

## **E29. Emergency management area – Hazardous facilities and infrastructure**

### **E29.1. Background**

For the purposes of this section, the identified hazardous facilities and infrastructure are the Wiri Oil Terminal, Wiri LPG Depot and the high pressure Refinery to Auckland petroleum pipeline.

This section provides a framework to manage the risk of adverse effects on activities located in proximity to existing hazardous facilities and infrastructure.

Hazardous facilities and infrastructure pose a risk to surrounding land uses and can result in emergency events. These are events of low probability but high potential harm to people and damage to property. They may include vapour cloud explosions, large fires or the release of toxic gas which could cause blast overpressure, fragments, heat radiation or poisoning.

Restricting or managing the encroachment of land uses in proximity of certain existing hazardous facilities and infrastructure may be necessary to ensure that risk to those land uses is appropriately managed. This is also to ensure that the operation and potential expansion of the facilities and infrastructure is not compromised by surrounding incompatible or conflicting land uses. Incompatible activities may create a lower threshold of acceptable risk in the receiving environment and generate reverse sensitivity effects. Some of these hazardous facilities and infrastructure are critical to the functioning of Auckland and New Zealand.

The provisions for emergency management areas have two related elements that may be relevant to the activity:

- an inner emergency management area applies to the area closest to the facility, and is subject to the greatest potential effects from emergency events. In addition to the preparation of emergency management plans, building design elements must be considered for all buildings within this area; and
- a Wider Emergency Management Area applies to an area around the inner emergency management area, which requires the preparation of emergency management plans to ensure that activities operating within proximity of the hazardous facilities and infrastructure are aware of the risks and are suitably prepared.

The emergency management areas also restrict sensitive activities or incompatible land uses, including those generating high populations of people.

Sensitive activities contain people intensive activities, or those containing vulnerable populations that would require a greater level of assistance in the case of an emergency scenario, which are defined as “activities sensitive to hazardous facilities and infrastructure”.

### **E29.2. Objectives [rcp/dp]**

- (1) Activities sensitive to hazardous facilities and infrastructure are avoided in emergency management areas.

- (2) The use and development of identified hazardous facilities and infrastructure are not unreasonably constrained by the establishment or expansion of sensitive and incompatible activities.
- (3) The risk to activities in proximity to identified hazardous facilities and infrastructure is at a level acceptable to those types of activities.

**E29.3. Policies [rcp/dp]**

- (1) Identify emergency management areas around hazardous facilities and infrastructure where this is justified on the basis of a quantitative risk assessment.
- (2) Manage the risk to activities within the emergency management area for the Wiri Oil Terminal and the Wiri LPG Depot to acceptable levels and manage reverse sensitivity effects on the development and operation of the Wiri Oil Terminal and Wiri LPG Depot by:
  - (a) avoiding the establishment or expansion of activities sensitive to hazardous facilities and infrastructure; and
  - (b) limiting the establishment or expansion of incompatible activities; and
  - (c) requiring the preparation and implementation of a site emergency management plan; and
  - (d) requiring buildings within the Inner Emergency Management Area to consider how layout reduces risk of harm to people from an emergency event.
- (3) Consider the risk to activities sensitive to hazardous facilities and infrastructure within 34 metres of the boundary of designations 6500 and 6501 (Petroleum Pipeline) where the pipeline is constructed to a “thin wall” specification.

**E29.4. Activity table**

Table E29.4.1 Activity table specifies the activity status of land use and development activities located within the emergency management areas for the Wiri Oil Terminal shown in Figure E29.6.1 and Figure E29.6.2 and the Wiri LPG Depot shown in Figure E29.6.3 pursuant to section 9(3) of the Resource Management Act 1991.

Table E29.4.1 and Standard E29.6.1 do not apply to the high pressure Refinery to Auckland petroleum pipeline, only Policy E29.3(3) and Rule E29.5(1) apply.

Where more than one Auckland-wide or zone rule applies to the same activity, then the most restrictive status applies.

**Table E29.4.1 Activity table**

Activity		Activity status
(A1)	Activities sensitive to hazardous facilities and infrastructure	Pr
(A2)	Activities not otherwise permitted in the Business – Heavy Industry Zone (except Emergency Services within the Business	NC

	– Heavy Industry Zone)	
<b>Development</b>		
(A3)	New buildings within the Inner Emergency Management Area for the Wiri Oil Terminal (Figure E29.6.2) or Wiri LPG Depot (Figure E29.6.3)	C
(A4)	Alterations to buildings that increase the building platform area or building height within the Inner Emergency Management Area for the Wiri Oil Terminal (Figure E29.6.2) or Wiri LPG Depot (Figure E29.6.3)	C

### E29.5. Notification

- (1) Any application for resource consent for an activity sensitive to hazardous facilities and infrastructure (including controlled activities) located within 34m of the boundary of designations 6500 and 6501 (Petroleum Pipeline) where the pipeline is constructed to a “thin wall” specification will be subject to the normal tests for notification under the relevant sections of the Resource Management Act 1991.
- (2) Any application for resource consent for an activity including controlled activities listed in Table E29.4.1 Activity table will be subject to the normal tests for notification under the relevant sections of the Resource Management Act 1991.
- (3) When deciding who is an affected person in relation to any activity for the purposes of section 95E of the Resource Management Act 1991 the Council will give specific consideration to those persons listed in Rule C1.13(4) and including any person operating within the inner emergency management area.

### E29.6. Standards

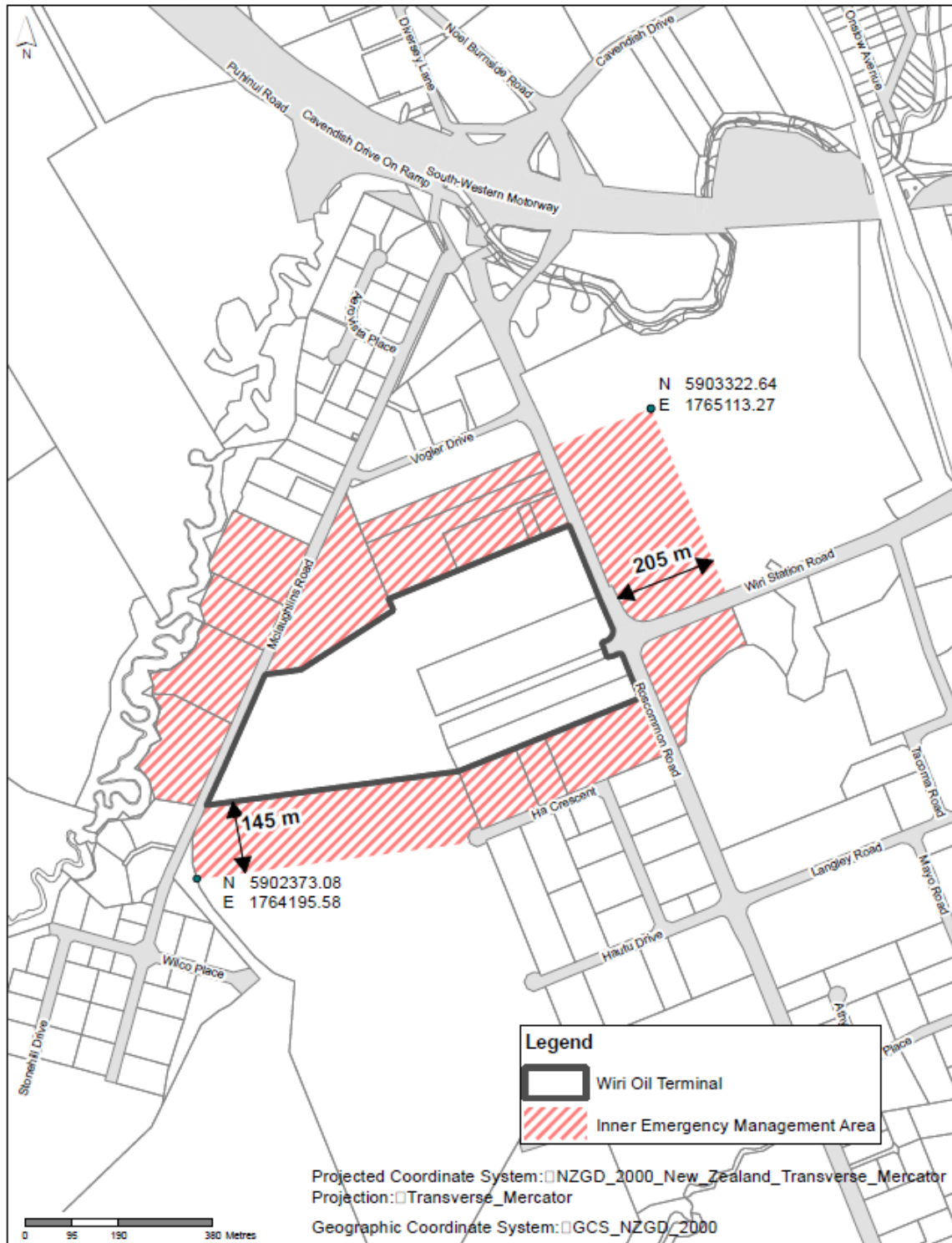
The following standards apply to all activities located within the wider emergency management area for the Wiri Oil Terminal shown in Figure E29.6.1 and the Wiri LPG Depot shown in Figure E29.6.3.

#### E29.6.1. Site Emergency Management Plan

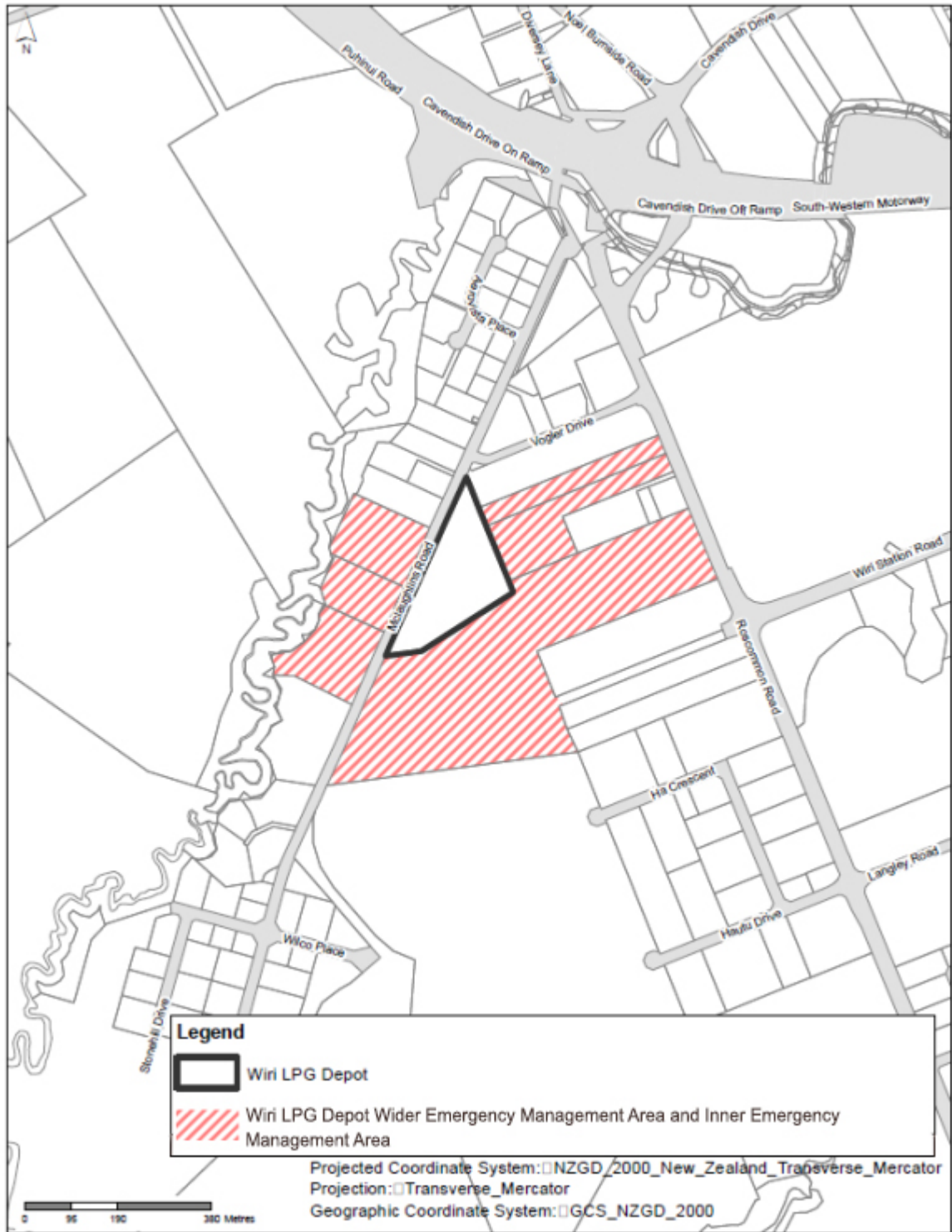
- (1) A Site Emergency Management Plan must either be prepared and completed in accordance with the template set out E29.9.1 Site Emergency Management Plan template (non-statutory) or otherwise prepared and completed by a suitably qualified expert (for example a fire safety engineer).
- (2) The Site Emergency Management Plan must be implemented and submitted to Council at least 10 working days prior to the proposed date of commencing any new activity or any change of activity.



Figure E29.6.2 Inner Emergency Management Area for the Wiri Oil Terminal



**Figure E29.6.3 Wider Emergency Management Area and the Inner Emergency Management Area for the Wiri LPG Depot**



## **E29.7. Assessment – controlled activities**

### **E29.7.1. Matters of control**

The Council will reserve its control to all of the following matters when assessing a controlled activity resource consent application:

- (1) new buildings and alterations to buildings that increase the building platform area or building height within the Inner Emergency Management Area for the Wiri Oil Terminal (Figure E29.6.2) or Wiri LPG Depot (Figure E29.6.3):
  - (a) building layout and mitigation measures for risk management purposes.

### **E29.7.2. Assessment criteria**

The Council will consider the relevant assessment criteria below for controlled activities:

- (1) new buildings and alterations to buildings that increase the building platform area or building height within the Inner Emergency Management Area for the Wiri Oil Terminal (Figure E29.6.2) or Wiri LPG Depot (Figure E29.6.3):
  - (a) the extent to which the design of buildings or alterations to buildings ensures the safety of occupants from an emergency event at the hazardous facility. The following design matters should be considered:
    - (i) layout of the buildings on the site (including the orientation of main building entrances) should maximise the separation of higher occupancy areas (such as offices) from the hazardous facility;
    - (ii) the location of glazing in relation to the hazardous facility. Where it is not practicable to locate windows away from the hazardous facility, consideration should be given to mitigation measures (such as strengthened glass / protective films) to reduce risk of harm to people; and
    - (iii) the location of the emergency egress points to facilitate movement away from the hazard (noting that fire egress doors may still be required on the side of buildings facing the hazardous facility to meet building code requirements).
  - (b) to ensure that operators of hazardous facilities are made aware of proximate activities and potential reverse sensitivity effects, whether the application includes evidence of consultation with the operator of the hazardous facility, including:
    - (i) a copy of the application to the operator 10 working days prior to lodgement of the application with the Council;
    - (ii) details of the nature of the activities in the building or alteration;
    - (iii) details of the number of staff; and

(iv) details of the hours of operation.

**E29.8. Assessment – restricted discretionary activities**

**E29.8.1. Matters of discretion**

The Council will reserve its discretion to all of the following matters when assessing a restricted discretionary resource consent application:

- (1) any activity that does not comply with Standard E29.6.1:
  - (a) the nature and extent of emergency management planning.

**E29.8.2. Assessment criteria**

The Council will consider the relevant assessment criteria below for restricted discretionary activities:

- (1) any activity that does not comply with Standard E29.6.1:
  - (a) refer to Policy E29.3(2).

**E29.9. Special information requirements**

There are no special information requirements in this section.

**E29.10. Site Emergency Management Plan Template (non-statutory)**

Name/Address		
Contact details	Phone Email Website	Fax
Emergency contacts	Name Role Phone	Mobile
	Name Role Phone	Mobile
Contact details of Hazardous Facility / Facilities	Name Role Phone	Mobile
	Name Role Phone	Mobile
Date Plan provided to Auckland Council		



Date copy of Plan provided to Hazardous Facility Operator/s	
Date last updated and reprinted	
Date updated Plan provided to Auckland Council	
Date updated Plan provided to Hazardous Facility Operator/s	

**Note 1**

For the purposes of this Emergency Management Plan the term ‘Hazardous Facility’ means (delete any not relevant):

- Wiri Oil Terminal
- Wiri LPG Depot

**(1) Purpose**

This plan applies in addition to [name of organisation's] own building evacuation plan which addresses incidents arising from its own operations.

This plan outlines how [name of organisation] will respond to a potential emergency arising from the Hazardous Facility and thereby partly satisfies the requirements and obligations of the Resource Management Act 1991 and health and safety legislation. Located within the Hazardous Facility Emergency Management Area, the [name of the organisation] is in a location where it may be subject to such emergency scenarios.

The key hazard at the Hazardous Facility is the storage and handling of large quantities of flammable and combustible materials. There are two particular potential emergency scenarios that could occur at the Hazardous Facility with the potential to impact offsite areas:

- flammable vapour cloud with the risk of ignition and explosion; and
- hazardous substances fire (e.g. tank or bund fire at the Wiri Oil Terminal or LPG fire at the Wiri LPG Depot).

**(2) Site plan**

A copy of site plan showing location of on-site and off-site safe assembly areas and outside evacuation routes (to be attached as Appendix A).

Safe assembly areas and evacuation routes have been selected and meet the following criteria:

- designated off-site assembly area as far as reasonably practicable from the Hazardous Facility e.g. a minimum of 400 metres from Wiri Oil Terminal site

boundary or outside the Inner Emergency Management Area of the Wiri LPG Depot;

- the exits and outdoor evacuation routes avoid cul-de-sacs and routes that take any person closer to the Hazardous Facility. The route(s) lead away from the Hazardous Facility;
- exit points to be used should be as far away from the Hazardous Facility as possible;
- avoid assembly area being adjacent to large areas of glazing; and
- assembly area is preferably in an open area and or removed or remote from buildings.

### **(3) Notification (relevant only in relation to the Wiri Oil Terminal)**

Wiri Oil Terminal provides a warning/notification system in the event of an emergency scenario arising at the Wiri Oil Terminal. The [name of the organisation] will facilitate and enable the notification system to be implemented on site. Although mitigation and warning systems are in place at the Terminal, catastrophic failure of systems can never be ruled out and there may be little or no prior warning.

### **(4) Response actions (as appropriate):**

- Receive notification of incident from the Hazardous Facility or emergency services.
- Avoid operating any electrical switches, including lights, alarms or any other electrical appliances and systems.
- Leave immediately by the nearest safe exit route away from the Hazardous Facility.
- Evacuate on foot in a direction away from the Hazardous Facility to the assembly area.
- Do not rubberneck.
- Do not operate a vehicle.
- Report to the off-site safe-assembly area and building wardens to reconcile staff and visitor / customer names and numbers.
- Do not leave the assembly area or re-enter the building until advised it is safe to do so by the Fire Service.

### **(5) Plan testing and evaluation**

- Practise relevant drills such as evacuation simulations.
- Take part in scheduled Hazardous Facility emergency exercise as requested.
- Fully document all exercises undertaken.
- Address any difficulties and problems encountered during exercises and update Plan as required.

**(6) Plan review and updating**

Review and update the Plan at least annually and following any change in circumstances

(e.g. physical changes to building or on site activities, exits or routes or personnel).

**(7) Attach Site Plan**