

ଜିଲ୍ଲା ଖଣିଜ ପ୍ରତିଷ୍ଠାନ, ସୁନ୍ଦରଗଡ଼
DISTRICT MINERAL FOUNDATION, SUNDARGARH



ସୁନ୍ଦରଗଡ଼

RFP NO: -DMF/SNG/08-2020-21

REQUEST FOR PROPOSAL

**Annual Rate Contract for Supply and operation of Machineries on
hiring basis for cleaning service in Sundargarh District**

TENDER SCHEDULE

Availability of Tender documents : 29-07-2020 at 11.00 A.M.

Last date for submission of Sealed Tender: 12-08-2020 up to 5.00 P.M.

Opening of Technical Bid & Financial bid: 13-08-2020 at 11.00 AM

Issued by:
Collector & Chairperson
DMF, Sundargarh .

ଜିଲ୍ଲା ଖଣିଜ ପ୍ରତିଷ୍ଠାନ, ସୁନ୍ଦରଗଡ଼
DISTRICT MINERAL FOUNDATION, SUNDARGARH



Collectorate Campus,
 Near Sub Collector Office
 Sundargarh -770001
 Email- dmfsundergarh@gmail.com
 Tel. 06622-273846

Letter No. 1365 / (DMF)

Dated the 27/07 / 2019

RFP NO: -DMF/SNG/08-2020-21

1.	The Collector-cum-Chairperson, District Mineral Foundation (DMF) Sundargarh, Government of Odisha invites technical and financial proposals from reputed implementing Agency/ Firms of National and International repute for “Annual Rate Contract for Supply and operation of Machineries on hiring basis for cleaning service in Sundargarh District ” as detailed in the Scope of Work in this DTCN. The interested and eligible Firms with valid Registration Certificate as a Company, as detailed in DTCN, may apply for the same in OFF-LINE mode. (For details visit www.sundergarh.nic.in).		
2.	Nature of Works	:-	Annual Rate Contract for Supply and operation of Machineries on hiring basis for cleaning service in Sundargarh District
3.	Tender(Bid) Cost	:-	Rs.10,000/-
4.	EMD	:-	Rs.5,00,000/-
4.	Availability of bid document in the website	:-	From 11.00 A.M. of 29.07.2020 to 12.08.2020 up to 5:00 P.M.
5.	Last date of receipt of Bid	:-	12.08.2020 up to 5:00 P.M.
6.	Mode of Receipt of Bids	:-	Through Speed Post/ Registered Post (India Post)/courier/ by hand and by no other means.
7.	Date of opening of Technical Bid and Commercial Bid	:-	Date: 13.08.2020 at 11:00 A.M.
8.	Address for Business query and correspondence	:-	Chief Executive Officer, District Mineral Foundation, Sundargarh Sundargarh -770001, Tel- 06622-273846 Website-www.sundergarh.nic.in E-mail Id- dmfsundergarh@gmail.com
9.	The bidders have to participate in OFF-LINE bidding only. Further details can be seen from the Sundargarh District website (www.sundergarh.nic.in). Any addendum /corrigendum / cancellation of tender can also be seen in the said websites. If any query then contact E-mail ID - dmfsundergarh@gmail.com .		

Memo No...1366..... /DMF

Dt. 27/07/2020

Copy to DIO, NIC, Sundargarh with a request to upload this Bid Identification Notice in the Sundargarh District Web-Site www.sundargarh.nic.in by **29.07.2020** for wide publication and timely response by the intending Contractors.


Collector & Chairperson,
DMF, Sundargarh

Memo No...1367..... /DMF

Dt. 27/07/2020

Copy to the A.D.M., Sundargarh/ Rourkela/ Sub-Collector, Sadar/Panposh/Bonai/ All Block Development Officers of the District/Executive Engineer, R&B Division, Sundargarh/Rourkela/ Executive Engineer, RW Division, Sundargarh/Rourkela/ Executive Engineer Minor Irrigation Division ,Sundargarh/ Executive Engineer, Irrigation Division ,Sundargarh/ Executive Engineer, Rukura Irrigation Division, Panposh/ Executive Engineer, RWSS Division, Sundargarh/Rourkela/ Executive Engineer, OLIC, Sundargarh/ Rourkela/ Executive Engineer, PHED, Rourkela/Executive Officers of Urban Local Bodies of the district/ DI & PRO, Sundargarh/ Rourkela for information and with a request to display this Tender Notice in their respective office Notice Board for wide publication.

Copy to Addl. P.D.(Tech.), DRDA, Sundargarh/ Asst. Director, OREDA, DRDA, Sundargarh/ Asst. P.D.(Finance), DRDA, Sundargarh/ Asst. P.D.(RH), DRDA, Sundargarh/ Junior Engineer(Estimator), DRDA, Sundargarh/Cashier, DRDA, Sundargarh/ DMF Cell, Sundargarh/ Notice Board of DRDA, Sundargarh for information & necessary action.


Collector & Chairperson,
DMF, Sundargarh

PART-1 (TECHNICAL BID)

RFP NO: -DMF/SNG/08-2020-21.

1. NOTICE INVITING TENDER

Interested bidders are requested to submit the Bids in sealed envelope for the aforesaid work as per detailed specifications and other requirements as mentioned more specifically elsewhere in this tender document. Sealed Bids in **TWO SEPARATE SEALED ENVELOPES** indicating clearly "**Envelop - No.1 - Technical bid**" and "**Envelope No.2 –Price bid**", shall be addressed to **Chief Executive Officer, DMF, Sundargarh** and Envelops should also be super scribed **Annual Rate Contract for Supply and operation of Machineries on hiring basis for cleaning service in Sundargarh District**. Last date for the submission of tender is **12 .08. 2020 up to 5.00 pm**.

1. This tender document can be downloaded from the website of www.sundergarh.nic.in .The tender document will be available on the website, till the last date of submission.

2. The two envelopes must carry the following:

Envelope no. 1:

- a) "Technical bid" of tender with every page signed and stamped.
- b) An initial part amount of **Rs 5,00,000/- (Rupees Five Lakhs Only) towards Earnest Money Deposit (EMD)** by way of Demand Draft (DD) from Nationalised/Scheduled Bank, to be submitted along with "Technical Bid" in a separate envelop. EMD envelop shall be super scribed as EMD towards "**Annual Rate Contract for Supply and operation of Machineries on hiring basis for cleaning service in Sundargarh District**". The Tender without EMD shall be rejected out rightly. No interest shall be paid on the EMD thus collected. EMD of the successful bidder shall be refunded after the successful completion of the work, whereas EMD of the unsuccessful bidders will be refunded upon the issuance of work order to and acceptance of the same by the successful bidder. Power of attorney authorizing the person to sign the tender.

Envelope No.2:

- a) Price Bid shall be addressed to **Chief Executive Officer, DMF, Sundargarh**.
 - b) Envelope No.2 shall not contain any condition whatsoever and any conditional price bid shall be rejected.
 - c) Price Bid envelopes shall be opened only in respect of those tenderers who are found to be eligible as per the prequalification criteria specified by DMF and have complied with all the requirements in tender document.
3. If the last date of receipt or opening of the tenders happens to be a holiday, then the receipt and opening of the tenders shall be shifted to next working day without change of time and venue.

4. Before filling up the tenders, the bidders may note the following:
- a. The bids shall remain valid and open for acceptance within **03 months** from the date of opening of Envelope No.1. If the tenderer withdraws his tender before the expiry of the said period or makes any modifications in terms and conditions of the tender which are not acceptable to the DMF, then the DMF without prejudice to any other right or remedy will be at liberty to forfeit the earnest money.
 - b. **Time of Completion:** Time is the essence of the contract. The Agency shall be allowed to execute the work after working hours, in nights & on holidays, with the prior permission from DMF. No extra payments will be made for the work being done during the odd hours. Date of commencement shall be either one-week, from the date of issue work order or the day on which the agency will take possession of site, whichever is earlier. The supply and operation of vehicle shall be completed within 45 Days from the date of commencement.
 - c. The quantum of liquidated **damages** for delay in completion of the works per week shall be calculated at **0.50%** of the monthly estimated cost subject to maximum of **5%** of the monthly accepted tender amount.
 - d. The tenderer should quote the rates in figures. The rate for each item should be worked out and the requisite total amount shall be calculated accordingly. Rates quoted by the agency in item rate tender in figures and words shall be accurately filled in so that there is no discrepancy in the rates .
 - e. The annual rate contract is for 1 years & it may extend depending upon the requirement & performance of service.
 - f. The tenderers must include in their tender prices quoted for all duties, GST, cess and sales tax, works contract tax or any other taxes or local charges, transportation charges, , labour charges etc. if applicable. No extra claim on this account will in any case be entertained.
 - g. The tender document must be filled in English. If any of the documents are missing or un-signed in price bid, the tender shall be considered invalid. In case of technical bid, the details of incomplete or missing documents will be intimated to the tenderer and the tenderer has to submit all those documents within after communicating the same, otherwise the tender will be rejected.
 - h. DMF reserves the right to accept or reject any /all tender/s in part or whole of any firm / firms without assigning any reasons for doing so.
 - i. Canvassing in connection with tenders is strictly prohibited and the tenders submitted by the tenderer who resort to canvassing will be liable to rejection.
 - j. All taxes including GST or any other payable/ prevailing tax on material or on finished works etc, in respect of this contract shall be payable by tenderer and the DMF will not entertain any claim whatsoever in this respect over the quoted price.
 - k. The tenderer, apart from being a competent agency must co-ordinate himself with all the departments as and when required.
 - l. Before quoting, the tenderer shall inspect the site, to fully acquaint himself about the condition in regard to accessibility of the site, working condition of site, locality including installations of

tools and plants (T&P) and local authority regulations / restrictions if any, conditions affecting accommodations and movement of personnel etc. required for the satisfactory execution of the work contract. No claim whatsoever on such account shall be entertained by the DMF in any circumstances.

- m. The quantities of various items given in the schedule of quantities are approximate. The quantities of work may vary at time of allotment / execution of work. DMF reserves the right to omit / delete any item(s) of work from the schedule at the time of allotment /execution of work. Agency will be paid for the actual work done at the site duly verified by the concerned official of the DMF.
- n. DMF does not bind itself to accept the lowest or any tender at all. DMF also reserves the right to negotiate or partly accept any tender or all tenders received without assigning any reasons thereof.
- o. Any discrepancies, omissions, ambiguities in the tender documents, if any, or any doubt as to their meaning should be reported in writing to CEO, DMF, Sundargarh who will review the questions and if information sought is not clearly indicated or specified, DMF will issue clarifications to all the tenderers which will become part of the Tender Document.
- p. DMF will not be responsible if the discrepancies, omissions, ambiguities in the tender documents or any doubts as to their meaning are not brought to the notice of DMF before 5 (Five) working days prior to the last date of submission of the tender.
- q. DMF also reserves the right to divide and distribute the work to more than one tenderer at its sole discretion.
- r. The successful bidder shall execute an agreement on non-judicial stamp paper with DMF within 07 days from date of issue of work order failing which the bidder's EMD may stand forfeited.

2. FORM OF TENDER

To
The Collector & Chairperson,
DMF, Sundargarh.

Dear Sir/Madam

Annual Rate Contract for Supply and operation of Machineries on hiring basis for cleaning service in Sundargarh District

I / We have examined the Scope of Works, Specifications and Schedule of Quantities and Terms and Conditions relating to the tender for the said works after having obtained the Tender document invited by you.

1. I / We have visited the site, examined the site of works specified in the Tender Document and acquired the requisite information relating thereto as affecting the Tender.
2. I / We hereby offer to execute and complete the works in strict accordance with the Tender Document at the item rates quoted by me / us in the attached Schedule of Quantities in all respects as per the specifications and Scope of Works described in the Tender Document and the Annexures containing Terms and Conditions.
3. I / We enclose herewith interest-free **Earnest Money Deposit (EMD) for Rs.5,00,000/- (Rupees Five Lakhs Only)** by Demand Draft payable at Sundargarh in favour of "CEO, DMF, Sundargarh" and the sum shall be forfeited in the event of our withdrawal of Tender before expiry of the validity period of offer and/or in the event of our failure to execute the Contract when called upon to do so by accepting our Quotation.
4. I/ We agree to pay all Government (Central and State) Taxes such as Income Tax, GST etc. and other taxes prevailing from time to time and the rates quoted by me/us are inclusive of the same.
5. The rate quoted by me / us is exclusive of GST .
6. The rates quoted by me / us are firm and shall not be subjected to variations on account of fluctuation in the market rates, taxes or any other reasons whatsoever, during the currency of the contract.
7. I / we hereby agree to abide by and fulfil all the Terms and Conditions and Provisions of the said Contract Document annexed hereto.

Name of the person authorized to sign and submit the Tender

I).....

II).....

Yours faithfully

Place

Signature

Date

Seal

3. PRE-QUALIFICATION CRITERIA

Minimum Eligibility Criteria for pre-qualification of tenderers is as follows:

The Bidding Firm/Company: - **ANNEXURE 1**

1. Bidder must be a manufacturer / their Authorized dealer (dealership agreement must be 3 years or more) against tender for participation. Manufacturer can Authorise only one bidder. (ANNEXURE 4)
2. Bidder/OEM must submit Details of Similar works completed with Certificates in support of 3 years' experience. (ANNEXURE 5)
3. Documents (Audited Balance Sheets of last 3 financial years, Profit & Loss Statements (CA Certified Copy) and Auditor's Reports of last 3 years, IT return documents of last 3 years, GST registration certificate, PF, ESIC registration certificate, ISO 9001:2015, Manufacturing Certificate of OEM,MSME cert of OEM).
4. Declaration of manufacturer from their letter head.
5. Joint venture against tender for participation is not acceptable. Only direct manufacturer/ their authorized dealer can participate by fulfilling of eligibility criteria. L1 bidder cannot sublet the contract.
6. Bidder should furnish copies of their Income Tax Permanent Account Number (PAN), GSTIN registration, Bank details like name of bank, branch, branch code, Bank Account Number to be submitted.
7. The average annual turnover of the bidder in the last three years commencing from 2017-18 to 2019-20 shall not be less than Rs.10.00 Cr. (Rupees Ten Crore).The turnover details shall be supported by copy of audited Balance Sheets and Profit & Loss Statements or certificate of Turnover (if accounts not finalized) issued by a Chartered Accountant.
8. Work/Purchase orders and Completion certificates issued by the client should be enclosed and need to be produced before DMF, whenever called for verification purposes.
9. OEM must have the accreditation from any reputed Govt. Agency for their manufactured items (at least for one item) within last 5 years.
10. Out of tendered items, minimum 50% of the quoted machineries must from a single OEM to participate in bidding for better technical service .

With seal & Signature.

4. SCOPE OF WORK

“Annual Rate Contract for Supply and operation of Machineries on hiring basis for cleaning service in Sundargarh District”

The scope of above work shall include the following:

The project is to carry out the work of Sweeping, Cleaning, and Water Sprinkling of selected rural and urban areas roads and evacuating of human waste from Septic Tanks of Sundargarh District. Mechanical cleaning of all roads and all type of footpaths drains will be done as per the requirement. The brief of the Project is as follows.

1. The Contract Period shall be for 3 (Three) years.
2. Mechanical Sweeping and Cleaning, , Beautification of municipality, De-fogging, Water Sprinkling of selected roads and evacuating of human waste from Septic tanks shall be done as per the required specifications.
3. The illegal dumps on all roads shall be cleaned as per requirement.
4. Garbage Collection from individual household.
5. For all roads, the footpath shall be washed as per requirement.
6. Wild grass and vegetation on the side berms, footpaths, medians of all roads shall be removed by the Operator as per the schedule fixed by the Operator, for all the roads.
7. The Drain along the roads should be cleaned.
8. All solid and semi solid waste from all roads, commercial markets and in front of houses should be disposed at the specified dumping Site.
9. Maintaining a clean and Green MIS tracker with RFID installation at Garbage Collection Points identified by District Administration
10. Removal died animals.
11. High Pressure Washing of pavements, footpath, Dividers, medians, roundabout, bus stand street furniture, signage & Monuments facia etc.

General Conditions

1. Though mentioned above, the scope of the work is not limited strictly to the areas/units mentioned, but is required to be carried out at any other locations other than those mentioned above as directed by the DMF.
2. Supply of manpower with tools and tackles etc., along with supervision to carry out the miscellaneous jobs as directed by the DMF.
3. All the jobs given to the agency shall be taken up on priority basis without any delay by mobilizing all the resources immediately at site.
4. If the job is delayed beyond the given schedule, DMF shall be at its discretion to execute job through any other suitable agency at the risk and cost of the original agency.
5. No unauthorized person should be allowed to travel in the vehicle, when official duty
6. GPS equipped Vehicle with continuous backend tracking should be available
7. The Vehicle deployed should have fire extinguisher and a first aid kit
8. Rates once finalized shall remain fixed & valid for 1 year . Upward change in rates will not be entertained due to any hike in any other reasons during the period of contract
9. The period of contract can be extended on the same rates, terms and conditions for a further period at the discretion of the Collector & Chairperson, DMF, Sundargarh
10. The DMF will not be responsible for any challan, loss, damage or accident to the vehicle or to any other vehicle or injury, Death etc.
11. Tender has invited for annual rate contract for each type of the Vehicle and the rate for each Vehicle is valid for three year. Agency has to provide the Vehicle as per the requirement of District Administration. In case of, any new vehicle/equipment will require by the client, the bidder has to provide the same & the monthly hiring rate shall be finalized on mutual consent of both the parties.
12. The vehicle will have to be maintained by the agency in good running condition which includes at least the following
 - I. Minimum noise of engine and body while running
 - II. Tyres with proper treads.
 - III. Inflated Stepney , working headlights, tail lamps, indicators, speedometer, milometer, temperature indicator etc.
 - IV. Proper paint on the outside.
 - V. Good condition of bumpers
 - VI. Proper locking of all doors
 - VII. Vehicle must be inspected and tested for emissions.
13. Bidders must submit an undertaking for providing Monthly Wages/ Salary to be paid to the drivers and cleaners (not less than the minimum wages) including provision of mobile phones, uniform

(two pairs), black shoes (2 pairs) as applicable for the drivers should be indicated by the bidders. They must enclose the breakup of the wages for drivers and cleaners

14. An undertaking to the effect that the firm has not been blacklisted ANNEXURE 6/ banned/ suspended/ debarred from any organization/ institute and no case is pending with the police or in court of law against their name, duly notarized. If the same is found at any point of time in any circumstance, the contracted shall be terminated and performance guarantee shall be forfeited
15. Copy of entire tender document must be numbered page-wise and duly self-attested and stamped on each pages as a token of acceptance of our terms and conditions
16. In case of the absence of the Driver, the agency has to provide the substitute. If the agency fails to provide the substitute of Driver/ vehicle, a penalty as per section 5 shall be imposed
17. The agency will take care of Insurance of the Vehicles as well as of the Drivers/ Helpers
18. The agency shall deploy helper/ cleaner in all the Vehicles failing which penalty @ `500/- per day per person shall be imposed on the agency. In case of frequent violation, the contract may be terminated by the DMF. The Driver(s) and Helper(s) deployed should not be below 18 years
19. All maintenance servicing of the vehicles should be done by the agency at their own cost. The interior and exterior conditions of the vehicles should be well maintained
20. In case of break down, the agency will be responsible for repair and maintenance of the vehicle and will arrange alternate vehicle within one hour. DMF will not pay any type of compensation for replacement/maintenance/damage of the vehicle .
21. Total breakdown period excluding routine maintenance in a year should not exceed 12 days. If exceed 5% penalty of annual hired value of particular vehicle.
22. In case of frequent violation of the terms and conditions, the contract can be terminated forthwith at the cost of the agency.
23. The vehicles must have valid permits from the concerned authorities
24. All the drivers provided for the vehicles must have a valid driving license from the RTO.
25. The DMF is not bound to accept the lowest rates and reserves the right to accept tender in whole or in part or can reject it entirely without assigning any reason.
26. The agency shall be abide by all statutory laws, rules and regulations of the State Govt. Central Govt. as per jurisdiction.
27. The Corrigendum (if any) & clarifications to the queries from all Applicants will be uploaded on the website <http://Sundergarh.nic.in>. Any such corrigendum shall be deemed to be incorporated into this Tender
28. All the certificates, testimonials desired in tender as per the eligibility criteria will be verified with the original documents to be presented by the firms/ agencies on the date of opening of Technical bids. Accordingly, all the bidders desirous in participating in bidding process must attend the bid opening and come prepared with the entire original documents of which copies have been submitted with the tender for verification. Any bidder is found absent on the date of opening or fail to submit the original documents; their offers will be summarily rejected

29. It is the responsibility of the agency to pay the wages to the drivers and helpers as per the Minimum Wages Act., as notified by the Ministry of Labour from time to time. The drivers/ helpers must be paid not less than the minimum wage. The contract may be cancelled if any complaints received from the drivers/ helpers in this regard
30. No manpower should be engaged exclusively for this contract; when the contract terminates there shall be no physical or normal pressure on the DMF, on grounds of "person displaced from job". The DMF shall not entertain such claim.
31. During the agreement period, all safety measures must be taken care of by the agency for the vehicle and the personnel engaged under this contract. Any safety hazard occurring during the lease period shall be the sole responsibility of the Agency. The DMF shall in no way be liable for any such incident occurring during or in connection with this contract.
32. The DMF rules shall be binding for execution of the contract. Further in case of any dispute arising out of or in connection with the aforesaid contract either during subsistence of the contract or thereafter, the Collector & Chairperson, DMF, Sundargarh is the sole arbitrator to decide the same or his decision is final and binding on both the parties. If differences persist even after arbitration and there are compelling reasons to go to the court, it will be decided in the court of Sundargarh only
33. The vehicle can be de-hired at any point of time, giving prior notice of one month considering the requirement of the District administration for which no payment will be made by the DMF. In case of unsatisfactory services, the contract of the agency may be terminated giving one week's notice.
34. The Agency (agency) should make arrangement of his own for the stay/ accommodation of the drivers and helpers so that the latter remains available at all reasonable hours of the day.
35. Quoted rate shall be valid for 3 (three) year .No escalation in price on account of any reason whatsoever will be allowed during the currency of the contract. The contract price shall be inclusive of all types of taxes, duties, levies, check gate, parking and service charges. No variation in above taxes, duties etc. will be entertained during the currency of the contract.
36. The DMF reserves the right to cancel/ reject any or all proposals without assigning any reason thereof.
37. The DMF reserves the right to accept whole or any part to the tender and the same shall be binding on the agency.
38. The need of the vehicle may increase/ decrease in future.
39. The contract cannot be outsourced to third party.
40. The Log Book shall be Maintained by the agency. Kilometre reading shall be necessarily recorded in relevant columns and verified regularly by an authorized officer before making payment
41. The agency shall be responsible for ensuring compliance with the provisions related to Labour Law and especially Minimum Wages Act, Payment of wages Act, PF, ESI, Act, Payment of Bonus Act, Contract Labour (R&A) Act, Workmen compensation Act etc. as applicable from time to time. The employees of the agency shall not be deemed to be employees of the user department and hence the compliance of the applicable acts lows will be the sole responsibility of the agency.

42. The agency shall be personally responsible for any theft, Misconduct and/or disobedience on the part of drivers so provided by him.
43. The Mileage count will start from the Site location and no extra kilometers from the garage to the Site Location point will be provided.
44. The vehicle cannot be put to any private/commercial use beyond the duty hours or on holidays. Unauthorized use of the vehicle by the driver/service provider will lead to unilateral termination of the contract with immediate effect. The agency has to ensure the safety of passenger by avoiding negligent driving by their drivers such as over speeding, rash driving and driving vehicle without brakes/ defective brakes.
45. The agency has to make an agreement with DMF Sundargarh on Rs.100/- Non-Judicial Stamp Paper
46. In case of non-satisfactory performance of the contract, DMF shall have a rights of forfeiting the performance security
47. **Arbitration:-** In case of any dispute or difference arising out of or in connection with the tender conditions/ job order and contract, the DMF and the contract will address the dispute/ difference for a mutual resolution and failing which, the matter shall be referred for arbitration to a sole Arbitrator to be appointed by the DMF.
48. **Jurisdiction:** - The Court at Sundargarh alone will have the jurisdiction to try any matter, dispute or reference between parties arising out of this tender/ contract. It is specifically agreed that no court outside and other than Sundargarh court shall have jurisdiction in the matter
49. **Force Majeure:** - If at any time during the currency of the contract, either party is subject to force majeure, which can be termed as civil disturbance, riots, strikes, tempest, acts of God etc., may prevent either party to discharge his obligation, the affected party shall promptly notify the other party about the happening of such an event. Neither party shall be reason of such event to be entitled to terminate the contract in respect of such performance of their obligations. The obligations under the contract shall be resumes as soon as practicable after the event has come to an end or ceased to exist. The performance of any obligations under the contract shall be resumed as soon as practicable after the event has come to an end or ceased to exist. If the performance of any obligation under the contract is prevented or delayed by reason of the event beyond a period mutually agreed to if any or seven days, whichever is more, either party may at its option terminate the contract.
50. **Single bidder :-** Collector & chairperson , DMF , Sundargarh will do it's best to encourage the participation of multiple parties for the tender, however in the case of a single bidder, Collector & chairperson , DMF , Sundargarh can take a decision of awarding the contract due to the nature of the service being that of emergency services and affecting the lives of the citizens of the District
51. The bidder whose proposal is accepted and Award issued shall have to deposit Performance Security Deposit (PSD) for an amount of 5% of the Annual contract value, validity for 38 Months. Amount of EMD can be adjusted into the security deposit. Security deposit is for due

performance of the agreement. Non submission of Performance security within the specified time shall also lead to forfeiture of the EMD.

52. Insurance cost (Comprehensive with Zero Depreciation) of all Vehicles, for both initial and subsequent years shall be borne by the Agency. The comprehensive insurance shall cover all persons engaged in the Vehicle. Agency shall ensure timely renewal of the insurance coverage of the assets.
53. A bidder is eligible to submit only one bid for the project. A bidder bidding as single entity shall not be entitled to submit another bid either as a single entity as the case may be.
54. The performance will be reviewed monthly by Collector & Chairperson, DMF Sundargarh .
55. Establish and operate GPS based Automatic Vehicle Location Tracking System for all Cleaning Machine This will include biometric attendance and online real-time data transfer.

5. EVALUATION OF TECHNICAL BID

- a) The DMF will open the Pre-qualification/ Technical Bids in the presence of the Bidders or of their representatives who choose to attend at the appointed place and time. They must bring proper authorization from their firm/ agency at the time of opening of the bids failing which they will not be allowed to participate in the opening of process
- b) The bid of any bidder who has not complied with one or more of the conditions prescribed in the terms and conditions will be summarily rejected.
- c) The bidder must produce the original documents towards the eligibility/ qualifying criteria on the date of opening of tender for verification. Besides this DMF has reserve the right to verify the document so submitted from those organizations who have issued such certificates.

6. EVALUATION OF FINANCIAL BID

- a) Financial bids of only the technically qualified bidders will be opened for evaluation in the presence of qualified bidders.
- b) The financial bid shall contain the exact charges as applicable against the vehicles (as per the Annexure 2) on monthly basis. Further, the DMF also reserves the right to cancel the financial bid of any agency if it is found that the charges quoted are unreasonable or unjustified.
- c) One authorized representative of each of the bidder would be permitted to be present at the time of opening of the bids

7. PAYMENT OF AGENCY'S BILL:

- i. Monthly payment of Vehicles shall be based on as per financial bid (Annexure 2)
- ii. Investment and Ownership: All movable and immovable assets created in the project will be the property of Service Provider
- iii. The Service Provider shall submit the GPS reports (as customized by the Authority from time to time) along with monthly claim to validate the same.

TECHNICAL BID (Check List)

Sr. No.	General particulars of the Agency	Details to be filled up by the Bidder
1	(a) Name of the Agency	
	(b) Registered address with telephone nos.,	
	Mobile no.	
	E-mail ID	
	(c) Year of Establishment/ Incorporation	
	(d) Authorized Person's a. Name & Designation b. Tel. No. Landline c. E-mail ID: d. Mobile e. fax:	
2	Type of Firm: Private Ltd./ Public Ltd./ Cooperative/ NGO/ PSU. (Please enclose copy of Memorandum/ Articles of Association/ Certificate of Incorporation)	
3	Details of bid document amount (tender fee- Rs. 10,000) Demand Draft no.	
4	Details of Earnest Money Deposit (EMD- Rs. 5,00,000) Demand Draft No.	
5	GST No	GST No. (Copy of self-attested certificate attached) Yes/ No (page No.)
6	The firm/ agency should have PAN No.	PAN No. (Copy of self-attested certificate attached) Yes/ No (page No.)

7	The bidder should have at least three (3) years' experience in work of similar nature with Govt. offices/ IITs/ NITs/ PSU's/ industry etc., and must -have executed the similar contract as mentioned in the eligibility criteria (Copy of the same to be attached) ANNEXURE 5	Yes/ No Attached Document (Page No.)
8	Copy of Work Order & Satisfactory Performance Report from at least two clients where the Agency has been working/ worked during last three years Attached	Yes/ No (Page No.)
9	Certificate for average annual turnover duly approved and signed by the Chartered Accountant (Financial Year 2017-18, 2018-19 ,2019-20) (Copy of the same to be attached)	Yes/ No Attached the Certificate Approved by Chartered Accountant (Page No.) (ANNEXURE 3)

Note: Agencies/ Bidders not submitting full information/ documents at the first instance shall be rejected

Signature with stamp:_____

Date:_____

Full Name:_____

Address:_____

FINANCIAL BID

Sl. No	Name of the vehicle	No. Vehicle	Monthly Hiring rate of Vehicles (Excluding GST)
1	Hoper Tipper Dumper for door to door waste Collection (Partition Container)	1	
2	Hydraulic Battery-Operated Garbage Collector Vehicle (Partition Container)	1	
3	Truck Mounted Vacuum Assisted Mechanical Sweeper with 7GVM Chassis or with 16 ton GVM	1	
4	Road Sweeping Machine	1	
5	Vacuum Litter Picker for street and park Cleaning	1	
6	Vehicle mounted Vacuum Litter Picker for street and park Cleaning	1	
7	Mini Tipper with Bin Lifter hand carts discharging system	1	
8	Petrol Chain Saw	1	
9	Petrol Grass Cutter Machine	1	
10	Backpack Leaf Blower	1	
11	Tractor with Loader	1	
12	Water Tanker	1	
13	Hydraulic Ladder	1	
14	2Cu.M. Fully Company built closed box Tipper with hard top cover & dry wet Partition	1	
15	Water Sprinkler Application Mounted on Water Truck Cabin Truck with Water Tank	1	
16	De-Fogging Machine	1	
17	Suction-Cum-Jetting Machine	1	
18	Trailer Mounted Sanitizer cum disinfectant	1	
19	Mobile Septage Treatment unit	1	
20	Garbage compactor (Side loading)	1	
21	Open Nalla Desilting Machine (Mini Pickup)	1	

22	Open Nalla Desilting Machine Mounted on 11 Ton GVW Tipper Chassis(BS 6) with Knucle Boom Crane for Deep & Wide Drains	1	
Sl. No	Name of the vehicle	No. Vehicle	Monthly Hiring rate of Vehicles (Excluding GST)
23	Vehicle mounted fogging machine for mosquitos	1	
24	Bolero Pick-Up/ Tata ace	1	
25	Tipper Truck/Hyva	1	
26	Excavator-cum-Backhoe Loader	1	
27	Skid Loader	1	
28	Mini Cesspool Machine	1	
29	Cesspool Machine 10000 Ltrs.	1	
30	Tractor with Trolley	1	
31	Pond Cleaning Machine (Trash Skimmer)	1	
Total (Rupees)			

Note

- I. Fuel cost will be paid as per the actual consumption of Diesel/Petrol. Bidder has to submit the minimum fuel consumption / mileage statement from the manufacturer before signing of agreement.
- II. TDS & All Taxes as applicable will be deducted from the bills of the Vendor.
- III. Monthly quoted rate is for 10 Hrs. in a day & 26 days in a month. Monthly hiring charges including Manpower & Maintenance cost . No extra cost shall be paid above the quoted price .
- IV. No. of vehicle will increase / decrease. Requirement of Vehicles will be on need basis
- V. L1 price will be decided on the basis of lowest Total cost & the rate shall be valid for 1 year
- VI. L1 bidder has to submit the detail cross break up of above quoted rate before signing of agreement .

Place-
Date -

Signature of Authorized Signatory
Seal with Designation

AVERAGE ANNUAL TURNOVER STATEMENT

The Average Annual Turnover statement of <name of the organization>, at<address of the organization >, for the last three financial year are given below and certified that the statement is true and correct.

Sl. No.	Financial Year	Turnover in lakhs (₹)
1	2017-18	
2	2018-19	
3	2019-20	
	Average annual turnover statement	

Date:

Signature of Chartered Accountants

Place:

Seal:

Membership No:

Manufacturers Authorization Form

Manufacturers Authorization Form is required for any material bidder proposes as part of the contract but is not manufactured by them.

Date:

Tender No and Name: **Annual Rate Contract for Supply and operation of Machineries on hiring basis for cleaning service in Sundargarh District**

To

**Collector and Chairperson
District Mineral Foundation,
Sundargarh (Odisha) Pin 770001**

WHEREAS _____ who are official producers of _____ and having production facilities at _____ do hereby authorize _____ located at _____ (hereinafter, the “Bidder”) to submit a bid and subsequently negotiate and sign a Contract with you for resale of the following Products produced by us, for the quantities, specifications and delivery schedule called for by the Supply Requirements associated with the above Invitation for Bids:

We hereby extend to you a full guarantee and warranty, Defect Liability, of the Conditions of Contract and with our own standard product warranty, and duly authorize the Bidder to act on our behalf in fulfilling all warranty obligations with respect to the above-listed products offered for resale by the Bidder in relation to this Invitation for Bids.

We also certify that the Bidder is qualified by us to provide the following maintenance, technical or help desk support, new version upgrade and/or other services related to the above-listed Products in accordance with Scope of the System, and the Conditions of Contract:

Name :
In the capacity of :
Signed :

Duly authorized to sign the authorization for and on behalf of: _____

Dated on _____ day of _____, _____.

Note: This letter of authority must be on the letterhead of the Producer, must be signed by a person competent and having the power of attorney to bind the Producer, and must be included by the Bidder in its bid as specified in the Instructions to Bidders. Minor variations in wordings of the letter may be allowed.

Annexure 5

Experience

Sl. No.	Name of Project	Year of Project	Page Number
1			
2			
3			
4			
5			

Detailed Project Experience

Project Information	
Name of the project	
Client Name	
Name and contact details of the client	
Description of the project	
Scope of services	
Start date	
Completion date	
Duration of the project	
Other Relevant Information (if any)	

Please check (v) on the supporting documents enclosed:

- Work Order received from Client
- Agreement signed between Bidder and Client
- Client Certificate/ others (if any)

NON – BLACKLIST

We,<name of the Organization>, having our registered office at , <HQ address of the Organization> hereby declare that we are submitting this proposal in reference to the **“Annual Rate Contract for Supply and operation of Machineries on hiring basis for cleaning service in Sundargarh District”** out of D.M.F Fund’ We declare that we have not been blacklisted by any Ministry / Department / industry Public Sector Undertaking or any other agency of the Central/State Government.

We declare that there are no proceedings, disputes or enquiries pending against us in connection with cheating, misappropriation of funds or exploitation of beneficiary.

We also acknowledge that in case of misrepresentation of the information, our proposal / contract shall be rejected / terminated at any stage by the client, which shall be binding on us. Any loss or damage to the client, on this count will be compensated by us.

Date:

Authorized Signature

Place:

Name and Title of Signatory

Seal:

TECHNICAL SPECIFICATIONS

1 Hoper Tipper Dumper for door to door waste Collection (Partition Container)

Certification ARAI/VRDE/ICAT	complete vehicle
Certification ARAI/VRDE/ICAT No	AALN0247
Form 22 A - For compliance with pollution standards, safety standards of components and road worthiness as per CMVR Rules	Yes
Registration to Local RTO (Regional Transport Office)/RTA(Regional Transport Authority) by seller	Yes
Drawing of the complete vehicle indicating overall length, width, track and height will be provided on demand of buyer	Yes
Vehicle Kerb Weight with fabrication	1150 kilogram
Gross Vehicle Weight	990 kilogram
Pay Load Capacity (GVW-VKW with Fabrication)	1150 kilogram
Gradeability (Degree)	10.2
Maximum speed of vehicle (Kmph)	54
Max Engine BHP	9.3
Rated RPM at max engine HP	3200
Max Torque (N-m)	24
Rated RPM at max torque	2000
Vehicle Emission Compliance	BS-VI
Vehicle Mileage (Kmpl)	30
Type of Fuel	Diesel

Fuel Tank Capacity (Ltrs) (Kg in case of LPG/CNG)	8
Engine Aspiration	Diesel
Cooling system	Liquid
Anti-air pollution measures adopted	Yes
Electronic Control Unit (ECU)	No
Battery Volt	12 Volt
Type of Exhaust Gas Re-circulating System	Other
If other, mention the type	No EGR
Lambda Sensor	No
Type of Transmission	Mechanical
Type of Clutch	dry single plate
Gearbox	Manual
No of forward/speed gears	5
Gear Ratio	ist:27.14
Type of suspension system	swing arm
Speedometer	Yes
Designation of Front Wheel	4.50-10, 8PR
Designation of Rear Wheels	4.50-10, 8PR
Type of wheel rims	Sheet metal
Type of steering control	Handle bar
Location of Steering	Centre
Type of Front Brakes	Drum
Type of Rear Brakes	Drum
Head Lamp High beam	Yes
Head Lamp dipped beam	Yes
Front position light	Yes
Tail / stop light	Yes
Number plate illumination light	Yes
Direction indicator lights, front and rear	Yes
Parking lights	Yes
Reversing light(s)	Yes
Reflex reflector rear	Yes
Reflex reflector side(if provided)	Yes
Hazard warning lamp (wherever applicable)	Yes
Rear-view mirrors	Yes

2 Hydraulic Battery-Operated Garbage Collector Vehicle (Partition Container)

Type of E Cart	Fully Electric, Battery Operated Motor Driven for Carrying Bins
Colour of E Cart	GREEN/BLUE/RED
The E Cart Must Fabricated From Good Quality Steel properly Painted to avoid Rusting for more than 5 Years,	YES
Name and Grade of Steel from which E Cart Body Framed	CRCA
Kerb Weight of E- Cart (kg)	320 kilogram
Garbage Carrying Capacity (kg)	310 kilogram
Run Distance (for a Full Charge of Battery , to be tested with full load at maximum AIS-040)) (km)	80
Number of Bins	2
Capacity of Individual Bins in litres (Ltrs)	155 liter
Type of Chassis for E cart	MONOCOQUE
Ground Clearance as per IS : 9435 (mm)	180
Wheel Base (mm)	2080 millimeter
Turning Radius (mm)	2200 millimeter
Power Transmission from Motor Shaft to Wheels	Direct Mounting
Please Specify the Mechanical Mechanism otherwise Put NA	NA
Tipping Facility	Yes
Tipping Angle	85 degree
Method of Tipping	Hydraulic

If Others, mention the method of Tipping	NA
Type of Battery as per AIS-048	Lead Acid , EV Grade , Tubular Deep Discharge
Capacity of the Battery approved by ICAT/ARAI (Ah)	110
Battery Voltage ,Nominal (Volts)	48V
Maximum Overall Dimensions of the Battery (L x Wx H) (mm3)	380 X 170 X 280
Nominal Filled Weight of the Battery (kg)	35.06 kilogram
Motor Controller (Must Suitable for starting, accelerating, decelerating, driving , and stopping of E Cart	YES
Battery Charger	220/230 V Nominal Input Voltage , High Efficiency Type
Charging Current (A)	12
Type of Motor	Brushless DC Motor
Motor Output Power ,48V/60V at Full Load (watt)	1300
Overall Efficiency of the E Cart (to be tested at Full Load with maximum speed as per Concerned AIS standards (%)	90
Gradeability of E-cart , (to be tested at full procedure as per AIS -003 Load (Degree)	30

3 Truck Mounted Vacuum Assisted Mechanical Sweeper with 7GVM Chassis or with 16 ton GVM

Type of Road Sweeper	TRUCK MOUNTED VACUUM ASSISTED ROAD SWEEPER MACHINE
Main Engine Capacity(cc)	ENGINE HP – MIN 150
Type of Chassis Frame	FULL FRAME CHASSIS
Category of Vehicle for which Chassis to be used	Light Capacity Commercial Vehicles
Type of Chassis	Cab Chassis with day cabin
Type of Fuel	Diesel
Vehicle Emission Compliance	BS-VI
Fuel Consumption (declared by OEM as certified by Test Agency under Rule 115of CMVR 1989) (Ltr/Hr)	15 (FOR BOTH TRUCK ENGINE AND AUXILLARY ENGINE)
Speed, Max (Km/Hr)	80
Max Engine Power BHP (BHP@rpm)	150
Max Engine Torque (N-M@rpm)	450 NM/1250-2000 RPM
No of Cylinder in Main Engine	4
Fuel Tank Capacity (Ltrs)	185
Wheel Base (mm)	4800
Side Sweep Brush (SSB) Dia	850 mm
Side Sweep Brush - MOC	Polyurethane
Side Sweep Brush - Life Expectancy hours	80 hours(nom)
Centre Sweep Brush (CSB) Dia	400 mm
Centre Sweep Brush - MOC	Poly Segment Brush Stocks
Centre Sweep Brush - Life Expectancy hours	150 hours(nom)
Nozzle trunk Hose - Dia/MOC/Qty	200 mm/ Rubber/ 2 No's
Nozzle – Type	Wide Mouth
Aux. Engine Power, Make	150 hp (Minimum), Mahindra/Kirloskar or Equivalent
Aux. Engine - RPM	Variable RPM (1200 - 2200)
Exhauster Fan - RPM/MOC	2200 rpm - 2800 rpm/ SS-304 Impeller fan

Gearbox – Mounting	Directly mounting Step Up GB on Aux Engine
Blower Drive	Belt and Pulley
Tank tipping	Hydraulic
Door Opening and Clamping	Hydraulic
Side Brush rotation	Hydraulic
Centre brush rotation	Hydraulic
Jetting Pump Drive	Hydraulic
Sweeping - Brush In-Out & Up-Down, Suction Nozzle up down Drive	Hydraulic
Sieving Working	Air along with dust is passed and small particle remain back
Water pump Flow/Bar	10-15 Lpm/80-100 bar
Spray Nozzle Qty	08 No's
Lance Length	900mm
Hose Dia/Length	1/2" / 15 meter
Water level indicator Type	Visual type
Control Panel	IP 65 with fuse box and relay
Wiring	CANBUS Plug and Relay
Type	HMI
System voltage	24 V DC
Debris hopper volume	6500 Ltr
Debris hopper Thickness/MOC	3 - 4mm/Stainless Steel
Tank Discharge Angle Deg.	52 deg. (nominal)
Diesel Tank Volume	200 Ltr
Diesel tank MOC	IS:2062
Water Tank volume	1800 Ltr
Water Tank MOC	Stainless Steel
Hydraulic Tank Volume	400 - 500 Ltr
Hydraulic Tank MOC	IS:2062
Sweeping width	2400 - 2600 mm (suction nozzle + one side brush)
Sweeping width	3200 - 3600 mm (suction nozzle + two side brush)
Dust separation	Water spraying or spray misting arrangement
Sweeping-Operation Mode	Dry & Wet Sweeping

4 Road Sweeping Machine

Type of Road Sweeper	Truck Mounted Sweeping Machine
Debris Collection Hopper Volume	2500 Ltr
Debris Collection Hopper Thickness/MOC	2mm/Stainless Steel SS 304,Import waterproof material filter cartridge
Debris Collection Hopper Discharge Angle Deg.	52 deg. (nominal)
Water Tank	500 Ltr
Water Tank MOC	2mm/Stainless Steel SS 304,Import waterproof material filter cartridge
Sweeping width	2500 mm (suction nozzle + one side brush)
Aux. Engine Power, Make	70 hp (Minimum), E mission standard Euro 4
Aux. Engine Power Fuel	Diesel
Aux. Engine Power RPM	Variable RPM (1200 - 2200)
Exhaust Dust control	PM-10
Maximum suction particle	100mm
Cleaning capacity	45000-90000 m ² /h
Sweeping speed	5-20km/h
Turning radius	5m
Filter cartridge	Filter accuracy:2μm Filter efficiency:99.9% Quantity:4 Filter cleaning system with compressed air pulse jetting continuously without stopping equipment.

Hydraulic Pump	CBW-F310-ALP; 1 unit
Hvdraulic Motor	Hvdraulic Motor
Hvdraulic Cylinder	ISO Certified
Blower	ISO Certified manufacturer
Electronic Water Spray Pump	NSQ Series
High pressure water pump	Brand PINFL, washing system shall be vehicle mounted, made up of metallic body complying to minimum MOC:
Jetting Hose with Lance	High Pressure Hose ,Diameter : 1/2",Length : 18m,with Hand Lance /
Control Switch	Brand: French Schneider
Electronic control components	Brand: Siemens
Magnetic valves	Brand: HAIRISEN
Clutch	Automatic Clutch, Brand
Rear LED Arrow lights	Quantity : 2 units
Manual emergency system	1 set
Automatic pulse clearing function	Make filter cartridge not to be blocked, computer PLC control, can adjust pulse interval time
Sweeping Brushes	Two side brushes left one and right one),sweeping Brushes Material : polypropylene, Brush Diameter: 650 mm, One Suction nozzle with roller
Monitoring system	Side camera for Side Brushes and Rear camera with display system in driver's cabin
Spare parts list	Sweeper brush : 1 set
	wheels for sucker : 1 set
	Seal strip for sucker : 1 set
Chassis Emission Norms	BS-VI
Chassis Chassis Engine output	Min. 90 HP
Chassis Driver's Cabin Type	Single Cabin
Chassis Wheel base required	3400 MM
Chassis Side PTO	Provision in Chassis gear box.
Chassis Scope	Customer

5 Vacuum Litter Picker for street and park Cleaning

Suction Pump operation	Battery Operated
Cleaning Type	Dry and Wet
Portability	Vehicle Mounted (Without vehicle)
IP Rating of the machine	IP 66
<i>Details Of Collection Bag Or Container</i>	
Collection Mechanism	Spillage Free closed container
Collection Bag / Container (bin) Material	HDPE
Volume of Collection Bag / container (bin) (Litre)	240 liter
Number of spillage Free Reusable Collection Bags supplied with Machine (inclusive in the scope of supply)	NA
<i>Details Of Hose</i>	
Hose material	Reinforced PU
Type of Hose	POLY
Suction Pressure in the hose (millibar)	40 millibar
Static Pressure (Closed Inlet of Hose Mouth) (mbar)	40 millibar
Minimum Airflow of operational system (Liter/Sec)	196
Minimum Air Velocity in Hose (FPM)	4527
Hose Inner Diameter (mm)	125 millimeter
Hose Length (m)	5 meter
Suction Hose shall be Corrugated, flexible, Smooth Wall, wear, tear, acid and UV resistant, non-choking hose	Yes
Boom Supported Hose	With
Boom Length (mm)	3 millimeter
Castor Wheel for hose	Yes
Operating Arc range (Degree)	180
<i>Details Of Engine And Battery</i>	
Rated Engine Power (BHP)	0

Engine Cooling	NA for Battery Operated
Starting Type (Start Stop Operation)	Single button press
Fuel Tank Capacity	0 liter
Diesel / Petrol / CNG Engine used shall meet the requirements of Environmental (Protection) Rules 1986	NA for Battery Operated
Battery Operated : Battery Voltage(in Volts)	36
Number of Batteries (nos)	4
Battery Capacity (VAH) for Battery Operated	225
Battery Type / Chemistry	Lead Acid Battery
Inbuilt Battery Charging System	Yes
Noise Level During Operation (db)	62
Continuous Operation (Hours)	8 hour
<i>Details Of Trolley</i>	
Trolley with wheels for smooth movement	Yes
Total Number of Wheels (nos)	2
Number of Wheels in front with castor mechanism	2
<i>Details Of Filter</i>	
Type of Filter	Metal Filter
Area of Filtration (sq m)	1.75 square meter
Filter Media	Mesh Filter
Filter Cleaning Process	Manual Cleaning
<i>Dimension Of Machine</i>	
Maximum Machine Length (Excluding hose, tool etc) (mm)	2200 millimeter
Maximum Machine Width (Excluding hose, tool etc) (mm)	950 millimeter
Maximum Machine Height (Excluding hose, tool etc) (mm)	1800 millimeter
Gross Machine Weight (kg)	450 kilogram
<i>Warranty And Servicing</i>	
Warranty Period (Years)	2 year
Firm should provide two years complete replacement warranty without any additional cost to the department	Yes
Number of Free Servicing (nos)	3

6 Vehicle mounted Vacuum Litter Picker for street and park Cleaning

Suction Pump operation	Diesel operated
Cleaning Type	Dry and Wet
Portability	Skid Mounted / also can be mounted on a vehicle
IP Rating of the machine	IP 65
Details Of Collection Bag Or Container	
Collection Mechanism	Spillage Free closed container
Collection Bag / Container (bin) Material	MS
Volume of Collection Bag / container (bin) (Litre)	225 Ltr
Details Of Hose	
Hose material	Reinforced PU
Type of Hose	POLY
Suction Pressure in the hose (millibar)	
Minimum Airflow of operational system (Liter/Sec)	3600 cum / hr
Hose Inner Diameter (mm)	150 mm
Hose Length (m)	5 mtr
Suction Hose shall be Corrugated, flexible, Smooth Wall, wear, tear, acid and UV resistant, non-choking hose	Yes
Rated Engine Power (BHP)	13
Engine Cooling	Air cooling
Starting Type (Start Stop Operation)	Pull cord
Fuel Tank Capacity	
Diesel / Petrol / CNG Engine used shall meet the requirements of Environmental (Protection) Rules 1986	Yes
Battery Operated : Battery Voltage(in Volts)	NA
Number of Batteries (nos)	NA
Details Of Trolley	
Trolley with wheels for smooth movement	Yes
Total Number of Wheels (nos)	3
Details Of Filter	

Type of Filter	Vortex airflow debries & dust separation system
Warranty And Servicing	
Warranty Period (Years)	2 year
Firm should provide two years complete replacement warranty without any additional cost to the department	Yes
Number of Free Servicing (nos)	3

7 Mini Tipper with Bin Lifter hand carts discharging system

Tipping Height :	1750 mm
Cylinder Size :	63 mm
Finish : Complete Structure have two coats of primer & two coats of finish paint.	YES
Type : Mini Tipper with Bin Lifter Hand Carts Discharging System.	YES
Body Construction :	Stainless Steel Sheet 2.00 mm
Hopper Capacity :	1.8 Cu. Mt.
Tipping Angle :	60 Degree
Bucket Capacity :	150 Liters
Hydraulic Cylinder :	Heavy Duty Two Stroke Hydraulic Cylinder -03 Nos.
Base Frame :	Base Construction heavy duty "C" channel 75 X 25 mm and 100 X 50 mm
Battery :	62-65 AH

8 Petrol Chain Saw

Product Specification

Model	390 XP
Power Consumption	4.8 kw
Brand	HUSQVARNA or Similar
Item Weight	7.3 KG

Warranty	6 months
Minimum Order Quantity	1 Piece

9 Petrol Grass Cutter Machine

Type of Machine	Line Trimmer with Nylon feed head attachment
Power Source	Petrol Engine
Speed control	Variable Speed
Transmission	Low Vibration Centrifugal Clutch
Tool-free changing of the attachments	Yes
Castor Wheels provided to the feed head	No
Handle Type	Two D- Loops for both hands
Type of Harness inclusive in the scope of supply	Double shoulder Strap
<i>SHAFT</i>	
Shaft Material	Stainless Steel
Shaft Type	Straight Shaft
Shaft configuration	Single
Shaft Length (mm)	700 to 724
Shaft Diameter	20 millimeter
<i>NYLON FEED HEAD ATTACHMENT</i>	
Nylon feed head attachment inclusive in the scope of supply	Yes
Feed head of Line Trimmer	NA
Number of Lines	Single
Line (Monofilament / Nylon) inclusive in the scope of supply	Yes
"If 'Yes', Length of the Line Provided in the Spool	0 meter
"Line Diameter (May indicate '0'if Not Applicable)"	2 millimeter
Line Feed	Manual
<i>CUTTER / CIRCULAR SAW ATTACHMENT</i>	
Blade Cutter attachment inclusive in the scope of supply	No

Blade Material	NA
Blade Type	NA
"Number of 2 teeth Blades inclusive in the scope of supply (May indicate '0'if Not Applicable)"	0
Number of 3 teeth Blades inclusive in the scope of supply	0
Number of 4 teeth Blades inclusive in the scope of supply	0
Number of 8 teeth Blades inclusive in the scope of supply	0
Circular Saw attachment inclusive in the scope of supply	NA
"Number of Circular Saw Blades inclusive in the scope of supply (May indicate '0' if Not Applicable)"	0
Circular Saw Material	NA
Diameter of the Circular Saw (mm)	200
Number of Teeth in Circular Saw	0
Feed head of Blade Cutter / Circular Saw attachment	NA
<i>HEDGE TRIMMER ATTACHMENT</i>	
Hedge Trimmer attachment inclusive in the scope of supply	NA
Cutting action	NA
Length of Hedge Trimmer Blade (mm)	200 to 230
Hedge Trimmer attachment adjustment angle (Max) (degree)	NA
<i>PRUNER / CHAIN SAW ATTACHMENT</i>	
Pruner (Chain Saw) attachment inclusive in the scope of supply	NA
Length of Pruner (Chain Saw)(mm)	200 to 230
Cutter Type	NA
<i>LEAF BLOWER ATTACHMENT</i>	
Leaf Blower attachment inclusive in the scope of supply	NA

Maximum Air Speed (km/hr)	250
<i>GENERIC</i>	
Other Accessories inclusive in the scope of supply	Debris guard
Cable Length (Maximum extension cord length) inclusive in the scope of supply	0 meter
Overall Dimensions (mm x mm x mm)	900X800X300
Maximum Operating Weight	8 kilogram
Additional features, if any	Heavy Brush Cutter
List of Items and Quantity of each item included in the offer	NYLON AND BLADE 3D,2D,OIL
<i>ENGINE</i>	
Make / Model of the Engine	LEO 530
"Engine Power Rating (Watt)"	300 Watt
"Engine Compliant to latest CPCB norms (May Indicate 'NA' if Not Applicable)"	No
"Engine Fuel Tank Capacity (May Indicate '0' if Not Applicable)"	2 liter
"Sound level in dB"	110
<i>PRIME MOVER</i>	
Battery Chemistry	NA
Battery Conforming Specification	NA
Availability of Test Report for Battery as per conforming specification	No
Voltage of each Battery	0 Volt
"Number of Batteries required for operation	0
"Number of Batteries supplied (Inclusive in the Scope of Supply)	0
"BATTERY CAPACITY (Ah)	0
Battery Charging Time	0 hour
Battery Run Time	0 minute
"Battery Charger inclusive in the scope of supply	NO

10 Backpack Leaf Blower

Product Specification

Power	2 HP
Speed	290 KMPH
Brand	HUSQVARNA or Similar
Model	350BT
Condition	New
Minimum Order Quantity	1 Piece

11 Tractor with Loader

Product Specification

Brand	Massey Ferguson or similar
Model Name/Number	9500
Horsepower Range	58 HP @ 2200 rpm
Number Of Cylinder	3
Cubic Capacity	2700 cc
Clutch Type	Dual 12" x 10", Cerametallic lining with breather (Luk)
Number Of Speed	Super shuttle 8F + 8R Comfirmesh
Lifting Capacity	Max 2050 kgf
Brake Type	Multi disc oil immersed brakes
Fuel Tank Capacity	60 L
Make	Simpson TSJ327 TIIIA, turbo charged (with charge cooler) or Similar
Power Take Off Speed	540 rpm @ 1790 erpm
Parking Brake Type	Binnacle mounted push-pull typeF

Front Axle Type	T5 axle
Front Tyre Size	7.5 X 16 (16 ply rating)
Rear Tyre Size	16.9 x 28 (12 ply rating)
Delivery Rate	56 lpm (2WD)
Load Capacity	6 ton

12 Water Tanker

Product Specification

Usage/Application	Drinking Water Transportation Purpose
Capacity	1000 Ltr upto 6000 Ltr
Maximum Payload	7 Ton
Capacity (liters)	500- 20000
Material	Steel

13 Hydraulic Ladder

Fire Fighting and Hydraulic Rescue Platform	The Hydraulic Platform shall be designed specifically for fire fighting and rescue work. The entire unit shall be mounted on a Turntable on a CMVR certified BS-IV compliant Chassis. The Truck Chassis complete with Company Built Cabin and PTO Unit are included under this equipment
Maximum Working Height from Ground level	9 meter
Type of Fuel	Diesel
Power Take Off (PTO Unit) Type	EXTERNAL PTO UNIT
Main Boom Configuration	ARTICULATED TELESCOP
Number of Booms	2
Number of Telescopic Sections	4
Cage Capacity with Dry Monitor	500 kilogram
Cage Capacity with Monitor delivering 3000 LPM	300 kilogram
Water Monitor capacity in (LPM)	3000
Maximum Cage floor height from Ground level	9 meter
Maximum reach from Slew centre to Cage corner at full rated load	8 meter

Slewing (degrees plus endless, continuous in both directions)	360 degree
Standard Sparewheel, Tool Kit, First Aid Kit	YES
List of Standard Accessories provided	YES
Optional Accessory - Portable Pump 1500 LPM @ approx 9 Bar	No
Availability of Drawing and Service Manual	YES
Transportation Charge in Rupees Per Km	100
Outreach management as per manufacturer's design shall be controlled automatically by	Both Electro Hydraulic and Computer Aided System
Computer Override Mechanism for operations even in case of failure or malfunction of the Computer Aided safety system	Yes, the mechanism enables to override the electronic computerised controlled safety system and operate the machine with modified reach parameters, with alternative mechanical/hydraulic/electric safety at full load and stability

14 2Cu.M. Fully Company built closed box Tipper with hard top cover & dry wet Partition

Type of TIPPER	Garbage Tipper
Type of TIPPER if other tipper ,please declare type of Tipper,	Garbage Tipper
Make of Chassis	Tata Ace Bs-IV
Type of Chassis Frame	Conventional
Category of Vehicle for which Chassis to be used	Light Capacity Commercial Vehicles
Type of Chassis	Chassis with Face cowl
Type of Fuel	Diesel
Vehicle Emission Complaine	BS-VI
Fuel Consumption (declared by OEM as certified by Test Agency under Rule 115of CMVR 1989) (Kmpl)	21.5
Speed, Max (Km/Hr)	80
Max Engine Power BHP (BHP@rpm)	16
Rated RPM at Max Engine Power	3200
Max Engine Torque (N-M@rpm)	39
Rated RPM at Max Engine Torque	1800
Main Engine Aspiration	Natural Aspiration

No. of Cylinder in Main Engine (Nos)	2
Fuel Tank Capacity (Ltrs)	30 liter
Gradeability of Vehicle with load(%)	16.38
Ground Clearance (mm)	160 millimeter
Wheel Base (mm)	2100 millimeter
Kerb Weight (Kg)	720 kilogram
Gross Vehicle Weight (Kg)	1700 kilogram
Type of BIS MARKED Vehicle Tyre	Radial
Chassis Transmission System	Manual
Number of Speed/ Forward Gears	4
Type of Steering	Manual
Turning Radius,Min (mm)	4300 millimeter
Speed Governors/ECU	Yes
ABS Fitted	No
Front Vehicle Brake	Disc Brake Hydraulic
Rear Vehicle Brake	Drum Brake Hydraulic
Type of Clutch	Single Plate Dry
Tipping Angle (Degree)	48
Tipper Container capacity/Volume(cubic meters)	2.2

15 Water Sprinkler Application Mounted on Water Truck Cabin Truck with Water Tank

Generic Parameters	
Capacity of Water Tanker for water Sprinkler in Kiloliter	6
Type of Fuel	Diesel
Emission Compliance	BS IV
Mount Type	Truck Mounted unit
For Water Sprinklers Power will be drawn from PTO	Yes
Fabrication Parameters	
Capacity of Split Shaft PTO of the vehicle (Kg-m)	400
Equipment Length	5020 millimeter
Equipment Height	2330 millimeter
Equipment Rear Over Hang	Yes

If Yes, Mention rear overhang length in millimeter	580 millimeter
Safety equipments	Yes
Drain Off valve	Yes
High Pressure Jetting Pump With pressure regulating Arrangement	Yes
Type Of Jetting Pump	High Pressure Triplex Plunzer Pump
Working Range of Jetting Pump	130 bar
Water Flow for Pump of Jetting Machine (Ltr/min)	153
Pressure Relief Valve Size	1.5 inch
Sprinkler tube with Nozzle	3
Sprinkler tube Diameter (Capable of withstanding 1point5 times the maximum pressure generated by the pump) in milli meter	65
Working pressure of Washing Hose	180 bar
Burst pressure of Washing Hose	720 bar
Spray gun	Yes
High Pressure Washing Pump	110 bar
Water Flow of Washing Pump (Ltr/min)	20
Length of hose	60 meter
Hose Reel Drive available	No
Hose Reel Type	Manual
Hose Reel diameter	1000 millimeter
Water Level Indicator Type	Yes
Water Level Indicator Nos	2
Accessories And Spares	
Two nos Spray Gun	Yes
Two Nos Spray nozzle	Yes
Two sets of operation and service manuals and spare parts lists	Yes
Two reels of hose pipe, each of 50m length	Yes

16 SPECIAL PURPOSE VEHICLE MOUNTED FOGGER MACHINE WITH DIESEL GENSET, MOUNTED ON 12 TON GVW CHASSIS

Generic Parameters	SPECIAL PURPOSE VEHICLE MOUNTED FOGGER MACHINE WITH DIESEL GENSET, MOUNTED ON 12 TON GVW CHASSIS
Capacity of Water Tanker for water Sprinkler in Kiloliter	6
Type of Fuel	Diesel
Emission Compliance	BS-VI
Mount Type	Chassis
For Water Sprinklers Power will be drawn from PTO	No.
Tank	6000 ltr
Fan motor	11 KW
Drive Pump	4/4.5 KW
Canon Range	40 – 60 Mtr
Flow	3.5 cum/hr
Pitch Angle	-10 – 55 degree
Horizontal rotating Angle	0 – 360 Degree
No of Nozzles	25
Fineness of water mist	10 – 150 micrometer
Generator Unit	50 Kw / Diesel
Chassis	12 Ton GVW, AL Model 1215

17 3000 liter (Tank capacity) Tractor Trailer mounted Suction cum Jetting Machine

Vacuum Pump	Type	Rotary Sliding vane
	Cooling	Air cooled
	Drive	Auxiliary. engine through gear box
Jetting Pump	Type	Triplex plunger pump
	Displacement	Reciprocating positive displacement
	Drive	Auxiliary. engine through gear box
Jetting Hose	Dia./Length/Qty./Type	(3/4")/60 mtr/01 nos./Thermoplastic
Jetting Nozzle	Size/Shape/Qty.	(3/4")/Round/01 nos.
	Size/Shape/Qty.	(3/4")/Conical/01 nos.
Hose reel	Drive	Manual
	Type	Swivel
Tank	Tank rear door opening	Manual and openable in horizontal plane.
	Tank tipping /Angle	not applicable
	MOC	5 mm/IS:2062 Gr.B
Suction Hose	Dia./Length	3"/10 mtr.
Sludge Suction & Drain valve	Size	3"
	Type	Knifegate
Tank	Volume	3000 ltr.
	Fresh water /Sludge water	2000 ltr./1000 ltr.
Vacuum Pump	Flow/Vacuum	(318 cum./hr.)/90%
Jetting Pump	Flow / Pressure/Power	70 LPM/130 bar/25 hp
Jetting Hose	Max. Working Pressure	172 bar
	Min. Burst Pressure	430 bar
Hose reel	Jetting hose storage Capacity	60 mtr
Gearbox	Throughput Torque	400 kgm
	No.of Auxiliary Outputs	2
Auxiliary Engine	Power	30 HP
	Type	4-Stroke, Electric Start, Diesel Run Engine

Water level indicator	Type/Qty	Tube type/02 nos.
Pressure relief valve	Size/Qty	2"/1 nos
Vacuum relief valve	Size/Qty	1.5"/1 nos
Trailer	GLW	6 TON
Equipment	Equipment length	6350 mm approx.
	Equipment height	1870 mm approx.
	Equipment rear over hang	1470 mm approx.
	Overall width	1895 mm approx.
	Overall height	2500 mm approx.
Surface preparation and finish	Equipment's Exterior	Spray-painted with two coats of superior quality anti-corrosive primer and two coats of enamel metal paint. Colour code will be as per customer / tender requirements.
	Tank's interior	Coated with 2 coats of superior quality anti- corrosive grey epoxy paint.

18 SPECIAL PURPOSE TRAILER MOUNTED SANITIZING MACHINE

SANITIZING machine, trailer mounted contains a tank for storage of water, a spraying arrangements for sprinkling water and a platform to operate the same from. The spraying contains a number of nozzles through which water gets continuously sprayed under high pressure.

Area Of use :-

- 1) Mosquito, Fly, sand fly, acarid control.
- 2) Plant protection in field of crops and Forest, tree disinfections.
- 3) Grasslands, road sides, lake and river sides, Fruit, vegetable gardens, public places Sanitation and Disinfection

4) Public Health (insect, mosquito control in Public places such as Parks, Lake sides, Underground sewage channels) in hotels, food production plants, private gardens and lawns.

5) Food plants, depots, stocks, warehouses

Tank	MOC /Thickness	SS304/ 3 mm
	Manhole Qty/position/Dia	1 Nos/Tank Top/600 mm
	Drain- Qty/position/Dia	1 Nos/Tank Bottom/3"
	Shape	Cylindrical or Elliptical or rectangular
Jetting Pump	Type	Reciprocating positive displacement-Triplex plunger pump
	MOC	Stainless Steel
	Drive	Electric Driven - 3 KVA Diesel Generator.
Hose reel	Drive	Manual
	Type	Retractable
Jetting Hose	Dia./Length/Qty./Type	(1/2")/20 mtr/01 nos../ Rubber
Lance Gun	Length/Qty	900 mm/1 no's
Tank	Volume	3000 ltr.
Jetting Pump	Flow / Pressure	21- 40 LPM/150 Bar
Jetting Hose	Max. Working Pressure	172 bar
	Min. Burst Pressure	430 bar
Hose reel	Jetting hose storage Capacity	20 mtr.
Fogging Fan/Spraying	Canon Range	3-6 meter
Canon	Misting capacity	10 to 150 microns
Water level indicator	Type/Display	cup type/ 3 no's
Pressure relief valve	Qty	1"/1 nos.
PPE kit	Qty	2 Nos
	GLW	4 TON

TRAILER	Equipment length	3000 mm approx.
	Equipment Width	1800 mm approx.
	Equipment height	2500 mm approx.

19 SPECIAL PURPOSE VEHICLE MOUNTED MOBILE SEPTAGE TREATMENT UNIT, MOUNTED ON 2.8 TON GVW (BS-VI) CHASSIS

<p>Problem Statement</p> <p>Currently on-site pit latrines and septic tanks account for a substantial proportion of toilets in urban India – over 47% of urban Indian households depend on onsite facilities (Census 2011) and this proportion is increasing. There is going to be a rapid increase of on-site arrangements in cities at locations where sewerage systems are not available. Thus, while the containment of human waste is being achieved at higher rate than ever before by virtue of Swachh Bharat Mission (SBM), its treatment still poses a huge challenge. Presently, in most urban cities and towns, truck operators are desludging on-site containment systems and dumping the faecal sludge and septage in drains, water bodies and open areas, causing high level of environmental pollution and health risks. Many Indian cities are already suffering the consequences in the form of health ailments and serious pollution of water and soil resources. Most of the operators do not decant the septage in treatment plants due to non- availability of the same. In some cases, treatment plants are so distant that it deters the operators to decant there due to high fuel/operational costs.</p>
<p>Innovative Solutions-Mobile Septage Treatment Unit</p> <p>The Mobile Treatment Unit (MTU) is an onsite faecal sludge treatment technology developed by the Water, Sanitation and Hygiene Institute (WASH Institute). It is a treatment system installed on the bed of a small truck, which is able to treat the contents of septic tanks. The MTU treated septage effluent is meeting India’s disposal standards. The on-site mobile treatment unit works with the concept of solid-liquid separation, sludge thickening and effluent treatment process. While the liquid is separated from the solid, the effluent passes through the treatment process and disposes the treated effluent. The sludge thickening process helps further in reducing the moisture content in the sludge. The operational capacity of the MTU varies from 3000 to 6000 lits/hr. The total cost of each mobile treatment unit is much lower than the septage emptying trucks used by the private operators. This mobile unit is easy to operate and it’s operational & maintenance cost is also at lower side.</p> <p>The MTU attempts to address several barriers to achieving safely managed septic waste. In general, the septage consists of higher volume of liquid than solid and most of the truck operators have to carry the entire septage (solid & liquid) to the treatment/disposal sites. This puts extra burden on transportation cost. Higher flow rate of MTU helps to empty & treat more number of septic tanks in a day. This will bring down the truck operational cost especially fuel cost and maximize the profit. If the truck operators pass on this benefit to the Households/customers, then the customers will</p>
<p>Advantages of MTU</p> <p>1) Capital Investment is lower than the Trucks used by Cesspool Operators</p>

2) The Treated effluent's characteristics are well below than the existing CPCB norms of wastewater disposal

3) Since the MTU can empty & treat 3-4 tanks in a day (depending on the size of the tank), Operators can empty & treat multiple tanks in a single trip, thereby saving fuel costs and preventing environmental pollution.

Technical Validation - Treatment Capacity of MTU

Duke University (US) has done the technical validation of the MTU.

WASH Institute has assembled 4 MTUs of which 3 Units are having a capacity of treating 3000 litres per hour. The 4th Unit can treat up to 6000 litres per hour. All the 4 existing units can together treat 15000 litres per hour

The current design of the MTU can empty & treat up to 95% of the total volume of a septic tank. The remaining 5% (which is thick sludge in nature) is left in the tank as sludge blanket for future growth of pathogens in the septic tank. It may be noted that the MTU is designed to empty & treat septage from sealed household septic tanks only, not from unsealed septic tanks or leach pits.

The MTU treats the effluent 100% and sludge gets collected in the centrifuge. On an average, the MTU treats 3-4 septic tanks depending on the storage capacity of the tank. At the end of the day, the sludge collected is taken for secondary treatment to drying beds or existing STPs. WASH Institute is converting the thickened sludge into Briquettes (low cost replacement for Charcoal).

Mounting Details :

Mounting	Chassis details	GVW	2.8 Ton
		Emmission Norms	BS-VI / As per applicable at area of usage
		Chassis Engine output	65 Hp
		Driver's Cabin Type	Single (Day) Cabin
		Make/Model/Wheel base / Hp	Mahindra/Big Bolero Pick Up/3260 mm/61Hp 1.7 T pay load.

20 SPECIAL PURPOSE VEHICLE MOUNTED REFUSE SIDE LOADING COMPACTOR MACHINE, MOUNTED ON 12 TON GVW CHASSIS

Container Body	Type	Smooth Curved stiffener less container Body.
	Side Wall / Thk / MOC	Rolled Smooth Curved/ 4mm / IS:2062
	Bottom / Thk /MOC	4 mm / IS:2062
	Top / Thk /MOC	Rolled Smooth Curved/ 4mm / IS:2062
	Leachate tank	Inbuilt in container front end and rear End.
	Rear Cross Member/ Thk/MOC	Press Channel / 6 mm / IS:2062
	Skid / Thk / MOC	Press Channel/ 6 mm / IS:2062
Compactor cum Ejector	Type	Smooth Curved shape
	Thk / MOC	4 mm/ IS:2062
	Operation	Hydraulic operated
Tail-Gate (Rear Door)	Locking	Tailgate (Rear Door) Locking System.
	Seal	Double Lip Type Rubber Seal
	Operation	Hydraulic
	Thk / MOC	4 mm / IS:2062
	Stiffener Thk / MOC	6 mm / IS:2062
	Operation	Hydraulic
Hydraulic Pump	Type	Positive Displacement
Hydraulic Cylinder	Nos.	6 nos.(Min) of Double acting Cylinders.
	Make	Manufactured by an ISO-9001 certified company.
	MOC	ST-52

Hydraulic Direction Control Valve	Bank/Nos	4 bank / 1 nos
Hydraulic Tank	Thk / MOC	3 mm / IS:2062
	Suction Filter	125 micron
	Return Line Filter	25 Micron
	Level Indicator	O' Ring Type Construction
	Filler Cum air Breather	40 Micron
Bin -lifter	Operation	Hydraulic Operated
	Lifting	Universal DIN Standard Bins
Container Body	Volume	06 cum (Minimum)
Leachate tank	Mounting	Inbuilt in container front end and Rear End.
	Volume	75 ltr.
Hydraulic Tank	Volume	125 ltr.
Hyd. Pump	Displacement / rpm	(64 cc / rev.) / 1500 rpm
Bin -lifter	Lifting	Universal DIN / EN Standard Bins (120 LTR and 240 LTR)
level indicator	Mounting / Qty.	On hydraulic Tank / 01 nos.
Pressure relief valve	Mounting / Qty.	DC valve Hydraulic / 1 nos.

Tailgate Locking (Rear Door)	Type	Tailgate (Rear Door) Locking System.
Hose Brust Valve	Mounting / Qty.	Tailgate (Rear Door) Lifting Hydraulic Operation / 2 nos.
Chassis	GVW	11 ton
	Emission Norms	As per local RTO Norms
	Chassis Engine output	Min. 100 HP
	Driver's Cabin Type	Single (Day) Cabin
	Make/model/wb/hp /Side PTO Provision	Ashok Leyland/Ecomet 1212/3970 mm/120 hp /Mandatory.
	Make/model/wb/hp /Side PTO Provision	Eicher /Pro 1110/3800 mm/107 hp/Mandatory.
	Make/model/wb/hp/Side PTO	Tata/LPT1109/3600 mm/130 hp/Mandatory.
Make/model/wb/hp /Side PTO Provision	Any other equivalent model of other chassis manufacturers.	
Surface preparation and finish	Equipment's Exterior	Spray-painted with two coats of superior quality anti-corrosive primer and two coats of enamel metal paint. Color code will be as per customer / tender requirements.
	Tank's interior	Coated with 2 coats of superior quality anti-corrosive grey epoxy paint.

21 SPECIAL PURPOSE VEHICLE MOUNTED OPEN NALLA DESILTING MACHINE, MOUNTED ON A MINI PICK-UP CHASSIS (BS-VI) WITH BUCKET FOR SMALL STORMWATER DRAINS

Scoop(Bucket) & Boom arm	Scoop Capacity	50 ltrs. (0.05 cu.m)
	Max depth below ground level	1.5 mtr. Approx.
	Max outreach	3.3 mtr. Approx
	Max lifting height	4.4 mtr. Approx.
	Lateral box extension	0.8 mtr.
	Slewing angle	90° degree
	Drive	Hydraulic
Hydraulic Power Transmission System And Drive	Hyd. Pump	Gear type
	Hyd. Pump Drive	Chassis side PTO
	Type:	Gear pump
	Flow at Rated Speed:	27 Lpm
	Pressure:	150 bar
	Return line Filter:	25 Microns
	Suction Filter:	125 Microns
	Total nos. of cylinders:	8 Nos.
	Controls:	8-bank valve; with 4-bank joystick controlled
Stabilizers	4 no's of vertical type hydraulic stabilizers are provided with base frame for stability of the vehicle during the operation.	
Chassis	Make/Model/GVW/WB/HP	MAHINDRA/BOLERO PICK UP EXTRA LONG.
Surface preparation and finish	Equipment's Exterior	Spray-painted with two coats of superior quality anti- corrosive primer and two coats of enamel metal paint. Colour code will be as per customer requirements.

22 SPECIAL PURPOSE VEHICLE MOUNTED OPEN NALLAH DE-SILTING MACHINE MOUNTED ON A 11 TON GVW TIPPER CHASSIS (BS-6) WITH KNUCLE BOOM CRANE FOR DEEP & WIDE DRAINS

Loader Crane	Max. Lifting Moment:	7.6 Ton-Meters.
	Max. Lifting capacity:	3300 Kg
	Max.Horizontal Outreach:	5.7 meters
	Lifting capacity at max outreach:	1360 Kg
	Hydraulic pump (Op. data):	35 LPM; 315 bar.
	Slewing angle:	400 deg.
	Bare Weight:	870 Kg Approx.
Tipper Body	Configuration:	All Steel Electric Welded;
	Load Body capacity:	5.3 Ton approx.
	Panel thickness Bottom:	4.0 mm
	Panel thickness Sides:	2.5 mm
	Panel thickness Rear:	2.5 mm
	Tipping angle:	40°
Hydraulic Pump	LPM / Pressure	35/315
	Drive	Through the Power Take off (PTO) unit.
Control	The operating levers for all crane functions are ergonomically arranged on the console. This provides comfortable, efficient working. The control console is mounted so that it is easy to service	
Chassis	GVW	12 Ton
	Emission Norms	BS-VI/ As per local RTO Norms
	Chassis Engine output	Min.100 HP
	Driver's Cabin Type	Day Cabin

23 Specification of Vehicle Mountable Fogging Machine

Sr. No.	Technical Data	
1.	Size	L = 160-170cm, B= 120-130 cm, H= 95-105 cm
2.	Weight Empty	60-70 Kg
3.	Solution Tank	2 x (60-70) Ltrs. (SS Tank)
4.	Fuel Tank	20-25 Ltrs. (Metallic) (non-pressurised*)
5.	Min. performance of Engine	75 KW (101.6 h.p.) (Twin Fuel Injection)
6.	Average fuel Consumption	8-10 ltrs/hr.
7.	Flow Rate	160 Ltrs/hr. (According to Dosing nozzle used)
8.	Application	Cold & Thermal Fog without the need to change any part. #
9.	Droplet Size Spectrum	less than 20 micron (oil)
10.	Ignition	Electronic Ignition coil fed by 4 dry batteries each 1.5 V = 6V
11.	Starting Device	Finger tip battery start + PVC Pump.
12.	Safety Feature	Machine should have Automatic Cut-off Device ©
13.	Machine should have Bio-technique i.e. injecting water together with the fog for a kind of cold fog application.	
14.	The machine should have CE, ISO, WHO and ISI mark certificates, also machine should be tested by Govt. Lab.	

Non-pressurized fuel tank ensures the non-burning of active ingredients in chemical as in pressurized tank engine heats & results in burning of chemical & also fire accidents.

Automatic cut-off device to prevent the fire accidents by disconnecting the solution flow when the engine stops. Multi-Application can be done with one machine i.e. thermal & cold fogging.

24 Bolero Pick-Up/ Tata ace	
ENGINE	
Type :	Tata 275 Gasoline MPFI" BS-VI, 4 stroke water cooled engine
Max. output :	22 kW@ 4000 RPM
Max. Torque :	55 NM @ 2500-3000 RPM
Clutch :	Single plate dry friction diaphragm type
Gearbox :	GBS 65-4/6.31
Steering :	Mechanical, variable ratio (23.1 to 28.9:1) Variable, 380 mm dia
SUSPENSION	
Front :	Parabolic leaf spring
Rear :	Semi  Elliptical leaf spring
Tyres :	145R12 LT 8PR RADIAL
VEHICLE DIMENSIONS (MM)	
Length :	3800 minimum
Width :	1500 minimum
Height :	1840 (Unladen) minimum
Wheelbase :	2100 or more
Front Track :	1300 minimum
Rear Track :	1320 minimum
Ground Clearance :	160 or more
Cargo Box Dimensions :	2200 (7.2 ft) X 1490 (4.9 ft) x 300 (1 ft)
Min Turning Circle Radius :	4300 minimum

25 (Tipper Truck/Hyva)

ENGINE

Engine	CuMmins B 5.9
Emission Norms	BS-III
Engine Cylinders	6
Engine Capacity	5883 cc
Max Power	180.4bhp @ 2400rpm
Max Torque	680Nm @ 1300-1500rpm
Fuel Tank Capacity	225 liters

PERFORMANCE

Gradeability	29 %
Max Speed	70 kmph

WEIGHT

Max GVW	25000 kg
Kerb Weight	NA kg
Payload (Passing)	14100 kg

DIMENSIONS

Length	7180 mm
Width	3350 mm
Height	NA mm
Wheelbase	3880 mm
Ground Clearance	250 mm
Min Turning Radius	9900 mm

BRAKES & SUSPENSION

Brakes	Air Brakes
Parking Brakes	YES
Front Axle	Heavy Duty Forged I Beam, Reverse Elliot Type
Rear Axle	Heavy Duty Single reduction Tandem Axle
Front Suspension	Semi Elliptical Leaf Spring
Rear Suspension	Semi Elliptical Leaf Spring
ABS	NO

CLUTCH & TRANSMISSION	
Clutch	Single Plate dry friction Push type(380 mm)
Gearbox	6-Speed
Steering	Hydraulic Power-assisted
Transmission	Manual
Power Steering	YES
TYRE	
Front Tyre	11 x 20 - 16PR
Rear Tyre	11 x 20 16PR
Tubeless Tyres	NO
BODY & CABIN	
Body Option	Box Body
Chassis Type	Chassis with Cabin
Cabin Type	Sleeper Cabin
Tiltable Cabin	NO
OTHERS	
Air Conditioning	NO
Seat Belts	YES
Hill Hold	NO
Fog Lights	NO

26 Excavator-cum-Backhoe Loader	
Compliance to IS 20474-4 for EARTH-MOVING MACHINERY—SAFETY REQUIREMENTS FOR BACKHOE LOADERS	Yes
On Buyer's Demand, Test certificate	Yes
Generic Parameters	
Engine Model	KOEL 4R810 NA OR SIMILAR
Engine Maximum HP (BHP@ RPM) (range)	49-55
Engine Maximum HP (BHP@ RPM)	49.5
Engine Rated RPM	2200
No of Cylinders (Nos)	4

Engine Bore (mm)	96 millimeter
Engine Stroke (mm)	112 millimeter
Engine Cooling System	Water Cooled
Max Torque (N-m@rpm)	203
Fuel Injection system	Mechanical Inline
Torque Backup (%)REM)-III A	0
Vehicle Emission Complainece	BS III
Vehicle Mileage (declared by OEM as certified by Test Agency under Rule of CMVR 1989) (Km/Ltr)	8
No of Air Cleaner	2
No of Fuel Filters	2
Type of Gear Box	Synchroshuttle type
No of speeds Forward (Nos)	4
Maximum Forward Speed (Km/hr)	28.8
Maximum Reverse Speed (Km/Hr)	28.8
Minimum Forward Speed (Km/Hr)	4.4
Minimum Reverse Speed (Km/Hr)	4.4
Power Steering	Yes
Steering wheel dia (mm)	400 millimeter
Brake type	Disc Type(Oil submerged)
Specific Fuel Consumption (SFC)in g/hp/hv (g/hp/hv)	175
Minimum Turning Radius (mtrs or mm) with brakes	4000 millimeter
Minimum Turning Radius (mtrs or mm) without brakes	5900 millimeter
Fuel Tank Capacity (Litres)	60 liter
Fuel Tank Oil Pan Capacity (Litres)	60 liter
Type of Wheel Drive	Two wheel Drive
Front Tyre Size with ply rating (mm)	8.25x16
Rear tyer Size with ply rating (mm)	14.9x24
Minimum Ground Clearance (mm)	330 millimeter
Backhoe Bucket Width	0 millimeter

Backhoe Bucket Capacities in Cubic Metre with locking/bolted teeth	0
Backhoe Bucket Digging Depth	3 meter
Backhoe Bucket Digging Force in Kgf	0
"Backhoe Bucket Dipper Tear out Force in Kgf"	0
"Backhoe Bucket Loading Height in metres"	3.3-4.0
Backhoe Bucket Loading Reach in metres	1.12-5.6
"Backhoe Bucket Reach from swing Pivot"	0
Type of Loader Bucket	Bottom Dump Bucket
Loader Bucket Minimum Capacity	0.55
Loader Bucket Dump height in metres	2.20-2.50
Loader Arm Break out Force in kgf	1700
Loader Bucket Maximum reach at full height in meter	1.12
Loader Bucket Pay Load in kgs	800 kilogram
Loader Bucket Dig depth	90 millimeter
Operating Weight (Kgs)	5670
Transmission Oil Capacity (Litres)	16 liter
Hydraulic Oil Capacity (Litres)	60 liter
Hydraulic Oil change period	2000 hour
Di-Ethyl Ether Type Cold starting Kit (to start the CI engine upto -25°C)	No
Rock Breaker	No
Rock Breaker Operating Weight	NA for without Rock Breaker
Rock Breaker Operating Pressure (Kgf/cm ²)	NA for without Rock Breaker
Rock Breaker Strike rate (350 blows per minute)min	NA for without Rock Breaker
Performance Parameters	

Noise level at operator s ear level (dB)	90
Vibration at seat	No
Vibration at seat (if yes) (micron)	0
Average travel speed (Km/hr)	7.1
Average fuel consumption (litre/hr)	3.5
Average distance travelled per litre of fuel(Km)	8
Excavator loader to perform various functions such as digging	Yes
Dozing,	Yes
Grabbing,	Yes
Grading	Yes
Loading	Yes
Spreading	Yes
Warranty Time (Month)	12 month
Operating hours during warranty period	2000 hour
Battery Warranty (months)	12 month

27 Skid Loader	
Self Propelled wheeled machine which has front-mounted equipment primarily designed for loading operation (bucket use) and which loads or excavates through forward motion of the machine	Yes
Conforming to IS/ISO 7131: 2009	Yes
Type of loader	Wheeled
Attachment	multi-purpose bucket
Ignition type	Diesel
Aspiration	Naturally aspirated
Number Of Cylinders	4
bore (mm)	84 millimeter
stroke (mm)	100 millimeter
displacement (cc)	2216
Net flywheel power at given engine speed (hp)	46 horsepower
Maximum Engine torque (Nm)	143
Engine cooling system	Liquid cooled
Type of fuel	Diesel

Engine location	Rear
Drive system	All-wheel drive
Emission Compliance	BS III
Gross Power (hp)	49.5 horsepower
Operating Weight (Kg)	2830 kilogram
Arm lifting force	14122 Newton
Operating Speed (kmph)	12
Maximum Speed (kmph)	12
Operating Load Rating	612
Wheel Base (mm)	1070 millimeter
Ground Clearance (mm)	210 millimeter
Operating voltage (Volts)	12
Alternator Supplied Amperage (Amp)	65
Operating mass (kg)	2830 kilogram
Shipping Mass (kg)	2770 kilogram
Certification Parameters	
Vehicle Certification ARAI/VRDE/ICAT	Yes
If No, mention the name of Vehicle Certification agency	-
Vehicle Certification name and date	ICAT05/01/2018
Constructional Parameters	
Overall length with attachment	3490 millimeter
Overall operating height	3900 millimeter
Bucket capacity	0.4 liter
dump angle (degree)	42
dump height	2260 millimeter
maximum dump height when clam open	2300 millimeter
maximum dump height when clam closed	3900 millimeter
Maximum dump height, side	0 millimeter
Rollback (specify height)	3900 millimeter
Maximum rollback at ground	30 millimeter
carry position	-
maximum rollback at carry position	42 millimeter
Minimum turning radius with bucket in carry position	2090 millimeter
digging depth	-10 millimeter
bucket width	1696 millimeter
maximum grading angle	35

Operating load	612 kilogram
breakout force	18142 Newton
machine clearance radius	2090 millimeter
TURNING RADIUS FROM CENTER - MACHINE REAR	1650 millimeter
TURNING RADIUS FROM CENTER - INC BUCKET	2090 millimeter
Type of transmission	hydrostatic
Number Of forward speed	1
Number Of Reverse speed	1
Maximum forward travel speed (kmph)	12
Maximum reverse travel speed (kmph)	12
Hydraulic pump system type	Gear Type
Hydraulic pump flow at given pressure (l/h)	4200
Hydraulic pump flow at given speed (l/h)	4200
Maximum normal hydraulic system operating pressure	23000 kiloPascal
Hydraulic system fluid capacity	69 liter
Type of filtration system	RLine,Charge Filter,
Type of final drive	Sprocket chain
Type and actuation system of the service brake	F-N-R
Type and actuation system of the parking brake	Multi disc
Type of Driving Axle	Hydrostatic
Steering system	All-Wheel Steer
Type of tyre	Heavy Duty
Size of tyre	10x16.5
Tyre tread	HEAVY DUTY XD44
Tyre Ply rating	10PR
Rim Size	16.5x8.25
Fuel tank capacity	98 liter
cooling system fluid capacity	10 liter
hydraulic tank fluid capacity	69 liter
Engine crankcase capacity	7.5 liter
final drive case capacity	38 liter
pump drives capacity	70 liter
Height to hinge pin, fully raised	3000 millimeter
Overall operating height when fully raised	3900 millimeter

Maximum scarifier lift height	0 millimeter
Performance Parameters	
Net Engine Power	46 horsepower
Tipping load at maximum reach (KN)	1224
Lift capacity to maximum height	3000 millimeter
Rated operating capacity	612 kilogram
Breakout force	18142 Newton
raising time	3.61 second
Lowering time	3.48 second
Dump time	1.9 second
Maximum travel speed (kmph)	12
Braking performance	1.7 m stopping
Turning radius	2090 millimeter
Warranty time	12 month
Operating hours during warranty period	2000 hour
Battery warranty	12 month
Number Of Free services	4
Transportation charge (Rs)	0
Maintenance cost for first 5000 Hrs	228045
Self-propelled crawler machine which has front-mounted equipment primarily designed for loading operation (bucket use) and which loads or excavates through forward motion of the machine	

28 Mini Cesspool Machine	
Chassis Certification ARAI/VRDE/ICAT	Yes
Chassis Certification ARAI/VRDE/ICAT No	TATA LPT407 OR SIMILAR
Form 22 A - For compliance with pollution standards, safety standards of components and road worthiness as per CMVR Rules	Yes
Conforming to IS:11387 for high pressure jetting machine for sewer cleaning	Yes
Availability of test reports for all critical components from the manufacturer or OEM of Jetting Pumps, power takeoff unit, Jetting Hose etc shall be from any ILAC /NABL accredited / Central Govt Lab to be furnished to buyers on demand	Yes
Registration To Local RTO (Regional Transport Office)/RTA(Regional Transport Authority) By Seller	Yes
NGT approval needs to be provided bu the Govt department if required	Yes
Generic Parameters	
Make and Model of Jetting Pump	JUROP OR SIMILAR
Make and Model of Jetting Hose	POLYHOSE OR SIMILAR
Make and Model of PTO	TATA OR SIMILAR
Make and Model of Hydraulic Motor	REPUTED MAKE
Make and Model of Hydraulic Pump	JUROP OR SIMILAR
Make and Model of Jetting hose	POLYHOSE OR SIMILAR
Chassis Make and Model	LPT OR SIMILAR
Chassis Model Number	LPT407 OR SIMILAR
Chassis Type	Light Motor Vehicle
Type of Fuel	Diesel
Chassis Gross Vehicle Weight	5950 kilogram
Kerb Weight	2680 kilogram
Pay Load Capacity (Tonne Load)	3066
Vehicle Emission Compliance	BS-VI

Max Engine BHP	98 horsepower
Max Engine Torque	300 Newton
Maximum Speed of Vehicle(KM/Hr)	80
No of Speed/ Forward Gears	5
Gradeability of Vehicle (%)	25.02
Wheel Base	3305 millimeter
Engine Aspiration System	Turbocharged Intercooler
Mount Type	Truck Mounted Unit
Fuel Tank Capacity	60 liter
Constructional Parameters	
Capacity of Split Shaft PTO of the vehicle (kgm)	210
Overall Length	5405 millimeter
Overall Width	2100 millimeter
Equipment Length	3000 millimeter
Equipment Height	1500 millimeter
Equipment Rear Over Hang	No
If Yes, Declare Equipment Rear Over Hang	0 millimeter
Type of Front Axle and Suspension System	LEAF SPRING
Type of Rear Axle and Suspension System	PARABOLIC
Derrick Arm Available	No
Type Of Cooling	Air cooled
High Pressure Jetting Pump With pressure regulating Arrangement	Yes
Jetting Pump - Triplex plunger reciprocating pump	Yes
Working Pressure Range of Jetting Pump	120 bar
Water Flow for Pump of Jetting Machine (LPM)	150
Pressure Relief Valve Size	25 inch
Jetting hose inner Diameter (Capable of withstanding one point five times the maximum pressure generated by the pump)	25 millimeter
Jetting Hose Length	60 meter
Number of Nozzles for removing Blockage (Conical Head)	1
Number of Nozzles for Flushing Sewer lines(Round Head)	1
Number of balanced Nozzles for dry silt	1
Water storage Tank Capacity	2000 liter
Maximum working pressure of Jetting Hose	160 bar
Minimum Burst pressure of Jetting Hose	430 bar
Thickness of tank plate	6 millimeter
Material of tank	Mild Steel (Grade-A)conforming to IS 2062 latest
Hydraulic Pump Type	Gear Type

Water Level Indicator Type (with safety coverage)	2
Water Level Indicator Nos	2
Thickness of Cover for Engine, Pump and Hose Reel compartment as per IS :11387	3 millimeter
Material of Cover for Engine, Pump and Hose Reel compartment	Galvanised IronSheet

29 Cesspool Machine 10000 LTRS	
NGT approval needs to be provided by the Govt department	Yes
Chassis Certification ARAI/VRDE/ICAT	Yes
Chassis Certification ARAI/VRDE/ICAT No	AAKN0087
Form 22 A - For compliance with pollution standards, safety standards of components and road worthiness as per CMVR Rules	Yes
Conforming to IS:13496 for Suction Machine for cleaning Sewers, Manholes and ancillary structures provided on sewer line and closed storm water drains	Yes
Conforming to IS:11387 for high pressure jetting machine for sewer cleaning	Yes
Availability of test reports for all critical components from the manufacturer or OEM of Jetting Pumps, vacuum pumps, power takeoff unit, Jetting Hose etc shall be from any ILAC /NABL accredited / Central Govt Lab, to be furnished to buyers on demand	Yes
Registration To Local RTO(Regional Transport Office)/RTA(Regional Transport Authority) By Seller	Yes
Generic Parameters	
Chassis Type	Heavy Motor Vehicle
Type of Fuel	Diesel
Chassis Gross Vehicle Weight	25000 kilogram
Kerb Weight	4950 kilogram
Engine Capacity Engine shall be capable to drive hydraulically vacuum pump and jetting pump using a high capacity intermediate drive line gear box	300 horsepower

Pay Load Capacity (Tonne load)	20
Vehicle Emission Complainece	BS-IV
Engine BHP@rpm (hp@rpm)	180 HP @ 2400 RPM
Engine Torque Max (N-m@rpm)	660NM@1200-1900 RPM
Gradeability of Vehicle (%)	19.8
Wheel Base	4902 millimeter
Engine Aspiration System	Turbocharged Intercooler
Mount Type	Chassis Mounted
Split Shaft PTO arrangement	Yes
Fuel Tank Capacity	400 liter
Constructional Parameters	
Capacity of Split Shaft PTO torque of the vehicle (kgm)	2000
Overall Length Of the Vehicle	9545 millimeter
Overall Width Of the Vehicle	2384 millimeter
Equipment Length	7210 millimeter
Equipment Height	3795 millimeter
Equipment Rear Over Hang	Yes
If Yes please mention the extracted length	2130 millimeter
Type of Front Axle and Suspension System	semi eliptical
Type of Rear Axle and Suspension System	semi eliptical
Free Air flow Rating (cum/Hr)	6000
Vacuum Suction Depth	8 meter
Rated Vacuum of blower	9000 millimeter
Vacuum Pump Power	900 millibar
Minimum Operating pressure	800 millibar
Vacuum Relief Valve Size	1.5 inch
"Suction Hose Type - Lightweight, heavy duty, reinforced, PVC "	Yes
Suction Hose Internal Diameter	125 millimeter
Suction Hose Length	3 meter
Number of Suction Hose (Nos)	5
Silencer/ Filter(Micro Strainer)	Yes
Exhaust Silencer and injection cooling air Inlet Silencer/ Filter	Yes
Blower Outlet and Air- Exhaust Silencer	Yes
Check valve	Yes
Vacuum Limitation Valve	Yes
Discharge Pipe Diameter	152 millimeter
Discharge Capacity of the Tank (LPM)	406
Drain Off valve	Yes

Capacity of Sludge Tank	8000 liter
High Pressure Jetting Pump With pressure regulating Arrangement	Yes
Hydraulic Jetting Pump	Yes
Pressure Range of Jetting Pump	150 bar
Water Flow for Pump of Jetting Machine (LPM)	406
Pressure Relief Valve Size	2 inch
Jetting hose Diameter (Capable of withstanding one point five times the maximum pressure generated by the pump)	31.25 millimeter
Jetting Hose Length	120 meter
Number of Nozzles for removing Blockage (Conical Head)	1
Number of Nozzles for Flushing Sewer lines(Round Head)	1
Water storage Tank Capacity	9000 liter
Thickness of water tank plate(Conforming to IS:2062 Grade-A)	4 millimeter
Material of water tank with Material Grade	IS-2062B
Surface preparation and finish of Equipment's Exterior	SPRAY PAINTED
Surface preparation and finish of Tank's Interior	2 COATS
Hose Reel Drive available	Yes
Hose Reel Type	SWIVEL
Hose Reel diameter	1220 millimeter
Dished Head	Yes
Primary shutoff device available	Yes
Reinforcement rings in pipes	Yes
Shut off valve diameter	50 millimeter
Hydraulic Pump Type	GEAR
Hydraulic Pump Drive	SIDE PTO
Hydraulic Pump Displacement	15.6
Pump Operational Time	30 minute
Water Level Indicator Type	ACRYLIC TUBE
Water Level Indicator Nos	2
Thickness of Cover for Engine, Pump and Hose Reel compartment	3 millimeter
Material of Cover for Engine, Pump and Hose Reel compartment	Galvanised Iron Sheet

Complete Equipment ARAI/VRDE/ICAT Certification (Suction Dump Tank)	No
If Yes, Please Mention ARAI/VRDE/ICAT No (Suction Dump Tank)	NA
NGT approval needs to be provided by the Govt department (Suction Dump Tank)	Yes
Chassis Certification ARAI/VRDE/ICAT (Suction Dump Tank)	Yes
Chassis Certification ARAI/VRDE/ICAT No (Suction Dump Tank)	AAKN0066
Form 22 A - For compliance with pollution standards, safety standards of components and road worthiness as per CMVR Rules (Suction Dump Tank)	Yes
Make and Model of Suction Dump Tank Chassis	ASHOK LEYLAND 1618
Number of Suction Dump Tank (Nos)	2
GVW of chassis (Suction Dump Tank)	16 tonne
Vehicle Emission Complianc (Suction Dump Tank)	BS-IV
Cooling System - Turbo Charged/Water Cooled (Suction Dump Tank)	Yes
Type of Fuel (Suction Dump Tank)	Diesel
Engine BHP (Suction Dump Tank)	180 horsepower
Tyre Size (Suction Dump Tank)	1000 x 20 (16 PR)
If Others, please mention tyre size	0
Wheelbase (Suction Dump Tank)	4330 millimeter
Truck chassis should be fitted with side PTO on the vehicles gear box (Suction Dump Tank)	Yes
Standard Cabin Sitting Capacity (No of Persons) (Nos)	2
Hydraulic Tipping Arrangement (Suction Dump Tank)	YES
Rear Door Opening (Suction Dump Tank)	YES
Number of Compartments (Suction Dump Tank) (Nos)	2
Clean Water Compartment Capacity (Suction Dump Tank)	2000 liter
Sludge Compartment capacity (Suction Dump Tank)	8000 liter
Total Compartment Capacity (Suction Dump Tank)	10000 liter

Thickness of water tank plate (Conforming to IS:2062 Grade-A)	6 millimeter
"Material of Tank with Material Grade (Suction Dump Tank) "	IS-2062B
Jetting System for Sludge Tank Washing (Suction Dump Tank)	Yes
Jetting system Discharge Capacity (Suction Dump Tank) (LPM)	70
Jetting pump Pressure (Suction Dump Tank)	130 bar
Drive Rating @ Pump RPM (Suction Dump Tank) (hp@rpm)	24
Pump Drive From PTO (Suction Dump Tank)	Yes
Torque (Suction Dump Tank) (kgm)	400

30 Tractor with Trolley	
Type of Tractor	minimum 50 HP
Type of Trailers	Semi Trailer (Single Axle)
Type of Platform	Tipping Platform
Capacity of Trailer (Gross Load)(tonnes)	6
Pay load of Trailer	3 tonne
Material used for fabrication of trailer as per Clause-5, Table-1 of IS:8213 (Latest)	Yes
Type of Axle Assembly (The capacity of Single Axle Trailers is not more that 5 Tonnes)	Class-A (Load carrying capacity upto 3 Tonne)
Overall length of Trailers (shall not exceed 5 m upto 6 tonne load, 6.7m for above 6 tonne load)	4.07 meter
Overall Width of Trailers between extreme points (meter)	1.53 meter
Overall Height of Trailers with tyre inflated from the supporting surface to top of platform (meter)	0.61 meter
Overall Height of Trailers with tyre inflated from the supporting surface to sideboard (meter)	1.38 meter
Ground Clearance (mm)	1550 millimeter
Axle Assembly Wheel Track(mm)	1500
Axle Assembly dimensions as per Table-2 of IS:8213 (Latest)	Yes

Hydraulic Ram of suitable capacity for tipping facility	Yes
Tipping Angle (degree)	45
Single telescopic cylinder as per IS:12371 (Latest)	Yes
Tilting of platform without disturbing the trailer	Yes
Reto Reflective Marking (tapes) as per AIS -090	Yes
Lighting and Lighting -signalling device as per AIS-062	Yes
Trailers shall be fitted with Rear Under Run Protective Device (RUPD) confirming to IS 14812 :2005	Yes
Trailers shall have service and parking brake as per AIS- 043	Yes
The Trailers shall be fitted with pneumatics tyres and rims of suitable size confirming to IS 13154 :1991 and IS 10694 :1988	Yes
Number of Wheels	2
Certification	
Conformity to standards	IS 8213:2000 (latest) and AIS 112 (latest)
Necessary clearance from RTO to be obtain before supply of Trailer	Yes
Construction Parameters	
ISI marked ISMC channel used for fabrication of Chassis and frame mounting on chassis	Yes
Type of spring suspension system (as per IS:1135) for load carrying capacity	NA
Diameter of the Axle of chassis (Min) (mm)	80 millimeter
Nos. Of spring leaves plates fitted (Nos.)	15
Lashing hooks for towing down load	Yes
No of Hooks	1
Type of Towing Device	NA
Capacity of Towing	3 tonne
Painted Colour on the Trailers as per AIS 112	Red
One coat of Red Oxide and 2 coat of Super Synthetic Enamel Paint	Yes

Painting on outer side of the tank as approved by the buyer	Yes
---	-----

31 Pond Cleaning Machine (Trash Skimmer)

Motor	Kubota V1505-T turbo diesel 44.9 hp / 3000 RPM. Environmental class Interim TIER 4/Stage 3 A. Euro class 3 Automatic stop function if the engine overheats or the oil pressure is too low. Warning system for driving at maximum slope that stops the diesel motor automatically if the maximum slope is exceeded.
Cooling System	Combi radiator for the motor and the hydraulic system. The air intake of the radiator is equipped with a filter (prevents the accumulation of dirt in the radiator cells).
Driver Seat	Ergonomically designed, adjustable driver's seat with thermostat-controlled electrically heated seat, foldable cab, adjustable steering.
Electrical Systems	12 Volt, generator 60 ampere, battery 45 A, adjustable thermostat-controlled operator's seat.
Dashboard	engine speed (RPM), motor temperature, control lights, hydraulic oil temperature, hydraulic pressure and fuel gauge.
Hydraulic System	Hydraulic tank with cyclone technology – 5.02 gal. Hydraulic system volume – 9.51 gal Load-sensitive hydraulic pump, torque 84.82 lbf. Control system with CAN bus signalling technology. Automatic stop if the hydraulic tank level gets too low.
Left Joystick	For Driving the machine. Hydraulic outlet 1 – work pressure 140 bar, adjustable flow 0-6.6 gal/min. Hydraulic outlet 2 – work pressure 130 bar, adjustable flow 0-2.9 gal/min.
Right Joystick	Lifting, tilting, weight distribution. Hydraulic outlet 3 – work pressure 200 bar. Adjustable flow 0-15.8 gal/min, 22.2 hk
Fork Lift	Lifting power 551.2 lbs, DM bracket for fast change of tools.
Caterpillar Track	(paddle track) of rubber.
Material	Pontoons manufactured of saltwater-resistant aluminium. Hot-dip galvanised steel structure.
Dimensions	Length 4.7 m, width 2.06 m, height 2.1 m.
Weight	3,86.47 lb
Equipment	4 work lights, service Tools.