**Appendix U**

**PRE-COMMISSIONING AND DECOMMISSIONING PROCEDURES AND WINTER MAINTENANCE**

**(OUTDOOR AND SEASONAL SWIMMING POOLS ONLY)**

**1.0 PRE-COMMISSIONING / SUMMERISING PROCEDURES**

At the start of each season the pool tank and water treatment plant must be commissioned for use, as follows:

**Pool structure:**

* Drain off the water in pool tank and remove large items,
* Wash and remove small debris from the pool, such as leaves, etc.
* Inspect the pool lining - concrete, tiled, or vinyl liner, as necessary, and report any major damage to the Property Manager as soon as possible,
* Inspect the pool inlets, outlets/drains, skimmers, handrails, steps and poolside fittings - replace or repair as agreed with the Property Manager,
* Assuming pool tank lining is satisfactory, clean the lining and fill the pool tank with water.

**Filter and Pipework:**

* Check the sand level and quality in the filter and top-up or replace as necessary,
* Replace all plugs in the heater exchanger, filter(s), strainer(s) pump(s) and reconnect all pipework, equipment, and fittings to set up circulation of pool water,
* Check all valves to determine whether they still function - replace if necessary,
* Reconnect the electrical power supply to the plant area. THIS WORK MUST ONLY BE CARRIED OUT BY A COMPETENT ELECTRICIAN,
* Select the 'backwash' position on the multiport valve. Prime the circulating pump and switch on,
* Run the pump for 5 minutes to flush system removing any rust and debris that may have formed during the winter, into the drain,
* Select the 'filter' position on the multiport valve, and switch on the pump. The pool water will now start to circulate and filter,
* Switch on pool heating (if appropriate) and check for leaks,
* Check the whole system for leaks and complete the report sheet.

**Chemical Treatment Systems**

* Add chlorine to the pool water and dose to approximately 5mg/l (milligrams per litre) and allow the system to circulate to achieve water clarity,
* Maintain Free Chlorine at operational levels recommended and allow treatment system time to clean and clear the pool water,
* Adjust pH to the range 7.2 to 7.4.

**Please Note: Never add concentrated or dry chemicals directly to the pool tank as these will damage the lining surfaces.**

**2.0 DECOMMISSIONING / WINTERISATION PROCEDURES**

At the end of each season, there must be a decommissioning of the pool tank and water treatment plant as follows:

**Pool Structure:**

* Remove the steps from the pool tank and store in a dry storage area or out-building.
* Remove the skimmer flap/float and debris basket and store in a safe place. Half-fill a plastic bottle with an anti-freeze mixture or small stones inside, and place this in each of the skimmer housings.
* Remove the pool cover thermal insulation blanket and store in a dark dry store, and keep dry.
* Place a number of plastic drums/large bottles, partly filled with an antifreeze solution or small stones, into the pool to float half submerged, in order to ensure that the formation of ice in extreme weather conditions does not damage the pool linings and walls.

**Filter and Pipe Work:**

* Thoroughly backwash the filter, and lower the water level to just below the skimmer weir opening.
* Open the suction and return valves to drain the pipework between the pool tank and plant.
* Remove the drain plugs from the pump and strainer, grease and place these plugs inside the pump strainer basket.
* Remove the plug at the bottom of the filter tank and drain all the water from the filters. Remove the top(s) of the filter(s) and take a sample of sand from each and inspect when dried. Identify if sand requires replacement before the following season - report as necessary.
* Remove the drain plug from the heat exchanger (if appropriate) and drain.
* Disconnect electrical power supply. THIS WORK MUST ONLY BE CARRIED OUT BY A COMPETENT ELECTRICIAN
* Disconnect the gas supply to boilers that feed the pool water heater
* Separate the pump and motor assembly from the pipework (only if the pump is located in an external shed and/or in damp conditions during the winter) and store in a warm dry store or plant room. These pumps are to be lightly sprayed with a water-repellent lubricant.

**Winterisation Covers for Outdoor Pools**

* It is recommended that outdoor pools should use a purpose-designed winterisation cover to prevent frost-damage as well as intrusion by animals during the winter months, etc.

**Chemical Treatment Systems:**

* Drain the Trichlorinator (if installed), remove any chlorine tablets and flush out with fresh water.
* Once flushed, dechlorinate with Sodium Thiosulphate solution, and then soak for 15-20 minutes in a weak phosphoric acid solution (to de-scale). Flush again with clean water and drain.

**MAINTENANCE DURING WINTER PERIOD**

Very little chlorine is required during the winter; when the temperature is below 7˚C (45°F), algae and bacteria will not grow. It is suggested that 250 grams per 4,500 litres (8 oz. per 1,000 gallons) of a chlorine donor is carefully dissolved and added to the pool water during the winter period on a regular basis. The determination of 'regular' must be left to the Pool Operator whose pool will demand treatment as the water deteriorates.

Make certain that leaves are not allowed to remain in the pool for long periods as these may stain the vinyl liner. The use of a Leaf Net will help to prevent this sort of damage and make commissioning the pool that much quicker and easier.

Lower the water level if necessary. If the pool is allowed to fill up to the top through excessive rain, and this develops into ice, then expansion of the ice may damage the pool surrounds. If the pump and filter have been winterised it may be advisable to contact the Property Manager, who should be able to advise on access to a submersible pump to lower this water level.

If the pool water level is above ground level it is possible to syphon out the pool to the correct level.