

Whangarei District Council

***Dangerous, Affected and Insanitary
Buildings Policy
Policy 035***

24 September 2020

Dangerous, Affected and Insanitary Buildings Policy (Policy 035)

Audience	External	Business owner (Dept)	Building Control
Policy Author	Paul Cook	Review date	Sept 2025

Dangerous, Affected and Insanitary Buildings Policy



Contents

Purpose of Policy.....	2
Background.....	2
Introduction.....	2
Legislative Requirements	2
Definition of Key Terms.....	3
Objective.....	4
Identifying Dangerous, Affected and / or Insanitary Buildings.....	4
Heritage Buildings.....	5
Investigation.....	5
Criteria for determining priority of issue.....	6
TA Powers (actions).....	7
Notice requiring building work.....	8
Notice restricting entry.....	8
Requirement to obtain a building consent	9
Order to the District Court (s.126).....	9
Measures to avoid immediate danger or to fix insanitary conditions (s.129)	9
Records.....	9
Risk Framework.....	10
Building Risk Matrix.....	25

Dangerous, Affected and Insanitary Buildings Policy (Policy 035)			
Audience	External	Business owner (Dept)	Building Control
Policy Author	Paul Cook	Review date	Sept 2025

Dangerous, Affected and Insanitary Buildings Policy

Purpose of Policy

The purpose of this policy is to meet the legislative requirements of the Building Act 2004 (the **Act**), specifically section 131, which requires the Territorial Authority (TA) to adopt a policy which states:

- the approach that Council will take in performing its functions under the Act
- its priorities in performing those functions; and
- how the policy will apply to heritage buildings

Background

This policy replaces Whangarei District Council's "Dangerous, Insanitary and Earthquake-Prone Buildings Policy" dated December 2011.

The previous policy has been replaced due to legislative changes including the addition of *affected* buildings and multiple changes to earthquake prone buildings; the latter no longer requiring a policy. This policy therefore addresses the requirement to have a policy for dangerous, affected and insanitary buildings.

The first part of this policy discusses legislative requirements; the second part deals with risk assessment and management.

Introduction

This policy sets out the TA's (i.e. Whangarei District Council) position in respect to the identification, assessment and management of dangerous, affected and / or insanitary buildings. The council is committed to ensuring the Whangarei region is a safe place to live and work in.

Conversions of existing aged buildings, lack of maintenance, overcrowding and unauthorised building alterations can cause serious building problems for occupants and those who use buildings.

The failure to obtain a building consent or use a building for a purpose for which it is not suitable can result in a building no longer complying with the Building Code and posing a danger to occupants, the general public or other properties.

The legal test under the Act that has to be met by the TA in exercising its power is that it must be satisfied that the threshold of being dangerous, affected or insanitary has been met and in most cases the TA will seek professional advice on these aspects

Legislative Requirements

Under Part 6¹ of the Act the TA is required to determine whether buildings in their district are dangerous, affected and / or insanitary. In doing so, a TA may seek advice from employees, volunteers and contractors of Fire Emergency New Zealand (FENZ) as being competent to give advice. If advice is sought, the TA must give due regard to that advice.

Under s.131 a TA must adopt a policy on dangerous and insanitary buildings, which states:

- it's approach to performing functions under the Act
- it's priorities in performing these functions

¹ Sections 121, 121A and 123-132

Dangerous, Affected and Insanitary Buildings Policy (Policy 035)			
Audience	External	Business owner (Dept)	Building Control
Policy Author	Paul Cook	Review date	Sept 2025

Dangerous, Affected and Insanitary Buildings Policy

- how it applies to Heritage Buildings
- how it applies to affected buildings.

The policy must be adopted (and amended or replaced) in accordance with the special consultative procedure in section 83 of the Local Government Act 2002. Furthermore, the TA must provide a copy to the Chief Executive of the Ministry of Business Innovation and Employment (MBIE) once it has been adopted or amended.

The policy must be reviewed within 5 years of being adopted and at intervals of not more than 5 years.

If a TA is satisfied that only part of a building is dangerous, affected or insanitary it may apply the provisions of the Act and in doing so may exercise any of its powers or perform any of its functions in respect to that part of the building rather than the whole of a building.

Definition of Key Terms

Part 6 of the Act provides the meaning of key terms and defines special provisions for dangerous, affected and insanitary buildings.

Dangerous Buildings (s.121)

A building is dangerous for purposes of this Act if:

- a) in the ordinary course of events (excluding the occurrence of an earthquake), the building is likely to cause
 - I. injury or death (whether by collapse or otherwise) to any persons in it or to persons on other property; or
 - II. damage to other property; or
- b) in the event of fire, injury or death to any persons in the building or to persons on other property is likely

Affected Buildings (121A)

A building is an affected building for the purposes of this Act if it is adjacent to, adjoining, or nearby:

- a) a dangerous building as defined in s.121 (see above); or
- b) a dangerous dam within the meaning of s.153

Insanitary Buildings (s.123)

A building is insanitary for the purposes of this Act if the building:

- a) is offensive or likely to be injurious to health because
 - I. of how it is situated or constructed; or
 - II. it is in a state of disrepair; or
- b) has insufficient or defective provisions against moisture penetration so as to cause dampness in the building or in any adjoining building; or
- c) does not have a supply of potable water that is adequate for its intended use; or
- d) does not have sanitary facilities that are adequate for its intended use

Dangerous, Affected and Insanitary Buildings Policy (Policy 035)			
Audience	External	Business owner (Dept)	Building Control
Policy Author	Paul Cook	Review date	Sept 2025

Dangerous, Affected and Insanitary Buildings Policy

Heritage Buildings (s.7)

Heritage building means a building that is included on:

- a) the New Zealand Heritage List / Rārangi Kōrero maintained under s.65 of the Heritage New Zealand Pouhere Taonga Act 2014; or
- b) the National Historic Landmarks / Ngā Manawhenua o Aotearoa me ōna Kōrero Tūturu list maintained under s.81 of the Heritage New Zealand Pouhere Taonga Act 2014

Building Work

For the purposes of this policy, building work includes the demolition of part or all of the building.

Objective

The objective in implementing this policy is to achieve compliance with the Act. The Act provides several statutory tools for dealing with dangerous, affected or insanitary buildings; these include:

- issuing formal notices
- owner carrying out remedial work
- TA undertaking the remedial work; and
- demolition.

Wherever possible, the TA will seek the co-operation of the owner and occupant to achieve compliance, without having to resort to the formal notice provisions of the Act; however, this may not always be possible.

A flexible approach must be taken to achieve this overall objective due to the diversity and dynamics which result in dangerous, affected or insanitary buildings.

Factors in determining the approach to be taken include:

- an assessment of the scale and immediacy of risk to occupants and the public
- an assessment of the likelihood of harm to adjoining properties
- an assessment of environmental impacts including contamination of water bodies
- the availability and viability of alternative options.

Identifying Dangerous, Affected and/ or Insanitary Buildings

The TA does not have the resources to carry out a systematic survey of the standard of buildings across the District, nor does it need to.

However, in order to identify whether a building is dangerous, affected or insanitary the TA will utilise any of the following mechanisms:

- the observations of its staff or contractors
- information or complaints received from members of the public or members of professional bodies such as Engineering New Zealand, etc
- events arising following natural or manmade disasters
- notification from the Ministry of Business Innovation and Employment (MBIE)
- notification from FENZ.

Dangerous, Affected and Insanitary Buildings Policy (Policy 035)			
Audience	External	Business owner (Dept)	Building Control
Policy Author	Paul Cook	Review date	Sept 2025

Dangerous, Affected and Insanitary Buildings Policy

In determining whether a building is dangerous or affected with respect to a fire hazard, the TA may seek the advice of FENZ. Similarly, in determining whether a building is insanitary with respect to drinking water, waste disposal or weathertightness, the TA may seek the advice of appropriate sources, such as its Environmental Health Team, technical building specialists, testing laboratories, geotechnical, fire or structural engineers, etc. The TA may also be guided by relevant Bylaws and seek legal advice.

Heritage Buildings

Whilst heritage buildings will be assessed in a manner consistent with assessments for other potentially dangerous, affected or insanitary buildings, special efforts will be made to meet heritage objectives. It is important that in remediating such buildings that heritage values and their protection are not lost sight of.

Discussions will be held with owners and Heritage New Zealand to identify a mutually acceptable way forward.

Where a dangerous, affected or insanitary building notice is issued for a heritage building, a copy of the notice will be sent to the Heritage New Zealand Pouhere Taonga as required by s.125(2) (f) of the Act.

Investigation

Once the TA becomes aware of a potential problem, they must carry out a full investigation including but not limited to consideration of the following points:

- review TA records prior to site visit
 - understand what consents have been approved for this site; whether a Compliance Schedule exists; the status of the Building Warrant of Fitness / IQP reports; Notices to Fix, etc)
- review GIS / aerials prior to site visit
 - understand whether there are any natural or manmade hazards or other issues to be aware of)
- how the TA was made aware of the situation
- location of the building
- actual site conditions
- previous and current use of the building
- occupancy numbers
- ownership / occupancy details
- whether the public have access to the building e.g. via the building or adjacent land and waterways
- what aspects of the building are considered dangerous (all or part of the building)
- whether any neighbouring properties are affected by the potentially dangerous or insanitary building
- what aspects of the building are considered insanitary e.g. lack of potable drinking water, sanitary fixtures or waste disposal, light and ventilation or vermin
- how and to what extent these aspects are non-compliant with the Building Code

Dangerous, Affected and Insanitary Buildings Policy (Policy 035)			
Audience	External	Business owner (Dept)	Building Control
Policy Author	Paul Cook	Review date	Sept 2025

Dangerous, Affected and Insanitary Buildings Policy

- who is or was responsible for creating this hazard (e.g. whether authorised or unauthorised work has been carried out)
- whether the land or building has heritage status
- priorities (the **immediacy**) of the issue

Criteria for determining priority of issue

A building (or part of a building) will be classified as dangerous or affected if it is likely to cause injury or death to the occupants, public or other property.

A building (or part of a building) will be classified as insanitary if it is likely to be injurious to health occupants, public or people on other property.

The *immediacy* of the issue depends upon whether the building is occupied or poses a danger to other property; for example:

- land is *unstable*
- building is *structurally unsound* and considered dangerous to occupants or the public
- building has a *high fire risk*
- building *lacks sufficient protection* to occupants, public or other property (i.e. unfenced pool or large-scale excavations)
- building which has *poor sanitation* and poses an immediate impact to the health of the occupants or the public
- building is *inadequately protected against moisture penetration* i.e. not weathertight.

Note: A building is less likely to be classified as dangerous, affected or insanitary if it is unoccupied; however, the risk to the public and other properties must still be considered. The TA will need to carefully consider these issues and determine whether they warrant immediate action to prevent injury or death. Each case must be considered on its own merits.

If the risk is significant e.g. the building is occupied or construction / earthworks pose a risk to the public or other property, immediate action may be warranted. Sometimes you might have a situation where the risk is significant but can be managed; in other situations, it may not be possible to manage the risk.

There is always a risk that in the event of a fire, death or injury will occur; however, there must be 'particular features' for this risk to be 'likely to occur'. Therefore, the TA must firstly focus on whether the building complies with the Building Code. If the answer to that question is NO, then the next consideration must be to focus on what features do not comply with the Building Code that make this building dangerous. A building may be non-compliant with the Building Code; however, this in itself does not make a building dangerous.

The TA will take into account the cost of effecting remedial work in assessing the various means of reducing the hazard to human life presented by a building which has been identified as dangerous, affected or insanitary. Also, the availability of alternatives to continued use and occupation of the building, both in the short and long term (refer example below).

Following the site visit and preliminary investigation the TA will determine whether the building is dangerous, affected or insanitary and if so, whether to issue a notice and / or take other actions.

Dangerous, Affected and Insanitary Buildings Policy (Policy 035)

Audience	External	Business owner (Dept)	Building Control
Policy Author	Paul Cook	Review date	Sept 2025

Dangerous, Affected and Insanitary Buildings Policy

Risk Management Scenario:

This scenario involves multiple people living in transient accommodation (e.g. Backpacker’s accommodation), which does not have a fire alarm system.

The risk is loss of life or serious injury occurring due to people being unable to escape in the event of a fire (i.e. not aware of fire or smoke in the building).

Risk Factor	Extreme
Risk type	Fire hazard
Building occupied	Yes
Sleeping accommodation	Yes
Death or injury likely	Yes
Can risk be eliminated immediately	No
Can risk be eliminated eventually	Yes install compliant alarm
Can risk be minimised immediately	YES <i>Interim measure - provide security guard 24/7 who could raise the alarm in event of emergency and have evacuation plans in place</i>
	NO <i>Evacuate the building; apply for building consent or complete work under urgency; obtain CCC / CoA and Compliance Schedule</i>

Note: Timing may impact on the outcome of the site visit. For example, in the above scenario the risk is extreme because there is sleeping accommodation in the building. Therefore if the visit was conducted early in the day a plan to minimise the hazard could be put into place and agreed to by close of business. However, if it was late in the day, this option may not be available and immediate evacuation may be necessary.

TA Powers (actions)

If a TA is satisfied that a building is a dangerous, affected, or insanitary building it may do any or all of the following under s.124:

- a) put up a hoarding or fence to prevent people from approaching the building nearer than is safe
- b) attach in a prominent place on, or adjacent to, the building a notice that warns people not to approach the building

Dangerous, Affected and Insanitary Buildings Policy (Policy 035)			
Audience	External	Business owner (Dept)	Building Control
Policy Author	Paul Cook	Review date	Sept 2025

Dangerous, Affected and Insanitary Buildings Policy

- c) except in the case of an affected building, issue a notice that complies with s.125(1) requiring work to be carried out on the building to
- I. reduce or remove the danger; or
 - II. prevent the building from remaining insanitary
- d) issue a notice that complies with s.125(1A) restricting entry to the building for particular purposes or restricting entry to particular persons or groups of persons

Note: The erection of a hoarding or fence is an action that a TA can take to ensure the immediate safety of people and is not considered building work.

Notice requiring building work

Under s.125, a notice issued pursuant to s.124 (2) (c) must be in writing and fixed to the building in question.

A copy of the notice must also be issued to the owner, occupier and any other person who has an interest in the land; this includes:

- every person who has an interest in the land on which the building is situated under a mortgage or other encumbrance registered under the Land Transfer Act 2017
- every person claiming an interest in the land that is protected by a caveat lodged and in force under section 138 of the Land Transfer Act 2017; and
- every statutory authority² that has exercised a statutory power to classify or register, for any purpose, the building or the land on which the building is situated; and
- Heritage New Zealand Pouhere Taonga, if the building is a heritage building.

Note: If a notice is not given to one of the above parties it does not make it invalid.

The notice must state the time within which the building work must be carried out. The time must be no less than 10 days after the notice is given or a period reasonably sufficient to obtain a building consent if one is required, whichever period is longer.

The notice must also state whether the owner of the building is required to obtain a building consent in order to carry out the work required by the notice.

Notice restricting entry

Under s.124 (2) (d) a notice restricting entry must be in writing and fixed to the building in question. A copy of the notice must be provided to the owner, occupier and any other person who has an interest in the land.

The notice may also restrict entry to any part or all of a building; it may also be restricted to particular persons or groups of persons.

In the case where a notice restricts entry to a building, it may be issued for a maximum period of 30 days; thereafter it may only be reissued once, for a maximum period of 30 days.

² Council will work with other agencies, for example Transit New Zealand for State Highways, or other Council departments, when considering any building such as a bridge that may be considered dangerous, to find a mutually acceptable way forward.

Dangerous, Affected and Insanitary Buildings Policy (Policy 035)			
Audience	External	Business owner (Dept)	Building Control
Policy Author	Paul Cook	Review date	Sept 2025

Dangerous, Affected and Insanitary Buildings Policy

Requirement to obtain a building consent

Under s.125 the notice must advise the applicant of the requirement to obtain a building consent (if applicable). However, under s.41 a building consent is not required in relation to building work where it is not practical to obtain a building consent in advance and the building work has to be done under urgency. If the applicant wishes to proceed under s.41 of the Act, the matter should be discussed and agreed with the Council.

In these circumstances a full, written scope of work will be required, followed by an application for Certificate of Acceptance as soon as practicable after completion of the building work.

If the TA carries out the building work, this section does not apply, and a building consent is not required. However, the TA must apply to the District Court for an order authorising it to carry out the work.

Order to the District Court (s.126)

If the owner does not carry out the building work identified in the notice or the building work is not proceeding with reasonable speed, the TA may apply to the District Court to do the work itself. However, before applying to the Court the TA must notify the owner in writing giving them no less than 10 days of their intention to do so.

If the TA carries out building work, the owner is liable for the costs; such costs are recoverable via a charge on the land.

Measures to avoid immediate danger or to fix insanitary conditions (s.129)

Where there is immediate danger or insanitary conditions present, the Chief Executive of the TA may by warrant issued under their signature take any actions necessary to remove the danger or fix the insanitary conditions. If any actions are taken under s.129 (2) the Chief Executive is required to apply to the District Court seeking confirmation of the warrant.

The District Court is required to:

- confirm the warrant
- confirm the warrant with modifications; or
- set the warrant aside.

The TA is not required to apply for confirmation of the warrant if the owner has notified the TA that they do not dispute entry onto the land.

Prior to taking this step, the TA will engage legal advice before executing a warrant.

Records

Where a building is identified as being dangerous, affected or insanitary, a requisition will be placed on the property file. This requisition will remain until the danger is remedied and made available if a Land Information Memorandum is sought whilst the notice is in place.

Dangerous, Affected and Insanitary Buildings Policy (Policy 035)

Audience	External	Business owner (Dept)	Building Control
Policy Author	Paul Cook	Review date	Sept 2025

Dangerous, Affected and Insanitary Buildings Policy

Risk Framework

The purpose of this Section is to describe a process for systematically and consistently identifying risk. The chance of something happening is measured in terms of consequences and likelihood; this is best described using a matrix³.

Likelihood - a qualitative description of probability or frequency

Level	Descriptor	Description
A	Almost Certain	Is expected to occur in most circumstances
B	Likely	Will probably occur in most circumstances
C	Possible	Might occur at some time
D	Uncertain	Could occur at some time
E	Rare	May occur in exceptional circumstances

Consequence - the outcome of an event expressed qualitatively or quantitatively, being a loss, injury, disadvantage or gain. There may be a range of possible outcomes associated with an event.

Level	Descriptor	Description
1	Insignificant	No injuries
2	Minor	May require some medical treatment
3	Significant	Medical treatment required
4	Major	Extensive injuries
5	Extreme	Death

Risk rating – the chance of something happening that will have an impact upon objectives. It is measured in terms of consequences and likelihood.

Likelihood	Consequences				
	Insignificant	Minor	Moderate	Major	Extreme
Almost Certain	Moderate	Moderate	High	Very High	Very High
Likely	Moderate	Moderate	High	High	Very High
Possible	Low	Moderate	Moderate	High	High
Uncertain	Low	Low	Moderate	Moderate	High
Rare	Low	Low	Moderate	Moderate	High

Legend:

- Very high extreme risk; immediate action required
- High high risk; senior management attention required
- Moderate management responsibility must be specified

³ Source AS/NZS 4630: 1999 Risk Management

Dangerous, Affected and Insanitary Buildings Policy (Policy 035)

Audience	External	Business owner (Dept)	Building Control
Policy Author	Paul Cook	Review date	Sept 2025

Dangerous, Affected and Insanitary Buildings Policy

Low manage by routine procedures

For the purposes of this Section, it is assumed that:

- there is no building consent for the building work being risk assessed; or
- if the work was consented in the past, it is no longer compliant with that building consent

Unauthorised building work means:

- building work for which a building consent has not been obtained when one was required; or
- building work which is considered exempt but does not comply with the Building Code

If the consenting process has been completed and a CCC issued and there are elements of that building work that do not comply then that work is considered to be non-compliant.

Note: In this scenario, it is likely that the bulk of the building work is compliant (work completed under a building consent) as opposed to the building work which occurred without a building consent. This is reflected in the risk assessment of unauthorised building work that occurs within a consented building for example, an extension or additions to a dwelling.

Once the outcome has been established i.e. that a building is dangerous and / or insanitary; the risk to other property (i.e. *affected buildings*) must then be considered using the same analysis.

Dangerous, Affected and Insanitary Buildings Policy (Policy 035)

Audience	External	Business owner (Dept)	Building Control
Policy Author	Paul Cook	Review date	Sept 2025

Dangerous, Affected and Insanitary Buildings Policy

Qualitative Measures of Consequences for Risks

Rating	Consequences	Description	Examples
1	Insignificant	<p>Would not cause illness or injury to any person</p> <p>Loss of amenity</p> <p>Temporary or very minor nuisance or inconvenience</p>	<p>Lack of insulation</p> <p>Unauthorised minor work e.g. carport, deck, small garden shed, temporary noise or odour, disconnected downpipe</p>
2	Minor	<p>May cause very minor injury to people</p> <p>Very minimal impact if any on people other than those in immediate proximity</p> <p>Minor damage to local physical environment only</p> <p>Significant loss of amenity, widespread impact from noise or odour</p>	<p>Unauthorised addition to existing building; multiple utility sheds on property; garden shed too close to boundary; mild stormwater runoff; tripping or slipping hazard in public place</p>
3	Moderate	<p>Potential to cause significant injury or illness to people</p> <p>Minor injury or illness to many people</p> <p>May cause some significant damage to property or the environment</p> <p>Can include multiple instances of minor effects long term</p>	<p>Structural elements fail that could cause a person to fall >1.0m but <2.0m</p> <p>Unconsented habitable space</p> <p>Significant storm water runoff</p> <p>Leaky home</p> <p>Persistent noise issues</p>
4	Major	<p>Serious illness, injury or death to one or more people</p> <p>Significant injury or illness to many people</p> <p>Major degradation to the wider environment (not contained on offending property).</p>	<p>Structural elements fail that could cause a person to fall >2m</p> <p>Non-compliant swimming pool</p> <p>Electrical supply to unauthorised building</p> <p>Sleepout or similar with unconsented sanitary fixtures</p> <p>Expired BWoF or failed systems</p>
5	Extreme	<p>Serious illness, injury or death to one or more people including building occupants, third parties (neighbours) or the general public.</p> <p>Threatens overall integrity of buildings other than the offending buildings</p> <p>Serious and irreversible degradation to the wider environment (not contained on offending property)</p>	<p>Serious threat to the overall structural integrity of the building such that collapse is imminent and would cause death or serious injury to third parties</p> <p>Public Use building considered unsafe due to fire or insanitary risk whether due to unsafe heating, energy systems or lack of means of escape</p> <p>Building condition could cause very serious harm to due to discharge or improper containment, processing of contaminants or hazards, including industrial and solid wastes</p> <p>Large excavation threatening other property</p>

Building Risk Factors – Dangerous Buildings

Risk Factor – B1	How can this occur?	Impacts	Impact rating
a) Deck (including stairs), roof tiles or roofing insecure or foundations / piles weak, removed or unsound	Degradation due to age Poor material quality Poor workmanship Unreasonable weight / loading Natural hazard including subsidence Willful damage Hazard zone not factored Poor design Change of use Fire / Flooding No / incomplete consent	May: <ul style="list-style-type: none"> • cause a person or persons to fall or trip • prevent access in or out of building • persons to be hit by falling materials • blow on to other property / roads • dampness and moisture issues • misalignment of doors and windows • collapse of building with various impact depending on height, geography of site 	Major
b) Internal support-bracing weak, removed or unsound	Degradation due to age Poor material quality Poor workmanship Unreasonable weight / loading Natural hazard including wind Willful damage Hazard zone not factored Poor design Fire No / incomplete consent	May cause: <ul style="list-style-type: none"> • collapse or sag of walls • misalignment of doors and windows • further weakening to main structural elements 	Moderate

Risk Factor – B1	How can this occur?	Impacts	Impact rating
c) Internal support-main structural beams weak, removed or unsound	Degradation due to age Poor material quality Poor workmanship Unreasonable weight / loading Natural hazard including wind Willful damage Hazard zone not factored Poor design Fire / Flooding Relocation of building Nearby excavation or erosion No / incomplete consent	May cause: <ul style="list-style-type: none"> • full or partial collapse of building 	Extreme
d) Flooring weak or unsound (not including surface failure)	Degradation due to age Poor material quality Poor workmanship Unreasonable weight / loading Natural hazard including wind Willful damage Hazard zone not factored Poor design Fire / Flooding Relocation of building Nearby excavation or erosion No / incomplete consent	May cause: <ul style="list-style-type: none"> • injury due to falling through floor • illness due to moisture problems 	Moderate

Risk Factor – B1	How can this occur?	Impacts	Impact rating
e) Bridges and retaining walls weak, removed or unsound	Degradation due to age Poor material quality Poor workmanship Unreasonable weight / loading Natural hazard including wind Willful damage Hazard zone not factored Poor design Fire / Flooding Relocation of building Nearby excavation or erosion No / incomplete consent	May cause: <ul style="list-style-type: none"> • collapse • an injury or fall • nuisance to other property, block road or river • a lack of access resulting in isolation of property 	Extreme

Risk Factor – D1-2, E1, F1-9, G1-15	How can this occur?	Impacts	Impact rating
a) Unsafe pedestrian access	Slippery surface Unsafe slope Irregular rise in stairs Lack of handrail Ungraspable handrail No landing or at long intervals in stairs Size of landing does not accommodate door opening No / incomplete consent	May cause: <ul style="list-style-type: none"> • injury due to tripping, slipping or another hazard 	Minor
b) Unsafe vehicular access of building	Slippery surface / unsafe slope Inadequate queuing / circulation space Inadequate sight distances Design does not avoid conflict between vehicles and people using or moving to space Safety from falling (lack of barriers or bollards) No / incomplete consent	May cause: <ul style="list-style-type: none"> • injury • damage to other property 	Moderate
c) Failure or inappropriate installation or use of a specified system (not fire related) e.g. mechanical installations	Degradation due to age Poor material quality Poor workmanship Not fit for purpose No / incomplete consent	May cause: <ul style="list-style-type: none"> • entrapment of person or limbs resulting in injury 	Major
d) Falling from places other than decks and stairs e.g. temporary site fences, mezzanine levels, etc <1.0m	Lack of suitable barrier Unreasonable weight Lack of warning No / incomplete consent	May cause: <ul style="list-style-type: none"> • injury 	Minor

Risk Factor – D1-2, E1, F1-9, G1-15	How can this occur?	Impacts	Impact rating
e) Falling from places other than decks and stairs e.g. temporary site fences, mezzanine levels, etc >1.0m	Lack of suitable barrier Unreasonable weight Lack of warning No / incomplete consent	May cause: <ul style="list-style-type: none"> • injury or death 	Major
f) Hazardous construction or demolition including access to site by small children	Unlimited access Unmarked projections Open hazards / projections Lack of safe route through site No / incomplete consent	May cause: <ul style="list-style-type: none"> • injury or death • damage to other property 	Major
g) Destabilisation of neighbouring property due to construction site	Collapse of land due to poor ground strength No retaining walls in place Silt and erosion Over-excavation of site No / incomplete consent	May cause: <ul style="list-style-type: none"> • injury or death • damage to other property 	Extreme
h) Lack of adequate access or escape route for disabled persons including visibility, width, etc	Lack of knowledge and awareness Site specific No / incomplete consent	May cause: <ul style="list-style-type: none"> • loss of amenity or inconvenience 	Minor
i) Harms due to offensive odour, food contamination, inadequate privacy, inability to clean effectively, lack of amenity or other annoyance (excludes facility for load / drainage risks)	Inappropriate sanitary facility provision either for purpose or number No / incomplete consent	May cause: <ul style="list-style-type: none"> • injury or illness • damage to property 	Moderate
j) Contamination from storage manufacturing or processing of food including animal products, medical treatment of humans or animals' reception of dead bodies	Inappropriate sanitary facility provision either for purpose or number No / incomplete consent	May cause: <ul style="list-style-type: none"> • injury or illness • damage to property 	Moderate

Risk Factor – D1-2, E1, F1-9, G1-15	How can this occur?	Impacts	Impact rating
k) Loss of fresh air, air temperature or activity space	Lack of ventilation Mechanical air handling system failure or not appropriate No means of removing or collecting cooking fumes, moisture from laundry, steam etc No/incomplete consent	May cause: <ul style="list-style-type: none"> • loss of amenity or inconvenience • illness 	Minor
l) Loss of noise transmission between adjoining occupancies	Lack of insulation Insufficient sound transmission class. Unreasonable noise levels No / incomplete consent	May cause: <ul style="list-style-type: none"> • loss of amenity or inconvenience • illness or injury 	Minor
m) Lack of natural or artificial light	Poor design Obstruction by neighbours No / incomplete consent	May cause: <ul style="list-style-type: none"> • loss of amenity or inconvenience • illness or injury 	Minor
n) Inadequate ventilation or explosion from gas appliance or installation	Improper installation System / product failure No / incomplete consent	May cause: <ul style="list-style-type: none"> • fire • damage to property • death or injury 	Extreme
o) Hot water explosion	Lack of pressure relief Temperature too high Unauthorised building work No / incomplete consent	May cause: <ul style="list-style-type: none"> • fire • damage to property • death or injury 	Extreme
p) Hot water unavailable	Failure to provide Energy supply failure Unauthorised building work	May cause: <ul style="list-style-type: none"> • inconvenience 	Insignificant

Risk Factor – D1-2, E1, F1-9, G1-15	How can this occur?	Impacts	Impact rating
	No / incomplete consent		
q) Foul odour, noise or other inconvenience	Unauthorised building work No / incomplete consent	May cause: <ul style="list-style-type: none"> • Inconvenience or nuisance 	Insignificant
r) Unauthorised foul water, industrial waste, solid waste disposal	Illegal dumping System not fit for purpose Unauthorised building work No / incomplete consent	May cause: <ul style="list-style-type: none"> • illness • contamination of the environment • damage to property 	Extreme
s) Inefficient use of energy when sourced from a network utility operator or a depletable energy source	Failure to limit uncontrollable airflow Degradation due to age Poor material quality Poor workmanship No / incomplete consent	May: <ul style="list-style-type: none"> • generate systemic inefficiency • generate unnecessary cost 	Insignificant

Risk Factor – C, G9-10	How can this occur?	Impacts	Impact rating
t) Lack of means of escape (including accessible features and signage F8) or lack of, or expired BWOF	No means of egress at all Failure to maintain gates locks Expired BWOF Lack of signage / direction Inadequate for user numbers Unauthorised changes to specified systems or new systems added Alarms, etc not fitted or appropriate Lack of resource Poor IQP performance Poor inspection, maintenance and monitoring process No / incomplete consent	May cause: <ul style="list-style-type: none"> • lack of warning of fire resulting in people becoming trapped in a building or part of a building if it catches fire • serious injury from fire or attempts to escape 	Extreme
u) Unauthorised or unsafe installation or operation of solid fuel heating system	Deterioration due to age Lack of awareness Use of second hand appliance Use of incorrect material when operating appliance No / incomplete consent	May cause: <ul style="list-style-type: none"> • fire when operated • injury or damage to property 	Extreme
v) Lack of appropriate fire retardation materials	Unauthorised work Poor installation Poor quality materials No / incomplete consent	May cause: <ul style="list-style-type: none"> • fire to spread more rapidly • injury or damage to property 	Major
w) Unauthorised electrical supply installation or electrical supply in unsafe building	Unauthorised connection - no approval from Energy Provider Poor installation Poor quality materials No / incomplete consent	May cause: <ul style="list-style-type: none"> • electric shock and or fire • injury or damage to property 	Major

Risk Factor – F9	How can this occur?	Impacts	Impact rating
x) Non-compliant pool barrier, unauthorised construction or lack of pool barrier	<p>Poor audit / monitoring</p> <p>Poor or no maintenance on gates, landscaping, etc</p> <p>No control of what happens on neighbouring property (boundary fences)</p> <p>Lack of awareness of risk</p> <p>No / incomplete consent</p>	<p>May cause:</p> <ul style="list-style-type: none"> drowning or injury especially to young children 	Extreme

Building Risk Factors – Insanitary Buildings

Risk Factor – G1, G12; G13	How can this occur?	Impacts	Impact rating
a) Insanitary due to lack of potable water supply or contaminated water	<p>No connection to services</p> <p>Contamination of supply at source or by systems materials</p> <p>Lack of filtration</p> <p>Low rainfall</p> <p>No on site retention of water</p> <p>Failure to plan for growth</p> <p>Lack of resource consent</p> <p>Lack of public infrastructure provision</p> <p>Cost prohibitive private solutions</p> <p>Lack of awareness of potable standards</p> <p>No / incomplete consent</p>	<p>May:</p> <ul style="list-style-type: none"> cause ill health due to drinking water that is not potable result in reliance on other methods for obtaining water 	Moderate
b) Insanitary due to drainage not functioning or non-existent drainage	<p>Degradation due to age</p> <p>Poor material quality</p> <p>Poor workmanship</p> <p>Poor design</p> <p>Nearby works</p>	<p>May cause:</p> <ul style="list-style-type: none"> illness from insanitary material flooding damage to property 	Moderate

Risk Factor – G1, G12; G13	How can this occur?	Impacts	Impact rating
	Failure to provide drainage solution Lack of resource consent Lack of public infrastructure provision Cost prohibitive private solutions Misunderstanding of sustainable solutions No / incomplete consent		
c) Insanitary due to drainage unauthorised discharge	Lack of resource consent Lack of public infrastructure provision Cost prohibitive private solutions No / incomplete consent	May cause: <ul style="list-style-type: none"> • illness from insanitary material • flooding • damage to property • damage to environment 	Major
d) Insanitary due to not enough facilities for loads (e.g. toilets)	Overcrowding due to poverty Overcrowding at events Unexpected increase in user / visitor numbers Inappropriate use / purpose group No / incomplete consent	May: <ul style="list-style-type: none"> • result in insanitary conditions being perpetuated due to alternative measures being used • cause environmental degradation • cause illness 	Moderate

Risk Factor – E2, G1-3	How can this occur?	Impacts	Impact rating
e) Insufficient facility for loads on other sanitary fixtures (e.g. bath, shower, hand washing)	Overcrowding due to poverty Overcrowding at events Unexpected increase in user / visitor numbers Inappropriate use / purpose group No / incomplete consent	May: <ul style="list-style-type: none"> • result in insanitary conditions being perpetuated due to lack of facilities • cause environmental degradation • cause illness • inability to wash 	Minor
f) Moisture ingress or moisture levels too high	Degradation due to age and lack of maintenance Poor material quality Poor design / workmanship Natural hazard including flooding Willful damage Hazard zone not factored Fire / Flooding Relocation of building Lack of impervious surface walls, floors and structural elements in contact with the ground Spaces and cavities transmitting moisture and / or condensation No / incomplete consent	May cause: <ul style="list-style-type: none"> • illness • damage to entire structure 	Major
g) Insanitary due to nature of sanitation facility	Location of facility No / incomplete consent Degradation due to age and lack of maintenance Poor material quality Poor design / workmanship	May: <ul style="list-style-type: none"> • not be able to clean facilities to an acceptable standard • cause illness 	Moderate

Risk Factor – E2, G1-3	How can this occur?	Impacts	Impact rating
	No / incomplete consent		
h) Lack of laundering facilities	Inappropriate sanitary facility provision either for purpose or number No / incomplete consent	May cause: <ul style="list-style-type: none"> • injury or illness • damage to property 	Insignificant

Building Risk Matrix

Risk Factor	D, A or I	Impact rating	Likelihood	Risk Rating	Possible options for risk mitigation

Key:
 Impact rating: (1) insignificant (2) minor (3) moderate (4) major (5) extreme
 Likelihood: (A) almost certain (B) likely (C) possible (D) unlikely (E) rare
 Risk rating: very high, high, moderate, low