# RATE CONTRACT

# REGD. From

The Director General, Supplies & Disposals, Haryana, S.C.O No. 9,(1<sup>st</sup>&2<sup>nd</sup> floor), Sector -16 Panchkula 134109(Haryana) Phone No.0172-2570121, 2570123, 2570124 Fax No.0172-2570122, E-mail: <u>supplies@hry.nic.in</u>

M/s IOTA Engineering Corporation, Opposite Plot No. 127, Udyog Vihar, Phase- 1, Dundahera

Gurgaon-122016, Haryana

e-mail : <u>iotain@yahoo.com</u>, <u>iotaec@gmail.com</u>, <u>rajat3099@gmail.com</u> Work Address:

M/s IOTA Engineering Corporation, Khasra No. 114, Rohad Industrial Area, Rohad, Bahadurgarh-124501, Jhajjar, Haryana

Memo. No. 84/HR/RC/E-2/2023-24/ Dated Panchkula the

Subject:- Annual Rate Contract for the purchase of Super Sucker Unit capable of desilting and de-choking civil/ industrial drains sewer lines of diameter upto 2000mm (Suction Dump Tank of 10000 Ltr. capacity)(Sr. No. 10.)

# -x-x-x-x-x-x-x-x-

With reference to your Bid ID no. 1187320, letter dated , and this office acceptance letter No. & dated , your letter No. & date given in Schedule- 'A' attached on the subject noted above, I have to inform you that your rates have been accepted for the supply of stores as per terms and conditions given in Schedule-'A & B'.

2. I enclose herewith an agreement form in duplicate and request that the agreement may be executed on a Non-Judicial Stamp paper of Rs.15/- signed and returned to this office within 10 days from the date of issue of this letter. One copy of the agreement will be sent to you duly executed on behalf of Governor of Haryana for your record. You may kindly send power of attorney in favour of the person/persons who is/are authorized to sign the agreement together with/their specimen signature duly attested by Magistrate or Oath Commissioner or Resolution of the firm authorizing the persons to sign the documents on behalf of the firm.

3. The Contract shall come into force from the date of its issue and shall remain operative for one year i.e up-to **15.07.2026** Government reserves the right to bring any other firm on the rate contract at any subsequent stage during the pendency of this rate contract.

4. The store must be supplied with approved specifications as per Schedule-'A' attached, failing which the same shall be rejected at your risk and cost.

5. The inspection of the material will be carried out by the Indenting Officers or their authorized representatives at your premises before dispatch.

6. The supply must be completed within the stipulated delivery period failing which the risk purchase will be affected against you and the excess cost thus incurred will be recovered from you. Delayed supplies may be accepted under penalty clause of the Schedule -'B' unless the delivery period is extended by the competent authority.

7. The Director General, Supplies & Disposals Haryana reserves to himself the right to obtain the contracted items of stores when available from any Govt. Deptt./approved source/any other source without prejudice to this contract.

8. Failure to execute Agreement/ effect supplies within the stipulated period, repeatedly offering supplies liable to rejection or without prior inspection may render your earnest money/security liable to forfeiture, debarring of your firm in addition to other remedies as available under the terms of the contract.

9. All cases where payments are not made within time, should be referred to this office for taking necessary action against the defaulters.

10. **PRICE FALL CLAUSE:** i) The price charged for the stores supplied under this rate contract shall not exceed in any way the lowest price at which you quote/supply the stores of identical description to GeM/State Govt./Central Govt./Institutions/Undertaking/any other person during the delivery period/currency period of the rate contract. If, at any time during the said period, you/successful tenderer reduces the rate, sale price, of quoted stores to any person/Organization/ any Deptt. of Central Govt./ etc. at a price lower than the price chargeable under the rate contract, the tenderer/you are required to inform this office and the price payable under the rate contract for the stores supplied after the date of coming into force of such reduction of the rates shall stand correspondingly reduced to that level. You promptly notify the reduction of rates to this office as well as to concerned Indenting Officers/Consignees. You shall also give a certificate on your bills that the rates charges by you are not in any way higher to those quoted to GeM/other State Govt./ PSU/ etc. during the corresponding period. The Indenting officer shall be required to ensure that requisite certificate is given by the concerned firm on the bills before releasing their payments.

11. All disputes will be settled within the jurisdiction of Headquarter of the Directorate of Supplies & Disposals, Haryana, Panchkula.

12. Two copies of Schedule-B (tender form) are enclosed herewith which are to be returned duly signed & stamped on all the pages by your Competent Person as well as signature of two witness alongwith the requisite agreement form.

Please acknowledge the receipt of this letter.

Joint Director, Supplies & Disposals, Haryana For & on behalf of Governor of Haryana Dated:

# Endst. No. 84/HR/RC/E-2/2023-24/

A copy is forwarded to the Engineer-in-Chief, Public Health Engineering Deptt. Haryana, Bay No.13-18, Sector-4, Panchkula for information and necessary action please:-

- He may place supply order directly with the approved firm under intimation to this office.
- 2. Maximum quantity to be ordered against the rate contact is 18 nos. and minimum quantity is 12 nos. Accordingly, Public Health Engg. Deptt. will act as Nodal Office against the rate contract so as to monitor the quantity to be purchased against the rate contract.
- 3. The inspection shall be arranged by the indenting officer/consignees or their authorized representatives at destination before releasing the payments of the

supplies. The store should be accepted only after satisfactory inspection and issue of proper inspection note showing the acceptance of the material as per approved specifications.

4.

After expiry of the rate contract/ delivery period and the satisfactory performance of the machines during the warranty period of 03 years, the Indenting Deptt. is required to confirm to this office within two months that the firm has supplied the Machines as per the specifications, terms & conditions of the rate contract & nothing is remaining to be recovered from the firm so that the security of the firm may be released.

-Sd-Joint Director.

For Director General, Supplies & Disposals, Haryana, Panchkula 2/RC/F-2/2023-24/ Dated :

Endst. No. 84/HR/RC/E-2/2023-24/

A copy is forwarded to the Excise & Taxation/GST Commissioner, Gurugram, Haryana for information and ensuring that the GST is paid by the firm to Government against this rate contract.

Joint Director For Director General, Supplies & Disposals, Haryana, Panchkula

Endst. No. 84/HR/RC/E-2/2023-24/ 6753

# Dated: 16-07-2025

A copy is forwarded to the following for information and necessary action:-

1. The Principal Accountant General (Audit) Haryana, Sector 33, Chandigarh.

- 2. St. Section.
- 3. Computer Programmer.

Joint Director, For Director General, Supplies & Disposals, Haryana, Panchkula

# SCHEDULE-'A'

Accepted rates, technical specifications and terms & conditions of **M/s IOTA Engineering Corporation, Gurgaon**, Opposite Plot No. 127, Udyog Vihar, Phase- 1, Dundahera, Gurgaon-122016, e-mail : <u>iotain@yahoo.com</u>, <u>iotain@indiatimes.com</u>, <u>iotaec@gmail.com</u>, *Work Address:* M/s lota Engineering Corporation, Khasra No. 114, Rohad Industrial Area, Rohad, Bahadurgarh-124501, Jhajjar, Haryana against firm's bid no ID no. 1187320 and letter dated 07.04.2025 and this office acceptance letter No.5952 dated 27.06.2025, firm's letter No. IEC/FIN/01 dated 07.07.2025.

#### a. Store Details & Rates:-

Sr.No.	Description of stores	Quantity:	Rates in Rs. per super sucker machine inclusive comprehensive operation and maintenance per machine for 5 years, inclusive of GST @ 18%, FOR Consignee stores etc
1.	Super Sucker Unit capable of de-silting and de-choking civil/ industrial drains sewer lines of diameter upto 2000mm (Suction Dump Tank of 10000 Ltr. capacity)	Contract basis: Minimum-12 Nos. Maximum-18 Nos	Rs. 8,99,00,000/-

Bifurcation of rates (Supply and operation & maintenance for 5 years ):-

Sr No	Item Description	Units	Rates in Rs.
1.	(A) For Supply of Super Sucker Unit,02 No. Suction Dump Tanks and Water Tanker, Complete in all Respects.	Per No.	2,55,00,000/-
2.	(B) For Comprehensive Operation and Maintenance	Unit	
	B.1 Operation Cost of each machine	Per No.	Basic Operation Cost in Rs
	For 1st Year starting from the date of operation	Per No.	1,10,00,000/-
	For 2nd Year	Per No.	1,15,00,000/-
	For 3rd Year	Per No.	1,20,00,000/-
	For 4th Year	Per No.	1,29,00,000/-
	For 5th Year	Per No.	1,30,00,000/-
	Total of (B.1) i.e Operation cost for 5 years		6,04,00,000/-

Page 4 of 26

	B.2. Maintenance Cost of each machine	Unit	Basic Maintenance Cost in Rs.
	For 4th Year	Per No.	20,00,000/-
	For 5th Year	Per No.	20,00,000/-
	Total of (B.2) i.e Maintenance cost for 5 years		40,00,000/-
3.	Total cost of per machine including supply of machine, Operation and maintenance cost (1+total of B.1+total of B.2)		8,99,00,000/-

# b. DETAILED SPECIFICATIONS OF SUPER SUCKER UNIT, 02 NO. SUCTION DUMP TANKS AMD WATER TANKER, COMPLETE IN ALL RESPECTS:-

The Super Sucker Unit comprising of following equipments: -

Suction-Cum-Jetting Unit

01 Nos.

The broad details of each equipment are as under: -

# GENERAL DESCRIPTION

This should be a truck chassis mounted, Jetting-cum-Suction unit capable of de-silting and dechoking civil / industrial drains and sewer lines of diameters upto 2000mm. The unit should also be capable of creating vacuum for siphoning out effluents, liquids slurry, sludge and other material from sub-soil located drain lines, manhole chambers, sump tanks and other locations from depths of around 8 to 10 mtrs, **depending on the specific gravity of the effluent.** 

An air-mover unit (vacuum generation plant) should be fitted with a high vacuum, high airflow, positive displacement tri-lobe type Vacuum Blower driven by an independent auxiliary diesel engine of a suitable power rating.

The high flow-high pressure Jetting Pumps shall be of the triplex plunger type. De-choking and de-silting of the sewer and drain water lines shall be carried out by injecting high pressure water into the lines through sewer jetting hose and special cleaning nozzles.

The equipment shall be stationed close to the point of application and the sludge and slurry shall be extracted under high vacuum and high flow rate conditions, through a suction hose and a specially designed suction tool, connected to the tank by a quick-connect hose coupling.

# The Equipment should be Designed to meet the following Operational Requirements :

- Truck's engine power should be utilized to drive jetting pump through a pneumatically actuated Full Torque PTO.
- Independently driven hydraulic pump. This system of drive should have a distinct advantage over the conventional system of driving the hydraulic pump in tanden with the jetting pump as it eliminates the risk of water starvation for the jetting when the hose reel has to be attended to with the water storage tank empty.
- A suitably sized Sewer Jetting Hose made of lightweight, abrasive resistant perforated polyurethane for better handling during jetting operations.
- Equipment fitted with a High flow High Vacuum, continuous rating vacuum blower.

# EQUIPMENT MOUNTING

The equipment shall be mounted on a Truck chassis having wheel base min. 4800 mm, min 28 Ton GVW, Multi Axle Vehicle chassis having an output rating of not less than 180 HP with BS VI.

The Truck Chassis will also be supplied by the manufacturer/supplier of Supper Sucker Unit with factory fitted.

- Auxiliary Power-take-off on the vehicle's gearbox, and
- A Driver's Day Cabin.

The firm shall offer suitable/compatible models of manufacturers i.e. Tata, Ashok Leyland and Eicher.

# THE HIGH FLOW-HIGH PRESSURE JETTING EQUIPMENT

The equipment essentially comprises of the following 3 Main Systems

- A. High Pressure Jetting System,
- B. Suction Plant or the Vacuum Generating System and
- C. Hydraulic System.

# A. High Pressure Jetting System

#### Working Principle

De-choking and de-silting of the sewer and drain water lines and chambers shall be carried out by High Pressure Jetting System working on the principal of hydrodynamic cleaning by injecting high pressure - high flow water into the lines through a suitably dimensioned sewer jetting hose and special cleaning nozzles.

The jetting system should consist of:

- High Pressure Jetting Pump
- Drive systems
- Hose and Hose Reel
- Sewer Jetting Nozzles
- System's accessories and safety equipment

# High Pressure Jetting Pump

The equipment shall be fitted with 1 no., triplex plunger, reciprocating pump of specified make having a flow and pressure rating of 400 LPM (+/- 3%) at 155 bar respectively.

- Pump body in cast iron.
- The pump head made of chemical-nickel treated spheroidal cast iron. Two, selfadjusting roller bearings with double roller rims.
- Forged steel connecting rods and antifriction bearings.
- Crankshaft made from nitrided, hardened and tempered alloy steel.
- Plungers made of stainless steel with ceramic coating.
- Vertically positioned, stainless steel suction and delivery valves.
- Double pressure packings, lubricated by the inlet water and are of leak-free design.

# TECHNICAL DATA

Type: Delivery Capacity: Pressure: Triplex plunger pump 400 LPM ± 5% 155 bar

Minimum 180 HP @ 1500RPM / 1800 RPM and sufficient to deliver 400 LPM ± 5% at 155 bar.

#### Drive system

The high-pressure jetting pump shall be driven by the vehicle's engine, the power of which shall be tapped from a new generation total power-take-off (split shaft PTO) which shall be mounted in the center of the auxiliary frame and between the vehicle's gearbox and the differential.

#### Full-Torgue Split-Shaft-PTO Drive:

The total-power-take off shall be fitted with two independent output drive shafts from which individual drives can be obtained. Each drive shall work independently or simultaneously as desired. The complete unit shall be mounted over suitable AVMs on the sub-frame and between the vehicle's gearbox and the differential.

Changeover of the various drives shall be made effective by independent pneumatic clutches. The total power take-off shall be of renowned PTO manufacturer of specified make and its design shall allow drawing of the full power/throughput torque of the vehicle engine and drive.

# TECHNICAL DATA:

Throughput Torque: 2000 KGM No. of outputs: Two (one main + one auxiliary) PTO Output ratios: 1:1 on main shaft and 1.28:1 on auxiliary shaft

The hydraulic pump shall be independently driven by the factory fitted lateral / axial PTO fitted onto the vehicle's gearbox.

#### Hose and Hose Reel

Fitted on the rear end of the equipment, the hose reel shall be of the fixed type. The hose reel shall be designed to store 120 meters of the supplied sewer jetting hose.

Each unit shall be supplied with Meter Counter, which shall be mounted on control panel to know the distance travelled by jetting hose in the sewer line. Delivery and recovery of the jetting hose shall be done via a low speed, high torque hydraulic motor drive.

The machine shall be delivered complete with 120 mtr. of lightweight high-pressure thermoplastic sewer jetting hose of 1.25" diameter, and in a single length.

#### TECHNICAL DATA

120 m
32 mm (Appx. 1.25 inch)
50 mm (Appx. 2 inch)

Max. Working pressure Min. Burst Pressure: Construction:

490 bar Thermoplastic Techno-polymer core with a two braided high tensile synthetic fiber pressure reinforcement. Outer cover made of thermoplastic techno-polymer.

#### Sewer Jetting Nozzles

Set of three No. Nozzles for each of the following sewer jetting nozzles shall be supplied with the equipment.

210 bar

- Bullet Nozzles
- Round head nozzle for de-choking and general pipe cleaning applications with forward and reverse Jet.
- Conical head high thrust Nozzle for high thrust de-choking and general, fast cleaning of pipes

The nozzles shall be by a renowned Nozzle manufacturer of specified make.

# Accessories and Safety Equipment

The high-pressure jetting system shall come equipped with all the necessary accessories and safeties as below.

# A. Pressure Regulating Valve

Fitted to the pressure side of the High Pressure Jetting Pump THE PRESSURE REGULATING VALVE should facilitate the following:

- (i) Regulation of the operating pressure of the system by releasing the exceeding water volume back to the pump inlet through the by-pass,
- (ii) Limiting the pressure in the system to the adjusted value,
- (iii) By totally closing the consumer unit, the increase in pressure is limited to the minimum,
- (iv) Prevents any overpressure in the system.

The pressure-regulating valve should be manufactured from high quality brass and has a sterile deposited AISI SS420 valve seat.

The valve should be suitably designed and manufactured by pump manufacturer as specified.

# B. Safety Valve

Also fitted on the pressure side of the pump, the SAFETY VALVE operates to limit the pressure at the maximum working pressure of the system. The valve shall be factory set and sealed from the pump manufacturer. When the maximum working pressure is exceeded, the valve opens and discharges the total pump flow in the atmosphere, thus eliminating the high pressure in the system.

The valve made from high quality Brass and stainless steel valve seats, should be supplied factory set and labelled according to the working pressure stamped on the valve body.

The valve should be suitably designed and manufactured by pump manufacturer as specified and should be able to withstand the pump's flow and pressure ratings.

# C. Suction Strainer

A Basket type filter, the SUCTION STRAINER should be fitted on the water inlet side of the Jetting Pump.

It protects the pump from ingress of foreign matter, traps the same, which can be drained off at regular intervals through a drain plug, provided at its bottom.

The Suction Strainer should be from a pump manufacturer as specified.

<u>Water Storage Tank:</u> - The tank should be fabricated from MS plates of 6 mm thickness, confirming of IS 2062 Grade-A. This should be of cylindrical in shape with welded torrispherical ends and should have a volumetric capacity of 5 cum.

The tank should be mounted on frame for ISMC 150 section and shall be adequately strengthened to render it torque resistant. The frame should be manufactured to the size of the vehicle's chassis and should be of an all electrically welded construction. The storage tank should be fitted with following accessories:-

1. 2" Ø Ball valve, at the forward end of the compartment to facilitate draining-1 No.

2. Suitably sized ball valve to isolate the tank from the jetting system to facilitate carrying out of maintenance on the system even with the tank completely full--1 No.

3. Level glass fitted in a convenient position to enable the operator to gauge the tank content's level.

4. Manhole with cover to allow man-entry in the tank for routine inspection and cleaning.

5. A tank breather should be fitted on the tank top.

# B. Suction Plant - Vacuum Generation

# Working Principle

Aspiration of the effluent from sewer and drain water lines and chambers shall be carried out on the principle of generating **high vacuum** in the mobile truck mounted vacuum loader tanks which shall be connected to the vacuum generation plant.

The suction plant consists of:

- Air mover Injection Air-cooled, Vacuum Blower
- Drive system Auxiliary Diesel Engine
- Air-material Separation system-Combined Cyclone Separator / shut-off.
- System's accessories and safety equipment

#### Vacuum Blower

The equipment shall be fitted with a continuous rating, Rotary lobe, air cooled positive displacement type, vacuum blower, free airflow rating of 4200 M<sup>3</sup>/hour and shall be capable of achieving maximum vacuum upto 8000mm (Water Column) i.e. vacuum pressure of 80% during suction. The vacuum blower shall be driven by separate diesel engine mounted on machine skid. The entire assembly shall be mounted on a frame with vibration dampners. The vacuum blower shall be by manufactured by Vacuum Blower manufacturer as specified.

# The Technical details of vacuum blowers :

Туре	: Positive displacement vacuum blower
Cooling arrangement	: Air cooled

Air Handling capacity	: Min 4200 M <sup>3</sup> /hour
Minimum vacuum	: 80%
RPM	: 1500

#### The salient features of the vacuum blower are:

- The precision machined, heavy-duty, lobe rotor profile safely allows for operations at high rpm, and contributes towards the system's negligible pulsation characteristics thus providing outstanding energy-efficiency.
- Cylindrical roller bearings designed to take up the radial forces generated during operations and in belt transmission arrangements, thus achieving longer operational life.
- Rotor shafts are fitted with the unique well-proven labyrinth seals for effective sealing and low wear.
- Precise synchronization of the rotors is achieved through precise machining of the helical timing gears a major factor contributing to the blower's high volumetric efficiency and smooth and near noiseless operations.
- The air injection cooling system incorporated in the blower ensures cooler continuous duty
  operations under all vacuums.

## Drive System

An independent auxiliary diesel engine as per B.S.No. 5514/1970 or IS No.10001 & 10002 with latest amendments of specified make mounted on the chassis shall drive the high vacuum blower.

It should be suitably rated to meet the power demands of the blower, ensuring that the system does not stall during extreme operating conditions. The engine shall be fitted with the standard engine manufacturer's accessories, safeties and an independent control panel.

# TECHNICAL DATA OF ENGINE

Туре	: 4-Stroke, In-Line, 6-Cylinders, Electric Start,
0.00	Water Cooled, Turbocharged, Diesel Run Engine
Power	: 150 HP at 1500
Starting System	: 24 Volts D.C. Electric Start

The complete blower and engine unit shall be enclosed in a sound proof enclosure to reduce operational noise levels to an acceptable limit.

#### **Cyclone Separator**

A CYCLONE SEPARATOR - SHUTOFF shall be fitted immediately before the blower inlet.

They function to protect the vacuum blower from any probable carry over of suspended water and sludge particles which may be drawn into the system from the water surface in the sludge compartment due to the high vacuum conditions within. The cyclonic effect thus created within these devices, separates out the heavier water and sludge particles which accumulate and drains regularly after each operations through a drain valve provided at the separator's bottom. The air stream entering the chamber spirals downwards and the denser water and sludge particles are hurled towards the cyclone wall due to the centrifugal force. The particles on hitting the wall separate out from the air stream, which get collected in the cyclone's bottom compartment. A drain valve is provided at the bottom to clean out the accumulated material.

A ball float shut-off arrangement should be incorporated inside the cyclone, for the protection of the blower system from any accidental overflow and carryover of material from the suction dump tank.

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

#### Accessories and Safety Equipment

The suction system shall come equipped with all the necessary accessories and safeties as below.

**Vacuum Limitation Valve** shall be line mounted to protect the equipment and system from excessive vacuum. The valve shall be factory set to control operating vacuum parameters of the system. As the system reaches the set vacuum level, this valve lifts and ventilates the system by virtue of allowing the air outside to enter the system.

Silencer / Filter - Blower inlet shall be incorporated in the airflow circuit between the cyclones and the blower. It is a stainless steel, basket type Micro Strainer designed to handle the pump's flow rating and filter out any particulate matter sizes beyond that of the pumps handling capacity. It should be fitted with automatic cleaning system with reverse compress air Jet Blowing. Further it also serves as a silencer in the system.

The micro strainer is a very essential part of the filtration system, as it ensures total protection to the blower against ingress of, foreign particulate matter due to accidental damage to the filter bag/s OR any solids such as nuts, bolts and hand tools, which could have been accidentally dropped/left behind in the cyclones of other components in the suction system.

**Exhaust Silencer** shall be fitted on the blower's exhaust and cooling air-injection ports respectively to effectively reduce the pump's operational noise levels. The air injection silencer / filter shall come fitted with a filter to protect the unit against infiltration of atmospheric impurities, during operation.

A Check Valve (non-return, plate type) shall be incorporated at the blower inlet to prevent backflow of air from the atmosphere to the tank when the equipment is stopped, thus disallowing the engine to motor in the opposite direction and also maintain the vacuum in the sludge tank.

# Suction Hose and Hose End Nozzle

10 Nos., 150 mm dia., hose sections, each of 3 meters long, shall be supplied alongwith the equipment. The suction hose shall be of a lightweight, heavy duty, wire reinforced, PVC construction, and shall be renowned manufacturer as specified.

Each section shall be fitted with quick-connect hose couplings at both ends.

1 no. deep suction tool of 150mm dia., and fitted with a quick-connect coupling shall be supplied as a standard accessory.

## C. Hydraulic System

A hydraulic pump of ample capacity to meet the operational requirements of the system shall also be driven off the Split-Shaft-PTO unit. The hydraulic pump shall be of renowned pump manufacturer as specified.

The hydraulic system shall be provided with an oil-storage tank of suitable capacity, suction and return line filters, and a direction control valve.

All hydraulic connections shall be a combination of high-pressure seamless pipes and flexible hoses, to facilitate easy field replacement / repairs.

The hydraulic motor required to drive the hose reel shall be of specified make.

# SURFACE PREPARATION AND FINISH

The equipment's exterior shall be spray-painted with two coats of superior quality anticorrosive primer and two coats of enamel metal paint of a reputed make. The colour shade shall be that of our choice.

The following general technical specifications shall be complied with: -

(a). All hydraulic circuits shall be fitted with safety valves to avoid pressurization of the system.

(b). All hydraulic lines shall be adequately clamped.

(c). All hydraulic tanks shall have a level sight glass or dip stick level indicator.

(d). All equipments shall be painted after primer coat in two coats or more of enamel paint of color 'specified by PHED, with monogram of PHED painted prominently with the words PHED in English and Hindi as specified by PHED, .

All the equipments supplied should be in ready to use condition in all respect and all operation of the equipment should be from the outside.

# LIST OF MAKES

- VACUUM BLOWER ROBUSCHI & C (ITALY) GARDNER DENVER, HIBON, AERZEN (USA), JUROP/MORO(ITALY)
- 2. AUXILARY ENGINE FOR VACUUM BLOWER ASHOK LEYLAND / CUMMINS / KIRLOSKAR
- 3. JETTING PUMP PRETISOLI (ITALY), MYERS (USA), WOMA (USA)
- 4. JETTING HOSE PARKER, TRELLEBORG, VECTOR
- 5. P.T.O. PZB (ITALY), OMSI (ITALY), SKIBBL (GERMANY)
- 6. HYDRAULIC MOTOR PARKER, DANFOSS
- 7. HYDRAULIC PUMP DOWTY (UK), DANFOSS
- 8. SUCTION HOSE DURAFLEX / KANAFLEX
- 9. SEWER JETTING NOZZLE NUOVA CONTEC (ITALY)/EURO VAC (UK).

Note:- The firm shall specify a particular make out of above and model of all the components of Super Sucker Unit.

#### The detailed specifications of Suction Dump Tank:-

Suction Dump Tanks 02 Nos.

The broad details of each equipment are as under: -

#### SUCTION DUMP TANK OF 10000L VOLUMETRIC CAPACITY

#### GENERAL

The equipment should be a truck chassis mounted Suction Dump Tank unit.

The equipment shall be stationed close to a Suction Machine, which shall evacuate its tank and subject it to vacuum. The sludge and slurry shall be extracted under high vacuum conditions, through a suction hose, connected to the tank vide a quick release hose coupling.

The contents of the sludge tank shall then be emptied/transported to any desired destination for disposal and emptied by means of gravity or by hydraulic tipping of the tank.

# EQUIPMENT MOUNTING

The **SUCTION DUMP TANK** equipment shall be mounted on a two axle truck chassis with a wheel base of min. 4225 mm., 18.5 Ton GVW, having an output rating of not less than 130 hp with BS-VI.

Truck chassis shall also be supplied by the manufacturer/supplier of suction dump tank with a gear box mounted auxiliary PTO and a driver's cabin.

The firm shall offer suitable/ compatible models of both manufacturer i.e. Tata, Ashok Leyland and Eicher.

# SLUDGE COLLECTION AND STORAGE TANK

The Sludge Collection Tank shall be fabricated from 6 mm thick M.S. Plate confirming to IS-2062 Grade 'A' standard and shall have a volumetric capacity of 10000 litres. It shall be designed to withstand conditions prevailing from the operating vacuum and pressure conditions.

The tank shall be of a cylindrical design with torrispherical-dished ends to ensure a complete and fast off-loading of the collected material. Mounted on a heavy C-sectioned sub-frame to provide additional structural strength to the chassis frame, the tank shall be supported at the rear end by two heavy-duty hinge arrangements to facilitate its hydraulic tipping for unloading the sludge and effluent at appropriate disposal grounds. The forward end of the body shall be fitted with robust saddle supports, which shall rest on the sub-frame.

The tank shall have arrangements for hydraulic tipping for discharge of material. The tank's rear door shall be of a fully open able type, and its, as also the shell's perimeter shall be reinforced for structural integrity. Two heavy-duty hinges shall support the tank's rear door.

The rear door of the tank shall be fitted with hydraulic cylinders for opening and closing of doors. Locking and sealing of the rear door shall be done by hand wheel operated bolts, which shall be of a robust design located circumferentially on the tank's rear end of the shell. A High quality hollow "D" section type door sealing neoprene rubber gasket shall be used to ensure the door to be leak proof.

Adequate sealing and hydraulic locking arrangements shall be provided to render the door leak proof.

The discharge door shall be fitted with drain outlets at three heights for separating the water contents of the sludge (125 mm drain pipe). This facility enables the container to discharge the excess water back into the sever line and to retain the silt/waste material with minimum water contents.

Level indicators made of thick transparent acrylic sheet shall be provided on the side of the tank indicate the level of sludge inside the tank.

## Technical Data

Capacity:	10000 Ltrs.
Construction:	Cylindrical shell with torrispherical dished ends.
Material:	6 mm thick plates per IS 2062 Grade - 'A' for shell and
	dished ends;

# HYDRAULIC SYSTEM

The hydraulic pump shall be of Dowty/ DANFOSS make, manufactured by renowned pump manufacturer as specified.

The pump shall have an ample pressure and capacity rating to meet the operational requirements of the tank tipping and rear door-opening systems.

The hydraulic system shall be provided with an oil-storage tank of suitable capacity, suction and return line filters, pilot operated check valves and direction control valves.

All hydraulic connections shall be a combination of high-pressure seamless pipes and flexible hoses, to facilitate easy field replacement / repairs.

#### SURFACE PREPARATION AND FINISH

Both the exterior and interior surfaces of the debris collection tank shall be sand blasted prior to spray painting.

The tank exterior shall be spray-painted with two coats of superior quality anti-corrosive primer and two coats of enamel metal paint of a reputed make. The colour shade shall be that of our choice.

To resist corrosion, the tank interior shall be coated with 2 coats of superior quality anticorrosive grey epoxy paint.

#### SAFETY / PROTECTION DEVICES INCORPORATED

- Suction System:
- -Primary Shut-off
- -Cyclone / Secondary shut-off
- Hydraulic circuit:
- -Suction strainer
- -Return line filter
- -Pressure relief valve

The following general technical specifications shall be complied with: -

- (a). All hydraulic circuits shall be fitted with safety valves to avoid pressurization of the system.
- (b). All hydraulic lines shall be adequately clamped.
- (c). All hydraulic tanks shall have a level sight glass or dip stick level indicator.
- (d).All equipments shall be painted after primer coat in two coats or more of enamel paint of colour 'specified by Haryana PHED with monogram of Haryana PHED painted prominently with the words Haryana PHED in English and Hindi as specified by Haryana PHED.

All the equipments supplied should be in ready to use condition in all respect and all operation of the equipment should be from the outside.

# LIST OF MAKES

- HYDRAULIC PUMP DOWTY (UK), DANFOSS
- 11. SUCTION HOSE DURAFLEX / KANAFLEX

Note:- The firm shall specify a particular make out of above and model of all the components of Dump Tank.

# Additional Water Tank (9000 Ltr.):

# GENERAL

One No. additional Water Storage Tanker mounted on suitable truck chassis shall be supplied extra. The Water Tank shall be fabricated from 6 mm thick M.S. Plate confirming to IS-2062 Grade 'A' standard and shall have a volumetric capacity of 9000 liters. The tank shall have three internal partitions with ports.

The tank shall be of a cylindrical design with torrispherical-dished ends welded at both ends. A level glass shall be fitted at a convenient position to enable the operator to judge the tank's contents level.

The tank shall be mounted on an auxiliary frame, fabricated from ISMC-150 MS channel sections. The sub-frame shall be of an all electrically welded construction, manufactured to the size of the vehicle chassis. It shall be adequately strengthened to render it torque resistant.

# **TECHNICAL DATA**

Capacity : 9000 Ltrs.

Construction: Cylindrical shell with torrispherical dished ends.

Material : 6 mm thick plates per IS 2062 Grade - 'A' for shell and dished ends.

# EQUIPMENT MOUNTING

The Additional Water Tanker (9000 Ltr.) shall be mounted on a two axle truck chassis with a wheel base of min. 4225 mm., 18.5 Ton GVW, having an output rating of not less than 130 hp with BS-VI.

Truck chassis shall also be supplied by the manufacturer/supplier of suction dump tank with a gear box mounted auxiliary PTO and a driver's cabin.

The firm shall offer suitable/ compatible models of both manufacturer i.e. Tata, Ashok Leyland and Eicher.

## Water Pump Set:

A diesel engine driven pump set mounted on a MS frame, shall be installed at the rear end of the tank. The water pump shall suck water from the water tank and discharge the same to the tank mounted on the main unit. The pump suction shall be connected to the water tank through fixed GI fittings. The suction and the discharge of the pump shall be fitted with 1 each, flange type GM ball valves. The delivery of the pump set will be fitted with a 30 meter long flexible hose.

# TECHNICAL DATA

Туре	: Centrifugal.
Delivery rating	: 275 LPM
Drive	: Diesel Driven, Single cylinder, rope start, air-cooled, 4- stroke engine.
Power	: 7.2 HP

# LIST OF MAKES

1.

PORTABLE DIESEL ENGINE PUMP SET - KIRLOSKAR / GREAVES COTTON

Note: - The firm shall specify a particular make out of above and model of Pump Set.

# Surface Preparation and Finish

Both the exterior and interior surfaces of the water storage and sludge tank shall be thoroughly sanded prior to spray painting.

The tank's as also the equipment's exterior shall be spray-painted with two coats of superior quality anti-corrosive primer and two coats of enamel metal paint of a reputed make. The color shade shall be as per choice of the Department.

To resist corrosion, the tank interior shall be coated with 2 coats of superior quality anticorrosive grey epoxy paint.

- Note:- (i) The firm shall specify a particular make out of above and model of all the components of Super Sucker Unit/ Dump Tank and additional Water Tanker.
  - (ii) The firm shall also submit the back-up letters from the original equipment manufacturers (OEM) of various components for availability of spare parts and after sale services up to 10 years.
  - (i) The firm shall also submit the detail of the Super Sucker type Sewer Cleaning Machines supplied by them to Govt. Deptt./ Undertakings alongwith copies of supply orders received by them from Govt. Deptt./ Undertaking during last 2 years along with performance certificates.

# c. OPERATION & MAINTENANCE

#### General:-

The firm shall separately quote their rates for operation and maintenance of the machine for a period at least 5 years any where in Haryana State. During the O&M period the firm shall provide services of technically qualified persons well conversant with the functioning and operation of the machine. The Sewer Men / other labour required for plugging of Sewer Lines i.e. "Roka", by pass arrangement from one manhole to other manhole, dewatering etc., required if any shall also be provided by the firm. Consumables items like diesel and lubricants shall be provided by the department. However the firm will maintain the log book for the same and submit the account of consumables taken per month. All types of repairs, wear & tear shall be the responsibility of the firm. The overall responsibility of any accident will be the liability of the firm. The firm shall provide the safety equipments to their staff and responsibility of any mishap will also be the liability of the firm. The liability of the registration/ insurance of Super Sucker Unit and Staff during above period shall be responsibility of the firm. The firm shall adopt all necessary safety measures for Super Sucker Unit & his staff. The periodical servicing of the machine and vehicles will be got done by the firm and the expenditure on this account will also be borne by the firm. In case if any damage occurs to any 3rd party then it will also be the responsibility of the firm.

Note: - Subletting for maintenance of the machine and labour (if needed by the firm), can be done with any of the firm, however the successful firm will send the copy of such agreement to the department.

In case of subletting of comprehensive operation & maintenance of the machine, there will be a tripartite agreement in respect of O&M of the machine. Payment will be made directly to the Sublette firm, as per tripartite agreement.

However, this will not absolve the supplier firm of the responsibility under this agreement irrespective of the tripartite agreement.

#### 1. Maximum Break-Down time:-

Each Super Sucker Unit shall be operated minimum 200 hours per month (8 hours per day for 25 days in a month) including shifting from one place to another. The period of routine servicing shall not exceed more than three consecutive days in a month. The period for such

routine services have to be communicated to concerned Engineer-in-Charge of the department well in advance.

In case break-down time exceeds the above limit then the firm shall not be paid O&M charges for that break-down time period and shall be liable to pay penalty/ fine @ Rs. 1000/- per day for that excess break down, subject to a maximum of 10% value of supply order of same machine.

In case the firm fails to operate the machine less then 200 hours inspite of schedule provided by the Engineer-in-Charge, then the firm will be levied a penalty of Rs. 200/- per hour falling short of 200 hours.

In case the firm fails to operate the machine as per requirement of the Engineer-in-Charge as discussed above, Engineer-in-Charge will get the work done from alternative sources to provide essential services to the public. Work done in this regard, will be charged to risk and cost of the original work holding firm. However, Engineer-in-Charge will ensure to serve a prior notice to the original firm in this regard.

#### Conditions of O&M payment will be as under:-

- In case of emergency, only on the written orders of Engineer-in-Charge, the machine can be run for more than 8 hours per day or can be run less than 200 hours in a month. In this situation payment of the firm will be made on the pro-rata basis.
- TA/DA or any charges on account of operation of machine at any place in Haryana shall not be payable.

#### 2. Specification of Spares Required:-

The spares used for repair shall be of genuine make only and as per specifications of original unit. The firm will ensure that adequate supplies of original spares are maintained locally to ensure minimum break-down time and prolonged machine life.

The firm shall have all types of tools & equipments required for routine maintenance of super sucker unit. The firm shall provide all types of consumable like hoses, rubber parts, belts, filters & nozzles etc. Truck Chassis shall also be maintained by the firm.

#### 3. Diesel & Lubricants:-

Consumables items like diesel and lubricant oil & gear oil shall be provided by the department. All other material, equipments, consumables and manpower shall be arranged by supplier and no additional cost shall be payable on this account. However the firm will maintain the log book for the same and submit the account of consumables taken per month. In case the firm does not submit the account of consumables up to the 10<sup>th</sup> day of preceding month, the due payment of O&M for that month will not be made. In case the firm uses the excess consumable then the specified one, then the recovery of excess consumable will be made from the due payment of O&M.

The log book should have the details of maintenance / operation carried out on the machine alongwith date and time. Daily events and movement of machine with specific details of

operation such as date and time of leaving the parking shed, operations i.e. jetting / suction carried out from time to time, departure time from site & arrival at parking-shed should be mentioned in the log book.

# 4. Experience, gualification and minimum staff required for O & M: -

For all O & M work the firm shall provide skilled staff (labour, supervisor, driver etc.)) that has adequate qualifications and sufficient experience of similar works as per requirement of work. However, tenderer will ensure the availability of minimum following staff at site:-

Sr. No.	Designation	Requirement	Minimum Qualification
1.	Driver	02 Nos.	10 <sup>th</sup> pass alongwith heavy vehicle driving licence with one year experience
2.	Supervisor	01 No.	10 <sup>th</sup> pass + ITI (Mech.)
3.	Operator/cleaner	01 No.	10 <sup>th</sup> pass
4.	Sewer men	04 Nos.	8 <sup>th</sup> pass

O & M personal shall dedicate their 100% time & the firm will ensure that adequate number of his staff shall be available on duty 24 hours, 7 days per week including all holidays to meet out any emergency.

O & M personal to be provided by the contractor shall be suitably qualified & he will get their CV resume duly vetted by the Engineer-in-Charge before engaging them.

The firm shall engage staff as per the requirement for operation & maintenance of the unit including sewermen.

The firm shall maintain & submit attendance of staff on a format duly approved by Engineerin-Charge on daily basis.

The firm may employ such employees, as he may think fit. These employees shall be the employees of the firm for all-purpose what so ever and shall not be deemed to be in the employment of Public Health Department for any purpose whatsoever. The firm shall abide by all rules, laws and the regulations that may be in force from time to time regarding employment or conditions of service of these employees, If under any circumstance whatsoever, Public Health department is held responsible to the employees of the firm in respect of any matter, Public Health Department shall be compensated by the firm in that event.

The Engineer-in-Charge shall have full powers at all times to object the employment of any workman, foremen or other employment on the works by the firm and if the firm shall receive notice in writing from the Engineer-in-Charge requesting the removal of any such man or men from the work, the firm shall comply with the request forthwith. No such workman, foreman or other employees after his removal from the work by request of the Engineer-in-Charge shall be re-employed or reinstated on the work by the firm at any time except with the prior permission in writing of the Engineer-in-Charge.

The firm shall not be entitled to know the reason from the Engineer-in-Charge for requiring the removal of any such workmen or foreman or other employees.

No staff below the age of 18 years shall be employed on the work. The firm shall pay his staff at the rates not less than the wages paid for similar post/work in the neighborhood/ approved by the Govt. of Haryana.

#### Firm's Obligations:-

If any of the firm's labour is found tempering with the fire hydrants or water taps machinery, street light, laboratory equipment or any other equipment inside the Govt. premises, such labourers will be immediately shunt out from the premises and strict action will be taken against them and, if found necessary entry of such person will be prohibited.

Firm's labourers and supervisors will have to normally observe office timings of General shift and will not be permitted to enter or go out at any time as they like.

The firm must clearly understand that it is bound by this contract rigidly, enforce all safety regulations of Public Health Department and to ensure to provide life saving & safety equipments and also ensure proper use by his workers of all the safety and personal protective equipments. Violation of Public Health Department safety regulations and infringement of any enforceable statutory provisions on the part of the main contract terms will be dealt with by PHE Department in the manner laid down for serious violation of such terms.

Public Health Engineering Department will not be responsible for any injury sustained by the employees of the firm during the performance of the above contract, for any damages or compensation due to any dispute between the firm and his employees. All liabilities arising out of any provision of labour Acts/ enactments hereto shall be bone by the firm.

In every case in which by virtue of the provisions of section 12 sub section (1) of the workman's compensation Act-1923 with latest amendments, Government is obliged to pay compensation to a workman employed by the firm in the execution of the works. Government will recover from the firm the amount of the compensation so paid and without the prejudice to the rights of government under section 12 Sub Section (2) of the Act. Government shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due with Government to the firm whether under this contract or otherwise. The firm shall be fully responsible for all liabilities on account of any mis-happening to the staff employed by him at site during any work.

Government shall not be bound to contest any claim made against it under section 12 (sub-section (1) of the said except on the written request of the firm and upon his giving to Government full security for all costs for which Government might become liable in consequence of contesting such claim.

All sums recoverable by way of compensation for actual loss caused by the firm's employees shall be considered as the reasonable compensation. The decision of the Engineer-

in-Charge would be conclusive, final and binding upon the firm. The decision of the Engineerin-Charge, shall be final in this regard to all matters relating to this tender.

The firm shall be wholly responsible for the Implementation of various labour law's and rules there under that are in force and such of the labour enactments that may be made applicable to him/ them during the tenure of this contract so far his employees are concerned, whether they are employed by him or though any other agency under him. He will be responsible for implementing the provisions of all the labour laws.

The firm will be responsible for complying with the provident fund, ESI Act etc. if applicable to its employees. Firm will ensure the compliance of all the statutory obligations under the law of land.

#### Payments:-

The firm will submit his monthly bills in triplicate in respect of the subject contract to the concerned Sub-Divisional Engineer, Public Health Engineering Department, who will get the bills verified and pass on to the Division within 7 days for payment. The concerned Executive Engineer will ensure payment of the firm is made within 30 days from the date when verified bill received to him. However if the payment is delayed for any reason, it will neither violate other terms and conditions of the contract nor will give any right to the firm to suspend work under the contract to claim any damages on account of delayed payment. Tax will be deducted as per Govt. Rules.

#### Payment of Wages:-

- Wages of every worker will be paid to him directly by the firm.
- ii) All wages shall be paid in current currency through payee account cheque.

#### Fixation of Wages Periods:-

- i) The firm shall fix the wage periods in respect of which the wages shall be payable.
- ii) No wage period shall exceed one month.
- Wages of every workman employed on the contract shall be paid before the expiry of ten days after the last of the wage period in respect of which the wages are payable.
- iv) When the employment of any worker is terminated by or on behalf of the firm, the wages earned by him shall be paid before the expiry of succeeding month on which his employment is terminated.
- All payment of wages shall be made on a working day except the work is completed before the expiry of the wages period in which case final payment shall be made with in 48 hours of the last working day.

#### Wage Book and Wages Slips etc:-

- (1) The firm shall maintain a wage book of each worker in such form as may be convenient, but the same shall include the following particulars:-
  - (a) Rate of daily or monthly wages.
  - (b) Nature of work on which employed.
  - (c) Total number of days worked during each wage period.
  - (d) Total amount payable for the work during each wage period.

(e) All deductions made from the wages with an indication in each case of the ground for which the deductions is made.

- (f) Wages actually paid for each period.
- (2) The firm shall also maintain a Wage Slip for each worker employed on the work. The wages slip contain all the payment given in the wages book.

#### Fines and deduction which may be made:-

1. The wages of a worker shall be paid to him without any deduction of any kind except the following :-

(a) Fines.

(b) Deduction for absence from duty i.e. from the place or places where by as per the terms of his employment, he is required to work. The amount of deductions shall be proportions to the period for which he was absent.

(c) Deductions for damage to or loss of goods expressly entrusted to the employed person for custody or for loss of money for which he is required to account, where such damage or loss is directly attributable to his neglect or default.

(d) Any other deductions which the Govt. may time to time allow.

(2) No fine shall be imposed on a worker and no deduction for damage or loss shall be made from his wages until the worker has been given an opportunity in writing to defend against such fine or deduction.

(3) The total amount of fines which may be imposed on any one- wage period on a worker shall not exceed an amount equal to 5% of the wage payable to him in respect of that wage period.

(4) No fine imposed on any worker shall be recovered from him by instalments, or after the expiry of 90 days from the date on which it was imposed.

#### Register of fines etc:-

The firm shall maintain a Register of fines and of all deductions for damage or loss. Such register shall mention the reason for which fine was imposed or deduction for damage or loss was made.

The firm shall maintain a list both in English and in Hindi, a list approved by the chief Labour commissioner clearly stating the acts and omissions for which penalty of fine may be imposed on workmen and display it in a good condition at a conspicuous place on the work.

Note: The staff arranged by the firm will perform their duty as per the directions/ guidance of Engineer-in-Charge or his representatives.

# ARBITRATION CLAUSE FOR OPERATION & MAINTENANCE ONLY:-

The following Arbitration Clause shall be applicable for operation & maintenance only. In case of any litigation arising in supply of unit, the arbitration clause of DS&D, Haryana shall be applicable.

1. If any dispute or difference of any kind whatsoever shall arise between the Governor of Haryana/ his authorized agents and the firm in connection with or arising out of the contract of the executing of the work that is (i) whether before its commencement or

during the progress of the work or after its completion (ii) and whether before or after the termination, abandonment or breach of the contract, it shall, in the first instance be referred to for being settled by the Engineer-in-charge of the work at the time and he shall with in a period of sixty days after being requested in writing by the contractor to do so, covey his decision to the firm and subject to arbitration as here in after provided, such decision in respect of every matter so referred shall be final binding upon the firm. In case the work is already in progress, the firm will proceed with the execution of the work on receipt of the decision by the Engineer-in-charge as aforesaid, with all due diligence whether he or the Governor of the Haryana/ his authorized agent requires arbitration as herein after provided or not, If the Engineer-in-charge of the work has conveyed his decision to the firm and no claim to arbitration has been filed with him by the firm within a period of sixty days from the receipt of letter communicating the decision, the said decision shall be final and binding upon the contract and will not be subject matter of arbitration at all. If the Engineer-in-charge of the work fails to covey his decision within a period of sixty days after being requested, as aforesaid, the firm may within further sixty days of the expiry of first sixty day from the date on which request has been made to the Engineer-in-Charge request Engineer-in-Chief that the matter in dispute be referred to arbitration as herein after provided.

- All disputes or differences in respect of which the decisions is not final and conclusive shall at the request in writing of either party, made in a communication sent thought registered A.D. Post be referred to the sole arbitration of any serving Superintending Engineer or Chief Engineer of Haryana Public Health Engineering Department to be nominated by designation by the Engineer-in-Chief, Haryana Public Health Engineering Department at the relevant time. There will be no objection to any such appointment that the arbitrator so appointed is a Govt. servant or that he had to deal with the matters to which the contract relates and that in the course of his duties as a Government servant he had expressed his views on all or any of the matters in dispute. The arbitrator to whom the matter is originally referred being transferred or vacating his office his successor in office as such shall be entitled to proceed with the reference from the stage at which it was left by his predecessor. In case the arbitrator nominated by the Engineer-in-Chief is unable or unwilling to act as such for any reason, what so ever, the Engineer-in-Chief shall be competent to appoint and nominate any other Superintending Engineer or Chief Engineer as the case may be, as the arbitrator in his place and the arbitrator so appointed shall be entitled to proceed with the reference.
- 3. It is also a term of this arbitration agreement that no person other than person appointed by the Engineer-in-Chief, Haryana Public Health Engineering Department shall act as arbitrator and if for any reason that is not possible the matter shall not be referred to arbitration at all. In all cases where the agreement amount awarded exceeded Rs. 25,000/- (Rs. Twenty five thousand only) the arbitrator must invariably give reasons for his award in respect of each claim and counter claim separately.
- 4. The arbitrator shall award separately giving his award against each claim and dispute raised by the either party including any counter claims individually and that any lump sum award shall not be legally enforceable.
- 5. The following matters shall not be within the purview of arbitration.

- a). Any dispute relating to the levy of compensation as liquidated damages, which has already been referred to the Superintending Engineer and is being heard or/ and has been finally decided by the Superintending Engineer in charge of the work.
- b). Any dispute in respect of substituted, altered additional work committed work/ defective work referred by firm for the decision of the Superintending Engineer in charge of the work if it is being heard or has already been decided by the said Superintending Engineer.
- c) Any dispute regarding the scope of the work or its execution or suspension or abandonment that has been referred by the firm for the decision of the Govt. of Haryana and has been so decided finally by the Haryana Government.
- 6. The Independent claim of the party other than the one getting the arbitrator appointed, as also counter claims of any party will be entertained by the arbitrator not with standing that the arbitrator has been appointed at the instance of the other party.
- 7. It is also a term of this arbitration agreement that where the party invoking arbitration is the firm, no reference for arbitration shall be maintainable unless the firm furnish to the satisfaction of the Engineer in Charge of the work, a security deposit of a sum determined according to details given below and the sum so deposited shall on the termination of the arbitration proceedings be adjusted against the cost, if any, awarded by the arbitrator against the claimant party and the balance remaining after such adjustment in the absence of any such cost being awarded the whole of the sum will be refunded to him with in one month from the date of the award.

Sr. No.	Amount of Claim	Rate of Security deposited
1.	For claims below Rs. 10,000/-	2% of amount claimed.
2.	For claims of above Rs. 10,000/- and below Rs. 1,00,000/-	5% of amount claimed
3.	For claims of above Rs. 1,00,000/-	7.5% of amount claimed.

The Stamp fee due on the award shall be payable by the party as desired by the arbitrator and in the event of such party's default stamp fee shall be recoverable from any other sum due to such party under this or any other contract.

- 8. The venue of the arbitration shall be such place or places as may be fixed by the arbitrator in his sole discretion.
- 9. Neither party shall be entitled to bring a claim for arbitration if the appointment of such arbitration has not been applied with in 6 months of:
  - a). The date of completing of work as certified by the Engineer in charge.
  - b). The date of abandonment of the work or
  - c). Its non-commencement within six months from the date of abandonment or written orders to commence the work as applicable.
  - d). The completion of the work through any alternative agency or means after withdrawal of the work from the contract in whole in part and/ or its recession or.

e). Received an intimation from the Engineer-in-Charge of the work that final payment due to or recovery from the firm had been determined which he may acknowledge and /or receive.

# Which ever of (a) to (e) above is the latest.

If the matter is not referred to arbitration with in the period prescribed above, all the rights and claim of any party under the contract shall be deemed to have been forfeited and absolutely barred by time even for civil litigation not with standing.

- 10. It is also a term of this arbitration agreement that no question relating to this contract shall be brought before any civil court without firm involving and completing the arbitration proceedings as above if the scope of arbitration specified herein covers issues that can be brought before the arbitrator i.e. any matter that can be referred to arbitration shall not be brought before civil court.
- 11. The arbitrator shall be deemed to have entered on the reference on the day he issues notices to the parties fixing the first date of hearing. The arbitrator may from time to time with the consent of the parties enlarge the initial time for making and publishing the award.
- 12. If is also a term of this arbitration agreement that subject to the stipulation herein mentioned, the arbitration proceeding shall be conducted in accordance with the provision of the arbitration Act. 1996 or any other law enforce for the time being.

#### d. Other terms & conditions:-

- 1. Place of Delivery: At consignee Godowns at supplier risk, anywhere in Haryana.
- Unloading charges at destination: Inclusive.
- Delivery period:- Atleast one Super Sucker machine should be supplied every month against the rate contract as per requirement of the Indenting Department in spread out manner from the date of placement of supply order.

In case, the firm fail to deliver or dispatch any consignment within the period prescribed for such delivery or dispatch stipulated in the supply order, the delayed consignment will be subject to 2% penalty per consignment per month recoverable on the value of the stores supplied. The other details will be as per provision contained in sr.no. 14 of "schedule -B' condition of contract.

- 4. Validity period of rate contract: The rate contract will remain valid for one year from the date of its issue. The supply orders placed within the currency period of the rate contract are required to be executed by you.
- 5. Payment terms:-100% payment will be made within 60 days after receipt of inspected/accepted machine in good condition and after satisfactory demonstration of the machine at destination i.e consignee's godowns. The Indenting Department would have an option to release payments in RTGS/Electronics mode also.

Delay in payments to the suppliers beyond the stipulated credit period indicated in the supply order, unless supported by cogent reasons and approved by a higher authority, will attract penal interest on the defaulting amount @ Rs. 25/- per rupees one lakh per day of delay beyond the stipulated credit period. Non provision of adequate budget will be no ground for delay in payments to the supplier. This is as per provisions contained at Para 17 of G.O. No.2/2/2010-4I-BII of dated 28.05.2010 (or as amended from time to time in this regard). 6. Inspection :- The Inspection of the machine will be conducted at the premises of manufacture before affecting the supply. As such, the manufacturer shall have the sufficient facility for testing of the machine as per the specifications. The warrantee Certificate of Truck chassis will also be submitted at the time of inspection to the satisfaction of inspecting agency. It will be the sole discretion of indenting department to get the material inspected from anyone of the IIIrd party inspection agencies or from departmental officers or from a combination of both. In case of 3<sup>rd</sup> party inspection, inspection charges will be borne by the tenderer.

In case, the material offered for inspection by the firm fails to meet the specifications stipulated in NIT/Order/Contract and the samples are rejected by the Inspecting Committee, the Indenting Department will have the right to levy a penalty at 0.1% of the total order value. In case, the material offered for inspection fails during the 2<sup>nd</sup> inspection also, the Indenting Department will have the right to increase the penalty to 0.25% of the total order value. In case, the material offered fails during the 3rd and final inspection also, the firm will be liable for penal action including forfeiture of security, risk purchase, debarring/ blacklisting in future and no further opportunity for inspection would be provided to the supplier firm.

- Guarantee:- The Machine will be guaranteed for 3 years after the date of supply to the department. The guarantee will cover all the parts of the machines/Vehicles. As the machine is to be guaranteed for 03 years, so maintenance charges for the machines should not be included for the 1<sup>st</sup> three years.
- Training of Staff:- The firm shall provide free training to officers/ officials of indenting department for a period of 3 months for operating this equipment without any extra cost.
- 10. For operation and Maintenance only: The firm is required to submit performance guarantee in the shape of bank guarantee equivalent to 5% of the value of total cost of operation & maintenance ( of 5 years) of Super Suker Unit for satisfactory performance of the unit for 5 years. This performance bank guarantee is to be submitted to the concerned Executive Engineer of Public Health Engineering Department after inspection and delivery of the machine to the consignee and before release of payment to the agency. The bank guarantee shall be pledged in favour of concerned executive Engineer of Public Health Engineering Department
- 11. GST on the ORDERED/CONTRACTED ITEM will be paid as applicable. In case, the supplies are delayed by the firm beyond the stipulated delivery period and there has been any upward revision in the rates of GST on the CONTRACTED ITEM, no such increase will be allowed but if there has been any reduction in GST, the same will be availed. No variation in GST on inputs viz raw material/ freight etc. will be applicable.

(Other terms & conditions including Delivery period, Price Fall Clause, shall be as per NIT/Schedule-A/B.)

Joint Director Supplies & Disposals, Haryana, For & on behalf of Governor of Haryana.

Page 26 of 26