States of Jersey

Guidelines on Decommissioning Fuel Storage Tanks

Permanent Decommissioning Schedule

This includes: -

1. The removal from site of the storage tank(s) and associated pipe work or the making safe in situ.
2. The removal of the dispensers, if a whole site closure is involved.
3. The cleaning and if appropriate the removal of the petrol interceptor and connected surface water drainage system.
4. The disconnection and removal of the electrical installation where appropriate

The Complete Removal of all Tanks and lines and associated equipment

- This is always the preferred method for permanent decommissioning.
- Steps that must be taken: -
- All lines should be drained back and then all residual product should be uplifted. Immediately thereafter the tank(s) and lines should be inerted, or alternatively cleaned and gas freed.
  Inerting must be maintained during the excavation work and any fault in the tank shell sealed as soon as it is exposed.
- Throughout the excavation there must be monitoring for the presence of flammable gases.
- The tank must remain inerted or gas freed pending disposal.
- The tank and lines must be disposed of in line with current legislation
- The contractor should provide a certificate confirming removal of the tanks. A copy must be provided to the Licensing Authority, Jersey Fire & Rescue Service.

Making Safe in Situ

The making safe of tanks in situ is only acceptable where removal is not practicable and the tank is level within its excavation. This should be tested by placing a spirit level across the tank lid.

The Licensing Authority may accept the making safe of tanks by either: -

- Lean cement slurry filling 20:1 sand/cement slurry having 175mm slump according to BS5328. The slurry is to be vibrated during pouring ~ or ~ Hydrophobic foam filling to a compression

appropriate for permanent decommissioning 22 tonnes/m². The tank should be filled until foam discharges through the temporary vent pipe and then a back pressure of 0.5 bar applied to ensure that the tank is completely filled.

Steps to be taken: -

- All lines must be drained back, purged and capped. If hydrophobic foam filling, all lines and vents should be foam filled.
- All residual product must be uplifted and the tank immediately filled.
- If cement slurry filling, the tank must be inerted.
- If hydrophobic foam filling the tank should be cleaned prior to filling or as provided by the manufacturer's instructions.
- All vent pipes associated with the tank(s) should be dismantled and removed from the site. All notices referring to petroleum spirit storage where storage has ceased should be removed.
- The location of the disused tank(s) should be recorded for future reference. The Licensing Authority should be informed of its/their location.
- On completion of decommissioning the contractor employed to make the tank(s) safe should issue a certificate stating the capacity of the tank, method of making safe and the date on which the work was carried out. A copy of this certification should be supplied to the Licensing Authority.

Any work to either remove or make safe in situ must be carried out by a competent person as defined in Guidance for the Design, Construction, Modification, Maintenance and Decommissioning of Filling Stations.

This also provides guidance on decommissioning.

Before starting any work a full method statement must be provided to the Licensing Authority.

Temporary Decommissioning Schedule

The following information sets out the steps and conditions required by the enforcing authority to make petroleum spirit tanks temporarily safe.

Water Filling Tanks

Water filling only by prior agreement with the enforcing authority may be permitted for up to 6 months, provided that certain steps and conditions are complied with. Thereafter, a further extension period may be agreed after discussion and review with the enforcing authority. This further period will be for a further 6 months maximum only.

Steps to be taken by contractors: -

- Isolate the tanks and associated equipment from the electrical supply.
- All pipe work except the vent pipe work connected to the tank should be drained and then disconnected in the man way chamber of the tank.
- Remove all residual petrol. (Bottoming the tank).
- Immediately fill the tank or compartment with water to a level where clear water appears at the disconnected pipe work openings.
- Cap or blank off all openings to the tank or compartment.
- The vent pipe work together with the flame trap outlet(s) should remain connected to allow the tank to breathe.
- Flush through and cap at each end all pipelines previously connected to the tank or compartment.
- The filling/dipping pipes should be kept securely locked.

All offset fill pipes to be adequately secured against unauthorised access, vandalism or inadvertent use.

A competent person as defined by the Guidance for the Design, Construction and Maintenance of petrol filling stations must carry out all the above works.

Any tank made temporarily safe for a period of time will require leak testing before being brought back into use. An electrical test certificate will also be required for the filling station before bringing the site back into use.

All contaminated water must be disposed of with due regard to the environment and in accordance with current legislation.

Where the site is to be left unoccupied whilst being sold as a going concern, adequate steps should be taken to ensure risks from tampering or vandalism are reduced or eliminated. This may involve protection of the facilities by fencing off the site, or the removal or boarding up of dispensers. Monthly checks are still required to be undertaken.

Any tank that once contained petrol, or its previous status is unknown, should be treated as an ex-petrol tank and be completely water filled to avoid any possible build up of vapour. Many converted diesel tanks will fall into this category.

No tank should be left empty between the operations of bottoming and water fill.

Out of Use Petrol Tanks

Unfortunately, for a variety of reasons, a number of petrol filling stations have had to close in the Island.

Many site owners automatically propose to fill disused underground storage tanks with water, whilst they decide upon the future of their site. The Petroleum Licensing Authority (PLA) (Jersey Fire & Rescue Service) will review all proposals to water fill on a site-specific basis, however please remember this is only a temporary measure that will be allowed for a period of six months. Water fill is not allowed indefinitely.

During that six month period this authority requires the following to be undertaken;

- A monthly inspection of the water level to be carried out and recorded by the licensee or a representative.
- Notification of when the first monitoring check is due following water fill, as a petroleum officer may require being present.
- If the presence of petrol is detected on the surface of the water, then this should be removed and disposed of accordingly.
- Any reduction of water within the tank should be investigated and reported to the Licensing Authority. It is not just a case of topping up a tank each time there is a loss, as the tank may be leaking allowing contaminated water to enter the ground.

All recordings of monthly water level checks should be sent to the Petroleum Licensing Authority, whether there be a loss of water or no change in level since the last check.

If the above is adhered to and an extension to the six-month period is required, then it is possible for a further six months to be allowed following a review, so long as the above conditions are continued and the situation has been adequately risk assessed.

The petroleum licensing authority is empowered to take enforcement action on non-compliant sites. This will usually be via a Statutory Notice, which gives a deadline for the tanks and site to either be brought back into use following relevant testing or for the tanks to be removed from site, permanently decommissioned or other alternative to the satisfaction of the authority.

This action may be taken even though the initial agreed time period of six months has not passed.

This should not be an issue for the vast majority of site owners who accept and act upon their responsibilities. Please note the conditions of your petroleum licence as provided by the Petroleum Licensing Authority.

Therefore, you must notify the Petroleum Licensing Authority prior to cessation of use to allow all permissions and advice to take place. Failure to do so may delay proposals to alter or close your site.

Both the Temporary Decommissioning Schedule (complete water fill) and Permanent Decommissioning Schedule (hard foam or concrete slurry) schedules outline the methods required to decommission underground storage facilities.

Conversion of Petrol Tanks to Diesel

Converting an underground petrol tank to diesel? The following steps need to be taken.

- Empty and bottom out the tank.
- Check to ensure that the fill pipe is intact to prevent the possibility of splash loading.
- Check to ensure electrical continuity between the tank and the tanker.
- Restrict initial flow of diesel to less than 1m/s until the end of the fill pipe has been covered.
- Fill the tank to its maximum capacity.
- Flush through pipework to each dispenser connected to the tank, drawing at least 100 litres through each one. The flushings may be returned to the converted tank where its capacity is more than 4,000 litres. For smaller tanks, subject to the approval of the regulator (sewerage undertaker or the Environment Department), the flushings should be dispensed into a suitable container and removed from the site for disposal marked clearly as Class 1 petroleum or waste petrol for disposal. In any case the material returned to the tank should not reduce the flashpoint below the specified minimum.
- The tank fill pipe should be clearly relabelled.
- Site records should be amended to reflect the change of storage
- Disconnect any stage 1b or 2 vapour recovery pipework from the tank and blank off.
- Change or remove any signs associated with vapour balancing as appropriate.

Current guidance states that the tanks should be tested prior to conversion unless the tank is known not to be leaking. This should be assessed following careful analysis of your wetstock figures or other leak detection systems for the tank. If following analysis you are satisfied that the tank is suitable for continued storage use, please provide this in writing to the PLA and the testing may be dispensed with.

Once converted, the tank should be kept in constant use for diesel storage. To allow stocks to run down, allowing only a fill pipe seal, may allow explosive petrol vapours to form again in time.

When permanently decommissioning the tank, it must always be treated as an ex petrol tank and decommissioned accordingly.

If uplifting a converted diesel tank, it should be marked accordingly as being an ex petrol tank and removed in line with current guidance.

Further information can be obtained from

The Petroleum Licensing Authority for Jersey;
Jersey Fire & Rescue Service,
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