Determination 2007/87

Use of a cover instead of a fence for a swimming pool at 138 Cowes Bay Road, Waiheke Island

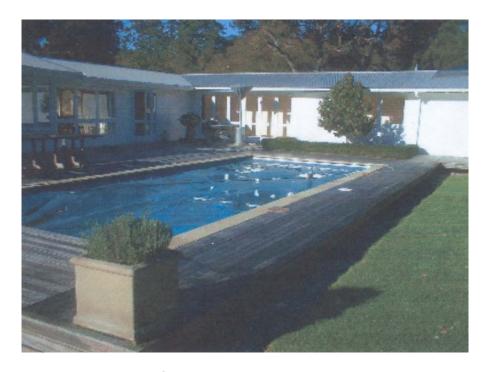


Figure 1: Pool and cover

1 The matter to be determined

- 1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004 ("the Act") made under authorisation by me, John Gardiner, Manager Determinations, Department of Building and Housing, for and on behalf of the Chief Executive of that Department.
- 1.2 The parties are the applicant, S Ellis and G McKenzie ("the owners"), acting through a firm of architects, and the Auckland City Council ("the territorial authority").

1.3 The application was for "an exemption to the requirement to provide pool fencing as stipulated in 'the Fencing of Swimming Pools Act' and to meet appropriate safety standards through the use of a [proprietary] swimming pool cover".

- 1.4 I have no power to grant exemptions under the Fencing of Swimming Pools Act 1987. However, if such an exemption were to be granted by the territorial authority, it would also be necessary under the Building Act for the territorial authority to make a consequential amendment to the building consent for the pool. That could be done only if the territorial authority was satisfied on reasonable grounds that the cover complied with clause F4 of the Building Code, or was willing to grant a waiver or modification of that clause. Accordingly, the territorial authority's decision to refuse to grant such an exemption is implicitly a decision to refuse to amend the building consent.
- 1.5 I have the power to make a determination in respect of that decision under section 177(b)(vi) of the Building Act. I therefore take the view that the matters for determination are:
 - (a) Whether the provision of the cover instead of a fence complies with clause F4 of the Building Code (the First Schedule to the Building Regulations 1992), and if not
 - (b) Whether a waiver or modification of clause F4 should be granted.
- 1.6 In this determination, unless otherwise stated, references to sections are to sections of the Act and references to clauses are to clauses of the Building Code.

2 The pool and the cover

- 2.1 The pool is in the garden of a house in a rural area with a beach frontage and adjacent to other water hazards. The pool was erected in 2002 under a building consent that included fencing complying with clause F4, but the cover was installed instead of the specified fencing. No code compliance certificate has been issued.
- 2.2 The cover can be described¹ as a barrier intended to inhibit the access of children under five years of age which can be placed over and removed from the water area of a swimming pool (intended to be completely removed before the entry of bathers) with a motorised mechanism.
- 2.3 After studying the first draft determination mentioned in 4.3 below, the owners, acting through a barrister, proposed installing a pool alarm system, which detects changes in water pressure and sounds sirens at the pool and in the house when a change is great enough to indicate that a child might have fallen into the pool. The owners also proposed a regime for the safety management of the pool and the cover.

¹ In words taken from ASTM F 1346 91 "Standard Performance Specification for Safety Covers and Labelling requirements for All Covers for Swimming Pools, Spas and Hot Tubs".

3 The building code

3.1 The relevant provisions of the building code are:

	Provisions	Limits on application
F4.3.1	Where people could fall 1 metre or more from an opening in the external envelope or floor of a building, or from a sudden change of level within or associated with a building, a barrier shall be provided.	Performance F4.3.1 shall not apply where such a barrier would be incompatible with the intended use of an area, or to temporary barriers on construction sites where the possible fall is less than 3 metres.
F4.3.3	Swimming pools having a depth of water exceeding 400 mm, shall have barriers provided.	Performance F4.3.3 shall not apply to any pool exempted under section 5 of the Fencing of Swimming Pools Act 1987.
F4.3.4	Barriers shall:	
(a)	Be continuous and extend for the full extent of the hazard,	
(b)	Be of appropriate height	
(f)	In the case of a swimming pool, restrict the access of children under 6 years of age to the pool or the immediate pool area.	Performance F4.3.4(f) shall not apply to any pool exempted under section 5 of the Fencing of Swimming Pools Act 1987.
F4.3.5	Barriers to swimming pools shall have in addition to performance F4.3.4:	
(a)	All gates and doors fitted with latching devices not readily operated by children, and constructed to automatically close and latch when released from any stationary position 150 mm or more from the closed and secured position, but excluding sliding and sliding-folding doors that give access to the immediate pool surround from a building that forms part of the barrier, and	
(b)	No permanent objects on the outside of the barrier that could provide a climbing step.	

4 The submissions and the draft determinations

4.1 The owners' submissions accompanying the application were organised under the following headings and said:

(a) The location: The house is in a rural area down a long steep drive "accessible only to 4 wheel drive vehicles". "Due to the long distances between houses and the rough nature of the road young children can not reasonably be expected to be encountered unaccompanied."

- (b) The residents: The owners live alone and have no children. "On the rare occasion when a child might be present it would be well monitored."
- (c) The cover: "The Pool cover is a sophisticated retractable model . . . rated by the American manufacturers as a safety cover. It is fully mechanised and is closed at all times when not in use."
- (d) Other water hazards: "The house is . . . on a beach Immediately adjacent to the house is a stream which at high tide is up to a metre deep The property contains a dammed stream over a metre deep approx 100 metres behind the house."
- 4.2 The territorial authority's submissions said:

Despite the fact that the dwelling/pool area is located on a rural property, consideration must be given to children visiting the site and eventually in the course of time new owners.

The . . . location of the dwelling and pool area in close proximity to the beach . . . does not have any regard to the requirements of fencing a swimming pool on private property albeit adjacent to an accessible beach.

- 4.3 After considering those submissions and the other documents that accompanied the application for determination, I prepared a draft determination ("the first draft") to the effect that the pool with the cover instead of fencing did not comply with clause F4 and that it would not be reasonable to grant a waiver or modification of that clause. I copied the first draft to the parties for their comments and advised that if each party accepted the draft then a hearing would not be necessary.
- 4.4 The territorial authority accepted the first draft.
- 4.5 The owners did not accept the first draft and responded:

In addition to the information provided [with the application] a waiver or modification . . . would be appropriate given the following modified package of safety measures:

- (a) The existence of a sophisticated retractable pool safety cover capable of supporting adult weight when closed. The safety cover has a fully mechanised operation which requires a key to operate.
- (b) The pool safety cover will be closed at all times when not in use.
- (c) The pool safety cover is locked when closed and cannot be operated without a key.
- (d) The pool safety cover will be locked closed at all times when unsupervised by an adult.
- (e) A notice shall be installed in the pool area stating that when the pool safety cover is retracted adult supervision is to be on hand at all times.

(f) [A proprietary] pool alarm system] will be installed.

The . . . alarm system detects when a child or pet falls in a pool by detecting changes in water pressure. When a change in water pressure is great enough to indicate a fall might have occurred a siren sounds at the detector unit (by the poll) and at the remote unit (inside the house). . . . The [alarm system] requires a security code to disarm the system before swimming and the alarm will automatically rearm when swimmers leave the pool. I enclose a copy of the [manufacturer's] brochure for your information.

The brochure described three alarm systems. Two of them incorporated remote controls for arming and disarming the system from inside the house.

- 4.6 After considering the owners' response to the draft, I prepared a second draft and copied it to the parties on 19 December 2006 under cover of a letter to the effect that a hearing would be necessary unless the second draft was accepted.
- 4.7 The territorial authority accepted the second draft.
- 4.8 The owners did not respond to the second draft despite two further letters. I took the view that the owners had failed to comply with a request under section 186(3)(a) and that therefore I was entitled under section 186(4) to make the determination without receiving the owners' comments. Accordingly, this determination corresponds to the second draft with some editorial changes.

5 Discussion

5.1 General

- 5.1.1 Although the building consent was issued under the Building Act 1991 ("the former Act"), under section 433 it must be treated as having been granted under the Act.
- 5.1.2 Determination 2002/10, made under the former Act, the Building Industry Authority decided in effect that a spa pool projecting 500 mm above a deck and with a proprietary lockable cover, without a safety barrier around it, did not comply with clause F4. I agree with that decision, and consider that the same general approach applies to this determination. Determination 2002/10 sets out the relevant provision of the Fencing of Swimming Pools Act and of the former Act, and discusses apparent discrepancies between them. I consider that discussion to apply to the Act also, allowing for the largely irrelevant differences between the Act and the former Act. Accordingly I have not considered it necessary to repeat it in this determination.

5.2 The pool cover

5.2.1 In Determination 2001/2, made under the former Act, the Building Industry Authority decided in effect that a horizontal safety canopy, in conjunction with a low vertical barrier, was an adequate safeguard against injury from falling from the roof deck of a house. I agree with that determination and accordingly recognise that the cover, when it is in place, can be regarded as a safety barrier for the purposes of restricting the access of children to a swimming pool as required by clause F4.3.3. However, when the cover is not in place the proposed alarm system is not a safety

barrier and can be considered only in the context of a waiver or modification of clause F4, see5.3 below.

- 5.2.2 I read clause F4.3.4(a) as requiring that a safety barrier must remain in place. However, people must be able to pass through such a safety barrier so as to use the pool. With a fence-type barrier, they pass through gates or doors which are required by clause F4.3.5(a) to automatically close and latch (the exemption for sliding and sliding-folding doors is irrelevant to this determination). The cover, however, is intended to be completely removed before bathers enter the pool. Because the cover is not self-closing and self-latching, I conclude that the cover does not comply with clauses F4.3.4(a) and F4.3.5(a).
- 5.2.3 I realise that NZS 8500:2006 "Safety Barriers and Fences Around Swimming Pools, Spas and Hot Tubs" ("NZS 8500") specifically refers to the use of automatic ("pushbutton") pool covers in conjunction with alarms on doors into the immediate pool area that are not self-closing and self-latching. However, I have not taken that Standard into account because:
 - (a) NZS 8500 had not been issued at the time of the application.
 - (b) NZS 8500 has not, or not yet, been cited in a compliance document issued in accordance with the procedure specified in section 29.
 - (c) In any case, I have been given no evidence that the pool cover and the alarm are being used in the circumstances specified in NZS 8500 and comply with its requirements.

5.3 Should a waiver or modification be granted?

- 5.3.1 I take the view that I, or a territorial authority, should grant a waiver or modification of the Building Code only when it is reasonable to do so. Factors of possible relevance to the granting a waiver or modification of clause F4 are set out in the owners' submissions outlined in 4.1 and 4.5 above. Addressing those submissions:
- 5.3.2 The location, see 4.1(a) above: Rural areas, particularly seaside areas, are increasingly being subdivided for residential development. It seems reasonable to expect that there will be increasing numbers of young children in the area during the life of the pool. In any case, the pool must provide for the safety of children under 6 who live in or are invited visitors to the house.
- 5.3.3 The residents, see 4.1(b) above: Experience in New Zealand is that houses change ownership with comparative frequency, on average of the order of 7 years or so. It cannot be assumed that future owners will have the same personal characteristics as the current owners.
- 5.3.4 The cover, see 4.1(c) above, and safety procedures (b) to (e) proposed by the owners, see 4.5 above: The prosed procedures are in effect management practices not required by legislation. In Determination 92.1102, made under the former Act by the former Building Industry Authority said, in the context of supervision of children:

... the Building Act does not cover the management of buildings in that respect, and assurances as to future management practices will rarely be enforceable under the Act.

The approach that management matters had little if any relevance to compliance with the Building Code was followed in subsequent determinations, see for example Determination 2001/3. I take the view that the approach is also correct under the Act. Furthermore, in Determination 2006/22 I took the view that I must take account of both present and future owners of the house. I appreciate that taking that approach means that an owner might feel aggrieved when a determination about its building is based on the likelihood that future owners will not adopt good management practices.

- 5.3.5 Other water hazards, see 4.1(d) above: I understand that there are more child drownings in private swimming pools and spas than in any other type of water hazard. In any case, the presence of other water hazards is not a reason for not protecting children against the hazard of the pool.
- 5.3.6 The alarm system, see 4.5 above: I have been given no information about the proposed system other than the manufacturer's brochure, and I have no information about experience with such systems (which are different from the alarm systems mentioned in NZS 8500). I offer no opinion as to the efficacy and reliability of such systems, but note that they depend on an adult being within hearing distance of the alarm and responding to it in time to prevent death or injury to a child who has fallen into the pool. Furthermore, the proper operation of the alarm itself, particularly for those systems with remote controls, depends on management practices to ensure that the alarm is armed whenever the pool is not under immediate adult supervision. The discussion in 4.3.4 above is therefore relevant to the alarm system. I recognise that an alarm system would in effect be a second line of defence if the pool cover was not in place and the pool was not under adult supervision contrary to the owners' proposed management practices. Nevertheless, I do not consider that such a system can be relied upon to provide a sufficiently high level of safety to justify a waiver or modification of clause F4.
- 5.3.7 I conclude that it would not be reasonable to grant a waiver or modification of clause F4 in respect of the cover.

6 Decision

6.1 In accordance with section 188 of the Act, I hereby confirm the territorial authority's decision to refuse to amend the building consent in respect of installing a cover and an alarm instead of the specified fencing.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 15 August 2007.

John Gardiner

Manager Determinations