

**The Commissioner
ROURKELA MUNICIPAL CORPORATION,
UDIT NAGAR, ROURKELA
0661-2500388
Fax : 0661-2500388 Email:
Bid Identification Notice No. 15689, Dt.20.12.16**

**Letter of Invitation
(LoI)**

1. Rourkela Municipal Corporation, Rourkela invites sealed proposal in conformity with RFP documents in Two Bid System (Part-I: Technical Bid and Part-II: Price Bid) from Company/ trust/ society/ NGO/ government owned entity/ individual/ proprietary registered under relevant statute and in operation for at least 1 year during the last 5 years to be selected as operator to carry out fleet management of Cesspool vehicles towards collection & transportation of septage generated in Rourkela town. The work details are mentioned below. More details on the services are provided in the Terms of Reference in this RFP document.

Sl.No	Name of Work	Contract Period	Cost of bid document in Rs. (Non-refundable)	EMD in Rs.	Last Date & Time of Sale of Bids.	Last date & time for submission of bids
1	2	3	4	5	6	7
1	Selection of Operator to carry out fleet management of Two number of Cesspool vehicles towards collection & transportation of septage generated in Rourkela town.	7 (Seven) Years	5,000/- + 5% VAT = Rs. 5250/- (Rupees Five thousand two hundred fifty only)	25,000/- (Rupees Twenty-Five Thousand Only)	Up to 1.00 P.M dated 23.1.2017	Up to 5.00 P.M dated 23.1.2017

- The details of the bid & bid document can be downloaded from the Govt. website: <http://www.odisha.gov.in> from 11am on 23.12.16 to 1.00 P.M on 23.1.2017. The filled-up bid document will be received up to 5pm on 23.1.17
- The Bid documents (RFP) can also be obtained directly from the office of Rourkela Municipal Corporation (in shape of CD media) on or before the last date and time of sale on payment of cost of bid documents Rs. 5,250.00 (Rupees Five thousand two hundred fifty only) in shape of account payee demand draft drawn in any Nationalized Bank drawn on or before the last date of sale of bid documents, in favour of the Commissioner, Rourkela Municipal Corporation payable at Rourkela.
- The bid must accompany with the cost of bid document (for downloaded RFP document) & EMD of required value as specified above in shape of Bank demand draft drawn in any Nationalized Bank in favour of 'the Commissioner, Rourkela Municipal Corporation, payable at Rourkela, failing which the bid shall be out rightly rejected.
- A pre-bid meeting shall be held at 11 am on 30.12.16 in the conference hall of Rourkela Municipal Corporation located Udit Nagar, Rourkela for clarification, if any.

5. A bidder can submit only one bid against the work. Submission of more than one bid by a bidder against the work will be liable for rejection of all such bids.
6. The bid Part-I (General & Techno commercial) will be opened at 11 am on 24.1.17 in presence of the bidder or their authorised representatives only in the conference hall of Rourkela Municipal Corporation located Udit Nagar, Rourkela, The opening of price bid for the bidders qualifying in the General & Techno commercial bid will be 11 am on 31.1.17.

This RFP is not an offer and is issued with no commitment. Rourkela Municipal Corporation reserves the right to amend or withdraw any of the terms and conditions contained in the RFP document at any stage. Rourkela Municipal Corporation also reserves the right to reject any or all bidder should it be so necessary at any stage, without giving any notice or assigning any reason. The decision of Rourkela Municipal Corporation in this regard shall be final and binding on all.

Sd/-
Commissioner
Rourkela Municipal Corporation

CHAPTER-1
INSTRUCTIONSTOBIDDER

A. GENERAL

1.1 Definitions:

- (a) “Authority” means the Urban Local Body with its office at Rourkela Municipal Corporation, Rourkela represented by its Municipal Commissioner or his authorised representative.
- (b) “Bidder” means any entity as defined in the RFP that provides the services to the Authority under the contract. The term Service Provider/Agency/Operator, used in the bid document interchangeably would mean the bidder.
- (c) “Contract” means the contract signed by the parties along with all attached documents listed in the Bid Document
- (d) “Day” means a calendar day.
- (e) “Fleet” shall mean Two nos. of Cesspool vehicles procured by Authority, whose right to use is given to the Operator by Authority for the purposes of undertaking septage collection and transportation in the town, in accordance with the terms of this Agreement.
- (f) “Government” means the Government of Odisha.
- (g) “Personnel” means professionals and support staff provided by the bidder and assigned to perform the services in full or in any part thereof.
- (h) “CC” means conditions of contract as laid down at chapter 3 of the bid document.
- (i) “RFP” means Request for Proposal and is the document which provides bidder all information needed to prepare their proposals.
- (j) “Service/Services” means the work performed by the bidder / service provider pursuant to the Contract. Project and service are interchangeably used in this document.
- (k) “Service area” means the area defined in clause 3.6 of this RFP
- (l) “Terms of Reference” (ToR) means the document included in the bid document at chapter-2, which explains the objectives, scope of work, activities, tasks to be performed, time line and deliverables of the assignment.

1.2 Background

The ULB proposes to undertake desludging of septage from Households and commercial establishments. To undertake management of septage, the ULB intends to select an operator to carry out fleet management of Cesspool vehicles towards desludging of septage, collection & transportation of septage collected to treatment/disposal facility designated by the ULB. The private operator(s) will have to deploy staff and carryout operation and maintenance including fuel charges in order to collect and transport septage from each household and all commercial establishments in the area designated by the ULB through Two nos. of Cesspool Vehicles procured by the ULB. It is envisaged that each vehicle has to provide service to minimum six applicants per day or the number of application logged, whichever is less. The technical specification of the Cesspool vehicles procured for the purpose is given in **Annexure-1** of this RFP.

With the objective of providing best sanitary conditions to the citizens, the ULB will carry out a transparent competitive bidding process for finalization of operator (s), who shall be responsible for delivering services as specified in the ToR.

1.3 Location

The service shall be performed in the geographical area of the ULB and neighbouring rural area as decided by the ULB from time to time.

1.4 BID description

Rourkela Municipal Corporation intends to engage agencies through an open competitive bidding process in accordance with the procedure set out herein.

In accordance with the provisions, the Operators are required to be engaged to carry out fleet management of Cesspool vehicles towards desludging of septage, collection & transportation of septage to treatment facility.

1.5 Service Period

The Agency shall be responsible for collection & transportation of septage for **7 (seven) year**.

1.6. Site visit and Due diligence by Bidder

1.6.1 Bidder is encouraged to gather full information about the assignment, the local conditions, applicable law and any other relevant information, before submitting the Bid Document, by paying a visit to Rourkela Municipal Corporation area.

1.6.2 Bidder can meet the Municipal Authorities during office hours on any working day prior to submission of the Bid to gather information about the project.

1.7. Availability of Bid Document

Bid Documents can be downloaded from the Govt. website: www.odisha.gov.in or can be purchased from the addressee set out in Clause 1.9.

1.8. Validity of the Bid

1.8.1. The Bid shall be valid for a period of 180 (one hundred eighty) days from the due date of submission of Bid Documents.

1.8.2. A Bidder agreeing to the validity extension request will not be permitted to modify his bid, but will be required to extend the validity of his EMD.

1.9. Bid Data Sheet

Availability of Bid Document	Bid Documents can be downloaded from the Govt. website: www.urbanodisha.gov.in or rmc.nic.in
Cost of Bid Document	Rs. 5,000.00 + 5% VAT = Rs. 5,250.00 (Rupees Five Thousand Two hundred fifty Only) which is non-refundable.
Earnest Money Deposit	Rs. 25,000/- (Rupees Twenty –Five thousand Only)
Downloading of Bid Document	From 11 am on 23.12.16 to 1 pm on 23.1.17
Date of Pre-bid meeting	11 am on 30.12.16
Place of pre-bid meeting	Conference hall of Rourkela Municipal Corporation located at Udit Nagar, Rourkela
Last Date of Receipt of filled	Up to 5 pm on 23.1.17

up Bid Document	
Date & Time of Opening of Techno Commercial Bid	At 11 am on 24.1.17
Date & Time of opening of price bid	At 11 am on 31.1.17
Address for Communication	The Commissioner, Rourkela Municipal Corporation Address: Udit Nagar, Rourkela Phone : 0661-2500388 Fax : 0661-2500388 Email: rourkelamunicipality@gmail.com (All communications, including the envelopes, should contain the following information, to be marked at the top in bold letters: - “BID DOCUMENT FOR SELECTION OF OPERATOR TO CARRY OUT FLEET MANAGEMENT OF CESSPOOL VEHICLES TOWARDS COLLECTION & TRANSPORTATION OF SEPTAGE GENERATED IN RMC”.)

1.10 Eligibility

The bidders are eligible to participate in the bid subject to fulfillment of both technical & financial eligibility criteria as detailed below. The bidder shall submit credential certificate from the Authority in support of proof of their eligibility, along with bid.

Technicaleligibilitycriteria

- a) A bidder may be a Company/trust/society/NGO/government owned entity/ individual/ proprietary registered under relevant statute and in operation for at least one year.
- b) Bidders should be in the business of managing vehicle fleet (2 or more four wheel vehicles or at least one cesspool vehicle) either self-owned or hired for at least one year during the last 5 years. Evidentiary proof in the form of contract/ document for carrying out business to be enclosed with bid.
- c) The bidder should have a valid PAN and Service tax registration certificate

Financialegibilitycriteria

- a) The bidder should have minimum annual turnover of Rs. 5 lakhs (Rupees Five lakh) in any one year during last 3 years. The bidder has to provide a certificate from a certified chartered accountant/ statutory auditor in support of the turnover.
- b) The bidder should have positive net worth. A certificate in support of the same from a chartered accountant/ statutory auditor has to be submitted by the bidder.
- c) Bidder should bid for ALL cesspool cleaning vehicles put to tender

1.11 Other Requirements:

- 1.11.1. Even if the bidder qualifies in technical & financial criteria, his bid shall be summarily rejected if the bidder is found to have misled or made false representation in the form of any of the statements submitted in proof of the eligibility and qualification requirements.

- 1.11.2. The bid shall also be summarily rejected if the bidder has been blacklisted/ barred by Authority in the past or has a record of non-performance such as absconding from work, works not properly completed as per contract, inordinate delays in completion or financial failure.
- 1.11.3. In addition to the above, even during the execution of the work, if it is found that the service provider produced false/ fake certificates in his bid, he will be blacklisted and the contract may be terminated at the discretion of Authority.

1.12 List of document to be submitted along with the bid

- a) Bid document cost (for RFP downloaded from website) and Earnest money deposit
- b) Work experience of in business of managing vehicle fleet (2 or more four wheel vehicles or at least one cesspool vehicle) either self-owned or hired for at least one year during the last 5 years as per **schedule 3**.
- c) PAN & Service tax registration certificate copy
- d) Bidders legal status document (certificate of incorporation)
- e) Audited Profit and Loss & Balance Sheet in support of financial eligibility criteria or a certificate from statutory auditor or a certified charter accountant.
- f) Bidder's net worth certificate from statutory auditor or a certified charter accountant.
- g) Income Tax return for the last 3 years
- h) Affidavit as per **schedule 2**
- i) Bidders detail as per **schedule 3**

1.13 Certificates/Documents attestation & verification:

All Certificates/Documents submitted should be self-certified and original shall be produced as and when required to verify the copies of statements and other information furnished along with bid. Failure to produce original documents in time will lead to disqualification.

1.14 Cost of Biding:

The bidder shall bear all expenses associated with the preparation and submission of bid.

B. BID DOCUMENTS

1.15. Bid Documents:

- 1.15.1. A set of Bid Documents comprising of the General & Techno-Commercial Bid and the Price Bid together with all addenda/clarification thereto, shall be available in the Govt. website: www.odisha.gov.in and www.urbanodisha.gov.in
- 1.15.2. The intending bidders can use the downloaded bid documents provided that the cost of bid document amounting to Rs.5, 000/- + 5% VAT =Rs.5,250/- (Rupees Five Thousand Two hundred Fifty) only has to be furnished with the bid document in shape of Bank Draft drawn in favour of '**the Commissioner**', Rourkela Municipal Corporation payable at Rourkela in a separate cover marked as "**COST OF THE BID DOCUMENTS**" along with General & Techno-Commercial Bid in Cover-A. The Demand Draft should be made within the last date of down loading of bid document failing which the bid will be liable for rejection.

1.16. Pre bid meeting and Clarification on Bid:

A pre bid meeting with prospective bidders for clarification of queries will be held in the conference hall of Rourkela Municipal Corporation on the date and time specified in the bid data. The bidders can also seek clarification on bid by communicating their queries/suggestions to the Commissioner, Rourkela Municipal Corporation, on or before the date of pre bid meeting. The Authority shall take decision on the clarifications, if necessary, communicate the same to the bidders/ publish the same in Authority website. The Authority may amend the RFP document and extend the dead line for the submission of bids by issuing an Addendum, if required. These decisions and conditions shall be binding on all bidders & the same shall also be a part of the bid document. It is to be noted that any bid not conforming to the bid requirement and the decisions taken as per the pre bid minutes or having any additional condition shall be summarily rejected.

C. PREPARATION OF BID

1.17. Language of the Documents:

All documents relating to the Bid shall be in the English language.

1.18. Documents Comprising the Bid:

- (a) General & Techno-Commercial Bid (Cover A of Bid Document)
- (b) Price Bid (Cover B of Bid Document)
- (c) All documents stipulated at Clause-1.12 & elsewhere in the RFP.

1.19. Preparation of bid:

1.19.1. Proposal should be written in English language. The bidder is expected to examine in detail the documents comprising the bid document. Material deficiencies in providing the information requested may result in rejection of a proposal.

1.20 The Financial offer:

1.20.1. The services shall be provided as described & elaborated in the terms of reference (ToR) at Chapter - 2. The bidders shall quote their offer **“per vehicle per Trip”** basis (hereafter called **“Price bid”**) for the services in the prescribed format in schedule 5 of the bid document. Price bid in no other format shall be accepted.

1.20.2 The rate quoted by the Bidder shall remain **firm** till the validity period or extension thereof.

1.21 Earnest Money Deposit:

1.21.1. The Bidder shall furnish Earnest Money Deposit (EMD) for an amount of **Rs. 25,000/- (Rupees Twenty-Thousands Only)**, along with the **General & Techno-Commercial Bid in cover A** of the bid document. This EMD must be in the form of Demand Draft / Bankers Cheque in favour of **“Commissioner, Rourkela Municipal Corporation payable at Rourkela.**

1.21.2. The EMD of unsuccessful bidders will be discharged / returned as promptly as possible and latest by the 15th (fifteenth) day from the signing of the Agreement with the Successful Bidder.

1.21.3. The earnest money deposited by the bidders will not carry any interest and it will be dealt with as provided in the conditions stipulated in the bid.

1.21.4. The EMD shall be forfeited if a successful bidder fails to sign the agreement for whatever reason, or a bidder withdraws the bid during the validity period of bid or modifies the bid in manner not acceptable to authority, or any other reason specified in the bid document.

1.22 Signing of Bids:

1.22.1 **The bidder's authorised signatory is required to sign in all the pages of bid document.**

D. SUBMISSION OF BIDS

1.23 Sealing and Marking of Bids:

1.23.1. The signed bid documents shall be submitted in sealed covers as described below.

1.23.2. The sealed Cover (Cover-A) shall bear the following identification marks.

- a. **GENERAL & TECHNO-COMMERCIAL BID**
- b. RFP No. _____
- c. Name of Work: "Selection of Operator to carry out fleet management of cesspool vehicles towards collection & transportation of septage generated in Rourkela town".
- d. Name & Address of the Bidder: _____

1.23.3. The sealed Cover (Cover-B) shall bear the following identification marks.

- a. **PRICE BID**
- b. RFP No. _____
- c. Name of Work: "Selection of Operator to carry out fleet management of cesspool vehicles towards collection & transportation of septage generated in Rourkela town".
- d. Name & Address of the Bidder: _____

1.23.4. The sealed covers A and B shall be super scribed in another cover 'C' and shall bear the following information.

- a. RFP No. _____
- b. Name of Work: Bid documents for "Selection of Operator to carry out fleet management of cesspool vehicles towards collection & transportation of septage generated in Rourkela town".
- c. DO NOT OPEN BEFORE _____

1.23.5. If the bid is received unsealed or in damaged condition such that contents are lost or damaged, the Authority will assume no responsibility for any such the misplacement or premature opening of the bid. Such a bid shall be summarily rejected.

1.24 Deadline for Submission of Bids:

1.24.1 Bids shall be received in the office of the officer designated by the date & time mentioned in the bid data. The bid may be submitted by Hand delivery/Registered Post/ speed post only at the specified address mentioned above. The risk and responsibility for loss, delay, damage to the seal etc. shall be of the bidder. Bid Documents submitted by fax, telex, telegram or e-mail shall not be entertained.

E. BID EVALUATION

1.25. Bid Opening:

1.25.1. The Authority will open the bids (cover C and then cover A containing General & Techno-Commercial Bids) pursuant to Clause 1.23, in his office at the date & time mentioned in the bid data, in the presence of the bidders or their authorized representatives who wish to attend.

1.25.2. A bid shall be rejected at this stage if,

- a) Price Bid is enclosed along with General & Techno-Commercial Bid in cover A.
- b) Cost of bid document (wherever applicable) as per clause 1.15 is not enclosed with General & Techno-Commercial Bid in cover A.
- c) EMD as specified at clause 1.21 is not submitted along with the bid.
- d) Sealed cover B containing Price Bid is not enclosed.
- e) All other required documents are not provided.

1.25.3. The cover "B" shall be opened only for those bidders who qualify in the General & Techno-Commercial evaluation. The date of opening of financial bid (cover "B") of the qualified bidders will be **11 am on 31.1.17.**

1.26. Clarification on documents submitted by bidders:

To assist in the scrutiny, evaluation and comparison of the bids, the Authority may ask bidders, individually for clarification on their bid document. The request for clarification and response shall be in writing or by mail. However, no change in the bid amount/ rate or substance shall be sought, offered or permitted by the Authority during the evaluation of the bid.

1.27 Evaluation of General & Techno-Commercial Bid:

1.27.1. The General & Technical Proposal shall be evaluated on the basis of minimum eligibility criteria in clause 1.10 & other conditions of bid document.

1.27.2. Financial bid of the selected bidders as above will be opened & evaluated.

1.28 Evaluation of Financial bid:

1.28.1. After the Technical evaluation is completed, the Authority shall inform in writing to the selected qualified bidders, the date, time and location for opening the Financial Proposals (Price Bids). The Financial Proposals of unqualified bidders will be returned unopened after completion of the selection process.

1.28.2. Financial bids shall be opened in presence of the bidder/their authorized representatives on scheduled date & time. The authorized representative should bring their authorization letter while attending opening of price bid. The bidder with the lowest price bid may be invited for negotiations, if considered necessary.

1.28.3 If the evaluation committee feels the rate quoted by the successful bidder is not reasonable even after negotiation, the Authority may cancel the bid process.

F. AWARD OF CONTRACT

1.29 Authority's Right to accept and to reject any or all Proposals

Notwithstanding any of the provisions above, the Authority reserves the right to accept or reject any bid, annul the bidding process, reject all bids at any time, at any stage prior to the award of contract without assigning any reasons thereof.

1.30. Notification of Award:

Authority will notify the successful bidder by fax, letter or in some other written form, that his bid has been accepted. This letter, hereinafter called "Letter of Award (LoA)", will constitute notification of the intention of the Rourkela Municipal Corporation "**Authority**" to enter into a contract with the bidder for the services under this contract, the bid rates which apply to this contract and the performance security amount to be deposited by the successful bidder.

1.31. The bidder is expected to commence the assignment within 15 days of signing of agreement.

1.32 Upfront Fees

Within 15 (Fifteen) days of the receipt of LOA from Authority the successful Bidder shall have to pay a **non-refundable upfront fee** for an amount equal to Rs.1,50,000/- (Rupees one lakh fifty thousand only) per vehicle for obtaining the right to operate and maintain cesspool vehicle provided by Authority for a period of seven years. The upfront fees shall be paid, in the shape of Bank draft, in favour of Municipal Commissioner, Rourkela Municipal Corporation payable at Rourkela.

1.33 Performance Security against the service

1.33.1 Within 15 (Fifteen) days of the receipt of LOA from Authority the successful Bidder shall furnish the Performance Security for an amount equal Rs. 100,000/- (Rupees One Lakhs Only) per vehicle, in the shape of Bank demand draft / Bank Guarantee, in favour of Municipal Commissioner, Rourkela Municipal Corporation payable at Rourkela. The BG shall be as per Performance Security Format at schedule 4 and shall be of minimum 3 years, renewable after that for next 2 years and valid till 3 months beyond the contract completion date. The ULB shall create a new account with bank to deposit in it the amount deposited in form of DD and the same account shall be used to revoke future penalties on operator, if required. The principal amount and the interest accrued under this account shall be returned back to operator within 3 months of the contract period expiry after deducting all penalties, if any. In the event of request from the successful bidder the Earnest Money Deposit can be adjusted towards the performance security.

1.33.3 Failure of the successful Bidder to submit the above-mentioned Upfront Fees, Performance Security or sign the Contract within the stipulated time shall constitute sufficient grounds for the annulment of the award/LoA, rejection of the bid and forfeiture of the EMD. In such an event the bidder will have no claim on the Authority and Authority has the option of inviting next ranked qualified Bidder for negotiation & award, however at the same price as quoted by successful bidder or invite fresh bid in which the present successful bidder will not be permitted to participate.

1.34. Signing of Agreement:

On receipt of the LoA, the successful bidder shall sign the agreement with the Authority within 15 (Fifteen) days from the date of issue of LoA along with completion of all requirements to sign the contract as per this RFP document. This RFP will form a part of the agreement.

CHAPTER-2
TERMS OF REFERENCE

2.1 Scope of Work

The objective of this contract is to ensure an efficient and effective septage management system to achieve the service outputs and standards as specified in the ToR.

The scope shall comprise of, but not limited to, the following broad components within the service area for existing customers as well as future customers as a result of new development & growth.

1. Deployment of resources as per field requirements
2. Desludging of septage, collection and transportation to designated location
3. Complaint registration and redressal
4. Implementation of tracking & monitoring mechanism

The total scope of work is divided into following Parts.

2.1.1 Part A - Resource Deployment as per field requirements

The operator shall be

- responsible for maintenance of the vehicles and shall repair/ replace spare parts immediately during the period of Contract. It may be noted that major repair for first 3 years shall be provided by Tata Motors (vehicle supplier) as a part of their contract, which will result in to lower repair maintenance cost during those years.
- deploy adequate manpower and monitoring mechanism for enabling effective and successful operation and maintenance;
- shall deploy adequate manpower for transportation operations. However, the Operator shall comply with all the provisions of the laws regarding deployment of labour under the contract. It shall be the responsibility of the Operator to implement the provisions of Abolition of manual scavengers Act, The Minimum Wages Act, the Workmen's Compensation Act and Provident Fund Act etc.
- have valid labour license, EPF and ESI registration and submit it to ULB;
- provide uniforms for the workers with the name of ULB. The staff shall wear clean uniforms during all periods of operation. Operator may also inscribe his company name along with ULB's name;
- ensure deployed staff carries an Identity Card with photo during working hours. The driver engaged by the Operator shall have a valid driving licence as desired for the specific vehicle;
- be responsible for health and safety of all his workers. The safety gears should be worn during working hours;
- have to ensure adequate insurance for the vehicles and its manpower. The insurance will have to be in the name of the ULB but cost for the same has to be paid by the operator;
- Any lack of workforce shall be considered as Operator's deficiency. The Operator shall ensure sufficient staff for different operations under this Contract. No additional payments will be made, if the increase in the work force and equipment are needed at a later stage to meet the requirement of work. The Operator may, at his own cost and responsibility, increase workforce and equipment in order to meet the requirement of work during peak seasons and festive occasions. One vehicle is expected to provide service to at least 6 nos. of applicants in a day or number of applications whichever is less.

2.1.2 Part B – Desludging of septage, collection and transportation to treatment facility

The operator shall

- be responsible for desludging of septic tanks from all residential areas, all commercial/office areas, hospitals, hostels, apartment complexes in the service area;
- have to transport the collected septage to the identified treatment facility as suggested by ULB;
- have to provide its services on all 365 days a year irrespective of any National Holidays or local holiday, Festivals and Sundays;
- ensure that there is no spillage/leakage of septage during transportation;
- take precautions to avoid inconvenience, damage, destruction or disturbance to any third party's right and properties;
- Collect user charges from customers at the quoted and approved rates for desludging of septage;-
The rate and help line contact number is to be displayed in the cesspool vehicle clearly;
- Issue of receipt to customer with the name of ULB on behalf of ULB.
- collect the copy of desludging request register from the “Septage Cleaning Request Registration Centre” (SCRRC), a centre created by ULB to register the desludging request and complaints of citizen w.r.t to septage management for required action;
- ensure uninterrupted communication system between the SCRRC and the supervisory field staff of the operator. Operator/ authorised representative has to communicate with SCRRC on daily basis, and collect copy of the Register daily at 5 PM;
- ensure services to customer request for desludging strictly as per the Serial No. maintained in the Register for desludging request within 3 days. In case, any request remains unaddressed even after 3 days of the scheduled time agreed between Authority and Operator then the Authority will have the right to demand an explanation. In so doing the Authority will factor in whether at least 18 nos. of desludging operation have been done by the Agency in 3 days by one vehicle and unaddressed serial number is beyond 18.
- ensure redressal of customer complaints such as incomplete service, spillage in the house or street etc. within the specified timeline as per the complaints Register serial maintained by SCRRC within
- 48 hrs. In case, complaint remain unaddressed even after forty-eight (48) hours of the scheduled time, then the Authority will have the right to demand an explanation or resolution of the complaint to their satisfaction;
- The quoted and approved rate is valid for providing service to areas within the ULB geographical limit. Service requests from areas beyond this may be attended after completing all pending works within ULB, with a rate mutually agreed between the Agency and applicant. Mandatory receipt has to be given in such cases also and ULB intimated on such trips with case-wise cost collected every month.
- Maintain “Register of desludging request and complaint redressal” containing Name of owner, address, location, dimensions, date of desludging/complaint redressal and share the same with ULB by
- 3rd of every month
- be required to submit a monthly complaint and redressal record to the Authority. Categorization of type of complaints

- Number of complaints during the previous month
 - Percentage of complaints addressed in forty-eight (48) hours
 - Percentage of complaints not addressed in forty-eight (48) hours and reasons therefore
 - Major unresolved complaints if any
- Undertake community interaction and consultations at regular intervals along with ULB officials.

2.2 Service delivery compliance

- Ensure safe transportation and unloading of the collected Septage at the designated site allocated by
- ULB.
- All vehicles shall have permanent name plates indicating the ULB's name and helpline number for complaint redressal system.
- All vehicles should comply with the fuel emission norms as per the applicable Laws.
- The drivers of the transportation vehicle shall carry the driving license/ registration certificate and all other documents of the vehicle as per requirements of RTO and applicable Laws.
- Cleaning and disinfection of the transportation vehicles must be carried out on a daily basis.

2.3 Service Delivery Schedule

A tentative time schedule/work schedule is indicated below.

Activities	Time Schedule
Desludging of septage from various houses/ establishments	6:00 AM to 6:00 PM

- The Operator shall ensure timely service of all the requests/ complaints forwarded by SCRRC.
- The Operator shall ensure operations on all 365 days in a year.

2.4 Service delivery performance Criteria

The Operator has to achieve the following performance levels.

Parameter Description	Time allowed to service delivery	Non-compliance penalty
Desludging of septage	Within 3 days from the service request forwarded by ULB to Operator if total applicants are 18 or less in 3 consecutive days.	25% of trip cost (as decided by ULB) for every day delay by operator in resolving the service request after the allowable time to perform the service. Maximum up to trip cost.
Compliant Redressal	within 48 hrs of the complaint request forwarded by ULB to Operator	10% of per trip cost (as decided by ULB) for every day delay by operator in resolving the complaint after the allowable time to resolve the complaint. Maximum up to 50% of trip cost.

Authority can conduct service delivery assessment and customer satisfaction sample survey within the service area at regular interval to assess the performance.

CHAPTER-3
DRAFT CONTRACT

This CONTRACT (hereinafter called the "Contract") is made the [day] of the month of [month] year [], between, on the one hand, <<Insert name of ULB>> (hereinafter called the "Authority") and, on the other hand, [name of Bidder] (hereinafter called the "Operator").

WHEREAS

1. The Authority vide its Request for Proposal document dated _____, 2016 (herein the 'RFP') invited competitive proposals (the 'Bids') for selection of a successful bidder, *inter alia*, for appointment of the successful bidder as an Operator to carry out fleet management of Cesspool vehicles towards collection & transportation of septage generated in town on the terms and conditions contained therein;
2. The Bidder submitted its proposals for the aforesaid work, whereby the Bidder represented to the Authority that it had the required expertise, personnel and resources, and in the said proposals the Bidder also agreed to provide the Services to the Authority on the terms and conditions as set forth in the RFP and this Contract; and
3. The cost of the services will be as per the terms and condition fixed by the Authority in respect to the offer made by the Bidder.
4. The Authority, on acceptance of the aforesaid proposals of the Bidder, awarded the work to the successful Bidder vide its Letter of Award No. _____ dated _____, (the "LOA"); and
5. The Selected Bidder has, in compliance with the terms of the LOA and as per the RFP, made the following payments on behalf of the to the Operator to Authority:
 - a) An non-refundable upfront fees, in the shape of Bank draft, in favour of Municipal Commissioner, Rourkela Municipal Corporation, payable at Rourkela, is sued by _____, _____, [name & address of the issuing bank (a scheduled/nationalized bank having a local branch in Bhubaneswar)] for an amount equal to Rs. _____ (Rupees _____ only), as upfront fees for _____ no. of vehicles @ 1.5 Lakh per vehicle towards its obligation under this Contract Agreement.
 - b) an irrevocable, unconditional Performance Security, in the shape of Bank draft/ Bank Guarantee Bank in favour of Municipal Commissioner, Rourkela Municipal Corporation, payable at Rourkela for an amount of Rs. 1,00,000 (Rupees One lakh only) per vehicle as Performance Security, for the performance of the obligations of the Operator under this Agreement (herein called the 'Performance Security'). This Performance Security shall be released in line of this agreement.
6. In pursuance of the LOA and furnishing of the upfront fees and performance security for the performance of its obligations under this Concession Agreement, the parties have agreed to enter into this Contract Agreement.

NOW THEREFORE, the parties hereto hereby agree as follows:

1. The following documents attached hereto shall be deemed to form an integral part of this Contract:
 - (a) Conditions of Contract

- (b) RFP document containing Chapter -I to Chapter -2
- (c) Additional Corrigendum, if any
- (d) Financial proposal of bidder
- (e) Form of performance Bank Guarantee
- (f) Letter of Award
- (g) Any other document specified.

2. The mutual rights and obligations of the Authority and the Bidder shall be as set forth in the Contract, in particular:

- (h) The Bidder shall carry out the assignment in accordance with the provisions of the Contract; and
- (i) The Authority shall make payments to the Bidder in accordance with the provisions of the Contract.

NOW, THEREFORE, in consideration of the foregoing and the respective covenants and agreements set forth in this Agreement, the receipt and sufficiency of which is hereby acknowledged, and intending to be legally bound hereby, the Parties agree as follows:

3.1. Law Governing the Contract and the Jurisdiction of the Contract:

The contract, its meaning and interpretation and the relation between the parties shall be governed by the applicable law and it shall be subjected to the jurisdiction of the courts inside Odisha.

3.2. Effectiveness of Contract:

This contract shall come into force and effect on the date of execution of Contract i.e., signing of agreement and the date of commencement of operation shall be referred as **Effective Date**.

3.3. Commencement of Services:

The Operator shall begin carrying out the services, within 15 days of signing of contract. The Authority shall hand over the service area or part of it, as and when the Operator demonstrates its preparedness to deliver the service, but no later than the stipulated 15 days for the entire zone.

3.4. Service responsiveness: As defined in scope of work under chapter 2 of RFP.

3.5. Service Period

7 (seven) years from the effective date of this agreement. After the service period the vehicle will be sold at a depreciated value of Rs 4.7 lakh and the operator would get first right to own the vehicle.

3.6 Service Area

The service area shall be the geographical boundary of ULB. However, the operator may give service to areas beyond the geographical boundary of ULB, after completing all pending works within ULB. The operator may charge different pricing (with receipt) to these areas mutually agreed between the agency and applicant.

3.7. Modification:

Modification of the terms and conditions of this Contract including any modification of the scope of the services may only be made by written agreement between the parties.

3.8 Mobilisation Advance

No mobilisation advance is payable to the Operator.

3.9. Sufficiency of Deployment

- a. The Operator shall ensure adequate deployment of manpower, accessories, tools & tackles, manpower, monitoring system and grievance redressal mechanism for proper, timely and efficient delivery of service. The Operator should ensure quality and timely deployment of resource.

3.10. Obligation of Authority

- a. **Nodal Officer:** The Authority shall appoint a nodal officer to oversee the assignment and co-ordinate with the Operator and to address issues associated with the service assignment.
- b. **Equipment to be provided by Authority:** Two nos. Rourkela Municipal Corporation, Rourkela of Cess- pool Vehicles shall be provided by the Authority to operator at the time of team mobilisation but not later than 15 days of signing of contract.
- c. The Authority shall establish a “Septage Cleaning Request Registration Centre (SCRRC)” to register customer requests for desludging of septic tanks. This centre shall also work as a customer complaints redressal centre to address customer complaints in line with established standard protocol.
- d. The SCRRC shall be equipped with a telephone/mobile helpline number to enable registration of requests/ complaints by customers. The timing for registration of request and complaints shall be between 10 am to 5 pm (on working days).
- e. The SCRRC shall be responsible for making a daily/ weekly monitoring so that timely desludging is done as per the serial maintained in the Register. Jumping of the serial will be considered as violation of performance by the Operator. In case of violation by jumping the serial no., penalty will be calculated as trip cost times the nos. of application jumped. However, if the site is inaccessible to the cesspool vehicle, the operator can serve the next applicant in queue. Inaccessibility of site/septic tank will be verified by the Authority.
- f. It shall be responsibility of ULB to ensure that existing vehicles of ULB in operational condition are put to service. After allocating six applications per day to the new vehicle, load can be allocated to the existing vehicle. While allocating daily trip load to existing vehicle, the per day average trip load performed by the existing old vehicle in past one month should be assessed and that no. of trips per day can be allocated to the existing vehicle.

3.11. Subletting

Subletting of work in part or full is not permitted without prior written approval of the Authority.

3.12. Deficiency in Service

In case, Authority observes deficiency in services in accordance with ToR and/or non-compliance to Authority instructions, the Authority reserves the right to

1. Intervene in the matter to remedy the deficiency at the cost of the Operator to be recovered from his performance security or other dues.
2. Terminate the contract as per the provision of the contract

Failure of the Operator to act upon the instruction within an agreed/justified time frame shall also result in deficiency of service. In no case the instructions shall be beyond the scope of the contract or applicable rules.

Communication in form of e-mail, instruction note or telephonic/mobile (in case of emergency) shall be deemed to be adequate, just and sufficient in such cases. In the event of intervention by the Authority, the same shall be properly communicated to the Operator.

3.13. Penalty

In case the Operator fails to achieve the service delivery performance criteria detailed at chapter 2, the Authority shall impose penalty as specified in the performance criteria table in Clause 2.4. The operator shall be required to deposit the penal charges as calculated by Authority at the end of every month, if fails do so in first 7 days of following month and then the same shall be recovered from performance security or other dues.

Penalty can be waived in part or full under situation of adverse conditions causing hindrance for

service delivery, to be properly justified by the service provider to the best satisfaction of the Authority. The quantum of waiver shall be at the sole discretion of the Municipal commissioner.

In case of mechanical shut down of vehicle(s) or some sudden or unprecedented situation beyond the control of operator which may result into hindrance to service fulfillment, operator shall inform the Authority in timely manner to avoid such imposition of penalties.

3.14. Termination of Contract

3.14.1 By the Authority:

The Authority may give not less than thirty (30) days written notice of termination to the Operator (except in the events listed in Para (f) below, for which there shall be a written notice of not less than sixty (60) days). Such notice can be given after the occurrence of any of the events specified in paragraph (a) through (e) below to terminate this contract.

- a) If the Operator under achieves any item of performance criteria specified at chapter 2 by less than 50% of the target.
- b) If the Operator fails to remedy a failure in the performance of their obligations within the time specified by the Authority or within such further period as the Authority may have issued notice in writing, for at least three times to this effect.
- c) If the Operator becomes insolvent or bankrupt or enters into any agreements with their creditors for relief of debt or take advantage of any law for the benefit of debtors or go into liquidation or receivership whether compulsory or voluntary;
- d) If the Operator submits to the Authority a false statement which has a material effect on the rights, obligations or interests of the Authority and which the Operator knowingly raised.
- e) If, as a result of Force Majeure, the Operator is unable to perform a material portion of the services for a period of not less than sixty (60) days or;
- f) If the Authority, in its sole discretion and for any reason whatsoever, decided to terminate this contract.

3.14.2 By the Operator:

The Operator may, by giving not less than thirty (30) days written notice to the Authority, such notice to be given, if, as a result of Force Majeure, the Operator is unable to perform a material portion of the services for a period of not less than sixty (60) days.

3.15. Forfeiture of Performance Security

- a) The performance security may be forfeited, if the bidder does not start operations as per provisions of ToR within stipulated 15 days from the effective date or any such date allowed by the Authority.
- b) If during the term of this contract, the Operator is in default of faithful performance of his obligations under this contract, the Authority shall, without prejudice to its other rights and remedies herein or as per the Applicable Law, be entitled to appropriate the performance Security.

3.16. Refund of Performance Security

The Performance Security will be returned to the Operator within three months of completion of the Contract period. The Performance Security with accrued interest shall be refunded. The Upfront Fees is non-refundable.

3.17. Settlement of Disputes:

a. Amicable settlement:

The parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this contract or the interpretation thereof. The dispute shall be referred to H&UD department, Govt. of Odisha whose decision shall be final.

b. Dispute Settlement:

Disputes which cannot be settled amicably, may be taken up by either party for settlement in accordance with the Applicable Law within jurisdiction of courts of Odisha.

c. Continuance of service during dispute settlement

Occurrence or Reference of a dispute shall not annul the contract. The Operator shall continue to provide service and the Authority shall continue to monitor as per their contractual obligation during the dispute settlement process

3.18. Force Majeure Event

For the purpose of this contract, “Force Majeure” means an event which is beyond the reasonable control of a party, and which makes a party’s performance of its obligations impossible or so impractical as reasonable to be considered impossible in the circumstances.

3.19. Counterparts

This Agreement may be executed **in two counterparts**, each of which when executed and delivered shall constitute an original of this Agreement but shall together constitute one and only the Agreement.

IN WITNESS WHEREOF THE, PARTIES HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN.

SIGNED SEALED AND DELIVERED

For and on behalf of the Authority by:

For and on behalf of Operator by:

(Signature)

(Signature)

(Name)

(Name)

(Designation)

(Designation)

In the presence of:

1)..... and 2)

Schedule 1

CoverLetter

Ref:

Dated:

To

The Commissioner, Rourkela Municipal Corporation, Rourkela

Address: Udit Nagar, Rourkela

Sub: Selection of Operator to carry out fleet management of ALL Cesspool vehicles put to tender towards collection & transportation of septage generated in Rourkela town, Odisha

Dear Sir,

With reference to your Invitation for Bid no. _____ dated _____, we, having examined the bid document and understood its contents, hereby submit our bid for the aforesaid Project.

- 1 The Bid is unconditional.
- 2 All information provided in the Bid Document and Schedules is true and correct and all documents accompanying Bid Document are true copies of their respective originals.
- 3 We shall make available to Authority any additional information it may find necessary or require to supplement or authenticate the Bid Document.
- 4 We acknowledge the right of Authority to reject our Bid Document without assigning any reason.
- 5 We declare that:
 - a. We have examined and have no reservations to the conditions and terms laid down in the Bid Document, including any Addendum issued by Authority.
 - b. We do not have any conflict of interest in accordance with provisions of the Bid Document;
 - c. We have not directly or indirectly or through an agent engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice.
- 6 We understand that Authority may cancel the Bid Process at any time and not bound to accept the bid received without incurring any liability to the bidder, in accordance with provisions of the bid document.
- 7 We undertake that in case due to any change in facts or circumstances during the selection process, we shall intimate Authority of the same immediately.

- 8 We hereby irrevocably waive any right which we may have at any stage at law or howsoever otherwise arising to challenge or question any decision taken by Authority in connection with Bid Process, in respect of the above-mentioned Assignment and the terms and implementation thereof.
- 9 We have studied all the document carefully and also surveyed the Project site. We understand that, we shall have no claim, right or title arising out of any documents or information provided to us by Authority or in respect of any matter arising out of or concerning or relating to the Bid Process including the award of Assignment.
- 10 We agree to keep this offer valid for 180 days from the Bid Document Due Date specified in the RFP.
- 11 We agree and undertake to abide by all the terms and conditions of the Bid Document.

In witness, thereof, we submit this Bid Document under and in accordance with the terms of the bid document.

Date and Place:

Yours faithfully,
(Signature of the Authorised Signatory)

SCHEDULE-2
AFFIDAVIT
(In non-judicial Stamp Paper)

I/We _____ (name & address of bidder(s)) do hereby certify, affirm and undertake as follows

1. That all information furnished is true and agree that my / our Bid shall be rejected if I / we am / are found to have misled or made false representation in the form of any of the documents, Schedules or Supplementary information and / or statements submitted in proof of the eligibility and qualification requirements or if I / We have a record of poor performance such as absconding from work, works not properly completed as per contract, inordinate delays in completion, financial failure.
2. That we will be disqualified for bidding further services with Authority, if I/We withdraw my/our Bid without a valid reason (to be decided by the Authority competent to accept this Bid).
3. That no criminal cases are pending against me/us partners at the time of submitting the Bid.
4. That my / our Bid shall be rejected if any criminal cases are pending against me/us/partners of the firm at the time of submitting the Bid.
5. That if the history of litigation, criminal cases pending against me/us/Partners furnished by me/us is false, I/ We will agree by the action taken by the Authority without approaching any court whatsoever for redress. However, I/We shall be given suitable opportunity to offer my/our explanation before action is taken against me/us.
6. That all the addenda issued by the Authority have been received by me/us and incorporated in my/ our Bid.
7. That no near relatives are working with the Authority.
8. That we will keep an accurate system of accounts, records and furnish the same (including that of associates) and agree to reimburse to Authority any excess amount claimed by me / us over and above my / our entitlement as per relevant clause of the contract.

Dated this day of 20...

Signature of in the capacity of
duly authorized to sign the Bid for and on behalf of
.....

(Signature of the Authorised Signatory)

Signature of Witness:
Name of Witness:
Address of Witness:

SCHEDULE 3

Bidder's details

1. (a) Name:
(b) Country of incorporation:
(c) Address of the corporate headquarters and its branch office(s), in India:
(d) Date of incorporation and/or commencement of business (Please provide documentary evidence of incorporation):
(e) Category wise no. of employees with different Business Units
2. Brief description of the organization including details of its main line of business
3. Details of individual(s) who will serve as the point of contact/communication & authorized signatory of the organization:
 - (a) Name:
 - (b) Designation:
 - (c) Company:
 - (d) Address:
 - (e) Telephone number:
 - (f) E-Mail Address:
 - (g) Fax number:

4. Bidders/Members Statement

A statement by the Bidder and each of its Members (where applicable) disclosing material non-performance or contractual non-compliance in past projects, contractual disputes and litigation/arbitration in the last 5 years is given below (Attach extra sheets, if necessary):

5. Bidder's Experience

Please fill up the format below as relevant to Clause 1.10.

Detailsofrelevantexperience

SL. No	Name of Work/ Project	Description	Agency* and Date of Award/ Date of Completion	Registration No. & Type of Vehicles engaged	Remarks, if any

*Note: Copy of evidentiary proof from client should be submitted for above projects. In case of 4 wheel/ cesspool machine owned and self operated by the owner, who do not have formal work order(s) from agencies, Commercial Registration Certificate (RC) book copy of the vehicle(s) be submitted.

Date:

Place:

Rubber Seal of the Bidder/

(Signature of the Authorized Signatory)
(Name and designation)

In the capacity of _____ (position) duly authorized to sign this Proposal for and behalf of _____ (name of Bidder)

_____ (Address)

Firm's Name:

Schedule 4
BANK GUARANTEE FROM A TOWN FOR PERFORMANCE SECURITY

To

The Commissioner
Rourkela Municipal Corporation,
Udit Nagar, Rourkela

WHEREAS.....
.....(name and address of the Operator) (hereinafter called “the Operator”) has undertaken, in pursuance of contract no./LOA no..... dated..... to carry out fleet management of Cesspool vehicles towards collection & transportation of septage generated in town (hereinafter called “the contract”).

AND WHEREAS it has been stipulated by you in the said contract that the Operator shall furnish you with a bank guarantee from a scheduled / nationalized bank for the sum of specified therein as Performance Security for compliance with its obligations in accordance with the contract.

AND WHEREAS we have agreed to give the Operator such a bank guarantee.

NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the Operator up to a total of(amount of the guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring the Operator to be in default under the contract and without cavil or argument, any sum or sums up to the limits of amount of guarantee as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Operator before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the Operator shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until the..... Day of....., 20.....

(Signature of the authorized officer of the Bank)

Name and designation of the officer

Seal, name & address of the Bank and address of the Branch

Schedule 5
PRICE BID Form-

1: PriceBid

[Rourkela,
Date_____]

To:

The Commissioner
Rourkela Municipal Corporation,
Address: Udit Nagar, Rourkela
Phone : 0661-2500388
Fax : 0661-2500388
Email: rourkelamunicipality@gmail.com

Project: Selection of Operator to carry out fleet management of **ALL cesspool cleaning vehicles** put to tender towards collection & transportation of septage generated in Rourkela town

Dear Sir:

Being duly authorized to represent and act on behalf _____ <<Insert name of bidder>> and having reviewed and fully understood all requirements of bid submission provided in the RFP document and subsequent clarifications provided in relation to project, I/ we hereby provide our financial proposal.

I have read the entire RFP including all the general conditions, ToR and condition of contracts etc. in detail and on the basis of my full study of the above-mentioned document/s and the conditions, I undertake to carry out fleet management of **ALL cesspool cleaning vehicles** put to tender towards collection & transportation of septage generated in Rourkela town in accordance with the terms and conditions as provided in the above-mentioned document/s.

Our bid price per trip per vehicle for cleaning of septic tank, soak pit and pit latrines are given below.

Sl. No.	Description	Rate quoted by Bidder per cesspool emptier vehicle
1	Cleaning and emptying of septic tank / pit latrine as per provisions of ToR & conditions of contract.	Rs-----/per Trip (In Words ----- -----)

We understand that you are not bound to accept the bid you receive.

We remain,

Yours sincerely,

Authorized Signature [In full and initials]:

Name and Title of Signatory:

Name of Firm:

Address:

**TECHNICAL SPECIFICATION OF 3000 LTR. CAPACITY, LCV CHASSIS
MOUNTED CESSPOOL EMPTIER**

The complete equipment is mounted on a 7 Ton GVW BS-III Vehicle chassis having minimum wheelbase of 3800 mm.

Model: TATA LPT 709

SLUDGE COLLECTION AND STORAGE TANK

The tank is fabricated from 6 mm thick MS plate conforming to IS – 2062 standard and volumetric capacity of 3000 ltr. The tank is designed to withstand conditions prevailing from the operating vacuum and pressure conditions.

The tank is mounted on a sub-frame and designed as ready for conversion to tipping at any time in the future.

The tank is of cylindrical design with torri-spherical-dished ends to ensure complete and fast off- loading of the collected material. Mounted on a heavy C-sectioned sub-frame to provide additional structural strength to the chassis frame, the tank is supported at the rear end by two heavy-duty hinge arrangements thus allowing it to be “ready for conversion to tipping” when required. The forward end of the body is fitted with robust saddle supports, which is securely bolted to the sub-frame. The tank’s rear door is fully openable type, and its shell’s perimeter is reinforced for structural integrity. Opening and closing operations of the door is effected manually and in a horizontal plane. Locking and sealing of the rear door is done by hand wheel operated swing bolts and located circumferentially on the tank’s rear end of the shell.

The sludge compartment is fitted with a level indicator and two nos. 75 mm drain-cum-suction valves. One of the valves is provided with an internal riser to allow discharge of only the water portion of the tank back into the chamber or a nearby storm water drain. This enables the vehicle to move from one application point to the other carrying only the sludge/ material waste without transporting the unwanted water portion.

A hollow “D” section type door sealing neoprene rubber gasket is provided to ensure the door to be leak proof.

TECHNICAL DATA

Capacity: 3000 ltr.

Max. operating Pressure: 1.0 to 1.5 bar

Construction: Cylindrical shell with torri-spherical dished ends

Material: 6 mm thick MS plate as per IS 2062 for shell and dished end

TANK MOUNTING:

The Sludge Collection Tank is mounted on a sub-frame, fabricated from ISMC 150 channel sections.

SUCTION SYSTEM:

Vacuum Pump (Exhauster/ Compressor)

The Equipment is fitted with a Rotary Sliding Vane, positive displacement type Exhauster/ Compressor. The pump is fitted with high temperature resistant, asbestos free vanes and have a free airflow capacity of 5300 LPM to 6000 LPM

The exhauster/compressor is imported origin. The exhauster/compressor is provided with:

- a) Convection Air – Cooling
- b) Forced Oil Lubrication pump
- c) Incorporated Check valve
- d) Incorporated 4-way valve.

Technical Data:

Make: JUROP SPA, ITALY

Type: Rotary sliding vanes

Delivery: 5300 LPM to 6000 LPM @ 1300 RPM – 1400 RPM Max.

Vacuum: 92%

Maximum operating pressure (Vacuum): 7.00 to 9.00 m

Maximum Pressure: 1.5 bar (abs)

The 4-way change-over valve will enable the unit to change quickly from the pressure to the suction mode and vice-versa

A pump inlet Filter of adequate capacity has been incorporated in the system for the protection of the pump against any ingress of foreign particles, in both the suction and the overpressure modes of operation.

Pressure relief and vacuum relief valves has been mounted to protect the equipment and system from over pressure and excessive vacuum respectively. The valves are factory set to control the operating pressure and vacuum parameters of the system.

The valves are factory set to control the operating pressure and vacuum parameters of the system.

Suction Hose, Hose Connection and Stowage

Ten nos. 3 meters long, heavy duty, PVC flexible suction hoses of 75 mm internal diameter and fitted with quick action couplings/ CAM-Lock couplings

DRIVE SYSTEM

The vacuum pump/ compressor driven by the factory fitted side PTO of the vehicle through a propeller shaft and a flexible V-belt & pulley configuration.

The arrangement allows the operator to stop the pump without necessitating stoppage of the truck's engine.

The changeover of the PTO unit for individual drive is from the driver's cabin.

PAINTING/ FINISHING OF THE COMPLETE UNIT

Both, exterior and interior of the tank has been sanded prior to spray painting. The tank exterior is spray-painted with two coats of superior quality anti-corrosive primer and two coats of enamel metal paint. The colour shade is golden yellow. The sludge compartment tank is internally coated with two coats of epoxy paint to resist corrosion due to weak acids.

ACCESSORIES AND SAFETY FEATURES INCORPORATED IN THE SUCTION SYSTEM

- A. **Pressure Relief Valve:** Fitted in a suitable position, this device provides safety to the storage tank as well as the complete system. The valve is of a spring loaded adjustable type and provides continuous relief when the systems pressure exceeds the pre-set limit.
- B. **Vacuum Relief Valve:** It is set to function at a desired operating valve and protects the pump and the complete system from operating under high undesired vacuum condition. As the system reaches the set vacuum level, this valve lifts and ventilates the system by virtue of allowing the air outside to enter.
- C. **Primary Shut-Off:** The Primary Shut-Off protects the exhauster/ compressor from the harmful effects of an accidental ingress of sludge and other foreign particles caused due to an overflow from the liquid waste tank.

Fitted inside the sludge compartment and on the tank top, this specially designed device consists of a stainless-steel ball which floats on water, rises, and seals against a rubber seat at a pre-set maximum tank level, thus ensuring that the tank contents do not overflow into the system.

D. **Secondary Shutoff:** Fitted immediately after the primary shut-off. It functions to protect the vacuum blower from any probable carryover of suspended water and sludge particles which may be drawn into the system from the water surface in the sludge compartment due to the high vacuum conditions within. The water and sludge particles that accumulate are required to be drained regularly and after each operation through a drain valve provided at the separator's bottom.

A ball float shut-off arrangement is incorporated inside the cyclone for the protection of the system from any accident overflow and carryover of material from the sludge tank.

In an event of the separator getting filled to a predetermined level, the ball float will rise and seal against the rubber seat provided at the mount of the cyclone outlet, ensuring that the water and sludge particles do not flow into the blower.

E. **Suction Filter:** Incorporated in the airflow circuit between the secondary shut-off and the pump, is a stainless steel, basket type Safety Filter designed to handle the pump's flow rating and filter out solid and semi-solid particulate impurities of size beyond that of the pumps handling capacity.

F. **Exhaust Silencer:** Fitted on the pump's exhaust side of the airflow circuit. This device dampens the airflow with minimum back pressure in the system, thus reducing the operational noise levels considerably.

PROTECTIVE GEARS

Protective gears i.e. helmet, full- body all weather jacket, safety shoes and gloves for 3 nos. of operating personnel per each cesspool emptier is provided along with the cesspool emptier.