

Westfield Eastgardens Planning Proposal

Date:	24/03/2022
For:	Sydney Region East – Alexandra Galea
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Following the submission of the technical note (doc no: 21449 TN-003, Rev 0, 05 Jul 2021) prepared by Sherpa Consulting to support the planning proposal for the Westfield Eastgardens Planning Proposal, the Department hazard team enquired about the reasons of the exceedance on the cumulative societal risk compared with BIP QRA 2018 Approved case. Scentre Group subsequently updated the technical note (doc no: 21449 TN-004, Rev 0, 23 Dec 2021) and provided to the Department for review on 18 February 2022.

This review is provided for the latest technical note (doc no: 21449 TN-004, Rev 0, 23 Dec 2021). This technical note is a risk assessment and will be referred as risk assessment in the following review.

Review

The planning proposal for Westfield Eastgardens is located within the area affected by the consequence from Botany Industry Park should an unlikely incident occurs. As such the land use safety consideration and, particularly, the effects on cumulative societal risk arise from this planning proposal to the most recent Botany Industrial Park Quantitative Risk Assessment dated December 2018 (BIP QRA 2018) is a critical consideration to ensure the planning proposal would not elevate the overall societal risk of BIP.

The Department is satisfied that the risk assessment has been prepared in accordance NSW Hazardous Industry Planning Advisory Paper (HIPAP) No.6 – Hazard Analysis and compared against the HIPAP No. 4 - Risk Criteria for Land Use Safety Planning. In accordance with HIPAPs, it assessed the individual risk and societal risk. It also demonstrated the effect on changes of cumulative societal risks comparing with the BIP QRA 2018 Approved Case. In addition, the risk assessment includes the technical assumptions same as the BIP QRA 2018.

Individual Risk

The individual risk is used to determine whether a parcel of land is subject to a risk exposure that is above the risk criteria for the specific land uses. The planning proposal is located approximately 280m north of the Botany Industrial Park and more than 400m from the nearest processing and storage areas. This location is outside of the risk criterion for sensitive uses. As such, the Department agrees with the findings of the risk assessment that Westfield Eastgardens complies with all individual risk criteria.



Societal Risk

Societal risk considers the risk of incidents from the hazard sources which may critically injure multiple people. The population assessment is critical to determining the societal risk. The risk assessment considers both the existing population and the additional population introduced by the planning proposal. This includes any residential and employment populations.

It undertook a detail population analysis to establish the existing population from the retail customers and employees. It also established the future population introduced from the planning proposal based on retail gross lettable area (GLA) and commercial areas from the new three towers. It also included the identical set of population from the existing and approved development surrounding the BIP other than the Eastgardens shopping centre.

The risk assessment indicated that the population introduced from the planning proposal would not further intensify the cumulative societal risk as indicated in the BIP QRA 2018 Approved Case. This is achieved by adjusting the population within the shopping centre building area that is located within the risk contour of 1×10^{-9} per year from BIP. This area is identified in Section A2 of Appendix A in the risk assessment.

The risk assessment identified that in order to maintaining the current cumulative societal risk level for BIP, the population within this area should not exceed 2,444 people, assuming 1 person per 16 m^2 . In order to give this effect, the GLA for the associated area is to be reduced from 14,152 m² to 11,711 m², or to approximately 83% of the proposed GLA.

Given the Applicant has agreed to amend the planning proposal to give effect to maintaining the population not exceeding 2,444 people within the area identified in Section A2 of Appendix A in the risk assessment, it is considered that the planning proposal can be supported on hazards and risk grounds. It does not intensify the cumulative societal risk for the BIP area, and satisfy all relevant risk criteria as stated in HIPAP 4.

It is important to ensure that future development applications associated with this planning proposal are consistent with findings of the risk assessment. Further population increase beyond 2,444 people within the area identified in Section A2 of Appendix A in the risk assessment must trigger re-evaluation of cumulative societal of risk based on the most updated BIP QRA findings.

Recommendation

The Department does not object to the planning proposal proceeding for a Gateway determination on hazard and risk grounds once it has been updated with the requirements of this letter. Nonetheless, the Department will still need to consider the strategic and site specific merit of the planning proposal if a Gateway request is received.