance tests of Foam-cum water monitor.

2.8.17.6.5 Performance tests of Foam-cum-water monitor with water through hydrant inlets.

2.8.17.6.6 Functional testing of each hose outlet individually and in combination.

2.8.17.6.7 Vibrations at rotary parts

2.9 **Personnel Protection:**

2.9.1 Electrical insulation or isolation shall be provided where necessary in order to prevent electrical shock from onboard electrical systems.

2.9.2 Workmanship shall ensure an operating environment free of accessible sharp projections and edges.

2.9.3 Safety-related (caution, warning, danger) signs shall meet the requirements of job.

2.10 **Controls and Instructions :**

2.10.1 Illumination shall be provided for controls, switches, instruction plates, gauges, and instruments necessary for the operation of the "**FOAM NURSER**" and the equipment provided on it.

2.10.2 All required signs, plates, and labels shall be permanent in nature and securely attached

2.11 **Load Distribution :**

2.11.1 Using the information supplied by the OIL, the "FOAM NURSER" manufacturer shall calculate the load distribution for the "FOAM NURSER".

2.11.2 When the "**FOAM NURSER**" is loaded to its maximum in-service weight, the front-to-rear weight distribution of the "**FOAM NURSER**" as defined shall be within the limits set by the chassis manufacturer.

2.11.3 The manufacturer shall engineer the "FOAM NURSER" to comply with the gross axle weight ratings (GAWR), the overall gross vehicle weight rating (GVWR), and the chassis manufacturer's load balance guidelines.

2.11.4 The axle loads shall not be more than the axle loads specified by the chassis manufacturer under full load and all other loading conditions.

2.11.5 **The total laden weight of the unit should not exceed the permissible GVW of Unit.**

2.12 **Serviceability :**

2.12.1 Where special tools are required for routine service on any component of the FOAM NURSER, such tools shall be provided with the FOAM NURSER.

2.13 **Road Tests :**

2.13.1 Road tests shall be conducted in accordance with this section to verify that the completed FOAM NURSER is capable of compliance roadability.

2.14 **INFORMATION / DOCUMENTS REQUIRED FROM SUCCESSFUL BIDDER :**

2.14.1 Any documentation provided with the FOAM NURSER shall be permitted to be in printed format, electronic format, audiovisual format or a combination thereof.

2.14.2 All drawings & literature shall be kept in Proper folders.

2.14.3 All literature shall be on A-4 size paper.

2.14.4 Each drawing shall be kept in separate pockets in folder. Contents in each pocket shall be labelled properly.

2.14.5 The bidder shall provide regularly fortnightly progress report of Mini Fire Tender through e-mail & photographs after placement & acceptance of Purchase Order.

2.14.5.1 **AFTER PLACEMENT OF ORDER :**

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

2.14.5.1.1 Flow diagrams showing all piping Tank, pump, location of valves, Type & size of valves etc.

2.14.5.1.2 GA & cross sectional drawings, characteristic curves and other details for Foam pump.

2.14.5.1.3 Drawings for system to drive pump from engine.

2.14.5.1.4 Detailed Drawing for Foam-cum water monitor.

2.14.5.1.5 Fabrication drawings & data for Foam tank.

2.14.5.1.6 Line diagram for electrical circuits.

2.14.5.1.7 Drawings showing layout of all equipment, lockers, cabin etc.

2.14.5.1.8 QAP incorporating the stipulated inspection and testing requirements.

2.14.5.2 **AFTER COMPLETION OF ORDER (4 SETS) :**

The manufacturer's record of FOAM NURSER construction details, including the following Information:

2.14.5.2.1 M/s Oil India Ltd. name and address (Oil India Ltd., Duliajan, Dibrugarh , Assam.)

2.14.5.2.2 FOAM NURSER manufacturer, model, and serial number

2.14.5.2.3 Chassis make, model, and serial number.

2.14.5.2.4 Front tire size and total rated capacity in pounds (kilograms)

2.14.5.2.5 Rear tire size and total rated capacity in pounds (kilograms)

2.14.5.2.6 Chassis weight distribution in pounds (kilograms) with Foam & manufacturer mounted equipment (front and rear)

2.14.5.2.7 Engine make, model, serial number, rated horsepower and related speed, and governed speed

2.14.5.2.8 Fuel tank capacity

2.14.5.2.9 Battery make, model, and capacity in cold cranking amps (CCA)

2.14.5.2.10 Chassis transmission make, model, and serial number

2.14.5.2.11 Chassis transmission gear ratio

2.14.5.2.12 Pump make, model, rated capacity in liters per minute and serial number

2.14.5.2.13 Foam tank certified capacity in liters.

2.14.5.2.14 Paint manufacturer and paint number(s)

2.14.5.2.15 As built drawings of FOAM NURSER

2.14.5.2.16 As built drawings for tank.

2.14.5.2.17 Flow diagram.

2.14.5.2.18 GA & cross sectional drawings, characteristic curves and other details for Foam pump.

2.14.5.2.19 As built Drawing for Foam-cum water monitor.

2.14.5.2.20 As built Line diagram for electrical circuits.

2.14.5.2.21 All inspection and testing records for tank, pump, piping, valves, monitor etc.

2.14.5.2.22 Operating and instruction manual for the FOAM NURSER. This should also contain adequate information for all bought out items also.

2.14.5.2.23 Fire pump manufacturer's certification of suction capability

2.14.5.2.24 Fire pump, the pump manufacturer's certification of the hydrostatic test

2.14.5.2.25 Weight documents showing actual loading of "FOAM NURSER" (with the Foam full but without personnel, equipment, and hose).

2.14.5.2.26 Operations and Service Documentation :

2.14.5.2.26.1 The Successful Bidder shall supply operation and service documentation covering the completed FOAM NURSER as delivered and accepted.

2.14.5.2.26.2 The documentation shall address at least the inspection, service, and operations of the "FOAM NURSER" and all major components thereof.

3.0 FOAM NURSER EQUIPMENT:

3.1 **Equipment Storage :** Weather-resistant compartmentation meeting the requirements for the storage of equipment.

3.2 **Hose Storage :** A Hose storage area for fire hose storage

3.3 **Minor Equipment :** Brackets or compartments shall be furnished so as to organize and mount the specified equipment.

3.3.1 **Following equipment shall be supplied:**

3.3.1.1 One first aid kit

3.3.1.2 One No. HDPE Long Spine Board Stretcher.

3.3.1.3 Two combination spanner wrenches

3.3.1.4 Two hydrant wrench

3.3.1.5 Double female adapter, sized to fit 2½ in. (65 mm) conforming to IS-901/1993- 5 Nos. (In locker)

3.3.1.6 Double male adapter, sized to fit 2½ in. (65 mm) conforming to IS-901/1993- 5 Nos. (In locker)

3.3.1.7 Four Nos. wheel chocks with chain link, mounted in readily accessible locations, each designed to hold the FOAM NURSER.

3.3.1.8 Fog lamps powered by the battery of the Unit- 2 Nos. (Fitted on front of FOAM NURSER. Switch in cabin).

3.3.1.9 Reversing lights-2 Nos. (At rear of chassis)

3.3.1.10 Strong Reversing siren connected with reverse gear of the Unit-1 set

3.3.1.11 All tools required for normal / routine maintenance of the Unit, which are not included with the kit of chassis -1 Set (In tool box under rear seat in cabin).

3.3.1.12 PESO/CCE approved removable spark arrestor (If chassis manufacturer not provided) fitted to the exhaust of the engine - 1 No.

3.3.1.13 Stainless Steel dividing breeching each having two 63MM female instantaneous type outlets, conforming to IS-905/1980- 2 Nos. (In Locker)

3.3.1.14 Stainless Steel collecting breeching each having two 63MM male instantaneous type outlets, conforming to IS-905/1980- 2 Nos. (In Locker)

3.3.1.15 Stainless Steel 3 way suction collecting head (With one 140MM outlet with round female threads and two female instantaneous type inlets), conforming to IS-904/1983-1 Nos. (In Locker).

3.3.1.16 Lightweight PVC rubber suction hose fitted with round thread male-female gun metal couplings. Length – 4.5 meter, Diameter: as per pump suction - 4 Nos. (In compartment on top deck, Compartment shall be open able from top with latching system)

3.3.1.17 Suction strainer with foot valve size to suit suction hose as per IS: 907-1984 - 1 Nos. (In locker)

3.3.1.18 Stainless steel foot strainer-1 Nos. (In locker)

3.3.1.19 Suction Wrench to tighten suction hose as per IS:4643- 04 Nos. (In locker)

3.3.1.20 Automatic Nozzle which shall flow from 60-200 GPM with unobstructed water way. The nozzle should have pistol grip. The nozzle shall be M/s. Elkhart / M/s. TFT make only – 04 Nos. (in locker)

3.3.1.21 Fireman's axe with belt and pouches conforming to IS: 3650-1981- 02 Nos. (In locker)

3.3.1.22 Crow bar (IS: 704-1984)- 01 No. (In locker)
3.3.1.23 Sledge hammer - 01 No. (In locker)
3.3.1.24 Female Adopter (150 mm X 100 mm) - 02 Nos.
3.3.1.25 Spade – 01 No.
3.3.1.26 Ceiling Fire hook as per IS:927:1981-2007 or latest - 1 No.
3.3.1.27 One 6 lb (2.7 kg) flathead or pick head axe mounted in a bracket fastened to the Tender
3.3.1.28 Door Breaker-01 No.
3.3.1.29 Carpenter saw-01 No.
3.3.1.30 Inline inductor 225 LPM-01 No.
3.3.1.31 Inline inductor 450 LPM- 01 No.
3.3.1.32 ISI marked 63MM SS male instantaneous couplings (threaded) with caps - 4 Sets.
3.3.1.33 ISI marked 63MM SS female instantaneous couplings (threaded) with caps - 4 Sets.
3.3.1.34 Hydrant key for 4" Gate valve : 10 nos.
3.3.1.35 Hydrant Key for 2 ½'' hydrant valve: 10 Nos.
3.3.1.36 Suction adopter (Stainless Steel) 4 inch round threaded by 63 mm instantaneous male coupling - 02 Nos.
3.3.1.37 Portable Pressure gauge for checking of Tyre Air Pressure – 02 Nos.
3.3.1.38 Hydraulic Jack (Floor Type) – 15 to 20 Ton capacity.
3.3.1.39 Curtain Nozzle with 63 MM Male Instantaneous, Stainless Steel with portable with Carrying Handle (Make: M/s. Newage/ M/s. Shah Bhogilal) - 04 Nos.
3.3.1.40 Portable Ultrasonic Flow meter 4 inch line size & Flow – 500 - 5000 LPM @ 5-12 Bar aprox. (Make : Rockwin / Siemens/ Anuraj Automation India/ Sciencific) – 01 No.

4.0 CHASSIS AND UNIT COMPONENTS :

4.1 Welding and drilling on frame work of chassis are not allowed.
4.2 An engine hour-meter shall be provided.
4.3 An angle of approach and an angle of departure of at least 8 degrees shall be maintained at the front and the rear of the Unit when it is loaded.

4.4 **FOR OTHER WORK ON CHASSIS :**

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

4.5 **Optical Warning Devices :**

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

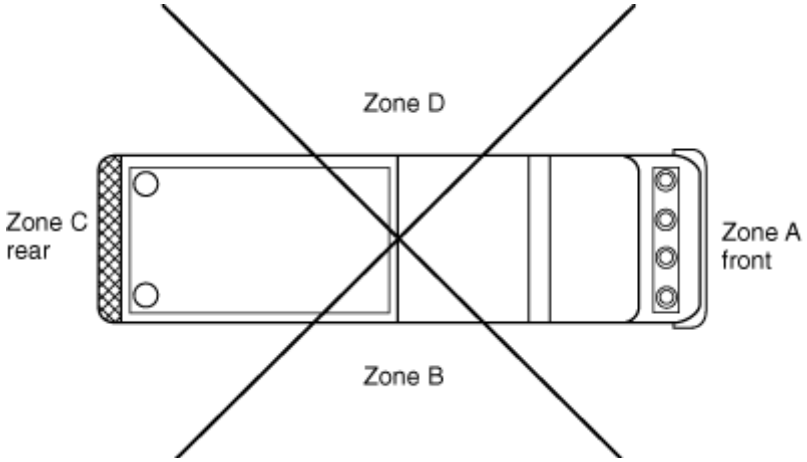


FIGURE: Warning Zones for Optical Warning Devices

4.5.4 Each optical warning device shall be installed on the FOAM NURSER and connected to the FOAM NURSER's electrical system in accordance with the requirements

4.5.5 A master optical warning device switch that energizes all of the optical warning devices shall be provided in driver's cabin.

4.5.6 The optical warning system on the "FOAM NURSER" shall be capable of two separate signaling modes during emergency operations.

4.5.7 One mode shall signal to drivers and pedestrians that the FOAM NURSER is responding to an emergency and is calling for the right-of-way.

4.5.8 One mode shall signal that the FOAM NURSER is stopped and is blocking the right-of-way.

4.5.9 The system shall be permitted to have a method of modifying the two signaling modes.

4.5.10 The optical warning devices shall be constructed or arranged so as to avoid the projection of light, either directly or through mirrors, into any driving or crew compartment(s).

4.5.11 The front optical warning devices shall be placed so as to maintain the maximum possible separation from the headlights.

4.5.12 The optical sources on each level shall be of sufficient number and arranged so that failure of a single optical source does not create a measurement point, in any zone on the same level as the failed optical source, without a warning signal at a distance of 100 ft (30 m) from the geometric center of the FOAM NURSER.

4.5.13 Flash Rate.

4.5.13.1 The minimum flash rate of any optical source shall be 75 flashes per minute, and the minimum number of flashes at any measurement point shall be 150 flashes per minute.

4.5.14 Color of Warning Lights.

4.5.14.1 Permissible colors or combinations of colors in each zone, within the constraints imposed by applicable laws and regulations, shall be as shown in Table.

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

4.5.15 **Audible Warning Devices :**

4.5.15.1 Audible warning equipment in the form of at least one automotive traffic horn and one electric or electronic siren shall be provided.

4.5.15.2 A means shall be provided to allow the activation of the siren within convenient reach of the driver.

4.6 **Work Lighting :**

4.6.1 **Ground Lighting :**

4.6.1.1 The work area immediately behind the Unit shall be illuminated

4.6.1.2 The "FOAM NURSER" shall be equipped with lighting that is capable of providing illumination on ground areas within 30 in. (800 mm) of the edge of the FOAM NURSER in areas designed for personnel to climb onto the FOAM NURSER or descend from the FOAM NURSER to the ground level.

4.6.1.3 All other ground area lighting shall be switchable.

4.6.1.4 Surface Lighting: The FOAM NURSER shall have sufficient lighting on all work surfaces, steps, and walkways.

4.6.1.5 Interior Lighting: The FOAM NURSER shall have sufficient lighting to provide in the driving and crew compartments.

4.6.1.6 Switches for all work lighting shall be readily accessible.

4.6.1.7 The lights shall be arranged or protected to minimize accidental breakage.

4.6.1.8 Backup Alarm (Reverse Horn): An electric or electronic backup alarm (Reverse Horn) with light indication shall be provided that meets the Type D (87 dBA) requirements.

4.6.2 The FOAM NURSER shall be equipped with all legally required stop, tail, and directional lights.

4.6.3 Directional lights shall be visible from the front, sides, and rear of the FOAM NURSER.

4.6.4 Equipment shall not be mounted in a manner that obscures the stop, tail, or directional lights.

5.0 **DRIVING AND CREW AREAS**:

5.1 **General :**

5.1.1 Each crew riding position shall be within a fully enclosed personnel area.

5.1.2 All interior crew and driving compartment door handles shall be designed and installed to protect against accidental or inadvertent opening.

5.1.3 **Means of Escape :**

5.1.3.1 Any interior area to be occupied by personnel shall have a minimum of two means of escape.

5.1.3.2 Each opening shall be large enough for a person to escape through the opening.

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

5.1.5 Controls and switches that are expected to be operated by the driver while the FOAM NURSER is in motion shall be within convenient reach for the driver.

5.1.6 There shall be two doors in the cabin, sized generously with proper arrangement for embarking and disembarking of crewmembers. The doors shall open outwards and hung forward and shall have levers for unlatching from outside and inside. The doors shall be provided with shatterproof safety glasses which can be raised / lowered by winding type mechanism.

5.1.7 First aid box made of fiber glass/ aluminum suitable for 10 persons shall be provided in the cabin. First aid box shall be suitably mounted in the cabin at easily accessible location.

5.1.8 Non slip type steps & grab rails shall be provided in the cabin to assist the crew members to get in & out. Front side of the cabin shall have glass paneling so that the crew can have an all-around view.

5.1.9 The cabin structure shall be so designed so as to avoid any vibration / rattling / deformation in the intended usage of the Unit. The entire floor of the cabin shall be provided with 3M make vinyl matting of minimum 6MM thickness with anti-skid features.

5.1.10 Battery shall be placed in totally enclosed box with spark proof gland for cable entry with battery cut-Off switch. Installed battery shall have a charging faculty from external source at its location itself. Battery shall be placed in wooden/ rubber coated box.

5.2 **Seating arrangement**

5.2.1 Seating arrangement for 6 persons shall be provided in cabin.

5.2.2 For Driver & Officer In-charge each - "HO Bostrom, USA / Ziamatic USA / USSC Valor, USA make"

5.2.3 For Crew (02 Nos.) - "HO Bostrom, USA / Ziamatic USA / USSC Valor, USA make"

5.2.4 For Crew (02 Nos.) - "HO Bostrom, USA/ Ziamatic USA / USSC Valor, USA make"

6.0 BODY, COMPARTMENTS AND EQUIPMENT MOUNTING:

6.1 STRUCTURE / FRAME WORK :

6.1.1 The structure/frame work on chassis & crew cabin shall be of welded construction and made from 30 mm X 30 mm X1.6 mm hollow square section of **SS-316L** and distance between each horizontal and vertical square shall be maximum 400 mm. Cross supporting members of the panelling shall be made of SS-316L channels of 75 mm X 5 mm thickness

6.1.2 The entire roof of the Unit including the crew cabin top, entire rear, crew cabin floor, locker floor and sides shall be made from 2 MM of **SS- 316L** sheets suitably treated for slippage and these shall be bolted to the frame for ease in removal of the tank for repairs. The roof of the cabins should be rigid enough to take the weight of two persons without deforming the roof sheeting.

6.1.3 Area around the monitors operation shall be provided with 16 SWG anodized aluminum-checkered plate (in addition to the 2 mm Alluminum sheets) and shall be bolted to the frame.

6.1.4 Proper access ladder with Grab rails and non-skid steps shall be provided to give access to the roof for approaching to the manholes for tank and monitor etc.

6.1.5 Access handrails shall be provided at each entrance to a driving or crew compartment and at each position where steps or ladders for climbing are located. Access handrails shall be constructed of, or covered with, a slip-resistant, non-corrosive material. Handrails shall be between 1 in. and 1-5/8 in. (25 mm and 41 mm) in diameter and have a minimum clearance between the handrails and any surface of at least 2 in. (51 mm).

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

6.1.7 Single Roller type Sun Shade Screen Assembly and long arm outside fitting rear view mirrors shall be fitted to cabin.

6.1.8 Proper draining arrangements shall be provided on the entire roof, crew cabin and inside the lockers.

6.2 LOCKERS :

6.2.1 Size and number of locker shall be decided such that on either side 15 nos. 22.5 m length fire hose can be easily accommodated in single layer and equipment may be accommodated in maximum two layers. Sufficient numbers of lockers shall be provided to accommodate all the equipment/accessories in an easily accessible manner.

6.2.2 All lockers shall be provided with Roller type shutter doors. The shutters shall have smooth operation. The aluminum shutters shall be dust & water proof of **M/s. MCD, France** imported make only made of extruded aluminum & duly hard anodized.

6.2.3 Roller shutters shall be of hollow rectangular shaped & made from aluminium inter-changeable links connected by means of plastic profiles.

6.2.4 Sealing of roller shutter shall be watertight when closed.

6.2.5 Roller shutters shall be inward rolling type and shall be provided with guide rails over entire length on both sides to make them torsion free.

6.2.6 When shutters are rolled, unobstructed access should be available to the equipment & hoses.

6.2.7 Shutters should open in all positions of the Unit even in rough terrains.

6.2.8 Roller shutters shall have locking arrangement to prevent accidental opening during movement of the Unit.

6.2.9 **Spare lock of shutters – 10 Nos. shall be provided.**

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

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

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

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

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

6.2.15 The hose storage area(s) shall be reinforced at the corners.

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

6.2.17 The bottom shall be constructed to prevent the accumulation of water and allow ventilation to aid in drying of hose.

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

6.2.19 Ladders and equipment holders shall be placed so as not to obstruct the laying or removal of hose from the storage area.

6.3 **Compartmentation :**

6.3.1 Any enclosed external compartments shall be weather resistant and ventilated and have provisions for drainage of moisture.

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

6.3.3 Equipment holders or compartments shall be provided for all tools, equipment, and other items that are on the FOAM NURSER.

6.3.4 Equipment holders shall be attached and shall be designed so that equipment remains in place under all operating conditions.

6.3.5 All tools and equipment shall be readily accessible.

6.4 **Pump and Plumbing Accessories :**

6.4.1 **FOAM PIPINGS:**

6.4.1.1 Foam piping shall be of SS-316L grade.

6.4.1.2 Stainless Steel lines joint - The bolting (studs, bolts) at break flanges shall be of SS-316L with washers.

6.4.1.3 A flow chart/schematic diagram shall be made and supplied with the FOAM NURSER.

6.5 One or more doors or panels that open or are removable without the use of tools shall be provided to allow visual inspection or access for checking the fire pump and plumbing area(If required).

6.6 All valves, gauges, controls, and other plumbing equipment shall be accessible for service and replacement.

6.7 The clear space required by the pump manufacturer to perform in-truck overhaul and maintenance shall be provided.

6.8 **Stepping, Standing and Walking Surfaces :**

6.8.1 Steps, platforms, or permanently attached ladders shall be provided so that fire fighters have access to all working and storage areas of the FOAM NURSER.

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

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

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

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

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

6.11 **Access Handrails :**

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

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

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

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

6.12 **PAINTING AND MARKING :**

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

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

6.12.3 Foam lines should be painted with of zinc phosphate epoxy primer each of 50 microns DFT and two coats of polyurethane finished paint each coat of 50 microns DFT. Foam lines shall be painted red in colour.

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

6.12.5 M/s Oil India Ltd. emblem in original colour together with name shall be written in golden yellow colour on both sides of the Unit.

6.12.6 On the front of the Unit "FOAM NURSER" shall be written IN ENGLISH.

6.12.7 The inside of lockers shall be painted.

6.12.8 The chassis frame shall be painted black and wheel arch shall be painted white.

6.12.9 Mud flappers of sufficient length and width shall be provided at wheels.

6.12.10 Under frame of Chassis shall be painted with chlorinated rubber paint.

6.12.11 The Unit shall be clearly having the following marks at suitable locations.

(a) Manufacturer's name & trade mark.
(b) Year of manufacture
(c) Pump serial numbers and capacities.
(d) Capacity of Foam tank in litres.
(e) Engine and chassis number.
(f) All instrument control & valves shall be identified with properly itched metallic Name plates.
(g) All valves and hoses inlet and outlet shall also be identified by suitable metallic Nameplates.

6.12.12 All exposed ferrous metal surfaces that are not plated or stainless steel shall be cleaned and prepared and shall be painted or coated.

6.12.13 The paint or coating, including any primer, shall be applied in accordance with the paint or coating manufacturer's recommendation.

6.12.14 A reflective stripe(s) shall be affixed to the perimeter of the FOAM NURSER.

6.12.15 The stripe or combination of stripes shall be a minimum of 4 in. (100 mm) in total width and shall conform the requirements.

6.12.16 At least 50 percent of the cab and body length on each side, at least 50 percent of the width of the rear, and at least 25 percent of the width of the front of the FOAM NURSER shall have the reflective material affixed to it.

7.0 Foam Concentrate Pump (FOAM PUMP) :

7.1.1 Pump to handle Foam Compound (AFFF/FFFP) shall be rotary gear type and EMI (Edward mfg. Inc. USA) / Chemguard, USA/ Rosenbauer, Austria make.

7.1.2 The pump shall be as per OEM specification and all components & materials of construction shall be as per OEM. The shaft sealing shall be as per OEM.

7.1.3 The pump shall have be minimum discharge capacity of 500 LPM at discharge pressure 12.0 KG/CM2 (G).

7.1.4 The pump shall be used to :

(a) Transfer foam compound from foam tank on chassis to other tender.
(b) Transfer foam compound from barrels to foam tank on chassis.

7.1.5 The pump shall be driven by the main engine on chassis through a side power take-off unit.

7.1.6 The pump shall have a by-pass to route the discharge to foam tank on chassis.

7.1.7 The pump shall have a PSV (set at suitable pressure) for protection of pump against over pressure and PSV discharge will be routed to foam tank on chassis. Isolation valve shall be provided on downstream side of PSV.

7.1.8 All the line valves shall be pneumatic operated (Except Pump Delivery valves 63 MM). Control of all the valves shall be from rear mounted pump panel. Manual override shall also be provided for all pneumatic valves.

7.2 **SPARES :**

7.2.1 The following mandatory spares shall be supplied by the Successful Bidder for foam pump:

(a) Shaft with gears- 1 Set
(b) Mechanical seal (s) complete with sleeve & gland plate etc.- 2 Nos.
(c) Mechanical seal spares- 2 Sets.
(d) Rotating & stationery faces with packing- 2 Sets.
(e) Springs pins, gaskets etc- 2 Sets

7.2.2 An instruction plate shall be provided for the foam proportioning system that includes, at a minimum, a piping schematic of the system and basic operating instructions.

7.3 **Operations and Maintenance Manual :**

7.3.1 Two copies of an operations and maintenance manual shall be provided.

7.3.2 The manual shall include a complete diagram of the system, together with operating instructions, system foam concentrate capabilities, original system calibration, and details outlining all recommended maintenance procedures.

7.4 **Certification and Documentation :**

7.4.1 The final installer shall certify the following:

(a) The foam system, as installed, complies with the foam equipment manufacturer's installation recommendations.
(b) The foam system has been calibrated and tested to meet the foam equipment manufacturer's and the purchaser's performance specifications.

8.0 WATER CUM FOAM MONITOR:

8.1 Foam-cum water monitor with manual override shall be mounted on rooftop of the "FOAM NURSER" having following specification:

(a) Make & Model: M/s. Elkhart/ M/s. TFT/ M/s. Akron / M/s. Rosenbauer
(b) Capacity: Automatic flow from 300 to 1000 GPM single Nozzle with Jet, Spray & Fog Pattern.
(c) Type: Non-aspirating
(d) Discharge Capacity: 300 to 1000 GPM at 7.0 KG/CM2 (at the base flange of the monitor)
(e) Barrel Size: Suitable size as per requirement (or 3 Inch)
(f) Material of Construction: Monitor body hard anodized Aluminum

8.2 **PERFORMANCE:**

(a) Water Throw 1000 GPM at 7.0 KG/CM2 (Monitor inlet pressure): Minimum 50 meter-Horizontal.
(b) Foam Throw 1000 GPM at 7.0 KG/CM2 (Monitor inlet pressure): Minimum 40 meter-Horizontal.

8.3 Operational control for the monitor shall be provided at the rooftop for horizontal movement, vertical movement & jet/spray pattern of the monitor.

8.4 One oil filled pressure gauge shall be provided near the monitor inlets flange (if not provided on monitor body).

8.5 Separate connection shall be made to operate Foam/Water Monitor directly from pressurized hydrant mains/ Tender by means of suitably sized inlet line 4 nos., 63MM, ISI marked instantaneous male connectors with strainer fitted on the rear side of the FOAM NURSER, shall be connected to the Monitor line with a SS isolation valves.

9.0 FOAM CONCENTRATE TANK :

9.1.1 Two Nos. foam compound tanks of 3000 liters net capacity each shall be fabricated out of 5MM thick SS-316L plates for the bottom & 4 MM thick SS-316L for the sides & top. In addition 2% of expansion space shall be made in the tank, over and above foam compound capacity.

9.1.2 The both side of Foam tank shall be Die Pressed Stiffened type.

9.1.3 The foam tank shall be of welded construction and shall be suitably stiffened with SS 316L angles/flats so as to avoid buckling and distortion.

9.1.4 Weld joints shall be minimized

9.1.5 Suitable lifting lugs shall be provided on the tank shell to enable it to be lifted off the Unit for repairs/replacement as necessary.

9.1.6 The tank shall be fitted with a sludge trap of 150 mm. The bottom of the tank shall have a slight slope towards the sludge trap.

9.1.7 The tank shall also have a cleaning hole and drain pipe with AUDCO make S.S. ball valve and 63MM (SS) instantaneous male coupling incorporated in it.

9.1.8 The tank shall have a filling hole of 150MM diameter at top and with a removable conical strainer of SS-316L. The filling manhole shall have a screwed cap. The filler cap shall have an etched SS name plates with marking 'FOAM'. A calibrated dip tape shall be provided on the tank to measure the tank level.

9.1.9 Breather valve shall be provided for automatic venting of the foam compound tank when the foam compound is drawn from it or when the tank is being filled.

9.1.10 The inlet line in the tank shall have an adequately strong deflector plate, which will avoid the incoming jet of foam from hitting the tank side/roof.

9.1.11 All nozzles for the tank shall have suitable reinforcement pads. Nozzles shall also have adequate stiffeners to take the loads from piping. Tank shall be provided with anti-vortex device at nozzle for pump suction.

9.1.12 Tank supporting structure on the chassis shall be of SS 316L.

9.1.13 Reinforcement pads at tank supporting structure shall be of same thickness and material as that of the foam tank

9.1.14 Provision shall be made on either side of the body for visual inspection/maintenance of the foam tank.

9.1.15 A calibrated dip tape shall be provided on the tank to measure the tank level.

9.1.16 The foam concentrate tank shall be provided with a fill tower.

9.1.17 The fill tower opening shall be protected by a completely sealed airtight cover.

9.1.18 The cover shall be attached to the fill tower by mechanical means.

9.1.19 The fill opening shall incorporate a removable screen with a mesh not to exceed ¼ in. (6 mm).

9.1.20 The fill tower shall be equipped with a pressure/vacuum vent that enables the tank to compensate for changes in pressure or vacuum when filling or withdrawing foam concentrate from the tank.

9.1.21 The pressure/vacuum vent shall not allow atmospheric air to enter the foam tank except during operation or to compensate for thermal fluctuations.

9.1.22 The vent shall be protected to prevent foam concentrate from escaping or directly contacting the vent at any time.

9.1.23 The vent shall be of sufficient size to prevent tank damage during filling or foam withdrawal.

9.1.24 The foam concentrate tank shall not be equipped with an overflow pipe or any direct opening to the atmosphere.

9.1.25 The foam concentrate tank(s) shall be designed and constructed to facilitate complete interior flushing and cleaning as required.

9.1.26 Inside the tank, Pump to tank Foam filling line shall have conical deflector and height shall not be more than 12 Inches.

9.1.27 **Level Indicator (For Each Tank):**

9.1.27.1 An indicator shall be provided that shows the level or amount of Foam in the tank(s).

9.1.27.2 A suitably protected Foam level indicator of the graduated glass tube, clear acrylic shall be provided close to the control panel. Isolation valve shall be provided just after the tap off point near the Foam tank for the level indicator.

9.1.27.3 Electronic LED Foam Level Indicators indicating the tank levels as EMPTY, ¼, ½ , ¾ and FULL shall be provided on the pump control panel. These levels shall be indicated by number of glowing LED lights (no LED Lights means and empty tank, All LED Lights means full tank). The indicators shall sense the fluid level in the tank with help of a pressure sensing probe. The indicators shall be located on the rear pump control panel in such a manner that the Operator / Firemen can easily view the tank levels while being away from the Unit. **Additional Level Indicator – 04 Nos. shall be provided as spare**.

9.1.28 Repeater Secondary Level Indicators shall be provided in the driver's cab to check the Foam level from the cab while travelling.

9.1.29 **Tank Drain :**

9.1.29.1 A minimum 1 in. (25 mm) inside diameter full flow drain valve and piping shall be provided at the lowest point of any foam concentrate tank.

9.1.29.2 The drain shall be piped to drain directly to the surface beneath the Tender without contacting other body or chassis components.

9.1.30 The foam concentrate tank shall be constructed and installed to be independent of the tender body.

9.1.31 The foam concentrate discharge system design shall prevent the siphoning of foam concentrate.

9.1.32 A label that reads "Foam Tank Fill" shall be placed at or near any foam concentrate tank fill opening.

9.1.33 The foam concentrate tank outlet connection shall be designed and located to prevent aeration of the foam concentrate and shall allow withdrawal of 80 percent of the foam concentrate tank storage capacity under all operating conditions with the Tender on level ground.

9.1.34 The foam concentrate tank inlet connection, if provided, shall prevent aeration of the foam concentrate under all operating conditions.

9.1.35 The foam tank will be mounted on the Unit on a sub frame using Rubber Metacones. This sub frame will be made from Anti-Corrosive Treated MS 4" section and will be bolted with the chassis using the high tensile bolts. 'U' Bolts shall not be used for mounting of Tank on Unit. The rubber metacones shall facilitate to absorb the jerks and bending torsions in expansion as well as compression mode without high deflection. The manufacturer shall provide complete design data of metacones and sub frame including the load calculations and metacone quantity sufficiency. Tank will be mounted on the chassis in a manner keeping in view the proper load distribution on the axles. The baffles will be arranged in a manner to facilitate easy cleaning of the Tank. The tank will be mounted on two / three cross bearers to counteract stresses caused by chassis flexing. The Centre of Gravity shall be maintained as low as possible.

9.1.36 A manual rotary transfer pump shall be provided for transferring foam compound from drums to the foam compound tank without causing any frothing in the tank. Arrangement shall be provided to connect this pump through a tube to the tank filling line.

9.2 **ACCESSORIES :**

9.2.1 **CONTROL PANEL :**

Adequately illuminated pump operating panel shall be provided at the rear side of the Unit and these shall include the following areas:

a. Auxiliary throttle control for the engine.
b. Independent pressure gauges calibrated to 25 KG/CM2 for pump discharge.
c. Threaded suction inlet of Foam pump with blind cap.
d. Quick opening pneumatic valve for lining up Foam tank to pump.
e. Level gauge for Foam Tanks.
f. System schematic etched on Stainless Steel plate.
g. Operating instruction plate and flushing out instruction plate (both on boldly etched Stainless steel plates).
h. Compound pressure gauges.
i. RPM meter for pump.

9.2.2 In addition to the items mentioned above, Successful Bidder shall provide any other items that he may find essential. Any of these items which are also required in the driver's cabin shall be provided at suitable locations in the driver's cabin. Each lever, switch, valve, gauges, outlet/inlet etc. shall have identification made on metal plate and duly riveted. The microphone of the PA system shall be fixed inside the driver cabin on a flexible stand at a suitable location.

10.0 PERFORMANCE GUARANTEE :

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

11.0 TRAINING :

11.1.1 Manufacturer is responsible for imparting training, to the operators of the equipment from the Unit holding the equipment. This training will be imparted to two operators for period of one week. The training will cover following areas:-

i) Assembly/ disassembly of pump and primer
ii) Trouble shooting
iii) Any other subject desired by the operator (assembly/disassembly) will be done at least five times with complete identification of all components of pump during the week.

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

Abbreviation:

Unit - Complete Foam Nurser
MVA - Motor Vehicle Act
RPM - Revolutions per Minute
LED - Light-Emitting Diode
PSV - Pressure Safety Valve

Annexure – A

For GVW

S. No.	Item	Numbers
1.	Foam Tank of capacity 3000 + 3000 Litres capacity (Wt. Approx. 7600 Kg)	01
2.	Chassis (Wt. Approx. 4300 Kg)	01
3.	Pump & Propeller Shaft (Wt. Approx. 1000 Kg)	01
4.	Fabrication & Piping (Wt. Approx. 1200 Kg)	01
5.	Weight of crew members (weight 420 Kg)	06
6.	Delivery hoses (type – B) with GM coupling (22.5 M length)	15
7.	Suction Hose	4
8.	SCBA Sets	2
9.	Foam Branches (FB – 10X)	4
10.	Triple purpose branch	4
11.	Standard branch	4
12.	Male to Male coupling	2
13.	Female to female coupling	2
14.	Fire suits	2
15.	Roof top ladder (10.5 M, Aluminum)	1
16.	Portable monitor	1
17.	Akron Branch	4
18.	Ceiling Hook	1
19.	Dividing Breachings	2
20.	Collecting breaching	2
21.	Collecting head	1
22.	MFG	2
23.	Safety Helmets	10
24.	Gum boots	10
25.	Manila rope (1” diameter, 50M length)	1
26.	Suction wrenches	2
27.	Strainer	1

Annexure I

BID REJECTION & BID EVALUATION CRITERIA

I) BID REJECTION CRITERIA

The bids must conform to the specifications, terms, and conditions given in the NIT. Bids shall be rejected in case the items offered do not conform to the required minimum / maximum parameters stipulated in the technical specifications and to the respective international /national standards wherever stipulated. Notwithstanding the general conformity of the bids to the stipulated specifications and terms and conditions, the following requirements shall have to be particularly met by the bidders, without which the offer will be considered as non-responsive and rejected:

A) TECHNICAL:

1. The bidder should have the experience of manufacturing/ fabricating / assembling and successful execution of supply of at least 1 (one) Similar order i.e. Supply of Foam Nurser with minimum 500 LPM at 12 KG/CM2 foam pump or Supply of Fire Tender with minimum 1800 LPM at 07 KG/CM2 or above water Pump capacity, on minimum 16 tonne chassis in the last 5 (five) years preceding to Bid Closing date of this Tender.

   Copy of purchase Orders and Proof of Supply/ Commissioning Report/ Performance Reports shall be submitted along with bid.

2 The bidder should have the manufacturing /fabricating / assembling facility and adequate testing /quality assurance facility of Foam Nurser.

   The list of the necessary machinery / Equipment for manufacturing/ fabricating / assembling & testing of Foam Nurser shall be submitted along with bid.

3 The Bidder shall be in the business of manufacturing/ fabricating / assembling of Foam Nurser with minimum 500 LPM at 12 KG/CM2 foam pump or Fire Tender with minimum 1800 LPM at 07 KG/CM2 or above water Pump capacity on minimum 16 tonne chassis in the last 5 (five) years preceding to Bid Closing date of this Tender.

   a. Copy of "Certificate of Incorporation" and "NSIC or equivalent Certificate specifying the nature of business of the firm shall be furnished along with the bid.
   b. The bidder should submit the order book (list of completed orders)for manufacturing/ fabricating / assembling of Foam Nurser / Fire Tender for last five years mentioning following details:
      i. Purchase Order No.
      ii. Purchase Order Date
      iii. Organization
      iv. Quantity
      v. Supply Date

B) FINANCIAL:

1.0 Annual Financial Turnover of the bidder during **any of preceding three financial / accounting years from the original bid closing date** should be at least Rs 33.25 lacs.

1.1 **Net worth** of bidder must be positive for preceding financial/ accounting year.

2.0 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-B.

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.

C) COMMERCIAL:

1.0 Bids are invited under **Single Stage Two Bid** System. Bidders shall quote accordingly under Single Stage Two Bid System. **Please note that no price details should be furnished in the Technical (i.e. Unpriced) bid.** The "Unpriced Bid" shall contain all techno-commercial details except the prices, which shall be kept blank. The "Price Bid" must contain the price schedule and the bidder's commercial terms and conditions. Bidder not complying with above submission procedure will be rejected.

2.0 Bid security of Rs. 1,33,100.00 shall be furnished as a part of the TECHNICAL BID (refer Clause No. 8.0 (Section A) of "General Terms & Conditions" for e-Procurement as per Booklet No. MM/CALCUTTA/E-01/2016 for E-procurement (LCB Tenders)).A bid shall be rejected straightway if Original Bid Security is not received within the stipulated date & time mentioned in the Tender and/or if the Bid Security validity is shorter than the validity indicated in Tender and/or if the Bid Security amount is lesser than the amount indicated in the Tender.

2.1 For exemption for submission of Bid Security, please refer Clause No. 8.16 (Section A) of "General Terms & Conditions" for e-Procurement as per Booklet No. MM/CALCUTTA/E-01/2016 for E-procurement (LCB Tenders).

2.2 **The Bank Guarantee towards Bid Security shall be valid upto 29.08.2017 (i.e. 90 days from the Bid Validity)**

3.0 Successful bidder will be required to furnish a Performance Bank Guarantee @10% of the order value. The Performance Bank Guarantee must be valid for a period of 18 months from the date of despatch or twelve(12) months from the date of receipt of the items at site, whichever is earlier. Bidder must confirm the same in their Technical Bid. Offers not complying with this clause will be rejected.

4.0 Bidders must confirm that Goods, materials or plant(s) to be supplied shall be new of recent make and of the best quality and workmanship and shall be guaranteed for a period of 18 months from the date of despatch or twelve(12) months from the date of receipt of the items at site, whichever is earlier against any defects arising from faulty materials, workmanship or design. Defective goods/materials or parts rejected by OIL shall be replaced immediately by the supplier at the supplier's expenses at no extra cost to OIL.

5.0 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.

6.0 Validity of the bid shall be minimum 120 days from the Bid Closing Date. Bids with lesser validity will be rejected.

7.0 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.

8.0 Bids containing incorrect statement will be rejected.

9.0 No offers should be sent by Telex, Cable, E-mail or Fax. Such offers will not be accepted.

10.0 All the Bids must be Digitally Signed using "Class 3" digital certificate (e-commerce application) with Bidder's organization name 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" digital certificate with Bidder's organization name, will be rejected.

11.0 Bidders are required to submit the summary of the prices in their Commercial (Priced) bids as per bid format (Summary), given below :

Sl. No.	Item	Rupees
(A)	Total material cost of Main Equipment	
(B)	Total cost of tools / tackles / accessories / mandatory spares/repair kit for commissioning	
(C)	Total Material Cost (A+B)	
(D)	Total Cost Of Fabrication	
(E)	TPI Charges	
(F)	Packing and Forwarding Charges	
(G)	Total Ex-works value, (C+D+E+F)	
(H)	Excise Duty including Cess	
(I)	Sales Tax, (Please indicate applicable rate of Tax)	
(J)	Total FOR Despatching station price, (G+H+I)	
(K)	Road Transportation charges to Duliajan	
(L)	Insurance Charges	
(M)	Assam Entry Tax (wherever applicable)	
(N)	Total FOR Duliajan value, (J+K+L+M)	
(O)	Installation & Commissioning Charges including Service Tax	
(P)	TOTAL VALUE OF PURCHASE (N+O)	
Total value in words : Rupees		

12.0 Offer shall be rejected straightaway without seeking clarification in case the party refuses to sign Integrity Pact.

II) BID EVALUATION CRITERIA

The bids conforming to the specifications, terms and conditions stipulated in the enquiry and considered to be responsive after subjecting to the Bid Rejection Criteria will be considered for further evaluation as per the Bid Evaluation Criteria mentioned below:

1.0 The evaluation of bids will be done as per the Price Schedule (SUMMARY) detailed vide Para 11.0 of Bid Rejection Criteria.

2.0 In the event of computational error between unit price and total price, unit price shall prevail and adopted for evaluation. Similarly, in the event of discrepancy between words and quoted figure, words will prevail.

3.0 To ascertain the inter-se-ranking, the comparison of the responsive bids will be done on TOTAL VALUE basis, subject to corrections / adjustments given herein.

Sl. No.	Item	Rupees
(A)	Total material cost of Main Equipment	
(B)	Total cost of tools / tackles / accessories / mandatory spares/repair kit for commissioning	
(C)	Total Material Cost (A+B)	
(D)	Total Cost Of Fabrication	
(E)	TPI Charges	
(F)	Packing and Forwarding Charges	
(G)	Total Ex-works value, (C+D+E+F)	
(H)	Excise Duty including Cess	
(I)	Sales Tax, (Please indicate applicable rate of Tax)	
(J)	Total FOR Despatching station price, (G+H+I)	
(K)	Road Transportation charges to Duliajan	
(L)	Insurance Charges @0.5% of Total For Despatching Station Value (I) above	
(M)	Assam Entry Tax (wherever applicable)	
(N)	Total FOR Duliajan value, (J+K+L+M)	
(O)	Installation & Commissioning Charges including Service Tax	
(P)	TOTAL VALUE OF PURCHASE (N+O)	
Total value in words : Rupees		

4.0 Purchase Preference, if any will be as per Section B of "General Terms & Conditions" for e- Procurement as per Booklet No. MM/CALCUTTA/E-01/2016 (LCB Tenders).

5.0 In case any of the Clauses of the Bid Rejection Criteria / Bid Evaluation Criteria (BEC / BRC) mentioned here contradict the Clauses in the General Terms & Conditions of the Tender and/or elsewhere, those mentioned in this BEC / BRC shall prevail.

Important Notes:

1. As mentioned in Clause 2.8 of PART – B Fabrication OF "Foam Nurser" With Accessories, Materials must be inspected and certified by any one of the OIL authorized third party inspection agencies viz. M/s. BV / IRS / Lloyds / RITES / DNV / Tubescope Vetco prior to despatch. Bidders must quote the inspection charges separately in % (percentage) in the offer for evaluation of offer, failing which it shall be construed that the quoted rates are inclusive of 3rd party inspection charges.
When a bidder mentions third party inspection charges as extra without specifying the amount, the offer will be loaded with maximum value towards third party inspection charges quoted against the tender for comparison purposes. If the bidder emerges as lowest bidder after such loading and in the event of order on that bidder, third party inspection charges mentioned by OIL on the Purchase Order will be binding on the bidder. Please also quote minimum TPI charges in case of part order or the same will be calculated on pro-rata basis.

2. 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.

3. **A bid shall be rejected straightway if it does not conform to any one of the following clauses:**
(a) Validity of bid shorter than the validity indicated in the Tender.
(b) Original Bid Security not received within the stipulated date & time mentioned in the Tender.
(c) Bid Security with (i) Validity shorter than the validity indicated in Tender and/or (ii) Bid Security amount lesser than the amount indicated in the Tender.
(d) Annual Turnover of a bidder lower than the Annual turnover mentioned in the Tender.

4. Integrity Pact:

OIL shall be entering into an Integrity Pact with the bidders as per format enclosed vide Annexure DDD of the tender document. This Integrity Pact proforma has been duly signed digitally by OIL's competent signatory. The proforma has to be returned 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. Any bid not accompanied by Integrity Pact Proforma duly signed (digitally) by the bidder shall be rejected straightway. 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.

The name of the OIL's Independent External Monitors at present are as under:
- SHRI SATYANANDA MISHRA, IAS(Retd.)
Former Chief Information Commissioner of India &
Ex-Secretary, DOPT, Govt. of India
e-Mail ID : satyanandamishra@hotmail.com

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

5. Installation and Commissioning charges must be quoted separately (not to include in materials cost) on lumpsum basis which shall be considered for evaluation of the offers. These charges should include amongst others to and fro fares, boarding/lodging, local transport and other expenses of supplier's commissioning and training personnel during their stay at the site

6. Bidders must categorically indicate the TPI charge, Installation and Commissioning charges in their offers and must confirm about providing the same in their Technical bids. In case TPI charge, Installation and Commissioning charges are NIL/inclusive, bidder must categorically mention the same in their offer.

7.0 Payment Terms: 70% payment will be made against supply of materials and balance 30% after satisfactory commissioning at site along with the installation & commissioning charges after adjusting liquidated damages, if any.

ANNEXURE - EEE

COMMERCIAL CHECKLIST

(To be filled up and submitted along with the bid)

Tender no.	
Bidder's name	

SL. NO.	BEC / TENDER REQUIREMENTS	COMPLIANCE BY BIDDER	
		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 as per BRC Technical		
6	Confirm that you have submitted Balance Sheet and Profit and Loss Account certified by a chartered accountant as mentioned in BRC Financial.		
7	Confirm that the offers and all attached documents are digitally signed using Class 3# digital certificate (e-commerce application) in Organization Name issued by an acceptable Certifying Authority (CA) as per Indian IT.		
8	Confirm that you have not taken any exception/deviations to the NIT.		
9.	Confirm that the product offered strictly conform to the technical specifications.		
10	Confirm that the prices offered are firm. *(Conditional offer shall be liable for rejection.)*		

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.

Bidder's Response Sheet **Annexure-FFF**

Tender No.	
Bidders Name	

Bidders Response Sheet

Sl No.	Description	Remarks
1	Place of Despatch	
2	Whether Freight charges have been included in your quoted prices	
3	Whether Transit 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 bidder is Small scale unit , whether you are owned by SC/ST entrepreneur.	
15	If Bid security submitted as Bank Guarantee, Name and Full Address of Issuing Bank including Telephone, Fax Nos and Email id of branch manager	
16	Confirm that the Bid Security submitted (In case of Bank Guarantee) is in toto as per format provided in the bidding document.	
17	Bid Security if Not submitted, reasons thereof	

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

ANNEXURE - GGG

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

Tender No.	**:……**
Name of Beneficiary	**:M/s……**
Vendor Code	**:……..**
Address	**:……**
Phone No. (Land Line)	**:……**
Mobile No.	**:……**
E-mail address	**:……**
Bank Account No. (Minimum	
Eleven Digit No.)	**:……**
Bank Name	**:……**
Branch	**:……**
Complete Address of your	**:……**
Bank	**:……**
IFSC Code of your Bank	
a) RTGS	**:……..**
b) NEFT	**:……..**
PAN	**:……..**
VAT Registration No.	**:……..**
CST Registration No.	**:……..**
Service Tax Registration No.	**:……..**
Provident Fund Registration	**:……..**

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

Office Seal **Counter Signed by Banker:**
Signature of Vendor **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.**