

23 August 2001

Swimming Pool Accident

PROMOTING SAFETY AND HEALTH IN THE WORKPLACE

ACCIDENT/INCIDENT ALERT

INCIDENT

A near fatal accident occurred involving a child at a swimming pool administered by a local council.

CIRCUMSTANCES

On 11th February 2001, two 8-year-old girls were in the toddlers' pool seeing how long they could hold their breath under water. While one child was lying face down in the water directly above the pool outlet, strands of her long hair were drawn through holes in the grill and became entangled. She became trapped and couldn't pull her head out of the water. Her friend summoned aid and her hair had to be cut to free her. She was unconscious when she was pulled out of the water and was given mouth-to-mouth resuscitation.

The local council, which owns the pool, prepares it prior to the season and then hands it over to a community committee of volunteers to operate. The committee operates the pool in accordance with the *Swimming Pool Guidelines*, which are issued by Water Safety New Zealand, the New Zealand Recreation Association and the Hillary Commission. The toddlers' pool is 3 years' old, measures 5 metres x 3 metres and is 0.4 metres deep. It has a 0.3 metre-wide weir at one end. Both the pool and the weir are linked to a recycling filter system that is set to draw water through a set of control valves. The filter system is designed to draw most of the water from the weir and a small amount from the pool. The pool also has a solar heating system that operates during the pool open hours. To avoid daily visits to manually start and stop the solar heating system, an electronic timer was installed to automatically start and stop the solar system.

On 2nd February 2001, the pool hours were extended half an hour. The solar system had automatically switched off at 5.30 pm and 15 minutes later a committee member noticed that the water level in the weir was low. This was a normal occurrence but at the time he believed that if the water fell further the pump would seize. To avoid this he changed the flow of water to the recycling filter system so that all of the water would come from the pool rather than from the weir. This caused a greater flow of water through the flat grill in the bottom of the pool, resulting in the creation of a strong whirlpool effect on the underside of the grill.

INVESTIGATION

The investigation by OSH found that there were a number of factors that led to the accident. These included poor communication between the council and the voluntary committee in relation to the operation of the

filter system and the fact that, at the time of the accident, the pool was not being operated in accordance with the *Swimming Pool Guidelines*.

RECOMMENDATIONS

OSH recommends that all councils with public pools:

1. Review their pool complexes, to ensure that hazards, such as the one outlined above, are being controlled and all practical steps are taken to eliminate, isolate or minimise hazards;
2. Ensure that health and safety manuals are reviewed and updated with the appropriate information annually prior to the season opening;
3. Clearly define the role and operation of voluntary committees in operating pools (if used) and put in place procedures to ensure the processes are being followed; and
4. Where the *Swimming Pool Guidelines* are being used to operate the pools, should ensure that the guidelines are being followed so that current best practices and industry standards are being met.

For further information, contact your local OSH regional office.