21.04 ENVIRONMENTAL RISKS

14/12/2017
C150

This clause provides local content to support Clause 13 (Environmental Risks), Clause 17 (Economic development) and Clause 19 (Infrastructure) of the State Planning Policy Framework.

Additional local content is also provided in Clause 21.10 to support implementation of both the State and Local Planning Policy Frameworks in a local area context.

21.04-1 Bushfire

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Areas susceptible to bushfire in Knox are predominantly focused on the interface between urban development and the foothills of the Dandenong Ranges and bushland in Lysterfield and are shown in Figure 1 below. Land use and development planning in these areas must minimise the risk to life, property and the environment by applying the precautionary principle in decision-making. It must also consider the appropriateness of the intensity and location of any use and/or development in the context of bushfire risk, directing new development to lower risk areas where appropriate.

Vegetation in the Dandenong Foothills and Lysterfield is particularly important for biological and landscape purposes. Development in these areas may be limited to both minimise bushfire risk and protect significant vegetation. Consideration may need to be given to tailored site specific responses to mitigate bushfire risk whilst also achieving protection of landscape and biodiversity values.

Key issues

- Identifying areas prone to bushfire.
- Managing development to minimise risk to life, property and the environment.
- Limiting new development in the Dandenong Foothills and Lysterfield where vegetation removal for bushfire management would affect significant vegetation.

Objective 1

To ensure that new development responds to bushfire risk to life and property.

Strategies

Where land is affected by a Bushfire Management Overlay:

1.1 Implement appropriate bushfire protection measures to reduce any risk of bushfire to an acceptable level.

1.2 Limit further subdivision and rezoning of land for urban purposes.

1.3 Require consideration of the location, nature and intensity of the use and/or development, including the number of additional persons that will be associated with the proposal, and the level of associated bushfire risk.

1.4 Direct new development to locations of lower bushfire risk where appropriate.

1.5 Require development to meet the requirements of the relevant fire authority in respect to fire fighting, water supply and emergency vehicle access.

Objective 2

Limit development in areas at high risk from bushfire where there is also significant vegetation of high biological and/or landscape value and where planned bushfire protection measures may be incompatible with the natural environment, landscape and biodiversity values.

Strategies

Where land is affected by a Bushfire Management Overlay:

2.1 Discourage the intensification of urban development in areas at high risk from bushfire events and which also have high biological and/or landscape values, particularly in the Dandenong Foothills and Lysterfield.

2.2 Limit new development where the extent of vegetation removal, required for bushfire management, would adversely affect the environmental or landscape values of land within the Dandenong Foothills and Lysterfield.

2.3 In areas of high landscape and biodiversity value, consider tailored defendable space and vegetation management responses that mitigate the bushfire risk to an acceptable level whilst retaining areas of highest biodiversity and landscape value.

21.04-2 Land use conflicts

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Exports from the manufacturing and wholesale trade account for a large proportion of the total gross revenue in Knox. In 2013, manufacturing and wholesale trade made up 40 per cent of the $19 billion of gross revenue from Knox industry. It is important to maintain the viability of industrial land by protecting it from the encroachment of commercial, residential and other sensitive uses. Conversely, in considering new industrial development, it is important to consider potential adverse impacts the development might have on surrounding sensitive uses, like noise and air emissions (odour and dust).

There are three active quarry sites within Knox as shown in Figure 1 below. The active George Street Quarry in Wantirna South is a Strategic Investigation Site. The other two quarry sites are both in Wellington Road, Lysterfield and provide a regionally significant source of hard rock aggregates for building and construction.

It is important to manage the interfaces between sensitive or commercial land uses and the active quarries, the Knox Transfer Station and other heavy industrial sites, in order to support ongoing operation of these facilities without exposing residents to adverse effects.

Key issues

- There are sensitive land uses and development sites in proximity to quarries and a waste transfer station;
- Encroachment of industry and quarries by sensitive uses and some commercial uses can impact industry operations and their viability;
- Protecting amenity of sensitive uses from residual air and noise emissions and landfill gas emissions.

Objective 3

To prevent conflict between commercial or sensitive uses with industry, waste recovery and natural resource extraction.

Strategies

3.1 Consider the need provide and maintain suitable separation distances between the following facilities and commercial or sensitive uses which may harm industry viability and to protect the amenity of sensitive uses:

- Lysterfield Quarry, Wellington Road.
- George Street Quarry in Wantirna South.
- Cathies Lane Transfer Station, George Street, Wantirna South.

3.2 Require applications for new industrial developments to consider the proximity and interface with existing commercial or sensitive uses, along with minimising the impacts of noise, odour, dust and traffic.

3.3 Maintain the viability and purpose of Knox's industrial land by minimising encroachment from non-industrial uses that are not complementary to the primary industrial use.

21.04-3 Closed landfills

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Knox has two closed landfills (Llewellyn Park Landfill and Cathies Lane Landfill) in Wantirna South, shown in Figure 1. In accordance with the Environment Protection Authority's (EPA) Publication 788.3 – *Best Practice Environmental Management: Siting, design, operation and rehabilitation of landfills,* August 2015 (Landfill BPEM), both closed landfills are categorised as Type 2 landfills as they contained putrescible waste. Use and development of these sites and land within proximity to these sites must consider environmental risks including land contamination and gas migration.

Key issues

- There are sensitive land uses and development sites located within the EPA recommended buffer distances from closed landfills.
- Proposed development and works within the recommended landfill buffer can pose a safety risk by potentially providing pathways for landfill gas migration and other adverse amenity impacts.

Objective 4

To manage the potential for adverse impacts associated with closed landfills, including gas migration.

Strategies

4.1 Implement the Environment Protection Authority recommended buffer distances included in Landfill BPEM (or as amended) for the closed landfills at Cathies Lane and Llewellyn Park, Wantirna South.

4.2 Where a proposed use and/or development encroaches into the Environment Protection Authority recommended buffer distances, have regard to Section 8.2.2 (Buffer distances and encroachment) of Landfill BPEM (or as amended).

21.04-4 Climate change resilience

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Global environmental issues can affect Knox at a local scale; these include air quality, greenhouse gas emissions and energy efficiency, noise, water quality and catchment management, land development and the loss of vegetation and waste management. Through responsible planning these issues can be better managed and mitigated.

Land use planning and development can have regard to climate change resilience by managing intensification of high-risk areas; encouraging sustainable design in all developments; reducing demand for the private car; and greening our urban areas, which are reflected in objectives and strategies throughout the Knox Municipal Strategic Statement.

Climate change can have major impacts on the environment and people and exacerbates environmental risks such as drought, changes in temperature, the urban heat island effect, and increased storm, flooding and bushfire events. Planning for land use and development should consider these with the view to mitigating the potential future impacts of climate change.

Key issues

- Adapting the built environment to mitigate the impacts of climate change.
- Increased temperatures in urban areas as a result of extensive hard surfaces.
- Increased severity and frequency of extreme weather events as a result of climate change.

Objective 5

To create an urban environment that is resilient to the impacts of climate change, in particular the urban heat island effect, heatwaves, droughts and storm events.

Strategies

5.1 Promote greater use of vegetation, including canopy trees and surface grasses, green roofs and other drought-tolerant green infrastructure in development.

5.2 Support the use of appropriate materials, colours and heat-reflective surfaces to buildings and permeable pavements and reduce sealed surfaces.

5.3 Support development that mitigates increased flood risk as a result of expected changes in storm and rainfall patterns from climate change.

5.4 Consider the impact of a changing climate on the Knox community and built environment when evaluating land use and development proposals.

21.04-5 Potentially contaminated land

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Land contamination can be a result of past land uses associated with industry, mining, agriculture and the handling, storing and disposal of waste or chemicals. In some circumstances, there is also the potential for off-site or groundwater contamination from neighbouring land uses and fill made up of contaminated imported soil. There are a number of potentially contaminated sites within Knox that may be redeveloped to a sensitive use. These sites require identification, testing and remediation where appropriate to ensure land is of a standard suitable for the intended new use or development.

Objective 6

To avoid harm to human health and the environment from contaminated land.

Strategies

6.1 Require applicants to provide an environmental site assessment, from a suitably qualified professional, where there is potential for contamination or the land use history is unclear, to determine if an environmental audit is necessary.

21.04-6 Implementation

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Policy Guidelines

- Apply State Environment Protection Policies in relation to siting and separation distances to industrial uses in consultation with the Environment Protection Authority.
- Apply Clause 22.02 (Industrial and Restricted Retail Sales Area Design local policy) to land in an Industrial 1 Zone or Commercial 2 Zone to manage siting, landscape buffers and visual amenity issues at the interface with residential land.
- Apply Clause 22.04 (Environmentally Sustainable Development local policy) to relevant development applications to improve the environmental sustainability of buildings to reduce greenhouse gas emissions and urban heat island effects.

Application of zones and overlays

- Apply a Bushfire Management Overlay to areas of high bushfire risk.
- Apply the Environmental Audit Overlay to potentially contaminated land that is rezoned to allow for a sensitive use.
- Apply the Vegetation Protection Overlay and Environmental Significance Overlay to significant environments and vegetation to protect and enhance existing vegetation to minimise climate change effects including the heat island impact.

Further strategic work

- Mitigate bushfire risk when planning for the redevelopment of key investigation sites or other large sites that are in a Bushfire Prone Area or in proximity to Lysterfield Park, Churchill National Park and Dandenong Ranges National Park.

- Investigate application of the Industrial 3 Zone to industrial areas to protect the amenity of surrounding sensitive uses, where appropriate.

Reference documents

Integrated City Strategy and Implementation Plan 2015-17, Knox City Council, 2015 (or as amended)

Knox City Plan (incorporating the Council Plan) 2013-17, Knox City Council, 2013 (or as amended)

Municipal Emergency Management Plan 2016-19, Knox City Council, 2016

Municipal Fire Management Plan 2015-18, Knox City Council, 2015

Figure 1 - Environmental Risks Map