



PUBLIC VERSION

**Banyule
Community Emergency
Risk Management (CERM) Plan**

LAST AMENDED: May 2011

Incident: HEATWAVE **Risk No.: 01**

Hazard Identification and Risk Assessment

<p>Initial Risk Rating: VERY HIGH</p>	<p>Elements at Risk:</p> <ul style="list-style-type: none"> People, especially: Baby (< 2 years), Pregnant Women and Nursing Mothers, People with a Disability, People with an Existing Medical Condition, Older Adult (60 + years), Low Socio-Economic Domestic animals Essential services and service authorities 	<p>Date: 20/12/2010</p>
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Risk Statement: [Hazard + Elements at Risk + Consequence (Vulnerability) = RISK]

Heatwaves are brief periods of unusually high temperatures which can result in significant harm. They are considered an increasing public health issue driven by climate change and the increasing heat-island effect resulting from progressive urbanisation. Extreme heat is a generic health stressor and can affect all members of the community; however some groups of people are more vulnerable due to recognised risk factors. The identified vulnerable groups include the elderly, babies, pregnant women and nursing mothers and people with pre-existing medical conditions such as diabetes, MS, heart disease, mental illness or a disability. Their increased vulnerability relates to a combination of an impaired physiological response to heat and the higher prevalence of chronic diseases involving the cardiovascular, respiratory, renal and endocrine systems. People's behaviour, background and their location can also significantly impact on the effects of heatwave. The direct effect of extreme heat exposure includes heat cramps, heat exhaustion and heat stroke. The latter is a medical emergency manifest by an elevated core body temperature and varying degrees of neurological impairment which can progress to death.

Potential Hazards or Exposures:	<ul style="list-style-type: none"> Death Illness Social Isolation 	<ul style="list-style-type: none"> Power failure and/or power infrastructure damage Public transport not operable and/or transport infrastructure damage 	<ul style="list-style-type: none"> Gas disruption Water disruption Flora or fauna damage or loss 	<ul style="list-style-type: none"> Wildlife and domesticated animals at large or in distress Communication overload/failure
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Initial Consequence: Catastrophic (5) The acceptance of climate change, with forecast increases in temperatures and resultant extreme weather events has demonstrated that prolonged extremely high temperatures are a major hazard for Victorians resulting in increased prevalence of heat related illness or fatalities. Typically mortality rates increase rapidly as temperatures rise past a threshold (the Melbourne threshold is an Average Temperature of 30oC or above over a 24 hour period). As heatwaves affect whole cities increasing ambient temperatures and disrupting essential services such as power, it is expected that there could be significant illness and fatalities in Banyule as a result of a prolonged extreme event. The number of people at increased risk from the adverse health effects of heatwaves in Australia is expected to increase in conjunction with ageing of the population and increased urbanisation.

Initial Likelihood: Almost Certain(A) Climate change is expected to increase the frequency and intensity of heatwaves in Victoria. Climatologists have concluded that as a consequence of global warming, it is very likely that heatwaves will become more intense and more frequent in the future. Because of past greenhouse gas emissions it has been predicted that Melbourne is already committed to global warming of at least 0.6oC by 2030. Thereafter, the extent of climate change we experience will depend on emissions we release over the next couple of decades and beyond.

<p>What responsibilities does the Municipality have to manage this risk?</p> <ul style="list-style-type: none"> Maintain the MEMP, CERM and MPHEMP and the Heatwave Response Plan Public Health & Wellbeing Act 2008 states that the function of Council is "to seek to protect, improve and promote public health and wellbeing" Municipal Public Health & Wellbeing Plans require Council to "identify goals and strategies based on available evidence for creating a local community in which people can achieve maximum health and wellbeing" 	<p>What responsibilities does the Community have to respond to this risk?</p> <ul style="list-style-type: none"> Develop a Home Emergency Plan, based on guides provided by Australian Red Cross or VicSES or CFA Develop and practice their evacuation plans with their household, both home evacuation and off site evacuation, consider access and egress routes Identify support networks and arrangements post incident, such as, alternative accommodation, insurance arrangements etc
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Other Agencies with risk management responsibility for this risk:

<p>Control</p> <ul style="list-style-type: none"> Victoria Police 	<p>Support</p> <ul style="list-style-type: none"> Department of Health Department of Human Services 	<ul style="list-style-type: none"> Ambulance Victoria, Hospitals & GP's Bureau of Meteorology Banyule City Council Neighbouring Municipalities Power Company Provider
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Is this risk tolerable? Yes No

WHY?
Heatwaves will occur, however, strategies and initiatives can be implemented (via a heatwave response plan) to reduce their impact on community.

Incident: HEAT WAVE
Risk No.: 01
Risk Control and Treatment Strategies

 Can Likelihood and / or Consequence be further reduced by new treatment strategies? Yes No

If no, WHY? If yes, HOW?

PREVENTION/PREPAREDNESS

- Maintain the Banyule Heatwave Response Plan that addresses adaptation measures for heatwaves
- Support and implementation of environmental strategies to reduce future greenhouse gas emissions
- Evaluation of the Banyule Heatwave Response Plan

RESPONSE

- Support emergency services as required by the MERC/DH and/or DHS
- Activation of the Banyule Heatwave Response Plan

RECOVERY

- Refer to Recovery Plan and refer to DH if appropriate

Current Controls:

- Community education and information
- Department of Health (DH) and Department of Human Services (DHS) support and guidelines
- Implementation of a Banyule Heatwave Response Plan

Treatments Identified:	Responsible Officer	Project Due:	Report Frequency:	Completion Date:	Review Date:
Review the Banyule Heatwave Response Plan which supports Banyule's Public Health Emergency Management Sub-Plan.	Kaylene Hodgkin	30/06/2012	Quarterly		CID
Evaluate existing community education on heatwave risks and survival strategies including information in the Banyule Banner and develop an education program targeted to our community.	Kaylene Hodgkin	30/06/2012	Quarterly		CID

Residual Consequence: Major (4)

Residual Likelihood: Almost Certain (A)

**Residual Risk Rating:
HIGH**

Approved by:	Responsible Officer:	Date of next review:
Council – 23/05/2011 MEMPC – 12/05/2011 MERO – 20/12/2010	Jacinta Brookes, Emergency Management Co-ordinator	31/12/2011

Incident: FIRE – NATURAL ENVIRONMENT, BUSH & SCRUB **Risk No.: 02**

Hazard Identification and Risk Assessment

<p>Initial Risk Rating: HIGH</p>	<p>Elements at Risk:</p> <ul style="list-style-type: none"> • People • Perceptions of safety • Air quality • Water quality • Land degradation and contamination • Flora and Fauna • Natural environment (including public lands and reserves) • Residential Property • Commercial/Industrial Property 	<p>Date: 10/12/2010</p>
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Risk Statement: [Hazard + Elements at Risk + Consequence (Vulnerability) = RISK]

Banyule is likely to be affected by fire in a variety of outdoor settings but our largest area at risk would be in the North at Plenty Gorge. This will affect local flora and fauna and impact on people's perceptions about their local amenity and quality of life issues. In Banyule City Council, fires have occurred in natural bushland and nature reserves.

Potential Hazards or Exposures:	<ul style="list-style-type: none"> • Death • Illness or injury • Burns and scalds 	<ul style="list-style-type: none"> • Cuts and lacerations • Flora and fauna damage and/or loss • Ember attack 	<ul style="list-style-type: none"> • Air contamination and/or pollution • Traffic congestion, blocked or inaccessible roads and/or disruption 	<ul style="list-style-type: none"> • Property or infrastructure damage • Communication overload/failure
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Initial Consequence: Moderate (3) Loss of amenity for a period. Regeneration or repair will be required. Minimal impact on day-to-day living other than recreational use of open space. Small impact on thoroughfare or park users and commuters. Potential loss of properties leading to displaced residents and impact on business.

Initial Likelihood: Almost Certain (A) Record of fire over the past 5 years indicates that they are mainly deliberately lit in areas such as creek valleys and waterways rather than environmental factors such as drought. High winds and fuel loads in Summer can also increase the likelihood of a fire intensity and spread.

<p>What responsibilities does the Municipality have to manage this risk?</p> <ul style="list-style-type: none"> • Maintain the MEMP and CERM • Have a delegated Municipal Fire Prevention Officer and Fire Prevention Plan • Enforcement role to penalise bodies not reducing fire hazards • Regular maintenance and management of public open spaces and land by responsible authorities / individuals • Maintain Council owned and managed spaces to minimise the likelihood of natural environment fires spreading to the built environment • Regular maintenance, private and public land • Education and information on risk factors 	<p>What responsibilities does the Community have to respond to this risk?</p> <ul style="list-style-type: none"> • Maintain private property to an acceptable level to reduce risk of fire spread • Develop and practice a Bushfire Survival Plan for their household and business.
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Other Agencies with risk management responsibility for this risk:

<p>Control</p> <ul style="list-style-type: none"> • Department of Sustainability and Environment • Country Fire Authority • Metropolitan Fire Brigade 	<p>Support</p> <ul style="list-style-type: none"> • Victorian State Emergency Service 	<ul style="list-style-type: none"> • Bureau of Meteorology Victoria • Red Cross Banyule City Council • Police
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Is this risk tolerable? Yes No

WHY?
This risk is tolerable as practises are in place to reduce the likelihood of fires occurring and response to fire are dealt with by the CFA, MFB and DSE

Incident: FIRE – NATURAL ENVIRONMENT, BUSH & SCRUB
Risk No.: 02
Risk Control and Treatment Strategies

Can Likelihood and / or Consequence be further reduced by new treatment strategies?

 Yes

 No

If no, WHY? If yes, HOW?

PREVENTION/PREPAREDNESS

- Maintain effective communication networks with response and recovery agencies
- Develop and maintain a close relationship with key stakeholders, e.g. Melbourne Water, Waterway Communities
- Ensure risk reduction strategies are implemented by Council department and waterway authorities
- Education strategies such as Can I Can't by CFA, which identifies what activities and equipment can be conducted or used during total fire ban days. Information is also provided via the internet regarding fire preparation from Parks Victoria and other bodies

RESPONSE

- Support emergency services as required by the MERC
- DEECD arrangements in place for facilities with children to close on Code Red days
- Assess suitability of Emergency Relief Centres based on the incident with most appropriate chosen for needs and considerations

RECOVERY

- Support communication links and build on existing links with at risk groups such as those residence surrounding parkland
- Support emergency services as required by the MERC / MERO / MRM

Current Controls:

- Regular maintenance of parks and open spaces by Council
- Conduct prescribed burns as required
- Power authority maintenance of sub station equipment and lines
- General line clearance by Council
- Road side vegetation management by the relevant road authority
- Three-yearly audit of hazard identification which is mapped and prioritised

Treatments Identified:	Responsible Officer	Project Due:	Report Frequency:	Completion Date:	Review Date:
Work with CFA and MFB to transition to IMFP including the change of the MFPC to IFMPC and the review/development of the IFMP from the existing Fire Prevention Plan.	Jenny Cotterell	31/12/2011	Quarterly		CID
Work with MFB/CFA to map higher risk sites across the municipality for the Victorian Fire Risk Register.	Jenny Cotterell	31/12/2011	Quarterly		CID
MFPO and Bushland to scope project to implement specific fire plans for high risk reserves. It is anticipated this would be for 8 – 12 reserves.	Jenny Cotterell	31/12/2011	Quarterly		CID

Residual Consequence: Moderate (3)

Residual Likelihood: (B)

**Residual Risk Rating:
HIGH**

Approved by:

Responsible Officer:

Date of next review:

Council – 23/05/2011

MEMPC – 12/05/2011

MERO – 10/12/2010

Jacinta Brookes, Emergency Management Co-ordinator

31/12/2011

Incident: FIRE - BUILT ENVIRONMENT, STRUCTURAL **Risk No.: 03**

Hazard Identification and Risk Assessment

<p>Initial Risk Rating: HIGH</p>	<p>Elements at Risk:</p> <ul style="list-style-type: none"> • People • Perceptions of safety • Air Quality • Community Essential Infrastructure • Roads and Transport • Essential Services • Service Authorities • Residential Property • Commercial/Industrial Property 	<p>Date: 10/12/2010</p>
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Risk Statement: [Hazard + Elements at Risk + Consequence (Vulnerability) = RISK]

Banyule is home to 48,000 properties and 130,000 people. Industrial estates are situated in Heidelberg West and Greensborough, and a major shopping centre within Greensborough. Other structures of concern within the municipality include the Austin Hospital and Mercy Hospital for Women, and educational institutes.

<p>Potential Hazards or Exposures:</p>	<ul style="list-style-type: none"> • Death • Illness or injury • Personal trauma • Evacuating persons • Burns and scalds • Economic impact 	<ul style="list-style-type: none"> • Communication overload/failure • Air contamination and/or pollution • Property or infrastructure damage • Structural collapse • Structural damage to surrounding properties 	<ul style="list-style-type: none"> • Contamination in waterways • Traffic congestion, blocked or inaccessible roads and/or disruption • Power failure and power infrastructure damage 	<ul style="list-style-type: none"> • Gas disruption • Water disruption • Fire • Explosion • Release of possible toxic fumes from fire
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Initial Consequence: Major (4) Localised damage, loss of employment, loss of life/injury, trauma, loss of business and economic activity.

Initial Likelihood: Likely (B) Small rate of incidents annually e.g. house fires. Records of major fires in the past 10 years include a plastics factory fire in Heidelberg West.

<p>What responsibilities does the Municipality have to manage this risk?</p> <ul style="list-style-type: none"> • Maintain Council facilities including installed essential safety measures – Over 230 Council facilities e.g. halls and community centres • Enforcement agency – reduction of fuel in public and private residences and spaces • Has ownership of fire hydrants – pays Melbourne Water to operate and maintain • Council planning regime – new buildings must comply with the Building Act 1993, the Building Regulations 2006 and Codes of Practice for Building and Construction Workplaces No.13 1990 • Maintain the MEMP and CERM • Have a delegated Municipal Fire Prevention Officer (MFPO) • Provide MBS service to respond to structural damage incidents • EHO role and responsibility for fire in food premises response 	<p>What responsibilities does the Community have to respond to this risk?</p> <ul style="list-style-type: none"> • Maintain property including safety provisions (smoke alarms) • Develop and practise emergency evacuation plans • Commercial property owners to maintain essential safety provisions as per Building Regs • Compliance with planning and building legislation and regulations
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Other Agencies with risk management responsibility for this risk:

<p>Control</p> <ul style="list-style-type: none"> • Metropolitan Fire Brigade or Country Fire Authority 	<p>Support</p> <ul style="list-style-type: none"> • Victoria Police • Ambulance Victoria 	<ul style="list-style-type: none"> • Vic SES • Bureau of Meteorology • Service Authorities • Banyule City Council
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Is this risk tolerable? Yes No

WHY?
Fire is unpredictable and can quickly spread from the built to the natural environment and from building to building. Fire in the built industrial environment can cause secondary emergencies such as smoke and toxic plumes. Response arrangements by CFA/MFB are well known to the community and should minimise the impact of fire.

Incident: FIRE - BUILT ENVIRONMENT, STRUCTURAL
Risk No.: 03
Risk Control and Treatment Strategies

 Can Likelihood and / or Consequence be further reduced by new treatment strategies? Yes No

If no, WHY? If yes, HOW?

PREVENTION/PREPAREDNESS

- Assess suitability of Emergency Relief Centres based on the incident
- Provide and promote community information on risk management issues such as smoke alarms, leaving children unattended
- Public safety campaigns with CFA and MFB

RESPONSE

- Support emergency services as required by the MERC
- Establish relief/recovery centre as required
- Assistance from relevant Banyule Council Statutory Services

RECOVERY

- Activate the Recovery Plan if required
- Support emergency services as required by the MERC / MERO / MRM

Current Controls:

- Maintaining the requirements under the Building Act 1993 and Council enforcement of construction approval and planning stages
- CFA/MFB response to fires

Treatments Identified:	Responsible Officer	Project Due:	Report Frequency:	Completion Date:	Review Date:
Work with CFA and MFB to transition to IMFP including the change of the MFPC to IFMPC and the review/development of the IFMP from the existing Fire Prevention Plan.	Jenny Cotterell	31/12/2011	Quarterly		CID
Work with MFB/CFA to map higher risk sites across the municipality for the Victorian Fire Risk Register.	Jenny Cotterell	31/12/2011	Quarterly		CID
Investigate and develop Standard Operating Procedure for MBS response requirements 24/7	Danny Hick	30/06/2011	Quarterly		CID

Residual Consequence: Major (4)

Residual Likelihood: Likely (B)

**Residual Risk Rating:
HIGH**

Approved by:	Responsible Officer:	Date of next review:
Council – 23/05/2011 MEMPC – 12/05/2011 MERO – 10/12/2010	Jacinta Brookes, Emergency Management Co-ordinator	31/12/2011

Incident: FLOODS, STORM AND EXTREME WEATHER

Risk No.: 04

Hazard Identification and Risk Assessment

<p>Initial Risk Rating: HIGH</p>	<p>Elements at Risk:</p> <ul style="list-style-type: none"> • People • Water quality • Land degradation and contamination • Natural environment (including public lands) • Roads and transport • Essential Services (hospitals, emergency services, schools, banking facilities and shops) • Residential property 	<ul style="list-style-type: none"> • Commercial/Industrial property • Service authorities (Power, Gas, Water, Drainage, Sewage and Telecommunications) • Domestic animals • Flora and fauna • Social wellbeing • Community health • Financial independence and stable economy 	<p>Date: 23/03/2011</p>
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Risk Statement: [Hazard + Elements at Risk + Consequence (Vulnerability) = RISK]

Floods in Banyule City Council can occur by way of flash flood or floods due to rising river levels. These can occur from the Yarra, Banyule and Plenty rivers. Other floods can result from reservoir failure, rain and major water main damage. At times of major flood substantial property damage and inundation will occur. This may be in one location such as identified in the Flood Plan or could be in areas / pockets throughout Banyule. Storm (extreme weather) may result in property damage to commercial, private and community buildings and infrastructure including roads and bridges, and may result in displacement or evacuation and relocation of people. Damage to the natural environment may also occur including damage to trees, rivers and waterways.

<p>Potential Hazards or Exposures:</p> <ul style="list-style-type: none"> • Communication overload/failure • Property or infrastructure damage • Power failure and power infrastructure damage, ie, lines down • Blocked or inaccessible roads and/or traffic congestion • Fires ignited by lightning 	<ul style="list-style-type: none"> • Traffic signal failure • Public transport not operable or transport infrastructure damage • Inappropriate water activities • Personal trauma • Evacuating persons 	<ul style="list-style-type: none"> • Persons marooned, entrapment and/or isolation • Death • Injury or illness • Drowning • Electrocution • Projectile materials e.g., roofing 	<ul style="list-style-type: none"> • Wildlife and domesticated animals at large or in distress • Flash flooding/ Flood levels (levy banks) • Contamination in waterways • Sewage in drains • Harmful bacteria in waterways and water supply
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Initial Consequence: Major (4) In extreme flooding that involves quick inundation, loss of life is possible. Injury due people could result from debris moving in flood waters or from wind. Floods, storms or extreme weather could result in extensive structural damage to property and infrastructure, trees, bus shelters, fencing etc. Minor water damage to buildings, homes and business resulting in un-inhabitable conditions for varying periods of time which may also include displacement of people for short periods of time. There may be some impact on the environment with potential long term effects. Financial loss to business and institutions such as schools could also be possible.

Initial Likelihood: Likely (B) Banyule has had some major floods and 3 minor flood events, including one occurrence of a "1 in 100 year storm" over 5 years. Bounded by three (3) creeks/ rivers which have been known to wash away foot bridges in previous storm events. Parts of the municipality have an ageing drainage system.

<p>What responsibilities does the Municipality have to manage this risk?</p> <ul style="list-style-type: none"> • Maintain the MEMP and CERM • Asset Management Infrastructure Strategy & Master Plan • Open Space and Park Management Strategy & Master Plan • Council's Drainage Strategy & Asset Management Plan and ongoing maintenance responsibility for drainage • Maintain Councils trees in accordance with the proactive and reactive tree maintenance schedule • After hours service to respond • Coordinating committees or forums for Darebin Creek and Plenty River • Provision of day-to-day operations in the areas of park and open space management • Community awareness, education, and communication in conjunction with VicSES 	<p>What responsibilities does the Community have to respond to this risk?</p> <ul style="list-style-type: none"> • Develop a Home Emergency Plan, based on guides provided by Australian Red Cross or VicSES or CFA • Develop and practice their evacuation plans with their household, both home evacuation and off site evacuation, consider access and egress routes. • Identify support networks and arrangements post incident, such as, alternative accommodation, insurance arrangements etc. • Residents should know their local area, particularly if there is a history of flooding. • Fix faults and remove leaves from guttering, debris and items that can cause localised flooding. • Residents should be prepared by trimming trees and removing overhanging branches, checking and securing tiles and roofing sheets, securing loose items and keeping downpipes and guttering clear.
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Other Agencies with risk management responsibility for this risk:

<p>Control</p> <ul style="list-style-type: none"> • Victoria State Emergency Service 	<p>Support</p> <ul style="list-style-type: none"> • Victoria Police • VicRoads • Country Fire Authority or Metropolitan Fire Brigade 	<ul style="list-style-type: none"> • Department of Human Services • Department of Sustainability Environment • Department Education & Early Childhood Development 	<ul style="list-style-type: none"> • Catchment Management Authority – Melbourne Water • Bureau of Meteorology 	<ul style="list-style-type: none"> • Parks Victoria • Banyule City Council
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Is this risk tolerable? Yes No

WHY? Weather is unpredictable, weather, flood and severe storms are an "Act of Nature". Awareness of impending storm is useful but we are often unable to predict the exact location and ferocity of storm. The variables of how bad the event will be, who it will affect and for how long implies that a proper response/recovery regime is put in place. While Banyule has ageing or old infrastructure, severe floods can test any drainage system. Council is reducing the risk through an asset management program and upgrade of drainage systems. The extent of drainage works and resources has implications on Council's Capital Works program. Resources are also being sought from other tiers of government and water authorities.

Incident: FLOODS, STORM AND EXTREME WEATHER **Risk No.: 04**

Risk Control and Treatment Strategies

Can Likelihood and / or Consequence be further reduced by new treatment strategies? Yes No

If no, WHY? If yes, HOW?

The likelihood of flooding, storm or severe weather can not be reduced as weather control is not possible. Consequences to people may be reduced if individuals are prepared for all incident types, however damage to fixed items can not be reduced as the weather event impact on fixed property, such as bridges and roads, and the natural environment can not be controlled. !CR! !CR! !CR!

PREVENTION/PREPAREDNESS	RESPONSE	RECOVERY
<ul style="list-style-type: none"> Ongoing preventative Council maintenance program for assets including trees, roads, kerbing, guttering, drains and pits Flood prevention education and awareness program developed by Melbourne Water/Vic SES Melbourne Water Flood Map – identifies potential flood prone areas within the municipality Council's Stormwater Management Plan Document and implement Council's Capital Works Strategy regarding drainage, including network inspection program Routine tree inspections Liaison with other tiers of government regarding funding to improve drainage system Promote issues in the community regarding activation and responsibility for managing floods and relief processes Assess suitability of Emergency Relief Centres based on the incident Council to deliver community awareness and education, informing the public and staff of emergency numbers and processes e.g. Fire, Police, Ambulance 000 and SES 132 500 Periodically check for early warning signs and advise via the media and Bureau of Meteorology Established and documented activation process Communication and understanding by key stakeholders between day-to-day operations and emergency situations Support communication links and build on existing links with at risk groups 	<ul style="list-style-type: none"> Improved liaison with response agencies SES and parks arriving at same jobs - ACTION cross ref 2 systems Emergency response arrangements Early warning via communication with Bureau of Meteorology website Support emergency services as required by the MERC Traffic management plans After hours duty officers with response teams and activation process Number of Council Officers on call 	<ul style="list-style-type: none"> Routine inspections of Council assets after storm or extreme weather by relevant asset managers Activate the Recovery Plan if required Support emergency services as required by the MERC / MERO / MRM

Current Controls:

- Structural assets are constructed in accordance with relevant building codes and for local conditions, such as history of flooding.
- Bushland environments established for significant areas to support local conditions such as flooding.

Treatments Identified:	Responsible Officer	Project Due:	Report Frequency:	Completion Date:	Review Date:
Work with VicSES so that requests for assistance regarding tree tasks are not double allocated to Council and VicSES crews.	Philip Ryan	30/06/2012	Quarterly		CID
Continue to map drainage network on GIS to enable efficient response during events	Scott Nutt	30/12/2011	Quarterly		CID
Tree Care Services to investigate park tree inventory and scope the benefit or proactive maintenance schedule.	Gary Berry	30/12/2012	Quarterly		CID
Evaluate existing community education for floods, storm and extreme weather including information in the Banyule Banner and develop an education program targeted to our community.	Russell Darling	30/12/2012	Quarterly		CID

Residual Consequence: Major (4)	Residual Likelihood: Likely (B)	Residual Risk Rating: HIGH
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Approved by: Council – 23/05/2011 MEMPC – 12/05/2011 MERO – 29/03/2011	Responsible Officer: Jacinta Brookes, Emergency Management Co-ordinator	Date of next review: 31/12/2011
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Incident: TRAFFIC AND/OR TRANSPORT INCIDENT **Risk No.: 05**

Hazard Identification and Risk Assessment

<p>Initial Risk Rating: HIGH</p>	<p>Elements at Risk:</p> <ul style="list-style-type: none"> People Social connectedness and information Perceptions of safety Financial independence and stable economy Natural environment (including public lands and parks) Water quality Roads and Transport Property/infrastructure damage 	<p>Date: 01/02/2011</p>
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Risk Statement: [Hazard + Elements at Risk + Consequence (Vulnerability) = RISK]

A major accident will impact on those affected and their families and those who witness it. The effect of a road closure may impact on a larger number of people from short to medium term and may impact on business and service continuity. The municipality has major arterial roads in the network which is used by heavy vehicles including those carrying dangerous goods/hazardous substances. Key transport hubs include Ivanhoe, Rosanna and Greensborough. Banyule has one train line (Hurtsbridge) through the municipality, the first station being Darebin and the last station Montmorency, which is approximately 13.5 kms of train line. There are 9 stations within the municipality, and 3 railway level crossings (Marshall Street Ivanhoe, Lower Plenty Road Rosanna and Ruthven Street Macleod). If such an incident occurred the effects could result in death or injury and property/infrastructure damage with major disruption to transport. This type of incident has not been recorded in Banyule within the last 10 years; however road collisions and derailments on Melbourne's urban network are known to have occurred. This type of risk includes incident's involving pedestrians and other types of derailments. An aircraft incident within Banyule could result in multiple casualties and significant property/infrastructure damage (localised), major disruption to businesses within the immediate area, and traffic congestion/road closures. Some environmental impact is likely.

Potential Hazards or Exposures:	<ul style="list-style-type: none"> Death Illness or injury Increased media presence 	<ul style="list-style-type: none"> Fire Environmental impact Spills or run off into waterways 	<ul style="list-style-type: none"> Power failure and power infrastructure damage Public transport not operable or transport infrastructure damage 	<ul style="list-style-type: none"> Property or infrastructure damage Traffic signal failure
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Initial Consequence: Catastrophic (5) A road incident may be limited to a small number of people but may affect families, schools/work places, commuters. A rail incident of this type could range from moderate to catastrophic. Several factors that would determine what the consequence would be include time of day, location and severity. An aircraft incident could result in localised damage, loss of employment, loss of life/injury, trauma, dislocation of community, loss of business and economic activity. This would be more significant if it is a passenger plane compared to a freight plane or light aircraft.

Initial Likelihood: Unlikely (D) Banyule has significant road and public transport networks that are used by industry, residents, heavy transport and people commuting through Banyule. Roads that have the highest frequency of traffic in Banyule are Greensborough Highway/Rosanna Road and Bell Banksia. The event may occur at some time, as has been experienced on the rail network in Australia. There are no recorded incidents of this type within Banyule. This type of incident will only occur in exceptional circumstances.

<p>What responsibilities does the Municipality have to manage this risk?</p> <ul style="list-style-type: none"> Maintain the MEMP and CERM Implement the Municipal Resources Sub-Plan and the Recovery Plan Maintain an effective road network Council to work proactively on this issue by identifying and targeting at-risk locations Advocate on transport safety and amenity issues to other tiers of government 	<p>What responsibilities does the Community have to respond to this risk?</p> <ul style="list-style-type: none"> none identified
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Other Agencies with risk management responsibility for this risk:

Control	Support		
<ul style="list-style-type: none"> Victoria Police 	<ul style="list-style-type: none"> Metropolitan Fire Brigade or Country Fire Authority State Emergency Service 	<ul style="list-style-type: none"> Banyule City Council Victrack/Metro 	<ul style="list-style-type: none"> VicRoads Department of Infrastructure Aviation Transport and Safety Bureau

Is this risk tolerable? Yes No

WHY?
Road safety is important to our community and a proactive policy structure of investigating any major incidents is standard practice. Road trauma is very costly to any community and has impacts on the victims, family, work place and institutions. This risk is tolerable as the likelihood is unlikely. The Victorian Public Transport Industry continues to make improvements to rail safety and a policy of investigating any incident is undertaken. Traffic management controls are implemented at crossings. Council cannot implement further controls to minimise this risk. An aircraft incident can have a long term effect on the immediate incident site and surrounding areas. The impact will have an effect on homes, infrastructure, environment and the economy. This risk is tolerable as it is unlikely their will be an aircraft incident in Banyule. There are strict air safety protocols governed by the Civil Aviation Authority and Council cannot implement any further controls to minimise the risk.

Incident: TRAFFIC AND/OR TRANSPORT INCIDENT
Risk No.: 05
Risk Control and Treatment Strategies

Can Likelihood and / or Consequence be further reduced by new treatment strategies?

 Yes

 No

If no, WHY? If yes, HOW?

PREVENTION/PREPAREDNESS

- Council has a dedicated Traffic Management Unit that has involvement in local road safety and transport networks
- Victorian Public Transport Industry Asset Maintenance Plan – Emergency Management Response plan
- Maintain MEMP and CERM
- Traffic diversion planning
- Civil Aviation Safety Authority maintains aviation and commercial aircraft safety programs

RESPONSE

- Alternative transport provided by rail company for commuters
- Austin Hospital's medical emergency plan – "Code Brown"
- Support emergency services as required by the MERC in accordance with MEMP
- Establish MECC as requested
- Activate traffic diversion plans as required
- Implement the MEMP and establish a relief/recovery centre as required

RECOVERY

- Provision of after-the-event recovery functions e.g. counselling debriefing
- Support emergency services as required by the MERC/MERO/MRM
- Establish a relief/recovery centre as required

Current Controls:

- Maintaining and improving local road networks
- Provision of public education on road safety (TAC implemented)
- Improving road safety funding and planning from State and Federal governments
- Ongoing Post-fatality inspections of sites and immediate implementation of remedial works, if possible
- Ongoing road inspection and maintenance (Road management Plan)
- Traffic management at level crossings (signage, lights, road markings etc)

Treatments Identified:	Responsible Officer	Project Due:	Report Frequency:	Completion Date:	Review Date:
Develop rail crossing traffic diversion plans for three (3) level crossing sites.	Daniel Kollmorgen	31/12/2011	Quarterly		CID

Residual Consequence: Catastrophic (5)

Residual Likelihood: Rare (E)

**Residual Risk Rating:
HIGH**

Approved by:	Responsible Officer:	Date of next review:
Council – 23/05/2011 MEMPC – 12/05/2011 MERO – 01/02/2011	Jacinta Brookes, Emergency Management Co-ordinator	31/12/2012

Incident: MAJOR EVENT AND/OR FESTIVAL **Risk No.: 06**

Hazard Identification and Risk Assessment

<p>Initial Risk Rating: HIGH</p>	<p>Elements at Risk:</p> <ul style="list-style-type: none"> People Social connectedness and information Social wellbeing Perceptions of safety Community essential infrastructure Roads and Transport Natural environment (including public lands and parks) 	<p>Date: 01/02/2011</p>
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Risk Statement: [Hazard + Elements at Risk + Consequence (Vulnerability) = RISK]
 Major events within Banyule include the Malahang and Banyule Festivals, Boulevard Lights and Carols by Candlelight. These events are risk assessed and controls implemented. In addition Banyule's Leisure and Culture team are present on each day of the Festivals to respond to incidents and help advise festival staff to ensure the safety of staff, the public and stall holders. They can also attend other events when required. Non council events include Traders Festivals in key local shopping strips and religious and/or cultural gatherings. Applications for these events must include a risk assessment and are to be submitted and approved by Council as they do occur on Council owned land and road reserves.

Potential Hazards or Exposures:	<ul style="list-style-type: none"> Death Illness or injury Slips and trips Electrocution 	<ul style="list-style-type: none"> Drowning Crushing Food contamination Traffic congestion, blocked or inaccessible roads and/or disruption 	<ul style="list-style-type: none"> Structural Collapse Noise pollution Moving equipment/striking Spills or run off into waterways 	<ul style="list-style-type: none"> Public disorder/riots Property damage or loss Communication overload/failure Fire Power failure
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Initial Consequence: Major (4) If an incident occurred at an event, the consequence could be classified as major due to the extent of the community that may be present. An incident could also have a damaging effect on the communities perceptions of safety, particularly if publicised by the media.

Initial Likelihood: Possible (C) It is possible that an incident will occur as the events have large volumes of traffic (pedestrian/vehicle) and various activities that are potentially hazardous during the set up, whilst events are running and during packing up. One known incident has occurred which involved a stage turning onto its side in high winds during the set up of the stage. Festival participants were not involved. There were no injuries.

<p>What responsibilities does the Municipality have to manage this risk?</p> <ul style="list-style-type: none"> Maintain the MEMP and CERM Ensure compliance with legislation Permit process for events Statutory roles during events/festivals - Local Law - Banyule Event Guidelines (may include, food handling, energy safe audit) Maintain risk assessments for Council events and festivals Review and approve non-Council event applications 	<p>What responsibilities does the Community have to respond to this risk?</p> <ul style="list-style-type: none"> Application to Council to hold event 6 weeks (min) prior to event
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Other Agencies with risk management responsibility for this risk:

Control	Support	
<ul style="list-style-type: none"> Victoria Police 	<ul style="list-style-type: none"> WorkSafe Metropolitan Fire Brigade or Country Fire Authority 	<ul style="list-style-type: none"> Victorian State Emergency Service St John Ambulance Red Cross Banyule City Council

Is this risk tolerable? Yes No
WHY?
 This risk is tolerable as measures have been implemented to reduce the known risk and any risks that are identified on the day of an event are controlled or eliminated, as far as practicable

Incident: MAJOR EVENT AND/OR FESTIVAL
Risk No.: 06
Risk Control and Treatment Strategies

Can Likelihood and / or Consequence be further reduced by new treatment strategies?

 Yes

 No

If no, WHY? If yes, HOW?

PREVENTION/PREPAREDNESS

- Conduct risk assessments prior to events and implement controls for known hazards where possible
- Planned traffic diversion routes and pre-warning signs of festival dates/road closures
- Development of procedures for emergency situations
- Event Co-ordinator is available at event with pre-event start checklist
- Warden staff appointed for Council events

RESPONSE

- Support emergency services and agencies as required
- Implementation of procedures for emergency situations

RECOVERY

- Refer to Recovery Plan and refer to recovery agencies if appropriate

Current Controls:

- Preventative measures are put in place prior to each event; any new hazards that are identified on the day are controlled.

- Event Co-ordinator attendance on the day helps identify issues.

- Compliance with Occupational Health & Safety Act 2004 and other relevant legislation.

Treatments Identified:	Responsible Officer	Project Due:	Report Frequency:	Completion Date:	Review Date:
Review the event guidelines under Local Law 1, considering Community Emergency Risk Management planning.	Tony Smith	30/06/2011	Quarterly		CID

Residual Consequence: Moderate (3)

Residual Likelihood: Possible (C)

**Residual Risk Rating:
HIGH**

Approved by:	Responsible Officer:	Date of next review:
Council – 23/05/2011 MEMPC – 12/05/2011 MERO – 01/02/2011	Jacinta Brookes, Emergency Management Co-ordinator	31/12/2012

Incident: INFECTIOUS DISEASES (EPIDEMIC AND PANDEMIC) Risk No.: 07

Hazard Identification and Risk Assessment

<p>Initial Risk Rating: HIGH</p>	<p>Elements at Risk:</p> <ul style="list-style-type: none"> People Community Health Social wellbeing Perceptions of Safety Financial independence and stable economy Essential services (Hospitals, Emergency Services, schools, banking facilities and shops) Service Authorities (Power, Gas Water, Drainage, Sewage and Telecommunications) 	<p>Date: 20/12/2010</p>
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Risk Statement: [Hazard + Elements at Risk + Consequence (Vulnerability) = RISK]
 A major outbreak of person-to-person infectious disease can cause serious harm and illness to affected persons, anxiety to the families and disrupt workplaces. These issues could adversely affect local business, community service, agencies service provision and institutional provision. These risks are broadly defined as contaminations such as flu, cold and vaccine-preventable diseases e.g. meningitis and chicken pox. It may also involve diseases that are originally source-to-person.

Potential Hazards or Exposures:	<ul style="list-style-type: none"> Death Illness or injury 	<ul style="list-style-type: none"> Social isolation Social/cultural implications 	<ul style="list-style-type: none"> Public disorder/riots Communication overload/failure 	<ul style="list-style-type: none"> Economic impact Essential service failure or disruption
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Initial Consequence: Major (4) Can cause death and illness to affected people, moderate risk for wider community if not addressed. The provision of services to our community may be effected, both increase in demand on some services, and reduced demand on community/group related services. Access to food is likely to be a priority for the community in quarantine instances.

Initial Likelihood: Possible (C) There has been a range of incidents over the past 10 years including H1N1, H1N5, norovirus, meningococcal, diphtheria, giardiasis, hepatitis, pertussis, campylobacter, salmonella, and legionellosis.

<p>What responsibilities does the Municipality have to manage this risk?</p> <ul style="list-style-type: none"> Maintain CERM, MEMP, MPHEMP and Pandemic Plan & Guidelines Council has legislated responsibilities under the Victorian Public Health and Wellbeing Act, Food Act. 	<p>What responsibilities does the Community have to respond to this risk?</p> <ul style="list-style-type: none"> Practice safe hygiene and follow public health official directions during outbreak.
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Other Agencies with risk management responsibility for this risk:

<p>Control</p> <ul style="list-style-type: none"> Department of Health 	<p>Support</p> <ul style="list-style-type: none"> Department of Human Services VicPOL 	<ul style="list-style-type: none"> Banyule City Council Community Health Neighbouring municipalities Department of Primary Industries
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Is this risk tolerable? Yes No
WHY?
 Infectious disease can be life threatening and / or cause life-long injury / impairment. The risk of a major outbreak could have serious mortality and morbidity. Banyule has a small proportion of semi-rural properties with farm animals.

Incident: INFECTIOUS DISEASES (EPIDEMIC AND PANDEMIC)

Risk No.: 07

Risk Control and Treatment Strategies

Can Likelihood and / or Consequence be further reduced by new treatment strategies? Yes No

If no, WHY? If yes, HOW?

PREVENTION/PREPAREDNESS

- Liaise closely with DH
- Promote DH information and communications
- Provision of information and support to community regarding infectious diseases and immunisation

RESPONSE

- Support emergency services as required by the MERC, DH and DHS
- Council has a Medical Officer of Health
- Provision of information to affected communities and individuals regarding, cross infection, prevention and management of infection

RECOVERY

- Refer to Recovery Plan and refer to DH if appropriate

Current Controls:

- Environmental Health Officers - monitoring and education roles
- Council provides public immunisation sessions
- Provision of information to affected communities and individuals regarding, cross infection, prevention and management of infection
- Pandemic Plan and Guidelines MPHEM sub-plan

Treatments Identified:	Responsible Officer	Project Due:	Report Frequency:	Completion Date:	Review Date:
Review the Pandemic Plan and Guidelines	Kaylene Hodgkin	30/06/2011	Quarterly		CID
Complete the review of Banyule's BCP.	Matthew LeCouteur	30/12/2011	Quarterly		CID

Residual Consequence: Moderate (4)

Residual Likelihood: Possible (C)

**Residual Risk Rating:
HIGH**

Approved by:	Responsible Officer:	Date of next review:
Council – 23/05/2011 MEMPC – 12/05/2011 MERO – 20/12/2010	Jacinta Brookes, Emergency Management Co-ordinator	31/12/2012

Incident: PUBLICLY WITNESSED DEATH AND MAJOR OR DOMESTIC SIEGE **Risk No.: 08**

Hazard Identification and Risk Assessment

<p>Initial Risk Rating: HIGH</p>	<p>Elements at Risk:</p> <ul style="list-style-type: none"> People Perceptions of safety Community essential infrastructure Residential Property Commercial/Industrial Property 	<p>Date: 01/02/2011</p>
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Risk Statement: [Hazard + Elements at Risk + Consequence (Vulnerability) = RISK]
 A death witnessed by members of the public can have long term psychological effects on the people involved. A domestic siege due to family conflict may result in injury, trauma/death to hostages, family and neighbours. This situation may require evacuation of the area if it escalates and may disrupt local members of the public in accessing their homes/children etc. A major siege may result in injury, trauma/death to hostages.

Potential Hazards or Exposures:	<ul style="list-style-type: none"> Death Illness or injury Hostage Personal trauma 	<ul style="list-style-type: none"> Social/Cultural implications Perceptions of safety Public disorder/riots Community trauma 	<ul style="list-style-type: none"> Increased media presence Traffic congestion, blocked or inaccessible roads and/or disruption Fire 	<ul style="list-style-type: none"> Explosion Bomb threat Property or infrastructure damage
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Initial Consequence: Moderate(4)
 It may be limited to a relatively small number of people but can have a very high impact on those who are present but not associated with the deceased i.e. bystanders. Family members / friends of the deceased are to be supported via the key response agency, VICPOL. Limited to a small number of people but may cause displacement of neighbours. High risk for those actually involved; moderate risk to wider community as event will be localised e.g. shopping centre, banks, university, Hospitals and industrial/commercial areas.

Initial Likelihood: Likely (B)
 There have been a number of publicly witnessed deaths in Banyule over the past 10 years. Numbers of multiple disadvantaged residents e.g. public housing tenants, high crime rates and levels of family violence. Also a number of examples with community trauma – rail track deaths, road incidents. Given the number of reports to the police on family violence, the number of people in the area using mental health services and a number of family and psychiatric services located in the Banyule area, it is quite possible that this type of incident can occur. There is a history of events over the past 10 years such as the Monash University shootings and the Latrobe University stabbing.

<p>What responsibilities does the Municipality have to manage this risk?</p> <ul style="list-style-type: none"> Maintain the MEMP and CERM Implement the Recovery Plan Banyule Community Safety Plan Banyule Community Safety Officer and the Police work together on initiatives for education and awareness programs. Banyule must ensure that Council-owned and operated facilities have suitable security at high risk sites (eg, child care facilities) and their own emergency and evacuation plans and procedures. Council has a role in facilitating networks and cooperative process for sharing of knowledge and information with response agencies and other stakeholders identified in this register. 	<p>What responsibilities does the Community have to respond to this risk?</p> <ul style="list-style-type: none"> none identified
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Other Agencies with risk management responsibility for this risk:

Control	Support	
<ul style="list-style-type: none"> Victoria Police 	<ul style="list-style-type: none"> Department of Human Services 	<ul style="list-style-type: none"> Banyule City Council

Is this risk tolerable? Yes No

WHY?
 Banyule crime rate against the person is lower than the state average. However witnessing a public death or violent incident resulting in a death significantly impacts on perceptions of safety for those directly and indirectly related to the incident. Banyule has had a history of publicly witnessed deaths and it is likely to reoccur. Family violence is not statistically high in Banyule in comparison with other areas, however statistics indicate that family violence is an issue across the municipality. A violent domestic incident has a significant impact on perceptions of safety for those directly and indirectly affected. A siege further heightens people's fears and is likely to result in trauma for those directly affected. This risk is tolerable as Council is unable to further implement any procedures to prevent a major siege from occurring. It is up to each organisation or institution to put measures in place to reduce the likelihood of this event occurring.

Risk Control and Treatment Strategies

Can Likelihood and / or Consequence be further reduced by new treatment strategies?

 Yes

 No

If no, WHY? If yes, HOW?

- Individual mental health and behaviours can not be controlled by emergency services or agencies.
- Council's role in this area is mainly recovery through the provision of counselling and personal family support / material aid

PREVENTION/PREPAREDNESS

- Provision of public education on family violence/mental illness
- Maintain local counselling network
- Maintain close liaison with police and justice services which is achieved via the Banyule and Nillumbik Network Service
- Banyule City Council local area development worker, police and justice service partnership
- Close relationship with Department of Education and Banyule's Youth Services for the identification/provision of services such as counselling
- Provision of available services to the community are promoted by Linku Team (Outreach Program – Information and referral services)
- Banyule City Council is part of a support network Partnership protocols are implemented
- Banyule City Council's Youth and Community Department are involved in community engagement programs
- Gaps in service provision is identified through Banyule and Nillumbik Youth Services Network
- Police Backup Referral Scheme – providing resources/services to young persons cautioned by the police

RESPONSE

- Response as required on Police instructions eg, traffic management

RECOVERY

- Implement the Recovery Plan working with Community Service Organisations eg, Banyule Community Health
- DEECD Core Response Teams for education institutions

Current Controls:

- Individual Council centres/facilities have their own emergency plans and/or security plans and Mandated services - children's services

Treatments Identified:	Responsible Officer	Project Due:	Report Frequency:	Completion Date:	Review Date:
none					

Residual Consequence: Moderate (3)

Residual Likelihood: Likely (B)

**Residual Risk Rating:
HIGH**

Approved by:	Responsible Officer:	Date of next review:
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Council – 23/05/2011

MEMPC – 12/05/2011

MERO – 01/02/2011

Jacinta Brookes, Emergency Management Co-ordinator

31/12/2012

Incident: INFRASTRUCTURE AND/OR CONSTRUCTION EQUIPMENT FAILURE

Risk No.: 09

Hazard Identification and Risk Assessment

<p>Initial Risk Rating: HIGH</p>	<p>Elements at Risk:</p> <ul style="list-style-type: none"> • People • Community health • Perceptions of safety • Air Quality • Water Quality • Natural environment (including public lands and reserves) • Roads and Transport • Essential Services • Residential Property • Commercial/Industrial Property 	<p>Date: 10/12/2010</p>
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Risk Statement: [Hazard + Elements at Risk + Consequence (Vulnerability) = RISK]

The likelihood of a building collapse occurring while occupied is rated as medium. A building is likely to indicate danger signs prior to collapse and it would be expected that the building and neighbouring properties would be evacuated prior to an incident occurring. Buildings affected by fire or other damage, identified by inspectors or reported by neighbours/property owners are handled by Banyule's Building Department and inspected immediately. The types of buildings in Banyule are predominantly residential dwelling with a few commercial centres encompassing multi- storey buildings. The Austin Hospital tower would be the tallest building in the Municipality. In Banyule there has been one localised incident where the jacks failed when a house was being restumped. Banyule, other agencies, private organisations and hire companies use construction equipment, therefore an incident may occur at sometime, and the severity is an unknown, as it may not affect the community. There have been no reported incidents of Infrastructure failure within the municipality of Banyule. However there have been incidents of infrastructure failure within other municipalities, for example; Sewer mains and a bridge collapse.

<p>Potential Hazards or Exposures:</p> <ul style="list-style-type: none"> • Death • Illness or injury • Personal trauma • Missing persons • Social/cultural implications • Increased media presence • Drowning 	<ul style="list-style-type: none"> • Falls from heights • Entrapment • Impalement • Crushing • Electrocution • Power failure and power infrastructure damage 	<ul style="list-style-type: none"> • Gas disruption • Water disruption • Sewage failure • Traffic congestion, blocked or inaccessible roads and/or disruption • Fire • Explosion • Environmental impact 	<ul style="list-style-type: none"> • Trenching or tunnelling • Projectile materials • Moving equipment/striking • Building debris • Structural collapse • Structural damage to surrounding properties
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Initial Consequence: Major (4) Localised property damage which may have minor effects on the environment. If the building is old, the collapse may result in airborne asbestos and lead particles being released. It is anticipated that the building would generally be evacuated prior to collapse, however a partial collapse may occur without warning. Localised property or asset damage with the possibility of short term environmental impacts and potential disruption to road and rail. Building collapse could have an impact on surrounding services and infrastructure.

Initial Likelihood: Possible (C) Exceptional circumstances. No reported collapses in the last ten years, other than those in controlled demolition situation. There are some known buildings that Council's Building Department has identified as having structural issues. It is likely that a infrastructure failure or building collapse occur at some time. Whether it is due to ageing infrastructure, changing weather patterns, incorrect construction, or compounding existing damage causing assets to deteriorate and fail.

What responsibilities does the Municipality have to manage this risk?

- Maintain the MEMP and CERM
- Enforce Building Codes and Legislation
- Road Management Plan

What responsibilities does the Community have to respond to this risk?

- Commercial property owners to maintain essential safety provisions as per Building Regs
- Compliance with planning and building legislation and regulations

Other Agencies with risk management responsibility for this risk:

<p>Control</p> <ul style="list-style-type: none"> • Vic POL • Asset owner, for smaller events 	<p>Support</p> <ul style="list-style-type: none"> • MFB CFA • Vic SES 	<ul style="list-style-type: none"> • Building Commission • Metropolitan Ambulance Service 	<ul style="list-style-type: none"> • WorkSafe • EPA 	<ul style="list-style-type: none"> • Essential service authorities • Road authorities
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Is this risk tolerable? Yes No

WHY?

Regulations and processes help prevent this type of incident occurring. Due to ageing and old infrastructure the likelihood of this risk could be increased especially with the changing weather patterns. Agencies and governing bodies can implement processes to ensure assets are properly maintained to prevent failure under their statutory responsibilities and authority. It is anticipated that private asset owners are implementing safe work practices and complying with legislation. Therefore the risk is tolerable.

Incident: INFRASTRUCTURE AND/OR CONSTRUCTION EQUIPMENT FAILURE **Risk No.: 09**

Risk Control and Treatment Strategies

Can Likelihood and / or Consequence be further reduced by new treatment strategies? Yes No

If no, WHY? If yes, HOW?

PREVENTION/PREPAREDNESS	RESPONSE	RECOVERY
<ul style="list-style-type: none"> Maintain the MEMP & CERM 	<ul style="list-style-type: none"> Support emergency services as required Support maintenance services as required by the MERC 	<ul style="list-style-type: none"> Activate the Recovery Plan if required Support emergency services as required by the MERC / MERO / MRM

Current Controls:

- Council adhering to Road Management Plan
- Investigate reports of hazard public and private
- Compliance with Building Act and other relevant regulations, Australian and Industry standards
- Inspection/enforcement activities according to legislation

Treatments Identified:	Responsible Officer	Project Due:	Report Frequency:	Completion Date:	Review Date:
Review and Implement Council Asset Plans	Steve Malotsis	30/06/2011	Quarterly		CID

Residual Consequence: Major (4)	Residual Likelihood: Possible (C)	Residual Risk Rating: HIGH
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Approved by:	Responsible Officer:	Date of next review:
Council – 23/05/2011 MEMPC – 12/05/2011 MERO – 10/12/2010	Jacinta Brookes, Emergency Management Co-ordinator	31/12/2013

Incident: CHEMICAL INCIDENT - DANGEROUS GOODS & HAZARDOUS SUBSTANCES AND/OR OIL SPILL/LEAK OR POLLUTION **Risk No.: 10**

Hazard Identification and Risk Assessment

<p>Initial Risk Rating: HIGH</p>	<p>Elements at Risk:</p> <ul style="list-style-type: none"> People Perceptions of Safety Community health Air quality Water quality Land degradation and contamination Flora and fauna Natural environment (including public lands and National Parks) Roads and transport 	<p>Date: 10/12/2010</p>
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Risk Statement: [Hazard + Elements at Risk + Consequence (Vulnerability) = RISK]

A major spillage affecting Banyule transport system may result in the closure of roads, evacuation, and closure of business / services. The effect of a spillage can also impact on property and environment such as waterways and drains. There may also be primary and secondary casualties as it may affect public health. The effect of a road closure may impact on a larger number of people from short to medium term and may impact on business and service continuity. Generally there is a high frequency of spills on roads which can lead to the release of chemicals into stormwater drains, and therefore waterways. One incident has occurred releasing toxic fumes due to a fire at Westaflex plastic factory in Heidelberg West. Known incidents of leaks into waterways have occurred in Banyule.

<p>Potential Hazards or Exposures:</p> <ul style="list-style-type: none"> Death Illness or injury Evacuating persons Water contamination 	<ul style="list-style-type: none"> Air contamination and/or pollution Property damage or loss Flora and fauna damage or loss 	<ul style="list-style-type: none"> Environmental impact Spills or run off into waterways Contamination in waterways 	<ul style="list-style-type: none"> Traffic congestion, blocked or inaccessible roads and/or disruption Fire Explosion
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Initial Consequence: Moderate (3) Moderate risk to community. Spillage containment methods are controlled by transport companies and sites that have dangerous goods and hazardous substances. The MFB and CFAB will assist in any emergencies. May disrupt businesses and residents for a short period of time and could cause medium to longer term damage to the environment. Current spillage containment methods are well developed. Disruption to traffic can occur.

Initial Likelihood: Likely (B) Banyule has a number of main highways which have heavy vehicles and large volumes of traffic. There are also intersections that include trains (tram line on Plenty Road) which raise the potential for intermodal accidents. An incident could also arise from maintenance, storage and refilling at large sites such as the Austin Repatriation Hospital, service stations, and Banyule Councils Operations Depot. Incidents have occurred where factories have spilled chemicals into the Darebin Creek. No known spills into the Yarra and Plenty Rivers reported.

<p>What responsibilities does the Municipality have to manage this risk?</p> <ul style="list-style-type: none"> Maintain the MEMP and CERM Council has a responsibility to maintain its own road networks and to liaise with VicRoads on major arterial roads. The Traffic Engineering Section has significant capacity to plan and manage the maintenance of major arterial roads, conduct traffic planning and to advocate road safety issues to other tiers of government. Council has a role in facilitating networks and cooperative process e.g. for sharing of knowledge and information with response agencies and other stakeholders identified in this register. 	<p>What responsibilities does the Community have to respond to this risk?</p> <ul style="list-style-type: none"> none identified
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Other Agencies with risk management responsibility for this risk:

<p>Control</p> <ul style="list-style-type: none"> Metropolitan Fire Brigade or Country Fire Authority Victoria Police (motor vehicle accident) Environment Protection Authority Melbourne Water 	<p>Support</p> <ul style="list-style-type: none"> Ambulance Victoria 	<ul style="list-style-type: none"> WorkSafe Parks Victoria BoM
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Is this risk tolerable? Yes No

WHY?
This risk is tolerable as companies are required under legislation to provide manifests and implement spills procedures. Dangerous goods regulations through the Victorian WorkCover Authority also require manifests of sites that have large quantities of dangerous goods and hazardous substances for emergency situations. This risk is tolerable as Council cannot control how a spill or leak occurs however controls are in place to reduce the impact of this type of incident.

Incident: CHEMICAL INCIDENT - DANGEROUS GOODS & HAZARDOUS SUBSTANCES AND/OR OIL SPILL/LEAK OR POLLUTION
Risk No.: 10
Risk Control and Treatment Strategies

 Can Likelihood and / or Consequence be further reduced by new treatment strategies? Yes No

If no, WHY? If yes, HOW?

At this stage, the risk can not be reduced as relevant legislation is being adhered to by responsible parties.

PREVENTION/PREPAREDNESS

- Maintain the MEMP and CERM
- Ensure resources are available for an incident
- Support communication links and build on existing links with at risk groups

RESPONSE

- Support emergency services as required by the MERC
- Assess suitability of Emergency Relief Centres chosen given environmental factors of incident

RECOVERY

- Activate the Recovery Plan if required
- Support emergency services as required by the MERC / MERO / MRM

Current Controls:

- Implementation of Council's Road Management Plan
- Mapping of road and drainage networks
- Road Transport (Dangerous Goods) Act 1995
- Designated road transport routes, transportation of hazardous material - check to see if transport policy
- Industry complying with dangerous goods leg.
- Provision of support to assist police / response agencies such as the provision of absorbent material etc.
- Maintain internal processes that are in place to manage this type of incident on a day-to-day basis for minor incidents that can be controlled at Council level

Treatments Identified:	Responsible Officer	Project Due:	Report Frequency:	Completion Date:	Review Date:
Continue to map the drainage network into Council's GIS system	Scott Nutt	31/12/2011	Quarterly		CID
Develop and deliver a community education strategy surrounding domestic HAZMAT waste disposal	Russell Darling	31/12/2011	Quarterly		CID

Residual Consequence: Moderate (3)

Residual Likelihood: Likely (B)

**Residual Risk Rating:
HIGH**

Approved by:	Responsible Officer:	Date of next review:
Council – 23/05/2011 MEMPC – 12/05/2011 MERO – 10/12/2010	Jacinta Brookes, Emergency Management Co-ordinator	31/12/2013

Incident: FOOD OR WATER CONTAMINATION (PUBLIC HEALTH) Risk No.: 11

Hazard Identification and Risk Assessment

<p>Initial Risk Rating: HIGH</p>	<p>Elements at Risk:</p> <ul style="list-style-type: none"> People Community health Water quality Flora and fauna Marine environment Service authorities (water and sewage) Financial independence 	<p>Date: 20/12/2010</p>
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Risk Statement: [Hazard + Elements at Risk + Consequence (Vulnerability) = RISK]
 A major outbreak due to either food contamination or water contamination can cause harm and illness to affected persons and anxiety to the families and workplaces. These issues could adversely affect local business, community service and agencies or institutions service provision. This risk statement takes in a wide range of causes but are categorised for the sake of operations as microbiological, chemical and physical contamination. These risks are broadly defined as either unintentional or sabotage.

Potential Hazards or Exposures:	<ul style="list-style-type: none"> Death Illness or injury 	<ul style="list-style-type: none"> Social/Cultural implications Communication overload/failure 	<ul style="list-style-type: none"> Economic Impact Food contamination 	<ul style="list-style-type: none"> Water contamination Contamination in waterways
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Initial Consequence: Moderate (3) Can cause death and illness to affected people, moderate risk for wider community if contamination not addressed. Could cause issues for businesses affected by recalls or other contamination events (eg, economic).

Initial Likelihood: Likely (B) There has been a range of food contamination incidents in the past including physical contamination of food with foreign objects, including sabotage of major brand foods. There have been no known water contamination incidents within Banyule.

<p>What responsibilities does the Municipality have to manage this risk?</p> <ul style="list-style-type: none"> Maintain CERM and MEMPlan and MPHEMP Council is mandated under the Public Health and Wellbeing Act and Food Act to enforce relevant regulations Close liaison with DH, EPA, neighbouring Council Health Departments and EHO networks Council's Water Watch Officer has a relationship with our water authority and monitors water quality on a regular basis Council to refer any mains water issues to the relevant water authority 	<p>What responsibilities does the Community have to respond to this risk?</p> <ul style="list-style-type: none"> Businesses/Community Groups selling food are required to register (where mandated) or notify under the Food Act. Home owners with domestic waste water management systems are required to appropriately maintain them in line with EP Act
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Other Agencies with risk management responsibility for this risk:

Control	Support		
<ul style="list-style-type: none"> Department of Health 	<ul style="list-style-type: none"> Department of Human Services 	<ul style="list-style-type: none"> Banyule City Council 	<ul style="list-style-type: none"> Department of Sustainability and Environment Yarra Valley Water

Is this risk tolerable? Yes No

WHY?
 Food contamination can be life threatening and / or cause life-long injury / impairment. As Banyule has approximately 780 food premises, the risk of food contamination from a source is quite likely. Council on average would receive a number of food complaints per month. Water contamination can be life threatening and /or cause life long injury / impairment, illness. As Banyule has a number of water ways and supplied by main water, the risk of water contamination could result in a large distribution throughout the municipality due to the majority of the population on mains water.

Incident: FOOD OR WATER CONTAMINATION (PUBLIC HEALTH)
Risk No.: 11
Risk Control and Treatment Strategies

 Can Likelihood and / or Consequence be further reduced by new treatment strategies? Yes No

If no, WHY? If yes, HOW?

Regulations are designed to prevent, however the total elimination of food and water contamination will continue to remain an issue. Some of the control is from state agencies, and whilst some controls reduce the likelihood, the consequence is likely to remain.

PREVENTION/PREPAREDNESS

- Water Authority has a continual improvement program for Melbourne's North Area water supply
- DH – policies and resources to Councils to undertake existing role
- Compliance of food businesses with relevant food act legislation
- Food Act Management Plan
- MPHEM Sub-Plan
- Domestic Waste Water Mgt Plan
- Identify key areas at risk, such as unsewered properties and high risk food business

RESPONSE

- Support emergency services as required by the MERC / DHS
- Water Authority Emergency Response Plan for Water Quality (YVW)
- MPHEM Sub-Plan
- Legislated enforcement measures under relevant Acts

RECOVERY

- Refer to Recovery Plan and refer to DH if appropriate

Current Controls:

- Environmental Health Officers - Ongoing monitoring, education, response and enforcement roles (e.g. inspections and enforcement)
- Ongoing Water Watch – monitoring and education roles
- Provision of information to community/businesses

Treatments Identified:	Responsible Officer	Project Due:	Report Frequency:	Completion Date:	Review Date:
Investigate the presence of sewer relief valves in Banyule	Vincent King	31/06/2011	Quarterly		CID
Review Domestic Waste Water Management Plan	Kaylene Hodgkin	31/12/2011	Quarterly		CID

Residual Consequence: Moderate (3)

Residual Likelihood: Likely (B)

**Residual Risk Rating:
HIGH**

Approved by:	Responsible Officer:	Date of next review:
Council – 23/05/2011 MEMPC – 12/05/2011 MERO – 20/12/2010	Jacinta Brookes, Emergency Management Co-ordinator	31/12/2013

Incident: INTERNATIONAL INCIDENT **Risk No.: 12**

Hazard Identification and Risk Assessment

<p>Initial Risk Rating: MEDIUM</p>	<p>Elements at Risk:</p> <ul style="list-style-type: none"> People (health of returning residents) CALD communities Social connectedness and information Social wellbeing Perceptions of safety Financial independence and stable economy 	<p>Date: 20/12/2010</p>
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Risk Statement: [Hazard + Elements at Risk + Consequence (Vulnerability) = RISK]
 In recent years a number of "international incidents" have occurred; September Eleven terrorism attack, the war on Iraq, the tsunami in Thailand, and bombings in London, Madrid and Bali for example. All of these incidents have had an effect on the local community and the country as a whole.

Potential Hazards or Exposures:	<ul style="list-style-type: none"> Personal trauma Social isolation 	<ul style="list-style-type: none"> Social/cultural implications Public disorder/riots 	<ul style="list-style-type: none"> Communication overload/failure Economic Impact 	<ul style="list-style-type: none"> Community trauma Immigration issues
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Initial Consequence: Minor (2) The type of incident will determine likely consequences – these will be influenced by public health issues, cultural factors, extent of economic impact etc

Initial Likelihood: Possible (C) International events that have already occurred have affected the Australian community in a number of ways, and future international incidents are likely to have some impact our community

<p>What responsibilities does the Municipality have to manage this risk?</p> <ul style="list-style-type: none"> Maintain the MEMP and CERM arrangements 	<p>What responsibilities does the Community have to respond to this risk?</p> <ul style="list-style-type: none"> Follow instructions given by officials
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Other Agencies with risk management responsibility for this risk:

<p>Control</p> <ul style="list-style-type: none"> Department of Human Services Victoria Police 	<p>Support</p> <ul style="list-style-type: none"> Banyule City Council
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Is this risk tolerable? Yes No
WHY?
 The risk is tolerable as Council can not implement any strategies to reduce this risk further. The Federal Government has responsibility for major disaster, national security foreign aid and international relations.

Incident: INTERNATIONAL INCIDENT

Risk No.: 12

Risk Control and Treatment Strategies

Can Likelihood and / or Consequence be further reduced by new treatment strategies? Yes No

If no, WHY? If yes, HOW?

International incidents are beyond our control

PREVENTION/PREPAREDNESS

- Maintain the MEMP & CERM

RESPONSE

- Agency Specific response plans

RECOVERY

- Refer to Recovery Plan and refer to DHS if appropriate

Current Controls:

- State Emergency Health Response Plan
- Banyule City Council's Recovery Plan
- Existing community/social programs

Treatments Identified:	Responsible Officer	Project Due:	Report Frequency:	Completion Date:	Review Date:
none					

Residual Consequence: Minor (2)

Residual Likelihood: Possible (C)

**Residual Risk Rating:
MEDIUM**

Approved by:	Responsible Officer:	Date of next review:
Council – 23/05/2011 MEMPC – 12/05/2011 MERO – 20/12/2010	Jacinta Brookes, Emergency Management Co-ordinator	31/12/2013

Incident: CRITICAL INFRASTRUCTURE SITES (Yallambie Radiation Laboratories, Simpson Army Barracks and Austin Hospital) Risk No.: 13

Hazard Identification and Risk Assessment

<p>Initial Risk Rating: MEDIUM</p>	<p>Elements at Risk:</p> <ul style="list-style-type: none"> • People • Perceptions of safety • Water quality • Land degradation and contamination • Roads and transport • Residential property • Commercial/Industrial property 	<p>Date: 23/03/2011</p>
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Risk Statement: [Hazard + Elements at Risk + Consequence (Vulnerability) = RISK]
 Radioactive materials are held by ARPANSA at Yallambie to undertake radiological testing and calibration activities. It is possible that fire may affect the ARPANSA facility with minor to moderate consequence. Austin Health has an emergency response plan in place to deal with emergency that may affect them. Council has no control over what occurs within the hospital. Types of incidents that may occur include, siege, major health outbreak etc. Austin Hospital has a disaster plan called Code Brown, which they use to respond to significant emergencies in the community to prepare for an increase in attendance in casualties. The Simpson Army Barracks are under Federal Government Control. They are not declared a Critical Infrastructure in relation to terrorism by the State Counter Terrorism team, however there location with Banyule and their national defence association can be a concern to the surrounding community.

Potential Hazards or Exposures:	<ul style="list-style-type: none"> • Death • Illness or injury • Public Health 	<ul style="list-style-type: none"> • Air contamination and/or pollution • Environmental impact • Spills or run off into waterways 	<ul style="list-style-type: none"> • Property damage or loss • Release of possible toxic fumes from fire • Possible localised radiation hazard may result in minor internal contamination 	<ul style="list-style-type: none"> • Disruption to a primary and a collector road by emergency personnel
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Initial Consequence: Moderate (3)
 In the worst case, radiation contamination would be contained within the ARPANSA facility. Damage from a major fire would most likely be localised to the affected area and the spread of fire is unlikely. The consequence of an incident at the Simpson Army Barracks site could be major, however given the size of the site, and types of incidents anticipated, it is likely that the impact would be local. The Austin Health site is significant and if impacted could have a major consequence on the communities ability to access health services.

Initial Likelihood: Unlikely(D)
 Since 1978 there have been three minor incidents at ARPANSA involving fire. None have caused property damage. Fire safety equipment is regularly maintained and alarms are connected directly to the local fire brigade and ARPANSA has an emergency management plan. The Regulatory and Policy Branch of ARPANSA oversees the use of radioactive materials by ARPANSA in accordance with international best practice in radiation regulation, and consistent with the requirements for radiation protection of the Australian State and Territory regulatory authorities. The building was purpose-built and has been designed with engineered controls to limit the risk of exposure to employees, the public and the environment from radiation practices. Small quantities of low activity unsealed radioactive sources present a minor risk in the event of fire. A complete manifest of radioactive materials is maintained and these materials are locked in appropriate containers. As the Simpson Army Barracks site has been identified as non critical infrastructure in relation to terrorism, the likelihood of this site being targeted is rare. Other incidents that may occur on this site, should be locally contained and the likelihood of community impact is low. The likelihood of an incident occurring at the Austin Health site is possible given the nature of service and clients attending the facilities.

<p>What responsibilities does the Municipality have to manage this risk?</p> <ul style="list-style-type: none"> • Municipal Emergency Resource Officer to ensure the Agency has an emergency management plan 	<p>What responsibilities does the Community have to respond to this risk?</p> <ul style="list-style-type: none"> • None identified
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Other Agencies with risk management responsibility for this risk:

<p>Control</p> <ul style="list-style-type: none"> • Department of Health • Australian Defence Force • Austin Health • Victoria Police 	<p>Support</p> <ul style="list-style-type: none"> • Metropolitan Fire Brigade 	<ul style="list-style-type: none"> • Ambulance Victoria • VicRoads • VicSES
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Is this risk tolerable? Yes No
WHY?
 ARPANSA complies with all legislative requirements and has management systems in place to prevent the occurrence of a radioactive incident. The Simpson Army Barracks has been identified as non critical infrastructure in relation to terrorism. Austin Health has overall responsibility to ensure emergency plans and procedures are in place to deal with these situations if and when they occur.

Incident: CRITICAL INFRASTRUCTURE SITES (Yallambie Radiation Laboratories, Simpson Army Barracks and Austin Hospital)

Risk No.: 13

Risk Control and Treatment Strategies

Can Likelihood and / or Consequence be further reduced by new treatment strategies? Yes No

If no, WHY? If yes, HOW?

Incident occurrence at these sites can not be controlled by agencies or organisations.

ARPANSA controls are in place to:

- Control the outbreak of fire (alarms and sprinklers) and
- Ensure the security of radioactive sources (register and secure cabinets). Only small quantities of radioactive materials are stored at the site

PREVENTION/PREPAREDNESS

- Maintain the MEMP and CERM
- ARPANSA provides 24 hour access to expert radiation protection advice in the event of a radiation incident.

RESPONSE

- Support emergency services as required
- Support maintenance services as required by the MERC
- It is the responsibility of the state emergency response agencies with guidance from State Radiation Safety Officers to respond to a radiation emergency within their jurisdiction.

RECOVERY

- Activate the Recovery Plan if required
- Support emergency services as required by the MERC / MERO / MRM

Current Controls:

- Australian Radiation Protection and Nuclear Safety Act
- Radiation safety quality management system
- Federal Government and Defence Force governance
- Hospital and health accreditation systems

Treatments Identified:	Responsible Officer	Project Due:	Report Frequency:	Completion Date:	Review Date:
Develop traffic diversion plans for three (3) Critical Infrastructure sites	Daniel Kollmorgen	31/12/2011	Quarterly		CID

Residual Consequence: Moderate (3)

Residual Likelihood: Unlikely (D)

**Residual Risk Rating:
MEDIUM**

Approved by:	Responsible Officer:	Date of next review:
Council – 23/05/2011 MEMPC – 12/05/2011 MERO – 29/03/2011	Jacinta Brookes, Emergency Management Co-ordinator	31/12/2013