9.3.25 Specialised centre code

9.3.25.1 Application

1. This code applies to assessing a material change of use if:
2. accepted development subject to compliance with identified requirements, where acceptable outcomes of this code are identified requirements in a table of assessment for a material change of use (section 5.5) or a neighbourhood plan (section 5.9); or
3. assessable development where this code is an applicable code identified in the assessment benchmarks column of a table of assessment for a material change of use (section 5.5) or a neighbourhood plan (section 5.9); or
4. impact assessable development, to the extent relevant.
5. When using this code, reference should be made to section 1.5 and section 5.3.3.

Note—The following purpose, overall outcomes, performance outcomes and acceptable outcomes comprise the assessment benchmarks of this code.

Note—Where the proposed use in a Specialised centre zone precinct includes a residential use or mixed-use development component, the Centre or mixed use code, Multiple dwelling code, Rooming accommodation code or Short-term accommodation code may form assessment benchmarks where their purpose is applicable to the proposal. For example, major education and research facilities may include colleges or rooming accommodation integrated with other commercial, retail or educational activities on campus.

Note—Where this code includes performance outcomes or acceptable outcomes that relate to:

* air quality assessment, guidance is provided in the Air quality planning scheme policy;
* crime prevention through environmental design, guidance is provided in the Crime prevention through environmental design planning scheme policy;
* design for the reduction of graffiti, guidance is provided in the Graffiti reduction guidelines planning scheme policy;
* the storage of hazardous chemicals, guidance is provided in the Industrial hazard and risk assessment planning scheme policy;
* public realm design and landscape elements and public riverside facilities, guidance is provided in the Infrastructure design planning scheme policy;
* noise impact assessment, guidance is provided in the Noise impact assessment planning scheme policy;
* planting species selection, guidance is provided in the Planting species planning scheme policy;
* refuse and recycling, guidance is provided in the Refuse planning scheme policy;
* access and on-site parking and servicing provisions, guidance is provided in the Transport, access, parking and servicing planning scheme policy.

Editor's note—Some land in the Specialised centre zone is regulated by other legislation or is not subject to planning and development control under the planning scheme. For example, land designated for development (such as major education facilities) under section 35 of the Act is accepted development, to the extent that the development would otherwise be accepted development subject to compliance with identified outcomes, or assessable development, under the planning scheme. Details of designations for development are identified in Schedule 5. Where planning control of a site in the Specialised centre zone is relinquished by the relevant legislation or governing authority, the planning scheme provides a default position for describing and assessing desired development outcomes.

Editor's note—For a proposal to be accepted development subject to compliance with identified requirements, it must meet all the identified acceptable outcomes of this code and any other applicable code. Where it does not meet all identified acceptable outcomes, the proposal becomes assessable development and a development application is required. Where a development application is triggered, only the specific acceptable outcomes that the proposal fails to meet need to be assessed against the corresponding assessable acceptable outcomes or performance outcomes and relevant overall outcomes. Other identified acceptable outcomes that are met are not assessed as part of the development application.

9.3.25.2 Purpose

1. The purpose of the Specialised centre code is to assess the suitability of development to which this code applies.
2. The purpose of the code will be achieved through the following overall outcomes:
3. Development contributes to the specific mix or type of activities envisaged in the zone precinct in an integrated and co-located manner to maximise site multifunctionality and efficiency of the use of land, and physical and social infrastructure, particularly where the proposed specialised centre purpose is not intended or cannot be easily accommodated in other centre zones at the scale or concentration required for optimal functioning.
4. Development protects the viability of the specialised centre purpose by excluding development that could limit the ongoing operation of existing uses or prejudice the establishment of new activities appropriate to the specific nature of the particular zone precinct.
5. Development for purposes not anticipated in the zone precinct provides for safety, quality design and integration with the surrounding area, and offers compensatory community benefits.
6. Development is appropriately located according to the activities envisaged in the zone precinct, and building and landscape design are of a scale, height, bulk and nature that provide a high level of amenity, are generally consistent with the character of the area, transition sensitively to surrounding uses, and reinforce the subtropical nature of the city.
7. Development of buildings and structures in the particular zone precinct is varied to present a variety of building forms, materials and facade treatments.
8. Development is provided with infrastructure, servicing and utilities commensurate with the level of service demands of the use.
9. Development is supported by complementary uses of appropriate scale and purpose to directly serve the employees and activities of the zone precinct, and which do not compromise the commercial, retail or community service role and function of nearby centre activities.
10. Development achieves satisfactory standards in minimising the potential adverse impacts (including glare, odour, light, noise, traffic, parking, servicing and hours of operation) on the health, safety and amenity of adjoining sensitive land uses, predominantly through maintaining adequate buffering between these land uses.
11. Development achieves a satisfactory standard of environmental performance by integrating into development principles of innovative, sustainable and efficient design, construction and operation, to encourage water conservation and responsiveness to climate.
12. Development maintains or enhances road, rail, public transport and active transport connectivity and accessibility between the specialised centre and key destinations to improve efficient and safe movement of people and goods, and a high level of accessibility for employees and visitors/patrons of the specialised centre.
13. Development of highly accessible world class venues for a use which is a significant economic driver, such as a university, consolidates the specialised centre's role in facilitating growth in allied industries such as research and development; drawing visitors and students to the region; and functioning as a major employment generator.

9.3.25.3 Performance outcomes and acceptable outcomes

Table 9.3.25.3.A—Performance outcomes and acceptable outcomes

|  |  |
| --- | --- |
| Performance outcomes | Acceptable outcomes |
| Section A—If for accepted development subject to compliance with identified requirements (acceptable outcomes only) or assessable development | |
| PO1  Development ensures that the hours of operation, including activities or operations associated with rubbish trucks, delivery vehicles, patrons, plant, motors, exhaust fans and other equipment, are:   1. consistent with reasonable community expectations for the use and consistent with the purpose of the zone or zone precinct; 2. controlled so that the use does not impact on the amenity of residences within the building within which the use is located, and nearby sensitive uses. | AO1.1  Development with a rear or side boundary to a sensitive use, limits the hours of operation for the non-residential component of the development to between 7am and 6pm. |
| AO1.2  Development limits the operation of delivery vehicles to between 7am and 6pm Monday to Saturday, excluding public holidays. |
| PO2  Development complies with the noise (planning) criteria in Table 9.3.25.3.B, low frequency noise criteria in Table 9.3.25.3.C and night-time noise criteria in Table 9.3.25.3.D at a sensitive use.  Notes—   * A noise impact assessment report prepared in accordance with the Noise impact assessment planning scheme policy can assist in demonstrating achievement of this performance outcome. * Where the development involves an activity regulated by the Entertainment Venues and Events Local Law, the operating noise levels and requirements may be specified on a permit or approval issued under that law. | AO2  Development does not generate noise which is clearly audible and creates a disturbance within a sensitive use. |
| PO3  Development:   1. avoids or minimises air emissions; 2. complies with the following criteria at a sensitive use: 3. air quality (planning) criteria in Table 9.3.25.3.E; 4. odour criteria in Table 9.3.25.3.F.   Note—An air quality impact report prepared in accordance with the Air quality planning scheme policy can assist in demonstrating achievement of this performance outcome. | AO3.1  Development:   1. does not involve activities that generate air emissions, including odour, dust, fumes or smoke beyond the site; 2. ensures that if food odour is released, exhaust is discharged vertically and directed away from a sensitive use and exhaust vents are separated from a sensitive use by the following distances: 3. a minimum of 6m horizontally; 4. a minimum of 2m above a thoroughfare or roof with regular foot traffic. |
| AO3.2  Development ensures that vents and exhausts for a below-ground car park or bus station are separated by a minimum 15m from a sensitive use. |
| PO4  Development for air conditioning, refrigeration and other mechanical plant, vents, exhausts and refuse and recycling storage areas are compatible in appearance and arrangement with nearby premises to ensure adverse amenity impacts associated with the development are ameliorated. | AO4  Development ensures that air conditioning, refrigeration and other mechanical plant, vents, exhausts and refuse and recycling storage areas are:   1. located so that they are not visually obtrusive when viewed from the street; 2. screened from an adjacent sensitive use. |
| PO5  Development ensures that the risk to public safety, property and the environment from technological hazards such as fire, explosion and toxic release from the development achieves the hazard and risk criteria in Table 9.3.25.3.H.  Note—A preliminary hazard analysis report prepared in accordance with the Industrial hazard and risk assessment planning scheme policy can assist in demonstrating achievement of this performance outcome. | AO5  Development does not include the storage of dangerous goods and combustible liquids above the volumes and quantities identified in Table 9.3.25.3.G. |
| PO6  Development provides complementary uses which:   1. support and enhance the purpose of the zone precinct; 2. do not limit or compromise the purpose of the zone precinct; 3. do not compromise the commercial, retail or community service role and function of nearby centres. | AO6  Development:   1. serves the needs of workers, visitors or businesses established or envisaged on the site; 2. does not target visitors not otherwise visiting the site; 3. has a direct relationship with businesses and activities on the site; 4. does not conflict with the establishment or ongoing operation of uses on the site. |
| PO7  Development for urban purposes is serviced adequately with:   1. water supply which meets the stated standard of service for intended use and fire-fighting purposes; 2. waste disposal. | AO7  Development is provided with:   1. reticulated water supply; 2. reticulated sewerage or appropriate on-site sewerage, if the development has no access to a reticulated sewer. |
| PO8  Development in the City core and City frame as identified in Figure a in the Transport, access, parking and servicing code provides parking spaces at rates to discourage private car use and encourage walking, cycling and the use of public transport. | AO8  Development in the City core and City frame as identified in Figure a of the Transport, access, parking and servicing code apply parking rates in compliance with the standards in the Transport, access, parking and servicing planning scheme policy. |
| PO9  Development outside of the City core and City frame as identified in Figure a of the Transport, access, parking and servicing code provides the number of on-site parking spaces to accommodate design peak parking demands without overflow parking to an adjacent premises or adjacent streets. | AO9  Development outside of the City core and City frame as identified Figure a in the Transport, access, parking and servicing code provides on-site parking numbers:   1. in compliance with the standards in the Transport, access, parking and servicing planning scheme policy; or 2. that does not result in on-street parking if no parking standards are identified in the Transport, access, parking and servicing planning scheme policy. |
| PO10  Development of outdoor lighting does not have an adverse impact on any person, activity or fauna because of light emissions, either directly or by reflection. | AO10.1  Development ensures that the technical parameters, design, installation, operation and maintenance of outdoor lighting complies with the requirements of AS 428-1997 Control of the obtrusive effects of outdoor lighting.  Note—The effects of outdoor lighting should be mitigated where windows of habitable rooms of nearby dwellings will be illuminated beyond maximum permissible values outlined in AS 4282-1997 Control of the obtrusive effects of outdoor lighting. |
| AO10.2  Development of floodlighting is restricted to the types that give no upward component of light where mounted horizontally, such as a full cut off luminar. |
| Section B—If for assessable development | |
| PO11  Development or redevelopment for a purpose not anticipated in the relevant Specialised centre zone precinct:   1. is safe, well designed and integrated with the surrounding area; 2. offers compensatory community benefits.   Note—Compliance can be demonstrated through a redevelopment master plan. | AO11  No acceptable outcome is prescribed. |
| PO12  Development not typically anticipated in the relevant Specialised centre zone precinct does not hinder or constrain the ongoing operation and future economic opportunities of uses expected within the relevant Specialised centre zone precinct. | AO12  No acceptable outcome is prescribed. |
| PO13  Development provides complementary uses which:   1. support and enhance the purpose of the zone precinct; 2. do not limit or compromise the purpose of the zone precinct; 3. do not compromise the commercial, retail or community service role and function of nearby centres. | AO13  Development:   1. serves the needs of workers, visitors or businesses established or envisaged on the site; 2. does not target visitors not otherwise visiting the site; 3. has a direct relationship with businesses and activities on the site; 4. does not conflict with the establishment or ongoing operation of uses on the site. |
| PO14  Development results in building height, scale and bulk which:   1. is consistent with the purpose of the zone precinct; 2. is compatible with the predominant built form of nearby buildings in the locality or where planned for the site through a neighbourhood plan; 3. provides a scale transition between large specialised centre buildings and surrounding residential areas and the streetscape; 4. minimises the visual impacts of the sometimes large-scale built form typically associated with the relevant Specialised centre zone precinct; 5. ensures the proposed use does not overshadow adjoining residential premises or public open spaces. | AO14.1  Development has the following gross floor area:   1. the maximum gross floor area in a neighbourhood plan applying to the site; or 2. specified in Section C of this code if the maximum gross floor area is not specified in a neighbourhood plan; or 3. a maximum site cover of 35% if the maximum gross floor area is not specified in a neighbourhood plan or in Section C of this code. |
| AO14.2  Development has:   1. the building height specified in a neighbourhood plan applying to the site; or 2. the building height specified in Section C of this code, if the maximum building height is not specified in a neighbourhood plan; or 3. a maximum building height of 3 storeys, if a maximum building height is not specified in a neighbourhood plan or in Section C of this code. |
| AO14.3  Development ensures that the building height of a building within 10m of a sensitive use is stepped down to a maximum of 2 storeys and 9.5m.  Note—Built to boundary walls are not permitted where a building height transition is required. |
| AO14.4  Development for a bulky or expansive building is partially sleeved by smaller, complementary uses, ancillary facilities or design features fronting the external environment, such as ground-storey administration offices, entrance foyers or forecourts. |
| PO15  Development adjacent to or opposite an existing residential or other sensitive use ensures that site layout, building setbacks, landscaping and buffering:   1. are compatible in appearance and arrangement with nearby premises; 2. ensure adverse amenity impacts associated with the use are ameliorated. | AO15.1  Development ensures that setbacks of buildings and other structures from the primary street frontage are a minimum of 6m. |
| AO15.2  Development provides a landscaped strip of a minimum width of 3m along the frontage of the site. |
| AO15.3  Development located across a street from a sensitive use provides articulation and variations in the building line setback at least every 10m. |
| AO15.4  Development with a rear or side boundary to a sensitive use ensures that:   1. the building setback from the boundary is a minimum of 3m or half the height of the building at that point, whichever is greater; 2. the boundary is landscaped with mature trees of a type appropriate for the locality, planted at intervals that screen between the development and the sensitive use; 3. an acoustic and visual screen fence of at least 1.8m high is erected and maintained along the entire length of the boundary where adjoining sensitive uses. |
| PO16  Development for the storage of goods, containers, materials, machinery or tools on-site ensures that they:   1. are stored in a safe manner; 2. do not detract from the visual amenity of the local area; 3. have a minimal impact on the residential amenity of premises surrounding the site. | AO16  Development for a storage area for goods, containers, materials, machinery or tools of trade associated with the development is not visible from the primary street frontage, by:   1. locating the storage area within a building; or 2. locating the storage areas at the rear of a building; or 3. locating any outdoor hardstand storage areas at least 3m from the primary street frontage and providing and maintaining a continuous landscape screening strip of a minimum 3m wide along the frontage of the site. |
| PO17  Development of a public plaza:   1. is provided where identified in a neighbourhood plan or master plan; 2. designed and sited to: 3. promote pedestrian and cyclist movement; 4. link with public transport interchanges; 5. provide options for the flexible use of the space by the community; 6. encourage a high level of accessibility and activation. | AO17  Development designs a new public plaza or enhances an existing public plaza, in compliance with the specifications of the Infrastructure design code and Infrastructure design planning scheme policy. |
| PO18  Development provides a building form and design, including building facades, elevations, openings and setbacks, which are varied by elements such as awnings, articulated wall panels, windows, sun protection, planting, recesses, splays and projections, and a range of materials, colours, textures or artworks to:   1. activate and address street frontages; 2. reduce building bulk; 3. avoid large blank walls; 4. reduce the height impact of the building and vary the vertical profile. | AO18.1  Development provides a building design which incorporates articulated walls with horizontal and vertical variation, solids and voids, shadow, detail and colour to reduce the impacts of building height and expansive blank walls. |
| AO18.2  Development ensures that the length of a uniform treatment of elevations above ground level without variation, articulation or openings is no more than 30m. |
| AO18.3  Development maximises recessed forms and openings around the building perimeter to allow external spaces to merge with building interiors and enhance subtropical design outcomes, except where safety and security would be compromised. |
| AO18.4  Development for a semi-enclosed arcade and shaded walkway is provided at the ground storey of a building adjoining a pedestrian route, using awnings, pergolas or other devices which may be suspended, freestanding, supported on columns or cantilevered. |
| AO18.5  Development incorporates external landscaping or planting on upper building levels, particularly on podiums or roof decks if the building design allows. |
| PO19  Development for a building is to be finished with high-quality materials, selected for their durability and the contribution they make to the character and function of the zone precinct. | AO19  Development provides materials and finishes which are easily maintained and do not readily stain, discolour or deteriorate. |
| PO20  Development ensures that:   1. roofs are not cluttered by plant and equipment; 2. building caps, parapets, skillions and rooftops contribute to the architectural distinction of the building and create a coherent roofscape in the zone precinct; 3. services structures, lift motor rooms and mechanical plant are designed as an architectural feature of the building or are screened; 4. where rooftops are used for open space, plant and equipment is visually and acoustically screened from the communal open space; 5. the rooftop is designed to enable future inclusion of communication structures or telecommunications infrastructure in an unobtrusive manner. | AO20  No acceptable outcome is prescribed. |
| PO21  Development provides a high-quality streetscape through landscape and footpath works which are consistent with the desired role and function of the street in the Streetscape hierarchy overlay map. | AO21  Development provides for street trees, furniture, lighting, footpath and kerb treatments in compliance with the road corridor design standards in the Infrastructure design planning scheme policy. |
| PO22  Development ensures the building siting and design achieves a pleasant and manageable environment by allowing a passage of cooling breezes, and employing sun-control devices, to reduce glare, shade buildings and maintain comfortable indoor temperatures. | AO22.1  Development use is orientated to allow good access to sunlight and breezes. |
| AO22.2  Development ensures that the window placement and internal layout allows cross ventilation. |
| PO23  Development of the building has regard for any wind generation or wind tunnel effects it may cause. | AO23.1  Development of outdoor pedestrian spaces is protected from adverse wind impacts. |
| AO23.2  Development of ventilation in and around buildings is promoted through appropriate building forms, breezeways, open courtyards and landscaped areas. |
| PO24  Development for a building does not incorporate types of glass or other surfaces likely to reflect specular rays that could create undue nuisance, discomfort or hazard to uses in the zone precinct or surrounding locality. | AO24.1  Development ensures that the reflectivity of roofing materials does not impact on the amenity of adjoining premises. |
| AO24.2  Development ensures that any wall or glass material has:   1. a level of light reflectivity of not greater than 20%; 2. a level of heat transmission of not less than 20%. |
| PO25  Development for a fence or non-building wall:   1. is visually attractive and contributes to or blends with planted landscaping and building materials; 2. is designed and detailed to provide visual interest to the streetscape; 3. provides an effective visual and acoustic screen to an adjoining sensitive use; 4. assists in highlighting entrances and pedestrian paths. | AO25  Development for a fence and non-building wall:   1. if having a common boundary with a sensitive use, is a minimum of 2m high, acoustic fence and incorporates planted landscaping; 2. if an extension of a retaining wall or earth batter, is landscaped or planted. |
| PO26  Development provides appropriate screening and buffering to a neighbouring sensitive use so that the visual amenity is maintained or improved. | AO26.1  Development provides:   1. if a building wall with no openings is the closest element of the proposal to a residential area, a densely planted landscaped buffer at least 3m wide; or 2. if a building wall with openings is the closest element of the proposal to the residential area, a densely planted landscaped and screened buffer area at least 6m wide. |
| AO26.2  Development provides buffers along the common side and rear boundaries, which consists of tall trees and shrubs, including a mix of fast-growing pioneer species and mature stock of slower growing permanent species, that will form a complete visual screen of a minimum 4m in height with 3 years of planting. |
| AO26.3  Development of all external areas are landscaped or sealed. |
| PO27  Development provides vehicular movement areas and pedestrian and vehicular accesses to the specialised centre use that are designed and located to:   1. minimise on-site and off-site safety hazards and conflicts between pedestrians and vehicles; 2. minimise impacts on local traffic; 3. ensure the use is highly accessible, with convenient and efficient pedestrian or vehicular ingress to or egress from the premises; 4. reduce the visual amenity impacts on the streetscape and adjoining residential premises; 5. integrate different components of the site or zone precinct, and not quarantine any elements of the development.   Note—Accesses are provided for staff, patrons and visitors in compliance with the Transport, access, parking and servicing planning scheme policy. | AO27.1  Development ensures buildings and activity areas are located to prevent potentially hazardous vehicular or pedestrian movements. |
| AO27.2  Development minimises the number of vehicle accesses from the street. |
| AO27.3  Development ensures that the location of accesses maintains the integrity, quality and primacy of footpaths, with convenient and safe pedestrian access provided to the site, along building edges, and through car parks. |
| AO27.4  Development provides clear, continuous, convenient and safe walking and cycling access from nearby centres, adjoining tenancies, public transport infrastructure and other public areas. |
| AO27.5  Development provides finished levels that allow easy pedestrian, cyclist, vehicular and car parking interconnection between premises and buildings within the zone precinct. |
| AO27.6  Development provides common accesses and consolidated parking areas which are shared by different activities and land uses within the zone precinct. |
| PO28  Development designs and locates car parking areas to ensure that employee, patron and visitor parking do not detract from the amenity of nearby residential areas and the streetscape.  Note—On-site parking areas are provided for staff, patrons and visitors in compliance with the Transport, access, parking and servicing planning scheme policy. | AO28.1  Development of all car parking, servicing activities and deliveries occur on site. |
| AO28.2  Development of large areas of car parking is interspersed with buildings, shade structures or landscaping, to reduce visual prominence. |
| AO28.3  Development for car parks maintains the amenity of the street and adjacent premises by locating car parking:   1. at the rear of buildings; or 2. if the site is opposite a sensitive zone, at-grade in the front setback, other than the landscaped buffer. |
| AO28.4  Development provides a minimum 2m wide landscaped buffer along the common side and rear boundaries between vehicle accesses and parking and movement areas, and a sensitive use. |
| AO28.5  Development ensures car parking areas used at night are acoustically screened from adjoining residential dwellings. |
| AO28.6  Development for a multistorey above-ground parking structure ensures that:   1. the facade avoids sloping ramps, strong horizontal banding of spandrel beams, or features with an excessive vertical emphasis; 2. openings in parking structure facades are screened to hide the parking operation.   Note—For example, multistorey parking structures may be installed at specialised centre uses with high-volume parking demand, such as entertainment and conference facilities, large-format retail premises that entail car-based access, or to accommodate student parking at major education facilities. |
| PO29  Development ensures servicing, storage, and waste disposal and collection areas are:   1. unobtrusive; 2. located and managed so that adverse impacts on nearby sensitive uses, neighbouring properties and the public domain are minimised. | AO29  Development reduces the visual impacts of loading bays, site storage and access points for waste collection by:   1. buffering with appropriate landscaping; 2. locating away from public spaces, primary street frontages and sensitive uses.   Note—Refer to the Refuse planning scheme policy for guidance. |
| PO30  Development ensures that landscape design:   1. contributes positively to the subtropical character, amenity and microclimate of the site and streetscape; 2. maximises passive cooling and heating within the site; 3. creates an attractive street frontage, where planting enhances the view of the use from key public vantage points and residential areas; 4. incorporates bold landscape elements that complement the scale and bulk of the built form associated with the use. | AO30  Development ensures that landscaping design, location and species selection of street trees and planting beds is integrated with the building design and site layout and is in compliance with the Landscape work code and Planting species planning scheme policy. |
| PO31  Development on a site larger than 1000m2 which allows for the placement of underground services and structures incorporates deep planting which:   1. is established in the natural ground and is open to the sky, with access to light and rainfall; 2. is sited to retain significant trees or grouped with deep-planted areas on an adjacent site; 3. is planted with large subtropical tree species which, at maturity are complementary in scale and height to the building form; 4. balances hardstand areas and provides shade and informal recreation spaces which are of a size and layout directly accessible from ground storey building tenancies or the street frontage. | AO31.1  Development provides deep planting which:   1. incorporates subtropical tree species in compliance with the Planting species planning scheme policy; 2. is located to retain and augment existing large trees on site, and achieves continuity with deep planting adjoining the site. |
| AO31.2  Development ensures that the development footprint provides for a minimum 10% of the site to be allocated for deep planting, with a minimum dimension of 4m in any direction.  Note—Deep planting requirements form part of the overall open space provision for the development site, and are not an additional impost. |
| AO31.3  Development ensures that each deep-planting area has a minimum area of 25m2. |
| AO31.4  Development ensures that each deep-planting area is directly accessible from the ground storey of development. |
| PO32  Development provides landscaping and shade trees for at-grade car parks and along accesses and movement areas to:   1. provide shade for pedestrians; 2. provide legibility and enhance pedestrian safety; 3. soften the built form and improve the urban landscape amenity. | AO32.1  Development provides shade trees in open-air car parking areas at a ratio of 1 tree for each 6 car parking spaces. |
| AO32.2  Development provides trees planted in car parking areas in compliance with the Landscape work code and the Planting species planning scheme policy. |
| AO32.3  Development provides a minimum 2m wide landscaped buffer along common side and rear boundaries between vehicle accesses and parking and movement areas, and a sensitive use. |
| PO33  Development presents vacant land as attractive temporary parkland. | AO33  Development ensures that if a building is demolished and, for whatever reason, redevelopment is delayed for more than 3 months, the following works are carried out:   1. the site is cleared of all rubble, debris and demolition materials; 2. the site is levelled to the same level as the adjoining footpath and turfed so it can be mowed; 3. the site is landscaped with perimeter planting consisting of advanced specimens of fast-growing species in accordance with the Planting species planning scheme policy; 4. drainage is provided to prevent ponding; 5. the site is maintained so there is no sediment run-off onto adjacent premises, roads or footpaths; 6. the site is maintained to ensure no nuisance to adjacent premises, roads or footpaths; 7. public access is provided where public safety can be maintained. |
| PO34  Development adjoining or opposite major transport infrastructure:   1. provides a high level of personal and community safety; 2. facilitates physical and visual integration with the station. | AO34  Development adjoining or opposite major transport infrastructure:   1. creates a vibrant and attractive street-level environment that activates edges adjoining the transport infrastructure; 2. maintains views and enables casual surveillance of surrounding streets and public spaces and transport infrastructure entry points and platforms; 3. facilitates safe, logical and direct pedestrian access to the transport infrastructure station entry points. |
| PO35  Development creates a safe environment by incorporating the key elements of crime prevention through environmental design. | AO35  Development incorporates the key elements of crime prevention through environmental design in its layout, building and structure design and landscaping by:   1. facilitating casual surveillance opportunities and including good sightlines to publicly accessible areas such as car parks, pathways, public toilets and communal areas; 2. defining different uses and ownerships through design and restricting access from non-residential uses into private residential dwellings; 3. promoting safety and minimising opportunities for graffiti and vandalism through exterior building design and orientation of buildings and use of active frontages; 4. ensuring publicly accessible areas such as car parks, pathways, public toilets and communal areas are well lit; 5. including way-finding cues; 6. minimising predictable routes and entrapment locations near public spaces such as car parks, public toilets, ATMs and communal areas.   Note—For guidance in achieving the key elements of crime prevention through environmental design, refer to the Crime prevention through environmental design planning scheme policy. |
| PO36  Development reduces the potential for graffiti and vandalism through access control, canvas reduction and easy maintenance selection. | AO36  Development incorporates graffiti and vandalism prevention techniques in its layout, building or structure design and landscaping, by:   1. denying access to potential canvases through access control techniques; 2. reducing potential canvases through canvas reduction techniques; 3. ensuring graffiti can be readily and quickly removed through easy maintenance selection techniques.   Note—For guidance on graffiti and vandalism prevention techniques, refer to the Graffiti prevention planning scheme policy. |
| Section C—If for assessable development in a particular zone precinct  Note—The performance outcomes and acceptable outcomes described below provide more detailed assessment benchmarks for development in particular zone precincts within the Specialised centre zone. To the extent of any contrary direction or inconsistency with the general code provisions listed above, these more specific performance outcomes and acceptable outcomes prevail. | |
| If in the Specialised centre zone – Large-format retail zone precinct | |
| PO37  Development for reconfiguring a lot ensures the dimensions of a lot are of a size and shape which cater for large-format retailing activities, where any requirements in relation to plot ratio, gross floor area, site cover, setbacks, car parking and other standards required by the planning scheme or a building regulation can continue to be met. | AO37  No acceptable outcome is prescribed. |
| PO38  Development is appropriate to the specific nature, function and large-scale built form typically associated with the Large-format retail zone precinct. | AO38  Development ensures that the premises are:   1. used for the sale or hire of goods of a bulky nature; 2. not used for day-to-day retailing functions for the sale of food, clothing items, footwear or personal effects, unless their sale is ancillary to the sale or hire of bulky goods. |
| PO39  Development provides a composition of uses which minimises competition impacts on the surrounding centres network and reduces demand for private vehicle travel by consumers seeking convenience services. | AO39  Development does not include centre activities such as supermarkets, restaurants, department stores and grouped small-scale tenancies. |
| PO40  Development has a site area, layout, building orientation and setbacks which:   1. are commensurate with the intent of the Large-format retail zone precinct for the display and sale of bulky goods; 2. minimise amenity impacts on an adjoining sensitive use, or where viewed from the road. | AO40.1  Development has a site cover which does not exceed 45%. |
| AO40.2  Development provides a minimum 15m setback from the building to the primary street frontage. |
| PO41  Development building height and scale is appropriate for the display and sale of bulky goods. | AO41.1  Development has a maximum building height of:   1. 15m; or 2. 9.5m within 20m of land in the Character residential zone or Low density residential zone. |
| AO41.2  Development for the purpose of retailing bulky goods has a minimum tenancy size of 500m2. |
| AO41.3  Development provides tenancies with large floor plates designed for large-format bulky goods retailing activities such as showrooms that may be sleeved by smaller tenancies fronting the external environment, to:   1. activate the building facade; 2. provide spaces for complementary uses such as food kiosks that serve visitors and employees in the zone precinct. |
| PO42  Development ensures that the design of building facades avoids large blank walls, allows for signage and addresses street frontages. | AO42.1  Development is orientated to address the highest order street frontage. |
| AO42.2  Development results in a building design that provides for facade articulation which incorporates:   1. freestanding wall panels; 2. pedestrian awnings to the front and side elevations; 3. articulated wall panels; 4. textural and material variation. |
| AO42.3  Design of facades allows for large-scale signage. |
| PO43  Development minimises impacts on local traffic and streetscape amenity, being located and designed to:   1. facilitate safe and efficient accessibility from higher order roads; 2. create an internal integrated vehicle circulation system between sites; 3. minimise the number of vehicle accesses; 4. accommodate convenient vehicle access, servicing, loading, parking and manoeuvring areas for customers, visitors, employees and service providers; 5. minimise traffic hazards and inconvenience to pedestrians moving through and around the site. | AO43.1  Development is not accessed from a minor road. |
| AO43.2  Development for all parking, manoeuvring, loading and servicing occurs on site. |
| AO43.3  Development provides integrated car parking and access between adjoining large-format retail premises through the creation of internal easements and shared access driveways and car parking.  Note—Creation of easements will require an application for reconfiguring a lot. |
| AO43.4  Development located opposite a residential area may provide parking at-grade in the front setback, other than the landscaped buffer, to provide greater horizontal separation between residences across the road and the large format retail premises. |
| If in the Specialised centre zone – Marina zone precinct | |
| Note—Prescribed tidal work in the Specialised centre zone – Marina zone precinct is assessed in accordance with the following:   * the Prescribed tidal work code in the planning scheme; * the IDAS code for development applications for prescribed tidal work in Schedule 4A of the Coastal Protection and Management Regulation 2003; * AS3962-2001 Guideline for design of marinas and AS4997-2005 Guidelines for the design of maritime structures. | |
| PO44  Development ensures that the height and design of buildings and other structures unique to marina activities respects the amenity of the foreshore location. | AO44.1  Development has a maximum building height of 14m if a mixed use development that combines marina-related activities and short-term accommodation for tourists. |
| AO44.2  Development of boat storage racks and other infrastructure such as cranes are located to minimise impacts on the visual amenity of the streetscape and nearby residential premises. |
| PO45  Development of maritime facilities and structures such as batters, revetment and retaining walls, marina basin lock systems and seawalls, are designed and constructed using proven methods, materials and technology to ensure:   1. structural soundness, integrity, stability, safety and longevity; 2. ease of maintenance; 3. minimum whole-of-life cost; 4. impacts from flooding, water seepage, tidal influences and hydrodynamic changes are minimised; 5. an attractive appearance appropriate to the surrounding area. | AO45  Development of maritime facilities and structures are designed and constructed in compliance with the standards for the structures in the Infrastructure design planning scheme policy, and certified by a Registered Professional Engineer Queensland. |
| PO46  Development for small-scale office uses is limited and established only if the office has a direct association with the marina activities. | AO46  Development of an office is complementary to the marina activities and has a maximum gross floor area of 250m2. |
| PO47  Development provides for safe public access along the water’s edge to and from publicly accessible areas or other maritime facilities. | AO47  Development provides a pedestrian movement corridor which is a minimum of 4m wide along the water’s edge from the top edge of the bank, to allow for public access along the water frontage and to maritime facilities. |
| If in the Specialised centre zone – Mixed industry and business zone precinct | |
| PO48  Development ensures that the height and design of buildings and other structures is commensurate to the nature and function of industrial, manufacturing or distribution activities typical within the Mixed industry and business zone precinct, with taller structures provided if required for specific industrial processes. | AO48  Development has a maximum building height of:   1. 15m; or 2. 9.5m within 20m of land in the Character residential zone or Low density residential zone. |
| PO49  Development protects nearby sensitive uses from unreasonable visual and amenity impacts. | AO49  Development of higher impact activities, large-scale built form and intensive uses are located centrally on the site to provide separation from a sensitive use on adjoining premises. |
| PO50  Development may provide for complementary uses such as food and drink outlets, offices, finance services, community facilities and convenience shops that complement mixed industry and business uses in the zone precinct, where they:   1. provide goods and services that directly serve the needs of local businesses and the immediate workforce within the zone precinct; 2. are established at accessible locations; 3. do not compromise the commercial, retail or community service role and function of nearby centre activities; 4. will not prejudice the establishment or operation of the primarily industrial uses within the area. | AO50  Development of a tenancy for a complementary use does not result in a total gross floor area, excluding any external dining areas, that exceeds:   1. 1,000m2 for a community facilities node; 2. 1,000 m2 for an office; 3. 250m2 all other complementary uses. |
| PO51  Development site layout and arrangement of lots provides for a wide range of industry and business uses and facilitates opportunities for future reconfiguring a lot use adaptations to meet emerging industry demands. | AO51  Development provides a minimum:   1. lot size of 1,000 m2; 2. site frontage width of 20m. |

Table 9.3.25.3.B—Noise (planning) criteria

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Criteria location | Intrusive noise criteria  Day, evening and night LAeq,adj,T are not greater than the RBL plus the value in this column for the relevant criteria location, where T equals:   * day – 11hr * evening – 4hr * night – 9hr | Acoustic amenity criteria  Day, evening and night LAeq,adj,T are not greater than the values in this column for the relevant criteria location, where T equals:   * day – 11hr * evening – 4hr * night – 9hr | | |
| Day | Evening | Night |
| Low density residential zone boundary | 3dB(A) | 55dB(A) | 45dB(A) | 40dB(A) |
| Low–medium density residential zone boundary | 3dB(A) | 55dB(A) | 45dB(A) | 40dB(A) |
| Medium density residential zone boundary | 3dB(A) | 55dB(A) | 50dB(A) | 45dB(A) |
| High density residential zone boundary | 3dB(A) | 55dB(A) | 50dB(A) | 50dB(A) |
| Character residential zone boundary | 3dB(A) | 50dB(A) | 45dB(A) | 40dB(A) |
| Tourist accommodation zone boundary | 3dB(A) | 55dB(A) | 50dB(A) | 50dB(A) |
| At a sensitive use in the Principal centre zone | 5dB(A) | 60dB(A) | 55dB(A) | 50dB(A) |
| At a sensitive use in the Major centre zone | 5dB(A) | 60dB(A) | 55dB(A) | 50dB(A) |
| At a sensitive use in the District centre zone | 5dB(A) | 60dB(A) | 55dB(A) | 50dB(A) |
| At a sensitive use in the Neighbourhood centre zone | 5dB(A) | 55dB(A) | 50dB(A) | 50dB(A) |
| At a sensitive use in the Specialised centre zone | 5dB(A) | 55dB(A) | 50dB(A) | 50dB(A) |
| Emerging community zone boundary | 5dB(A) | 55dB(A) | 50dB(A) | 45dB(A) |
| Environmental management zone boundary | 0dB(A) | 40dB(A) | 40dB(A) | 40dB(A) |
| Conservation zone boundary | 0dB(A) | 40dB(A) | 40dB(A) | 40dB(A) |
| At a sensitive use in the Mixed use zone | 5dB(A) | 60dB(A) | 55dB(A) | 50dB(A) |
| At a sensitive use in the Rural zone | 5dB(A) | 55dB(A) | 50dB(A) | 45dB(A) |
| At a sensitive use in Rural residential zone | 5dB(A) | 50dB(A) | 45dB(A) | 40dB(A) |
| At a sensitive use in the Township zone | 5dB(A) | 55dB(A) | 45dB(A) | 40dB(A) |

Note—

* LAeq,adj,T: The adjusted A-weighted equivalent continuous sound pressure level of the development during the time period T, where T is an 11-hour day (7am– 6pm), 4-hour evening (6pm–10pm) and 9-hour night (10pm–7pm), determined in accordance with the methodology in the Noise impact assessment planning scheme policy.
* RBL: Rating background level determined in accordance with the methodology in the Noise impact assessment planning scheme policy.
* dB(A): A-weighted decibels

Table 9.3.25.3.C—Low frequency noise criteria

|  |  |  |  |
| --- | --- | --- | --- |
| Criteria location | Day (7am–6pm) LCeq,adj,11hr is not greater than the following values at the relevant criteria location: | Evening (6pm–10pm) LCeq,adj,4hr is not greater than the following values at the relevant criteria location: | Night (10pm–7am) LCeq,adj,9hr is not greater than the following values at the relevant criteria location: |
| Low density residential zone boundary | 65dB(C) | 65dB(C) | 60dB(C) |
| Low–medium density residential zone boundary | 65dB(C) | 65dB(C) | 60dB(C) |
| Medium density residential zone boundary | 65dB(C) | 65dB(C) | 60dB(C) |
| High density residential zone boundary | 70dB(C) | 65dB(C) | 65dB(C) |
| Character residential zone boundary | 65dB(C) | 65dB(C) | 60dB(C) |
| Tourist accommodation zone boundary | 70dB(C) | 65dB(C) | 65dB(C) |
| At a sensitive use in the Principal centre zone | 75dB(C) | 75dB(C) | 70dB(C) |
| At a sensitive use in the Major centre zone | 75dB(C) | 75dB(C) | 70dB(C) |
| At a sensitive use in the District centre zone | 70dB(C) | 65dB(C) | 65dB(C) |
| At a sensitive use in the Neighbourhood centre zone | 70dB(C) | 65dB(C) | 65dB(C) |
| At a sensitive use in the Specialised centre zone | 75dB(C) | 75dB(C) | 70dB(C) |
| Emerging community zone boundary | 65dB(C) | 65dB(C) | 60dB(C) |
| Environmental management zone boundary | 65dB(C) | 65dB(C) | 65dB(C) |
| Conservation zone boundary | 65dB(C) | 65dB(C) | 65dB(C) |
| At a sensitive use in the Mixed use zone | 75dB(C) | 75dB(C) | 70dB(C) |
| At a sensitive use in the Rural zone | 70dB(C) | 65dB(C) | 65dB(C) |
| At a sensitive use in the Rural residential zone | 65dB(C) | 65dB(C) | 60dB(C) |
| At a sensitive use in the Township zone | 70dB(C) | 65dB(C) | 65dB(C) |

Note—

* LCeq,adj,T: The adjusted C-weighted equivalent continuous sound pressure level of the development during the time period T, where T is an 11-hour day (7am–6pm), 4-hour evening (6pm–10pm) and 9-hour night (10pm–7pm), determined in accordance with the methodology in the Noise impact assessment planning scheme policy.

Table 9.3.25.3.D—Night-time noise criteria

|  |  |  |  |
| --- | --- | --- | --- |
| Criteria location | Where the existing  LAeq,9hr night at the criteria location is: | Average of the highest 15 single LAmax events over a given night (10pm-7am) period is not greater than the following values at the relevant criteria location: | The absolute highest single LAmax event over a given night (10pm-7am) period is not greater than the following values at the relevant criteria location: |
| At the zone boundary of:   * Low density residential zone; * Low–medium density residential zone * Medium density residential zone; * High density residential zone; * Character residential zone; * Tourist accommodation zone; or * Emerging community zone | < 45dB(A) | 50dB(A) | 55dB(A) |
| 45 to 60dB(A) | LAeq,9hr night + 5dB(A) | LAeq,9hr night + 10dB(A) |
| > 60dB(A) | 65dB(A) | 70dB(A) |
| External to a sensitive use located in a:   * Principal centre zone; * Major centre zone; * District centre zone; * Neighbourhood centre zone; * Specialised centre zone; * Mixed use zone; * Rural zone; * Rural residential zone; or * Township zone | Not applicable | 65dB(A) | 70dB(A) |

Note—

* LAmax: The A-weighted maximum sound pressure level determined in accordance with the methodology in the Noise impact assessment planning scheme policy.
* LAeq,9hr: The A-weighted equivalent continuous sound pressure level of the development during the night-time period 10pm to 7am, determined in accordance with the methodology in the Noise impact assessment planning scheme policy.
* Night: 10pm to 7am
* dB(A): A-weighted decibels

Table 9.3.25.3.E—Air quality (planning) criteria

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Pollutant | Averaging time | Health outcome protected | Criteria including background (µg/m3) | Criteria including background (ppm) |
| Nitrogen dioxide | 1 hour | Health and wellbeing | 250 | 0.12 |
| Annual | Health and wellbeing | 62 | 0.03 |
| Sulfur dioxide | 1 hour | Health and wellbeing | 570 | 0.2 |
| 24 hours | Health and wellbeing | 230 | 0.08 |
| Annual | Health and wellbeing | 57 | 0.02 |
| Particulate matter (PM) as total suspended particulates (TSP) | Annual | Health and wellbeing | 90 | - |
| PM less than 10 µm (PM10) | 24 hours | Health and wellbeing | 50 | - |
| PM less than 2.5 µm (PM2.5) | 24 hours | Health and wellbeing | 25 | - |
| Annual | Health and wellbeing | 8 | - |
| Carbon monoxide | 8 hours | Health and wellbeing | 11,000 | 9 |
| Dust deposition as insoluble solids | Annual | Protecting aesthetic environment | 4g/m2/month | - |
| 1,1,1-trichloroethane  (methyl chloroform) | 1 hour | Health and wellbeing | 12,500 | 2.3 |
| 1,1,2-trichloroethane | 1 hour | Health and wellbeing | 1,000 | 0.18 |
| 1,1-biphenyl | 1 hour | Health and wellbeing | 24 | 0.0037 |
| 1,2-dichloroethane | 24 hours | Health and wellbeing | 750 | 0.17 |
| 1,3-butadiene | Annual | Health and wellbeing | 2.4 | 0.001 |
| Acetaldehyde | 1 hour | Odour | 42 | 0.023 |
| Acetic acid | 1 hour | Odour | 270 | 0.11 |
| Acetone | 1 hour | Health and wellbeing | 22,000 | 9.2 |
| Acrolein | 1 hour | USEPA extremely toxic | 0.42 | 0.00018 |
| Acrylonitrile | 1 hour | USEPA Group B1 carcinogen (probable human carcinogen) | 8 | 0.0037 |
| Alpha chlorinated toluenes  and benzoyl chloride | 1 hour | IARC Group 1 carcinogen (known human carcinogen) | 9 | 0.0018 |
| Ammonia | 1 hour | Health and wellbeing | 330 | 0.46 |
| Antimony and compounds | 1 hour | Health and wellbeing | 9 | - |
| Arsenic and compounds  (as total metal content in PM10) | 1 hour | IARC Group 1 carcinogen (known human carcinogen) | 0.09 | - |
| Annual | Health and wellbeing | 6ng/m3 | - |
| Asbestos | 1 hour | IARC Group 1 carcinogen (known human carcinogen) | 180 | - |
| Benzene | Annual | Health and wellbeing | 10 | 0.003 |
| Benzo(a)pyrene  (as marker for PAH) | Annual | Health and wellbeing | 0.3 ng/m3 | - |
| Beryllium and compounds | 1 hour | IARC Group 1 carcinogen (known human carcinogen) | 0.004 | - |
| Bromochloromethane | 1 hour | Health and wellbeing | 19,000 | 3.7 |
| Bromoform (tribromomethane) | 1 hour | Health and wellbeing | 90 | 0.009 |
| Bromotrifluoromethane | 1 hour | Health and wellbeing | 112,000 | 18 |
| Butyl acrylate | 1 hour | Odour | 100 | 0.019 |
| Butyl mercaptan | 1 hour | Odour | 7 | 0.002 |
| Cadmium and compounds  (as total metal content in PM10) | Annual | Health and wellbeing | 5ng/m3 | - |
| Carbon disulfide | 1 hour | Odour | 183 | 0.0055 |
| 24 hours | Health and wellbeing | 110 | 0.032 |
| Chlorine | 1 hour | Health and wellbeing | 50 | 0.018 |
| Chlorine dioxide | 1 hour | Health and wellbeing | 5.1 | 0.0018 |
| Chlorobenzene | 1 hour | Odour | 100 | 0.023 |
| Chloroform | 1 hour | Health and wellbeing | 900 | 0.18 |
| Chromium III compounds | 1 hour | Health and wellbeing | 9 | - |
| Chromium VI compounds | 1 hour | IARC Group 1 carcinogen (known human carcinogen) | 0.09 | - |
| Copper dusts and mists | 1 hour | Health and wellbeing | 18 | - |
| Copper fumes | 1 hour | Health and wellbeing | 3.7 | - |
| Cumene (isopropyl benzene) | 1 hour | Odour | 21 | 0.004 |
| Cyanide (as CN) | 1 hour | Health and wellbeing | 90 | - |
| Cyclohexane | 1 hour | Health and wellbeing | 19,000 | 5 |
| Cyclohexanone | 1 hour | Odour | 260 | 0.07 |
| Diacetone alcohol | 1 hour | Odour | 700 | 0.15 |
| Dichloromethane  (methylene chloride) | 24 hours | Health and wellbeing | 3200 | 0.85 |
| 7 days | Health and wellbeing | 480 | 0.13 |
| Diethylamine | 1 hour | Odour | 30 | 0.01 |
| Dimethylamine | 1 hour | Odour | 9 | 0.0052 |
| Dioxins and furans  (as TCDD TEF) | 1 hour | IARC Group 1 carcinogen (known human carcinogen) | 0.000002 | - |
| Diphenyl ether | 1 hour | Odour | 80 | 0.01 |
| Ethanol | 1 hour | Odour | 21,00 | 1.1 |
| Ethyl acetate | 1 hour | Odour | 12,100 | 3.5 |
| Ethyl acrylate | 1 hour | Odour | 0.4 | 0.0001 |
| Ethyl butyl ketone | 1 hour | Health and wellbeing | 4,200 | 0.9 |
| Ethyl chloride (chloroethane) | 1 hour | Health and wellbeing | 48,000 | 18 |
| Ethylbenzene | 1 hour | Health and wellbeing | 8,000 | 1.8 |
| Ethylene oxide | 1 hour | IARC Group 1 carcinogen (known human carcinogen) | 3.3 | 0.0018 |
| Formaldehyde | 1 hour | Protecting aesthetic environment | 96 | 0.07 |
| 24 hours | Health and wellbeing | 54 | 0.04 |
| Hydrogen chloride | 1 hour | Health and wellbeing | 140 | 0.09 |
| Hydrogen cyanide | 1 hour | USEPA extremely toxic | 200 | 0.18 |
| Hydrogen sulfide | 24 hours | Health and wellbeing | 160 | 0.11 |
| 1 hour | Odour | 6.5 | 0.0043 |
| Lead and compounds  (as total metal content in TSP) | Annual | Health and wellbeing | 0.5 | - |
| Magnesium oxide fumes | 1 hour | Health and wellbeing | 180 | - |
| Manganese and compounds  (as total metal content in PM10) | Annual | Health and wellbeing | 0.16 | - |
| MDI  (diphenylmethane diisocyanate) | 1 hour | USEPA extremely toxic | 0.04 | - |
| Mercury inorganic | 1 hour | Health and wellbeing | 1.8 | - |
| Annual | Health and wellbeing | 1.1 | - |
| Mercury organic | 1 hour | Health and wellbeing | 0.18 | - |
| Methanol | 1 hour | Odour | 3,000 | 2.4 |
| Methyl ethyl ketone | 1 hour | Odour | 3,200 | 1.1 |
| Methyl isobutyl ketone | 1 hour | Odour | 230 | 0.05 |
| Methyl mercaptan | 1 hour | Odour | 0.46 | 0.00023 |
| Methyl methacrylate | 1 hour | Odour | 120 | 0.027 |
| Methyl styrene | 1 hour | Odour | 140 | 0.029 |
| Methylamine | 1 hour | Odour | 2.7 | 0.0023 |
| n-Butanol | 1 hour | Odour | 500 | 0.16 |
| n-Butyl acetate | 1 hour | Odour | 1,020 | 0.21 |
| n-Hexane | 1 hour | Health and wellbeing | 3,200 | 0.9 |
| Nickel and compounds  (as total metal content in PM10) | Annual | Health and wellbeing | 0.02 | - |
| Nitric acid | 1 hour | Health and wellbeing | 90 | 0.037 |
| Nitrobenzene | 1 hour | Odour | 2.6 | 0.00052 |
| n-Propanol | 1 hour | Odour | 41 | 0.016 |
| Pentachlorophenol | 1 hour | USEPA extremely toxic | 0.9 | - |
| Phenol | 1 hour | Odour | 20 | 0.0052 |
| Phosgene | 1 hour | USEPA extremely toxic | 7 | 0.0018 |
| Phosphine | 1 hour | Odour | 3.1 | 0.0023 |
| Propylene oxide | 1 hour | USEPA Group B1 carcinogen (probable human carcinogen) | 90 | 0.037 |
| Pyridine | 1 hour | Odour | 7 | 0.0023 |
| Styrene | 1 hour | Odour | 65 | 0.014 |
| 7 days | Health and wellbeing | 280 | 0.06 |
| Sulfate | 24 hours | Health and wellbeing | 27 | - |
| Sulfuric acid | 1 hour | Health and wellbeing | 18 | - |
| TDI (toluene-2,4-diisocyanate; toluene-2,6-diisocyanate) | 1 hour | USEPA extremely toxic | 0.04 | - |
| Tetrachloroethylene (perchloroethylene) | 1 hour | Odour | 7,487 | 1.01 |
| Annual | Health and wellbeing | 270 | 0.036 |
| Toluene | 1 hour | Odour | 958 | 0.23 |
| 24 hours | Health and wellbeing | 4,100 | 1 |
| Annual | Health and wellbeing | 410 | 0.1 |
| Trichloroethylene | 1 hour | IARC Group 2A carcinogen (probable human carcinogen) | 500 | 0.09 |
| Triethylamine | 1 hour | Odour | 200 | 0.05 |
| Vanadium and compounds  (as total metal content in PM10) | 24 hours | Health and wellbeing | 1.1 | - |
| Vinyl chloride Monomer | 24 hours | Health and wellbeing | 28 | 0.01 |
| Vinyl toluene | 1 hour | Health and wellbeing | 4,400 | 0.9 |
| Welding fumes (total particulate) | 1 hour | Health and wellbeing | 90 | - |
| Xylenes (as a total of ortho, meta and para isomers) | 24 hours | Health and wellbeing | 1,200 | 0.25 |
| Annual | Health and wellbeing | 950 | 0.2 |
| Zinc chloride fumes | 1 hour | Health and wellbeing | 18 | - |
| Zinc oxide fumes | 1 hour | Health and wellbeing | 90 | - |

Note—

* Criteria that are stated in µg/m3 are to be referenced to 0°C.
* Criteria that are stated in ppm are to be expressed as volume/volume.
* Averaging times of 1 hour or less are to be presented using the 99.9th percentile concentration of the total site impact from dispersion modelling and background concentration for all pollutants in the above table, or the maximum concentration from dispersion modelling if no background concentration is available.
* Averaging times of greater than 1 hour are to be presented using the maximum concentration of the total site impact from dispersion modelling and background concentration.
* Dust deposition is the maximum allowable level from new and existing sources, calculated from annualised modelling data.
* Polycyclic aromatic compounds (PAH) are assessed as benzo(a)pyrene equivalent using potency equivalency factors as listed in the Air quality planning scheme policy.
* Dioxins and furans are assessed as 2,3,7,8-tetrachlorodibenzodioxin equivalent (TCDD) using toxic equivalency factors (TEF) as listed in the Air quality planning scheme policy.
* Criteria that are applicable for protecting agriculture or biosystems are not to be used at residential locations.
* ng – nanograms

Table 9.3.25.3.F—Odour criteria

|  |  |  |  |
| --- | --- | --- | --- |
| Pollutant | Averaging time | Health outcome protected | Criteria (odour units – OU) |
| Odour | 1 hour | Odour | 0.5 OU for tall stacks |
| Odour | 1 hour | Odour | 2.5 OU for ground-level and wake-affected plumes from short stacks |

Note—Odour criteria are to be evaluated using the 99.5th percentile concentration from dispersion modelling.

Table 9.3.25.3.G—Maximum quantities for storage of dangerous goods and combustible liquids

|  |  |  |
| --- | --- | --- |
| Name  (the following dangerous goods are defined in the Australian Code for the transport of dangerous goods by road or rail) | Class | Quantity  (tonnes) |
| Explosives | Class 1 | 0.025 |
| Flammable gases  (see considerations for LPG) | Class 2.1 | 2 |
| Non-flammable/non-toxic gases | Class 2.2 | 100 |
| Oxidising gases | Class 2.2 (Sub-risk 5) | 100 |
| Poisonous gases | Class 2.3 | 0.1 |
| Flammable liquids | Class 3 PGI | 20 |
| Class 3 PGII | 50 |
| Class 3 PGIII | 100 |
| Any mix of chemicals from any Packing Group where none of the items exceeds the threshold quantity on their own. | 100 |
| Combustible liquids  (as defined by AS1940-2004 The storage and handling of flammable and combustible liquids) | C1/C2 | 500 |
| Flammable solids | Class 4.1 PGI | 0.25 |
| Class 4.1 PGII | 2 |
| Class 4.1 PGIII | 5 |
| Any mix of chemicals from any Packing Group where none of the items exceeds the threshold quantity on their own. | 5 |
| Substances liable to spontaneous combustion | Class 4.2 PGI | 0.125 |
| Class 4.2 PGII | 1 |
| Class 4.2 PGIII | 2.5 |
| Any mix of chemicals from any Packing Group where none of the items exceeds the threshold quantity on their own. | 2.5 |
| Substances which in contact with water emit flammable gases | Class 4.3 PGI | 0.25 |
| Class 4.3 PGII | 2 |
| Class 4.3 PGIII | 5 |
| Any mix of chemicals from any Packing Group where none of the items exceeds the threshold quantity on their own. | 5 |
| Oxidising agents | Class 5.1 PGI | 1.25 |
| Class 5.1 PGII | 10 |
| Class 5.1 PGIII | 25 |
| Any mix of chemicals from any Packing Group where none of the items exceeds the threshold quantity on their own. | 25 |
| Organic peroxides | Class 5.2 PGI | 0.125 |
| Class 5.2 PGII | 1 |
| Class 5.2 PGIII | 2.5 |
| Any mix of chemicals from any Packing Group where none of the items exceeds the threshold quantity on their own. | 2.5 |
| Poisonous (toxic) substances | Class 6.1 PGI | 0.25 |
| Class 6.1 PGII | 2 |
| Class 6.1 PGIII | 5 |
| Any mix of chemicals from any Packing Group where none of the items exceeds the threshold quantity on their own. | 5 |
| Infectious substances | Class 6.2 | 0.1 |
| Radioactive material | Class 7 see definition of radioactive industry | n.a. |
| Corrosive substances | Class 8 PGI | 1.25 |
| Class 8 PGII | 10 |
| Class 8 PGIII | 25 |
| Any mix of chemicals from any Packing Group where none of the items exceeds the threshold quantity on their own. | 25 |
| Miscellaneous names substances | Class 9 | 10 |
| Acetaldehyde ammonia (UN1841) PGIII | 5 |
| Ammonium nitrate fertilisers (UN2071) PGIII | 1 |
| Blue/brown asbestos (UN2212) PGII & white asbestos (UN2590) PGIII | 0.01 |
| Polychlorinated biphenyls (UN2315) PGII | 0.01 |
| Polyhalogenated biphenyls or polyhalogenated terphenyls, liquid (UN3125) PGII, solid (UN3125) PGII | 0.01 |
| Polymeric beads, expandable, (UN2211) PGIII | 2 |
| Zinc dithionite (Zinc hydrosulfite) (UN1931) PGIII | 0.1 |
| Goods too dangerous to be transported | As listed in Appendix A of the Australian Code for the transport of dangerous goods by road and rail | 0.2 |

Note—Thresholds apply equally to those substances with a subsidiary risk.

Table 9.3.25.3.H—Hazard and risk criteria

|  |  |  |  |
| --- | --- | --- | --- |
| Fatality risk | | | |
| Land use | | Fatality risk criteria  (risk in a million per year): | |
| Hospital, education establishment, childcare centre, retirement facility, community care centre, health care service, residential care facility | | 0.5 | |
| Dual occupancy, multiple dwellings, short-term accommodation, community residence, dwelling house, rooming accommodation, relocatable home park, tourist park | | 1 | |
| Commercial developments including shops and shopping centres, food and drink outlet, offices, theatres and tourist attractions | | 5 | |
| Indoor sport and recreation, outdoor sport and recreation | | 10 | |
| Industry activities | | 50 | |
| Injury risk | | | |
| Type of risk | Injury risk criteria | | |
| Heat radiation | Incident heat flux radiation does not exceed 4.7kW/m2 at a frequency of more than 50 chances in a million per year. | | |
| Explosion overpressure | Incident explosion overpressure does not exceed 7kPa at frequencies of more than 50 chances in a million per year. | | |
| Toxic exposure | Toxic concentrations do not exceed a level which would be seriously injurious to sensitive members of the community following a relatively short period of exposure at a maximum frequency of 10 in a million per year.  Toxic concentrations will not cause irritation to eyes or throat, coughing or other acute physiological responses in sensitive members of the community over a maximum frequency of 50 in a million per year. | | |
| Risk of property damage and accident propagation | | | |
| Type of property damage accident propagation risk | Land use | | Property damage and accident propagation risk criteria |
| Heat radiation | Neighbouring potentially hazardous installations or at land zoned to accommodate such installations | | Incident heat flux radiation should not exceed a risk of 50 in a million per year for the 23kW/m2 heat flux level |
| Explosion overpressure | Neighbouring potentially hazardous installations,  at land zoned to accommodate such installations or  at nearest public buildings | | Incident explosion overpressure should not exceed a risk of 50 in a million per year for the 14kPa explosion overpressure level |
| Societal risk criteria (refer Figure a) | | | |
| 1. Societal risk is not considered significant where the societal risk value is below the green line, i.e. in the negligible region, provided other individual criteria are met. 2. Societal risk is not acceptable where the societal risk value is above the red line, that is, in the intolerable region, even if individual risk criteria are met. 3. Societal risk may be considered tolerable where the societal risk value is below the red line, i.e. within the ALARP region, only where the benefits clearly outweigh the risks and provided the other Hazard and risk criteria of this code are met. Where the societal risk value is in the ALARP region the emphasis is on reducing risks as far as possible towards the negligible line and with the development layout locating affected areas as far away from people as possible.   Note—Societal risk criteria are used for addressing the level of societal concern when there is a risk of significant, off-site, multiple fatalities occurring in one event. | | | |

