

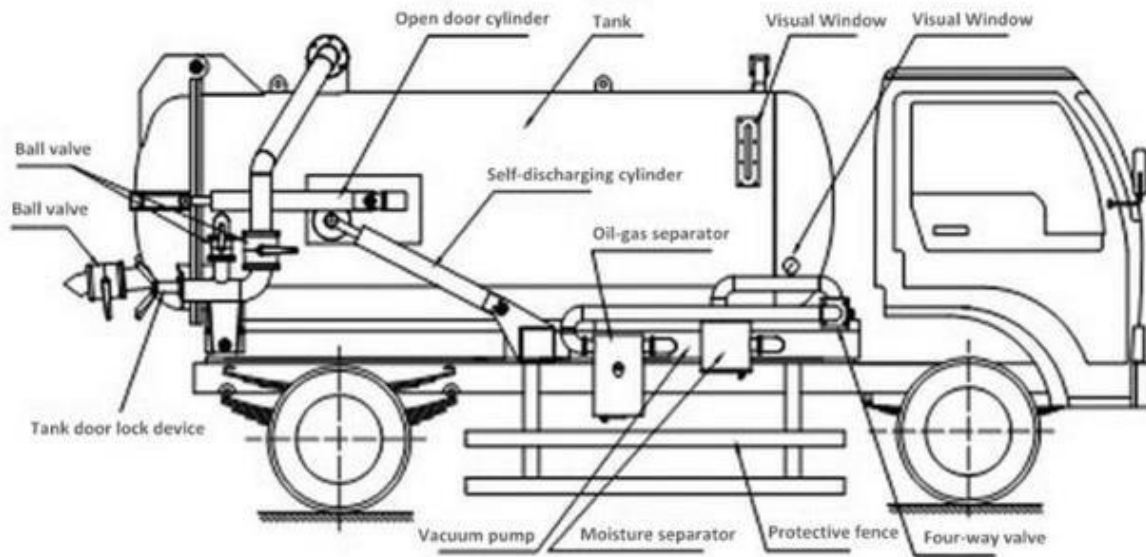
GENERAL SPECIFICATIONS FOR 5 CU. VACUUM TRUCK

Vacuum Tank	<ul style="list-style-type: none"> a. With smaller effective volume capacity capable to accommodate multiple septic tanks per trip b. The rear door must be hydraulically operated for raising and lowering, and it must provide a liquid-tight seal with a self-compensating mechanism, and must be securely fastened. c. The inlet and outlet ports must align with the plant acceptance specifications, with the following dimensions: Suction - 75mm, Discharge - 100mm d. The tank volume should be conveniently measured e. The tank body must be hydraulically tipped by hydraulic cylinder(s) to a minimum angle of 45 degrees f. Must have spillage flow regulator g. Must have internal baffled walled 																																													
Vacuum Pump	<ul style="list-style-type: none"> a. The vacuum pump must have the capability to reach and desludge a common septic tank within the west part of Metropolitan Naga Water District coverage b. The noise output and exhaust of the vacuum pump must be minimized to avoid disturbing nearby residents during desludging activities c. The vacuum pump must include safety features to ensure safe operation d. Air cooled with PTO vacuum pump system <table border="1" style="margin-top: 10px; width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="padding: 5px;">Particulars</th> <th style="padding: 5px;">Unit</th> <th style="padding: 5px;">Values</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Free air capacity</td> <td style="padding: 5px;">cfm</td> <td style="padding: 5px;">417</td> </tr> <tr> <td style="padding: 5px;">Air capacity at 15" Hg/50% vacuum</td> <td style="padding: 5px;">cfm</td> <td style="padding: 5px;">312</td> </tr> <tr> <td style="padding: 5px;">Max. vacuum</td> <td style="padding: 5px;">Hg (in.)</td> <td style="padding: 5px;">28</td> </tr> <tr> <td style="padding: 5px;">Max. pressure</td> <td style="padding: 5px;">psig</td> <td style="padding: 5px;">29</td> </tr> <tr> <td style="padding: 5px;">Power required at 15" of vacuum</td> <td style="padding: 5px;">hp</td> <td style="padding: 5px;">15.5</td> </tr> <tr> <td style="padding: 5px;">Power required at max. pressure</td> <td style="padding: 5px;">hp</td> <td style="padding: 5px;">41</td> </tr> <tr> <td style="padding: 5px;">Rotation speed</td> <td style="padding: 5px;">Rpm</td> <td style="padding: 5px;">1100</td> </tr> <tr> <td style="padding: 5px;">Oil tank capacity</td> <td style="padding: 5px;">quart (US)</td> <td style="padding: 5px;">4 qt.</td> </tr> <tr> <td style="padding: 5px;">Oil consumption</td> <td style="padding: 5px;">gal(US)/Hr</td> <td style="padding: 5px;">0.05</td> </tr> <tr> <td style="padding: 5px;">Sound pressure at 7 meters (23ft) 60% vacuum</td> <td style="padding: 5px;">dBA</td> <td style="padding: 5px;">79</td> </tr> <tr> <td style="padding: 5px;">Hose</td> <td style="padding: 5px;">in</td> <td style="padding: 5px;">3</td> </tr> <tr> <td style="padding: 5px;">Flange</td> <td style="padding: 5px;">in</td> <td style="padding: 5px;">-</td> </tr> <tr> <td style="padding: 5px;">Suggested Tank Size</td> <td style="padding: 5px;">gal</td> <td style="padding: 5px;">1000-4000</td> </tr> <tr> <td style="padding: 5px;">Weight</td> <td style="padding: 5px;">lbs</td> <td style="padding: 5px;">357</td> </tr> </tbody> </table>	Particulars	Unit	Values	Free air capacity	cfm	417	Air capacity at 15" Hg/50% vacuum	cfm	312	Max. vacuum	Hg (in.)	28	Max. pressure	psig	29	Power required at 15" of vacuum	hp	15.5	Power required at max. pressure	hp	41	Rotation speed	Rpm	1100	Oil tank capacity	quart (US)	4 qt.	Oil consumption	gal(US)/Hr	0.05	Sound pressure at 7 meters (23ft) 60% vacuum	dBA	79	Hose	in	3	Flange	in	-	Suggested Tank Size	gal	1000-4000	Weight	lbs	357
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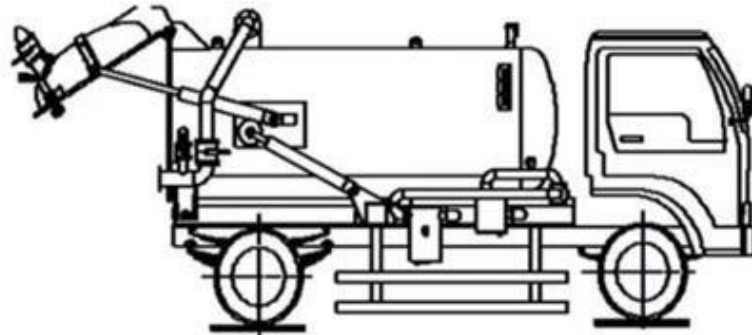
	<ul style="list-style-type: none"> e. The engagement and disengagement of the PTO shall be by air or electrical f. Safety device shall be provided to prevent accidental switch on of the control g. All vacuum pump system shall have original parts
Truck	<ul style="list-style-type: none"> a. Must have the capability to access facilities and navigate congested, smaller and narrow traffic roads within the west part of Metro Naga Water District Coverage b. The truck must be equipped with a GPS device incorporated into a fleet tracking application, with capabilities to monitor real-time location of the vacuum tank units (VTUs), historical trip data, vacuum pump activity, and other alerts to assist in performance monitoring. c. The truck must be capable of maneuvering on narrow roads, with a maximum turning radius of 6 meters
Truck Accessories	<ul style="list-style-type: none"> a. The unit shall be provided with two (2) hose trays, one on each side of the tank, capable of securely holding up to 100 meters of hose b. A pair of stainless hose rails shall be provided on each side of the tank each with a spacing of not more than 300 mm on centers

	<p>c. Two (2) black nylon strap with quick connect on each side of tank shall be provided at the hose tray</p> <p>d. Each unit shall be provided with hose of 100 meters total length which shall be divided into the following;</p> <ul style="list-style-type: none"> • Two 20-m length 4" diameter • Four 20-m length 3" diameter <p>e. Each length shall have aluminum quick connect/disconnect couplings on each end with male-female coupling</p>
Testing and Acceptance	<p>a. One (1) week operation and maintenance training for the technical crew and operators of the unit shall be conducted upon delivery at contractor's cost.</p> <p>b. Final testing/inspection shall be done in the Philippines. One week (8hrs/day) trouble free operation shall be one of the basis for final acceptance.</p>
Warranty and After-Sales Service	<p>a. The supplier shall have an available warranty service and after-sales support for the units.</p> <ul style="list-style-type: none"> • Twelve (12) months for the tanks and system defects in material or workmanship. • One year warranty for labor and maintenance services of the units shall be provided for every six (6) months or 5,000 km whichever comes first (replacement of engine oil, engine oil filter, fuel filter, air cleaner elements, etc.) • Twelve (12) months or forty thousand (40,000) kilometers for the chassis manufacturing defects. <p>b. The supplier must be able to provide on-site service and maintenance activities.</p>
Others	<p>a. Auxiliary clean water pump capable of cleaning desludging accessories such as hoses, with the recommended capacity</p> <p>b. The unit must be capable of eliminating unpleasant odors during desludging and septage discharge</p> <p>c. Must be equipped with safety tools or instruments to prevent fire</p> <p>d. Must have tools or instruments to manage septage spillage</p> <p>e. The overall truck design must adhere to MNWD branding guidelines, utilizing removable branding mechanism</p> <p>f. Must be equipped with technology to synchronize with the MNWD jingle</p> <p>g. The supplier must have DOT and LTO Certificate of Accreditation as Truck Importer</p>

DETAILS OF SEPTAGE TRUCK



1. OPEN THE REAR DOOR



2. UNLOADING THE SEPTAGE

