

Spring Bay Boat Club REFUELLING GUIDELINES, RULES and RESTRICTIONS

April 2021

This document sets out acceptable practice for members who cannot reasonably avoid refuelling their vessel at the SBBC marina or hard stand and sets out some prohibited actions related to refuelling. **At all times members undertaking refuelling are responsible for any adverse outcomes that may occur.** Members requiring bulk diesel should note that it is available across Vicary Creek from the Bennetts Petroleum bowser and that is the SBBC preferred source.

The order of risks presented by the two distinct fuel types, petrol, and diesel, differ.

The primary hazard with petrol-based product is fire. Petrol vaporises at normal air temperatures and petrol fumes ignite easily and violently unless well dispersed (by air movement over time). The consequence of environmental contamination is secondary but significant in substantial amounts on both land and water.

The primary hazard with diesel is environmental contamination, typically spillage, particularly directly or indirectly into water. In this respect it is far worse than petrol because diesel disperses rather than evaporates. It is a serious marine contaminant and highly visible on water. Diesel will only burn if heated but once alight is capable of sustained combustion even on water and difficult to extinguish.

Potential sources of accidental ignition of petrol include.

- Any naked flames
- Welding, grinding, smoking
- Sparks from mobile phones, fridges, battery chargers, or other electric/electronic devices
- Running engines
- Spillage on any hot surface
- Build up and discharge of static electricity

Pooled spillage, or accumulated petrol vapour remains at high risk of ignition until the spillage has evaporated and the vapour is sufficiently dispersed. Petrol vapour is heavier than air and can remain in poorly ventilated cockpits, cabins and bilges for extended periods.

The activities are separated into:

1. Safe refuelling from AS/NZ 29 AS 06:2001 “portable” fuel containers of 25 litres or less capacity

2. Safe refuelling from “transportable” fuel containers larger than 25 litres - “Bulk Refuelling”

1/ Safe refuelling from AS/NZ 29 AS 06:2001 “portable” fuel containers of 25 litres or less capacity

This advice is written with the risks associated with petrol in mind. With diesel, concentrate on avoiding spillage, but do not ignore the possibility of combustion.

Before any refuelling operation:

- Check for nearby naked flames, including on adjacent boats.
- Check for nearby welding, grinding, smoking, or running engines.
- Turn off or leave at a distance mobile phones, radios, fridges, battery chargers, or other electric/electronic devices that could possibly spark.
- Ensure that possible spillage or fumes cannot reach any hot surfaces.
- Alert persons nearby and maintain your situational awareness during the operation and cease refuelling immediately if necessary.

Avoid spillage by:

- Using a fitted pouring spout, suitable sized fuel funnel, or jiggle siphon
- Knowing approximately how much fuel your boat tank will take to avoid accidental overfilling.
- Using smaller fuel cans where the space is restrictive, or the volume of fuel required is small.

Manage static electricity build up and potential static sparks by:

- Removing any “tote tanks” from the boat or vehicle and filling them on the ground.
- Maintaining a continuous contact between the receiving fuel tank, the fuel source, any funnels/spouts and the refueller so that all items involved maintain a common earth potential. Any jiggle siphon or other hose should be fuel rated and have an integral earth strap.
- Not wearing synthetic clothing and/or insulating shoes as these dramatically increase the likelihood of static charge build up.

Portable fuel container: (colloquially “Jerry Can”) Any portable fuel rated container \leq 25 litres rated capacity which complies with AS/NZ 29 AS 06:2001 or an equivalent international standard. These containers are available in various sizes from 4 to 25 litres. They may be manufactured from both fuel grade “plastic” or metal. Available brands include but are not limited to “Proquip”, “Scepter”, and proprietary portable outboard “tote tanks”. The important common features are that they are:

- Robust for transport,
- Safe to contain fuel,
- Designed to dispense fuel with minimum spillage, using appropriate accessories.

Common smaller non-compliant containers including, but not limited to, oil drums, fruit juice containers, and old “flimsy” unrated fuel tins must not be used for fuel transport, storage or decanting at the SBBC.

NOTE: Members may not store portable fuel containers, either filled or empty, on the SBBC site.

2/ Safe refuelling from “transportable” fuel containers larger than 25 litres - “Bulk Refuelling”

The risks associated with bulk refuelling are the same as for refuelling from portable containers except that the potential consequences of mishap are magnified. A well-designed bulk refuelling device, operated according to a strict safety protocol, is safer than handling larger quantities of fuel in multiple portable containers.

Any operators of a bulk refuelling system at the SBBC premises shall:

- Have a written safe job method dealing with all the general issues outlined in the section on refuelling from portable containers above.
- Including the details of operation of their chosen bulk refuelling device, into their vessel(s)

If demanded for any reason by the SBBC committee, both the safety protocol and the refuelling device must be produced for scrutiny by any technical representative appointed by the SBBC, as they apply to their operation(s).

Specific actions that are prohibited by the SBBC at their premises include:

- **Using fuel delivery hoses that are not earthed.**
- **Running delivery hoses across other vessels.**
- **The use of fuel pumping systems for petrol which are not rated as “intrinsically safe”**
- **Storing the refuelling device onsite.**

SBBC Committee.