

# NEW SOUTH WALES FIRE BRIGADES OPERATIONS BULLETIN 2004/4



## Flexi-tanks for transporting bulk liquids.

Flexi-tanks are a relatively new method of transporting bulk liquids. They consist of a double layered thermoplastic polyethylene bladder, placed inside an ordinary shipping container lined with cardboard. They may contain large quantities of liquid - up to 20,000 litres.

There may be no outside indication that the shipping container holds a flexi-tank within, and incorrect opening of the container may lead to failure of the bladder.

If a flexi-tank is involved in a transport accident or other incident:

- Request the attendance of Hazmat.
- Ascertain the contents of the flexi-tank using standard methods (ie. ask the driver, check manifest, look at placarding etc.)
- Avoid using sharp or hot equipment that may rupture the bladder.
- Follow the relevant SOGs for *Hazardous Materials* and *Breathing Apparatus*.
- Put in place measures to contain the potential release of a large proportion of the contents of the flexi-tank to prevent the material entering drains or watercourses.

**Accessing the flexi-tank or decanting the contents must only be carried out under the supervision of a representative of the transport company and Hazmat personnel.**

The procedure is:

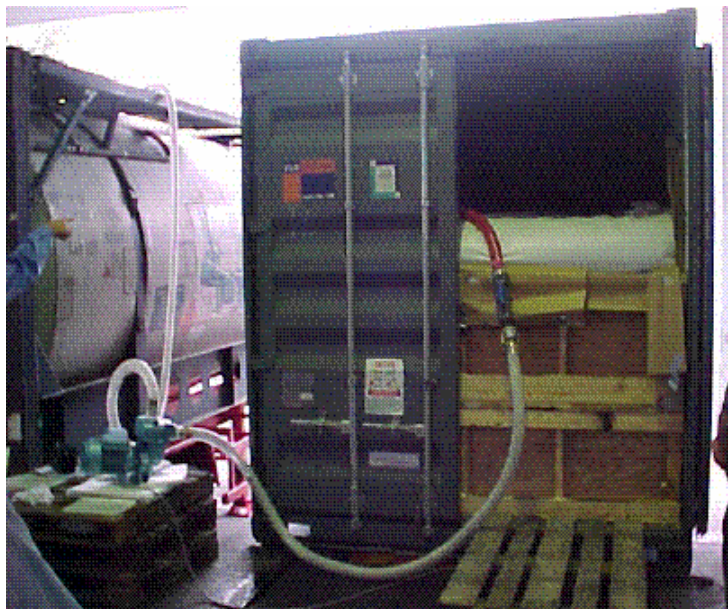
- Position the container as close as possible to the receiving tank, with the doors of the container facing downhill or jack the front of the trailer up.
- Chock the trailer wheels.
- Check the doors and door bolts for damage.
- Slowly open the **right hand door** as indicated in Figure 1. The left hand door **must** remain closed until the tank is almost empty.
- Ensure the horizontal steel bulkheads are still in position behind the doors.
- Connect the flexi-tank hose to the discharge pipe and open the shut off valve (see Figure 1).
- Do not strain the flexi-tank hose excessively.
- Only use self-priming, positive displacement pumps to decant the tank.
- Ensure the elbow in the flexi-tank hose remains vertical position while decanting.

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- As the fluid level drops, bulkheads can be removed **from the top down** to improve access. Removing bulkheads too soon, or from the bottom first, could cause the flexi-tank to bulge, roll out the back of the container or burst.
- As the bladder approaches empty, the edges can be lifted to drain any remaining liquid towards the discharge point.
- Replace the flexi-tank hose cap upon completion.



**Figure 1: Flexi-tank ready for decanting the liquid to a recovery vehicle.**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>Other</b>
Noted Station Commander					

<b>Contact Officer:</b>	<b>File Number:</b>	<b>Date:</b>
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**Previous Operations Bulletin: 2004/3 Low Voltage Electricity Pillar Boxes.**