

EMPTYING OF EFFLUENT TANKS METHOD STATEMENT

Section 1 – Daily checks and inspection of vehicle:

Before starting the vehicle it is important to carry out daily checks, i.e. oil, water, tyres, lights, fuel, tacho etc. It is also necessary to check the pump equipment as follows:

- a. Check the general security and pipe work on the pump.
- b. Check oil/lubricant levels on pump system.
- c. Grease where necessary.
- d. Check the strainer filter, wash out and clean and replace carefully.
- e. Drain off vapour vessel. This may require a little pressure from the pump so move main valve to pressure, shut tank vents, start pump and place receptacle under the valve and gently/slowly open valve. **Warning:** this can be messy. Once this has started to empty, turn off main pump and allow pressure to reduce. Once empty, re-close valves.
- f. Turn main pump to vacuum and start.
- g. Check that relief valves are working and the dripper on top of the pump is dripping approximately one drip per 10-15 seconds. This is adjustable via a thumb screw on top of the dripper.
- h. Turn off pump and release any vacuum in the tank via tank vent valve.
- i. Check all valves and caps are fitted and operational.
- j. Check that hoses are secured on vehicle.
- k. Approximately once a week the main tank door should be opened and the tank washed out - firstly ensuring that the tank is empty.
- l. Park the vehicle in a position which is easy to wash out the tank.
- m. Remove empty end cap and open both the empty and vent valves.
- n. Evenly loosen the securing nuts on the main door at the back of the tank. If these are tight, create a vacuum in the tank and try again. Try not to use a spanner. Remember you will need to close both tank valves to create a vacuum.
- o. Release vacuum by opening tank vent. Slowly and carefully open the tank door.
- p. DO NOT climb into the tank.
- q. Use a high volume water hose/jet to wash out any debris in the tank.
- r. Look inside the tank for any cracks, marking or splits that may be starting. Report any findings to Transport Manager.

- s. Once satisfied, close door ensuring that the seal is good and even and evenly tighten the securing nuts around the door by creating a vacuum in the tank. Tighten by hand only – DO NOT use a spanner.

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Section 2: Operation of Tanker on site:

On arrival at site ensure that you are wearing the appropriate Personal Protection Equipment and make yourself known to the appropriate people.

Ascertain the tank you are to empty and confirm with the client/site operative what is in the tank, i.e. if it is anything other than cess waste/toilet waste or water, we may not be able to move it on our Licence. If you are unsure about this ring Transport Manager.

Position the tanker as close to the tank as practically possible (the aim is to have the shortest run of suction pipe as possible. This speeds loading and is less of a Health & Safety issue with trip hazards).

Lay out and connect pipes from the tanker to the waste tank. Try to use the largest diameter pipes first as this allows for speedier, easier loading. Where possible try to use the same dirty pipe to go into the waste tank, this aids clean working practices. When sufficient pipe is connected up to reach well into the tank, remove tank lid and lower pipe in, making sure that it does not touch the bottom of the tank. Often it is better to only put the pipe just inside the tank to begin with and then lower it in as the tank empties. However, do not allow air to be sucked in as this will lose your vacuum.

Start pump vacuum and allow the pressure to increase. It is good practice to check the relief valve to make sure that it is working.

Now slowly open the main inlet valve to which the suction pipe is connected. Sometimes the suction pipe can move and be drawn into the tank, so care should be taken to ensure that people / objects are not knocked over. Also the pipe can be drawn down and stick to the bottom of the tank.

Once loading has commenced, the sniffer valve should be opened slightly to keep the pump cool and prevent it from overheating. This is especially important if the suction pipe is very long or has been reduced to a smaller diameter pipe, or liquid is very thick..

Once the tank is empty, or just before the lorry is full, the suction pipe should be lifted from the liquid in the tank so that air is let in to the tanker to clean the suction pipes. If this is not possible due to the size and weight of the full suction pipe, close the inlet valve and turn off the main suction pump. Then open the tank vent valve (this will release any vacuum in the tank). Reopen the tank inlet valve which will release any liquid in the suction pipe and let it flow back into the tank. (It will not empty the lorry tank as the inlet pipe goes to the top of the tank inside the lorry)

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Once the pipe is empty close the inlet valve and the vent valve and slowly open the connection between the tanker and the first suction pipe (If there is air rushing into this coupling there is probably still liquid in the pipes). If there is still liquid in this coupling, then the lorry is probably parked below the level of the tank.

It will be necessary to blow the liquid out of the pipe back to the tank. This is done by closing the tank vent valve, turning the suction valve to blow on the main pump and starting the pump. Then open the inlet valve slowly and watch/listen for the pipe to empty. Then close inlet valve, turn off pump and carefully remove pipes as before.

Disconnect the suction hose and keep the open end high and work your way along the pipe towards the tank feeding the pipe up through your hands. This will return any liquid left in the pipe back to the tank. As you approach the tank try to lift the pipe but do not remove the end that is in the tank until you are sure the pipe is completely empty.

Thoroughly clean up any spillages which may have occurred.

If you have any questions please call Clive or Jonathan.

JGVW/MN
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I:Corporate/methodstatement/effluent tank