

19. SWIMMING POOLS

Preface

Backwash and drainage from swimming pools and spas which are discharging to sewer is classified as trade waste, and approval is required

For the purpose of this guideline 'swimming pools' refers to;

- Commercial pools
- Institutional facility pools,
- Municipal facility pools
- Commercial ornamental fountains and ponds.
- Commercial spas

TABLE 1: KEY TRADE WASTE QUALITY & QUANTITY REQUIREMENTS

PARAMETER	GENERALLY ACCEPTED LEVEL
pH	Between 6-10 units
Chlorine	≤5mg/L
Temperature	≤38 degrees C
Total Dissolved Solids	1000mg/L
Suspended Solids	600mg/L
Flow Rate to Sewer	2L/S (maximum)

Pre-treatment requirements

Filtered backwash water shall be collected in a holding tank and then be discharged into the sewer at a controlled rate as specified in the approval conditions. Solids settled at the bottom of the holding tank should be removed for off-site disposal and not be discharged into the sewer. The discharge shall be limited to low flow periods in the sewer.

TABLE 2: ISSUES OF CONCERN AND RELATED SEWER ACCEPTANCE REQUIREMENTS


Issue	Concern	Sewer acceptance requirements
Large volume of discharge if pool is emptied	Treatment costs and possible local network overloading	Commercial / institutional pools are normally NOT to be drained to sewer, but may be drained to the stormwater system subject to Environment ACT approval. Under certain conditions Whitsunday Regional Council may agree to accept pool contents to sewer.
Pool overflow (from rainwater entry or overfilling)	Treatment costs. Rainwater is not permitted to enter the sewer	As above
Filter backwash	High flow rate may locally overload network. Other specific water quality concerns.	Pools may need to install and maintain instrumentation and controls to ensure discharge to sewer is rate limited, and restricted to times when the sewer has sufficient capacity. Water quality requirements indicated below must be satisfied. In addition suspended solids must be less than 600 mg/L.
Storage of chemicals (including salt)	Spilled chemicals in high concentrations may cause corrosion and pose a risk to the health and safety of sewer workers.	Chemicals must be stored within bunds or areas which cannot drain to sewer and also the pool.
Hydrogen peroxide (H ₂ O ₂), Ultraviolet and Ozone (O ₃) Chlorine gas,	No issues	No restrictions Total chlorine not to exceed 5 mg/L as Cl

<p>sodium hypochlorite (pool chlorine), or</p> <p>calcium hypochlorite</p> <p>Bromine</p> <p>Sodium hypochlorite with added bromide ion, or</p> <p>Bromochlorodimethyl hydantoin (Spabrom)</p> <p>Quaternary ammonium compounds (Quats)</p> <p>Sodium thiosulfate</p> <p>Hydrochloric acid (Muriatic acid)</p> <p>Colouring agents</p> <p>Waste from animal pools / aquaria</p>	<p>Zoonotic disease transmission and spread of exotic species</p>	<p>Combination of total chlorine plus total bromine concentrations not to exceed:</p> <p>5 mg/L as Cl, or 10 mg/L as Br</p> <p>(use relationship 2 mg/L Br is equivalent to 1 mg/L Cl)</p> <p>No limit</p> <p>Not to be used</p> <p>pH of discharge to be in the range 6.5 -10.0 units.</p> <p>No visible colour when the waste is diluted to the equivalent dilution afforded by domestic sewage flow.</p> <p>Whitsunday Water & Waste may determine further specific waste acceptance conditions.</p>
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Other issues

If emptying the pool for cleaning or maintenance purposes, Whitsunday Regional Council is required to be notified. Whitsunday Regional Council will determine an appropriate controlled flow rate to the sewerage system and limit the time of discharge to low flow periods in the sewer. This type of activity should not be undertaken during wet weather periods.

Whitsunday Regional Council may need to set an acceptance limit for total dissolved solids to suit local conditions for discharges from salt-water pools.



Furthermore, the discharger is required to provide Whitsunday Regional Council in advance the details of cleaning compounds, if any, (including brand name, quantity, MSDS where appropriate) which intends to use for cleaning of pool surfaces. The wastewater arising from cleaning of pool surfaces by using strong detergents or acids shall not be permitted to discharge into the sewerage system.