9.4.3 Environmental performance code

9.4.3.1 Application

(1) This code applies to assessable development identified as requiring assessment against the Environmental performance code by the Tables of Assessment in Part 5.

(2) When using this code, reference should be made to Part 5.

9.4.3.2 Purpose

(1) The purpose of the Environmental performance code is to ensure development is designed and operated to avoid or mitigate impacts on sensitive receiving environments.

(2) The purpose of the code will be achieved through the following overall outcomes:
- (a) development that has potential to cause an adverse impact on amenity of adjacent and surrounding land, or environmental harm is avoided through location, design and operation of the development;
- (b) sensitive land uses are protected from amenity related impacts of lighting, odour, airborne particles and noise, through design and operation of the development;
- (c) development ensure stormwater is discharged lawfully;
- (d) development is located, designed, constructed and managed to avoid or minimise impacts arising from altered stormwater quality or flow;
- (e) development contributes to the removal and ongoing management of weed species;
- (f) development is located and designed to ensure that users and nearby sensitive land uses are not exposed to unacceptable levels of contaminants.
- (g) development is designed and operated to ensure activities involving the use, storage and disposal of potentially hazardous materials and chemicals, dangerous goods, and flammable or combustible substances are located and managed to avoid or mitigate potential adverse impacts on surrounding uses, and minimise the health and safety risks to communities and individuals.

9.4.3.3 Criteria for assessment

Part A - Criteria for assessable development

Table 9.4.3.3.a – Environmental performance code – assessable development

Performance outcomes	Acceptable outcomes
For assessable development	
Lighting	
PO1 Lighting incorporated within development does not cause an adverse impact on the amenity of adjacent uses and nearby sensitive land uses. Note – Planning Scheme Policy – Environmental Management Plans provides guidance on preparing a report to demonstrate compliance with the purpose and outcomes of the Code.	**AO1.1** The use does not operate outside daylight hours or outdoor lighting is not part of the proposed use; or **AO1.2** Lighting is provided for user safety and the conduct of the use; and **AO1.3** Technical parameters, design, installation, operation and maintenance of outdoor lighting complies with the requirements of Australian

Performance outcomes	Acceptable outcomes
	standard AS4282-1997 Control of the obtrusive effects of outdoor lighting; and **AO1.4** Access, car parking and manoeuvring areas are designed to shield nearby residential premises from impacts of vehicle headlights.
Odour	
PO2 Potential odour causing activities associated with the development are avoided through design, location and operation of the activity. Note – Planning Scheme Policy – Environmental Management Plans provides guidance on preparing a report to demonstrate compliance with the purpose and outcomes of the Code.	**AO2.1** The development does not involve activities that create odorous air emissions; or **AO2.2** The use does not result in odour that causes environmental harm or nuisance with respect to surrounding land uses.
Noise	
PO3 Potential noise generated from the development is avoided through design, location and operation of the activity. Note – Planning Scheme Policy – Environmental Management Plans provides guidance on preparing a report to demonstrate compliance with the purpose and outcomes of the Code.	**AO3.1** Development does not involve activities that would cause noise related environmental harm or nuisance; or **AO3.2** Development ensures noise does not emanate from the site through the use of materials, structures and architectural features to not cause an adverse noise impact on adjacent uses. and **AO3.3** The design and layout of development ensures car parking areas avoid noise impacting directly on adjacent sensitive land uses through one or more of the following: (a) car parking is located away from adjacent sensitive land uses; (b) car parking is enclosed within a building; (c) a noise ameliorating fence or structure is established adjacent to car parking areas where the fence or structure will not have a visual amenity impact on the adjoining premises; (d) incorporating a densely vegetated buffer adjacent to car parking areas. Note – The Environmental Protection (Noise) Policy 2008, Schedule 1 provides guidance on acoustic quality objectives to ensure environmental harm (including nuisance) is avoided.
Airborne particles and other emissions	

Performance outcomes	Acceptable outcomes
PO4 Potential airborne particles and emissions generated from the development are avoided through design, location and operation of the activity. Note – Planning Scheme Policy – Environmental Management Plans provides guidance on preparing a report to demonstrate compliance with the purpose and outcomes of the Code.	**AO4.1** Development does not involve activities that will result in airborne particles or emissions being generated; or **AO4.2** The design, layout and operation of the development activity ensures that no airborne particles or emissions cause environmental harm or nuisance. Note – Examples of activities which generally cause airborne particles include spray painting, abrasive blasting, manufacturing activities and car wash facilities. Note – Examples of emissions include exhaust ventilation from basement or enclosed parking structures, air conditioning/refrigeration ventilation and exhaustion. Note – The Environmental Protection (Air) Policy 2008, Schedule 1 provides guidance on air quality objectives to ensure environmental harm (including nuisance) is avoided.
Waste and recyclable material storage	
PO5 Waste and recyclable material storage facilities are located and maintained to not cause adverse impacts on adjacent uses. Note – Planning Scheme Policy – Environmental Management Plans provides guidance on preparing a report to demonstrate compliance with the purpose and outcomes of the Code.	**AO5.1** The use ensures that all putrescent waste is stored in a manner that prevents odour nuisance and is disposed of at regular intervals.
	AO5.2 Waste and recyclable material storage facilities are located, designed and maintained to not cause an adverse impact on users of the premises and adjacent uses through consideration of: (a) the location of the waste and recyclable material storage areas in relation to the noise and odour generated; (b) the number of receptacles provided in relation to the collection, maintenance and use of the receptacles; (c) the durability of the receptacles, sheltering and potential impacts of local climatic conditions; (d) the ability to mitigate spillage, seepage or leakage from receptacles into adjacent areas and sensitive receiving waters and environments. Note – The Environmental Protection (Waste Management) Policy 2008 provides guidance on the design of waste containers (receptacles) to ensure environmental harm (including nuisance) is avoided.

Performance outcomes	Acceptable outcomes
Sensitive land uses	
PO6 Sensitive land uses are not established in areas which will receive potentially incompatible impacts on amenity from surrounding, existing development activities and land uses. Note – Refer to the definition of Sensitive land use contained in Schedule 1.2. Note – Planning Scheme Policy – Environmental Management Plans provides guidance on preparing a report to demonstrate compliance with the purpose and outcomes of the Code.	**AO6.1** Sensitive land uses are not established in areas where they will be adversely impacted by existing land uses, activities and potential development in an area; or **AO6.2** Sensitive land uses may be established in areas of potential adverse amenity impacts where they mitigate all of the potential impacts through location, design, operation and maintenance.
Hours of Operation	
PO7 The operation of the development is limited to hours of a day that ensures the impacts on the amenity of nearby sensitive land uses are appropriately mitigated. Note – Regard will generally need to be given to the form of development and the location and appropriateness of the sensitive use impacted with respect to the outcomes also sought by the zone.	**AO7.1** No acceptable outcomes are provided.
Lawful point of discharge	
PO8 Development activities are designed to ensure stormwater is directed to a lawful point of discharge.	**AO8.1** Development activities are designed to ensure stormwater over roofed and hard stand areas is directed to a lawful point of discharge.
	AO8.2 Development ensures movement of stormwater over the site is not impeded or directed through potentially polluting activities.
Stormwater quality	
PO9 Development is planned, designed, constructed and operated to avoid or minimise adverse impacts on stormwater quality by: (a) achieving stormwater quality objectives; (b) protecting water environmental values; (c) maintaining waterway hydrology. Note – Planning Scheme Policy – Environmental Management Plans provides guidance on preparing a report, particularly a stormwater quality improvement plan, to demonstrate compliance with the purpose and outcomes of the Code.	**AO9.1** A stormwater quality management plan is prepared, and provides for achievable stormwater quality treatment measures meeting design objectives listed in Table 9.4.3.3.b and Table 9.4.3.3.c, reflecting land use constraints, such as: (a) erosive, dispersive and/or saline soil types; (b) landscape features (including landform); (c) acid sulfate soil and management of nutrients of concern; (d) rainfall erosivity.
	AO9.2 An erosion and sediment control plan demonstrates that release of sediment-laden stormwater is avoided for the nominated design storm, and minimised when it is exceeded by addressing design objectives listed in Table 9.4.3.3.b for:

Performance outcomes	Acceptable outcomes
	(a) drainage control; (b) erosion controls; (c) sediment control; (d) water quality outcomes.
	AO9.3 Erosion and sediment control practices are designed, installed, constructed, monitored, maintained, and carried out in accordance with the erosion and sediment control plan.
	AO9.4 Development incorporates stormwater flow control measures to achieve the design objectives set out in Table 9.4.3.3.b and Table 9.4.3.3.c, including management of frequent flows, peak flows, and construction phase hydrological impacts. Note - Planning scheme policy - FNQROC Regional Development Manual provides guidance on soil and water control measures to meet the requirements of the Environmental Protection Act 1994. During construction phases of development, contractors and builders are to have consideration in their work methods and site preparation for their environmental duty to protect stormwater quality.
Land contaminants	
PO10 Development is located and designed to ensure that users and nearby sensitive land uses are not exposed to unacceptable levels of contaminants. Note – Planning Scheme Policy – Environmental Management Plans provides guidance on preparing a report to demonstrate compliance with the purpose and outcomes of the Code.	**AO10.1** Development is located where soils are not contaminated by pollutants which represent a health or safety risk to users. or **AO10.2** Development remediates contaminated soils prior to plan sealing, operational works permit, or issuing a building works permit.
Hazardous materials, chemicals, dangerous goods, flammable or combustible substances	
PO11 The use, storage and disposal of potentially hazardous materials and chemicals, dangerous goods, and flammable or combustible substances are located and managed to avoid or mitigate potential adverse impacts on surrounding uses, and minimise the health and safety risks to communities and individuals. Note – Planning Scheme Policy – Environmental Management Plans provides guidance on preparing a report to demonstrate compliance with the purpose and outcomes of the Code.	**AO11.1** No acceptable outcomes are provided.

Performance outcomes	Acceptable outcomes
Pest plants (for material change of use on vacant land over 1,500m^2	
PO12 Development activities and sites provide for the removal of all pest plants and implement ongoing measures to ensure that pest plants do not reinfest the site or nearby sites. Note – This does not remove or replace all land owner's obligations or responsibilities under the Land Protection (Pest and Stock Route Management) Act 2002.	**AO12.1** The land is free of declared pest plants before development establishes new buildings, structures and practices; or **AO12.2** Pest plants detected on a development site are removed in accordance with a management plan prepared by an appropriately qualified person prior to construction of buildings and structures or earthworks. Note – A declaration from an appropriately qualified person validates the land being free from pest plants. Note - Declared pest plants includes locally declared and State declared pest plants. Note – Planning Scheme Policy – Environmental Management Plans provides guidance on preparing a report to demonstrate compliance with the purpose and outcomes of the Code.
Additional requirements for Port services	
Ship-source pollutants reception facilities	
PO13 Development provides facilities for the handling and disposal of ship-sourced pollutants.	**AO13.1** Common user facilities for the handling and disposal of ship-sourced pollutants including oil, garbage and sewage are provided at a suitable location at the Port service.
	AO13.2 Facilities are designed and operated to ensure the risk of spillage from operations is minimised.
	AO13.3 Appropriate equipment to contain and remove spillages is stored in a convenient position near the facility and is available for immediate use.
	AO13.4 Boats visiting the marina are able to use the ship-sourced pollutants reception facilities. Note – Refer to the Australian and New Zealand Environment and Conservation Council (ANZECC), 1997, Best Practice Guidelines for Waste Reception Facilities at Ports, Marinas and Boat Harbours in Australia and New Zealand.
	AO13.5 The pollutant reception facility is connected to sewerage or other waste reception infrastructure. Note – Reception facilities require compliance assessment under the Plumbing and Drainage Act 2002. The plumbing compliance assessment process will ensure that the proposed facilities address 'peak load'.

Table 9.4.3.3.b – Stormwater management design objectives (Construction phase)

Issue	Design objectives
Drainage control (Temporary drainage works)	(1) Design life and design storm for temporary drainage works: (a) Disturbed area open for <12 months—50% AEP event; (b) Disturbed area open for 12–24 months—20% AEP event; (c) Disturbed area open for > 24 months—10% AEP event. (2) Design capacity excludes minimum 150 mm freeboard. (3) Temporary culvert crossing—minimum 100% AEP hydraulic capacity.
Erosion control (Erosion control measures)	(1) Minimise exposure of disturbed soils at any time. (2) Divert water run-off from undisturbed areas around disturbed areas. (3) Determine the erosion risk rating using local rainfall erosivity, rainfall depth, soil-loss rate or other acceptable methods. (4) Implement erosion control methods corresponding to identified erosion risk rating.
Sediment control (Sediment control measures, Design storm for sediment control basins, Sediment basin dewatering)	(1) Determine appropriate sediment control measures using: (a) potential soil loss rate; or (b) monthly erosivity; or (c) average monthly rainfall. (2) Collect and drain stormwater from disturbed soils to sediment basin for design storm event: (a) design storm for sediment basin sizing is 80th% five-day event or similar. (3) Site discharge during sediment basin dewatering: (a) TSS < 50 mg/L TSS; (b) Turbidity not >10% receiving waters turbidity; (c) pH 6.5–8.5.
Water quality (Litter and other waste, hydrocarbons and other contaminants)	(1) Avoid wind-blown litter; remove gross pollutants. (2) Ensure there is no visible oil or grease sheen on released waters. (3) Dispose of waste containing contaminants at authorised facilities.
Waterway stability and flood flow management (Changes to the natural waterway hydraulics and hydrology)	(1) For peak flow for the 100% AEP event and 1% AEP event, use constructed sediment basins to attenuate the discharge rate of stormwater from the site

Table 9.4.3.3.c – Stormwater management design objectives (post-construction phase)

Design objectives Minimum reductions in mean annual load from unmitigated development (%)				Application
Total suspended solids (TSS)	Total phosphorus (TP)	Total nitrogen (TN)	Gross pollutants >5 mm	
80	60	40	90	Development for urban purposes Excludes development that is less than 25% impervious. In lieu of modelling, the default bio-retention treatment area to comply with load reduction targets of 1.5% of the contributing catchment area.
Waterway stability management (1) Limit the peak 100% AEP event discharge within the receiving waterway to the pre-development peak 100% AEP event discharge.				Catchments contributing to un-lined receiving waterway. Degraded waterways may seek alternative discharge management objectives to achieve waterway stability. For peak flow for the 100% AEP event, use collocated storages to attenuate site discharge rate of stormwater.