

**APPENDIX A: LEAK TESTING PROCEDURE FOR EXISTING UPSS**

1. The tank shall be filled to maximum safe fill level 12 hours before the test is scheduled.
2. The fill and vent fittings shall be securely capped and a stand pipe fitted to the top of the dip pipe.
3. The level in the dip pipe shall be raised, using fuel from an adjacent tank if available, until the level in the standpipe is approximately 1 m above ground level. Care shall be taken to ensure that the pressure at the bottom of the tank does not exceed 35 kPa.
4. The level in the standpipe shall be observed for 30 minutes.
5. If there is an apparent loss, the amount shall be determined by the amount of product that must be added to the standpipe to restore the product to its original level.
6. Steps 4 and 5 shall be repeated until consistent results are achieved.
7. A consistent loss of 250 ml or more shall be taken to indicate that the system is leaking, and the following steps shall be taken.
8. The top of the tank shall be exposed and all pipes to dispensing equipment shall be isolated from the tank and tested hydrostatically to 250 kPa for suction lines, 400 kPa for pressurised lines.
9. If there is no access to the vent connection at step 2 above, the vent line shall be cut and capped and tested separately.
10. If all dispensing equipment lines prove sound, adjust the product level to 100 mm above the tank shell and observe for 30 minutes.  
During this period, all fittings along the top of the tank shall be closely checked for signs of weeping.
11. If there is consistent loss of product and no weeping is observed from the fittings, then it may be concluded that the tank is leaking, and must generally be replaced.
12. If there is no loss of product at step 11, then a standpipe test shall be applied to confirm that the fill pipe is the source of loss.

## APPENDIX B: TANK DISPOSAL NOTICE AND ACCEPTANCE

TO: \_\_\_\_\_ DATE: \_\_\_\_\_

LOCATION: \_\_\_\_\_

TANK DESCRIPTION: \_\_\_\_\_

In accordance with the Dangerous Goods Act 1974 we hereby advise you that this tank has held dangerous goods of Class 3 and is liable to contain flammable liquid or vapour. The tank has not been cleaned of such liquid or vapour by steaming or any other approved process.

This equipment may have or may still contain leaded sludge. The equipment shall not be used for the storage of drinking water or foodstuffs.

Furthermore, as the new owner of this tank, you must take notice that the following Dangerous Goods Regulations apply:

### Regulation 55: Alterations and repairs to tanks

- (1) No person shall make any alteration to any tank for the storage of any dangerous goods of Class 3 (other than repairs to the tank or its fittings) except with the approval of the local licensing authority, and every person carrying out any repairs to any such tank shall ensure that adequate precautions are taken for the prevention of accidents from fire or explosion.
- (2) No person shall remove any such underground tank from the ground until all openings in the tank are securely closed and made gas-tight.

### Regulation 56: Disused underground tanks

- (1) Where any underground tank that has been used for the storage of dangerous goods of Class 3 ceases to be used, and where any such underground tank is situated on premises that have ceased to be licensed for the storage of dangerous goods, the tank shall be removed by the Owner thereof unless permission to the contrary is given in writing by the licensing authority within whose area the tank is situated.
- (2) Any permission given by a licensing authority under subclause (1) of this regulation shall be subject to such conditions as the licensing authority thinks fit.
- (3) Where any underground tank is required to be removed under the provisions of sub clause (1) of this regulation, but by reason of its situation under a building or for any other reason it is impracticable to carry out the removal, the tank shall be filled with some solid incombustible material such as sand, and all openings in the tank shall be securely closed vapour-tight.
- (4) Where any filling pipe or dipping pipe which has been attached to any underground tank for dangerous goods of Class 3 ceases to be used the Owner shall either remove the pipe or shall dose it in such a fashion that no attempt can be made to use it.

**Regulation 194: Storage of used containers exceeding five litres**

No person shall keep or store any container of capacity exceeding five litres which has contained dangerous goods of Class 3(a) that has not been freed from flammable liquid and vapour, except in a licensed depot or an open yard or other storage place for dangerous goods permitted by these regulations, unless the container is secure from access by unauthorised persons and reasonably free from danger from fire, and is securely closed by a bung screwed well home, or in some other approved manner.

**Regulation 195: Disposal of containers**

No person shall dispose of any container which has contained dangerous goods of Class 3 or permit any such container to be disposed of unless he has taken reasonable precautions to ensure that any remaining dangerous goods or flammable vapour or gas therefrom will not be a hazard to persons or property.

**Regulation 196: Sale or disposal of containers exceeding twenty litres**

No person shall sell or otherwise dispose of or permit disposal of any container of capacity exceeding twenty litres which has contained dangerous goods of Class 3 (a), unless all dangerous goods and flammable vapour have been removed by an approved method, or the person given possession of the container has been notified in writing that it has held dangerous goods and is liable to contain flammable liquid or vapour.

**Regulation 197: Repairs to used containers**

No person shall repair or cause or permit to be repaired any container which has held dangerous goods of Class 3, nor shall any person bring or permit any source of ignition to be brought into such container or so near thereto as to create a hazard, unless that container has first been cleared of all traces of dangerous goods and flammable vapour by an approved method:

Provided that this regulation shall not prohibit the carrying out of such servicing and repairs as will not create or involve a source of ignition, and the work is carried out in accordance with conditions approved by an inspector.

The above notice has been read, understood and accepted by me prior to taking delivery of the tank and I acknowledge receipt of a copy of this notice.

**Signed:** \_\_\_\_\_ **Date:** \_\_\_\_\_

*(Recipient)*

## APPENDIX C: SAFE HANDLING OF PETROLEUM PRODUCTS

### General

All petroleum products are hazardous. They can cause EXPLOSION or FIRE.

Most petroleum products are TOXIC when not used with due care.

### Fire and Explosion

All petroleum products must be treated as being potentially explosive, even in small quantities.

Petrol, aviation gasoline and most solvents evaporate readily, producing an explosive mixture with air. Kerosine, aviation turbine fuel and the less volatile solvents can also produce explosive vapours, particularly in poorly ventilated areas. All products can accumulate static electricity which may trigger an explosion — kerosine-type products are particularly susceptible.

Automotive diesel, fuel oils and lubricating oils can produce explosive conditions if sprayed or heated, even over small areas.

### Precautions Against Fire and Explosion

Keep all SOURCES OF IGNITION away from petroleum products and their vapours. Sources of ignition include:

- × Matches, lighters and cigarettes, etc.
- × Any flame or spark.
- × Any non-flameproof electrical equipment, including switches, hand torches, electric radiators, vacuum cleaners, power tools and radios.
- × Welding sets, leads, connections and hand-pieces.
- × Gas welding torches.
- × Motor vehicles and all internal combustion engines.
- × Tools which can cause a spark if dropped, etc.
- × Grinders.

Petroleum vapours are heavier than air and will readily collect in pits, drainage sumps, cellars, and any low areas. Small quantities of vapour can be quickly and safely dispersed by good and rapid ventilation.

- The presence or absence of petroleum vapours can be checked by a competent operator using an explosimeter.
- **Do not enter any tank or pit** that has contained or does contain petroleum products unless it has first been tested and a safety certificate issued by a competent person.

- Do not do any hot work (e.g. welding, gas cutting, grinding, drilling or power wire-brushing) on any tank or container that still contains any product or that has not been tested and certified gas free by a competent person.
- Do not transfer or pour petroleum products from one container to another, without ensuring that both containers are fully earthed, and that an effective earthing connection is made between hose nozzle and receiving container before any transfer is started, and is maintained as long as the transfer continues.

### **Toxic Hazards**

Petroleum vapours can quickly asphyxiate. At lower concentrations, they irritate the eyes and lungs, and may cause nausea, headache and depression.

Petroleum products will irritate the eyes and skin and may cause dermatitis on prolonged or repeated contact.

In addition, high octane petrol and aviation gasolines contain toxic lead compounds. Internal surfaces of tanks which have contained these products will be contaminated and must be treated as highly toxic, even after all product has been removed.

### **Precautions Against Toxic Hazards**

- Avoid splashing, or any contact with the eyes or skin.
- Wear PVC gloves and boots, and cotton overalls. Wear goggles or face shield if splashing is possible.
- If clothing gets contaminated with product, remove under a running shower.
- If eyes or skin contact occurs, treat as under First Aid Treatment on following page.

### **Notes for Physician**

Administration of medicinal liquid paraffin may reduce absorption through the digestive tract. Gastric lavage should only be done after endotracheal intubation in view of the risk of aspiration which can cause serious chemical pneumonitis for which antibiotic and corticosteroid therapy may be indicated. Motor gasolines may contain lead compounds; however, the quantities involved are unimportant in the context of the treatment of acute gasoline poisoning.

## EMERGENCY ACTION

### In Case of Petroleum Spillage

- If a spill occurs, extinguish all naked flames.
- Shut down any other potential sources of ignition.
- Ensure area is well ventilated.

**Small Spill:** Absorb spills in enclosed areas. Absorb outside spills using sand, earth, or a proprietary absorbent.

**Large Spill:** Contain and pump into storage.

### Petroleum Fire

- Use dry powder, foam, B.C.F., or carbon dioxide extinguishers.
- Do not use water jets - these will spread the fire.

### First Aid Treatment

#### Petroleum Products Swallowed:

- **Do not induce vomiting!** The main hazard following accidental ingestion is aspiration of the liquid into the lungs, and children are more susceptible than adults.
- Give 250 mls (1/2 pint) of milk to drink; if not available, give water.
- **SEND TO THE HOSPITAL IMMEDIATELY.**

#### Eye Contact:

- Wash with copious amounts of water for at least 10 minutes.

#### Skin Contact:

- Drench the skin immediately with cold water.
- Remove contaminated clothing under a running shower and wash all contaminated skin with soap and water.

#### Inhalation:

- Move victim to fresh air.
- Keep the patient warm and at rest.
- If unconscious, place in the recovery position.
- If patient not breathing, give artificial respiration.
- Give cardiac massage if necessary.
- **SEND TO THE HOSPITAL.**

### Medical Treatment

See Notes for Physician on page 51.