

9.3.6 Extractive Industry Code



9.3.6.1 Application

This code applies to development identified as requiring assessment against the Extractive Industry Code by the tables of assessment in **Part 5 Tables of Assessment**.

9.3.6.2 Purpose

- (1) The purpose of the Extractive Industry Code is to ensure extractive industry operations are undertaken in a safe and efficient manner that is environmentally sensitive and minimises off-site impacts.
- (2) The purpose of the code will be achieved through the following overall outcomes:

(a) *Extractive industries:*

- (i) involving groundwater extraction occur only on large sites within Rural Zone (excluding the Tamborine Mountain Rural Precinct and Rural Escarpment Precinct) and avoid or minimise traffic impacts on *residential zones*;
- (ii) are established on sites of sufficient size to accommodate appropriate separation distances to ensure environmental and amenity impacts can be effectively managed within the site;
- (iii) provide for appropriate separation distances or other mitigation measures between the development and existing or likely future *sensitive land uses* to minimise land use conflict;
- (iv) are managed so that significant environmental impacts are contained within the site, or are managed and mitigated so as not to adversely impact *sensitive receivers* or the environment;
- (v) provide for the safe operation of the use;
- (vi) manage adverse amenity and environmental impacts;
- (vii) provide effective visual buffers to minimise land use conflict between extractive industry operations and urban development or future urban development areas;
- (viii) ensure haulage routes are safe for all road users, operate efficiently and safely, and do not unduly impact on adjoining *sensitive receivers*; and
- (ix) ensure land disturbed by extractive industry operations is restored and rehabilitated during the life of the development to achieve a stable and environmentally sustainable landform suitable for a future land use.

9.3.6.3 Assessment Benchmarks

Table 9.3.6.3.1— Criteria for Assessable Development - Groundwater Extraction Only

Performance Outcomes	Acceptable Outcomes
P01 Groundwater extraction: (1) occurs on large sites within Rural Zone only (excluding the Tamborine Mountain Rural Precinct and Rural Escarpment Precinct); and (2) avoids or minimises traffic impacts on <i>residential zones</i> .	A01 No acceptable outcome is prescribed.
P02 Vehicle movements generated by the development: (1) access roads of a standard and construction to adequately cater for the type and volume of traffic generated; (2) must not create or worsen any traffic hazard; and (3) must not have adverse effects on the amenity of the locality.	A02 No acceptable outcome is prescribed.
PA03 The proposed haulage route to and from the site does not involve roads which: (1) are not suitable for a high volume of heavy vehicle movements; (2) would result in an increased risk to other motorists; and (3) require heavy vehicles to traverse residential or rural residential streets.	A03 No acceptable outcome is prescribed.
PA04 Development accesses the road network directly onto a <i>higher order road</i> .	A04 No acceptable outcome is prescribed.
P05 Development mitigates potential <i>environmental nuisance</i> from dust.	A05 All driveways, car parking and manoeuvring areas are sealed where located within 200m of an off-site <i>sensitive land use</i> .
P06 Development does not cause <i>environmental nuisance</i> .	A06 No acceptable outcome is prescribed.
P07 Development protects the amenity of residents in the surrounding area and on primary haulage routes.	A07 No acceptable outcome is prescribed.
P08 Development is located on a site which has sufficient area to provide for an appropriate setback of operations from: (1) road frontages;	A08 Buildings and structures associated with the use are set back a minimum of: (1) 40 metres from the front boundary of the site; and

Performance Outcomes	Acceptable Outcomes
(2) site boundaries; (3) surrounding residential uses; and (4) other <i>sensitive land uses</i> ; so that the development mitigates <i>environmental nuisance</i> and achieves an acceptable standard of visual amenity.	(2) 15 metres from the side and rear boundaries of the site.
PO9 Large scale structures do not present an appearance of bulk to adjacent <i>sensitive land uses</i> , roads or public places through buffer screening, design or distance.	AO9 Development: (1) provides <i>buffer landscape</i> planting where the development is visible from adjacent <i>sensitive land uses</i> , roads or public places; and (2) ensures that landscaping is designed and constructed in accordance with Planning Scheme Policy 2 - Landscape Design .

Table 9.3.6.3.2 — Criteria for Assessable Development- Extractive Industry (other than *groundwater extraction*)

Performance Outcomes	Acceptable Outcomes
Siting and Location	
PO10 An <i>Extractive industry</i> is located on a site which has sufficient area to mitigate noise, light, dust and vibration impacts from blasting, by providing for adequate setback of operations from: (1) road frontages; (2) site boundaries; (3) bulk water supply infrastructure; (4) surrounding <i>residential uses</i> ; and (5) other <i>sensitive land uses</i> .	AO10 A development being: (1) a hard rock extraction and processing activity involving blasting is not carried out within: (a) 40m of any boundary of the site; or (b) 200m of Bulk Water Supply Infrastructure as identified on Overlay Map OM-09-A Regional Infrastructure Overlay - Water and Wastewater Infrastructure ; or (c) 1km of any residential premises not associated with the use, land included within a <i>residential zone</i> or other <i>sensitive land uses</i> ; or (2) an extractive and/or processing activity not involving blasting is not carried out within: (a) 30m of any boundary of the site; or (b) 200m of Bulk Water Supply Infrastructure as identified on Overlay Map OM-09-A Regional Infrastructure Overlay - Water and Wastewater Infrastructure ; or (c) 500m of any residential premises <u>not associated with the use</u> , land included within a <i>residential zone</i> or other <i>sensitive land uses</i> ; or (3) an extraction and/or processing activity is contained within the Resource and Processing area of the Key Resource Area (KRA), as shown in the State Planning Policy Guideline: Mining and Extractive Resources. Note - a topographic feature providing a natural buffer between extractive and processing activities and a sensitive use may justify provision of a lesser setback distance.

Performance Outcomes	Acceptable Outcomes						
Amenity							
PO11 The development protects existing visual amenity having regard to the characteristics of the site, the resource, the surrounding area and the character of the locality.	AO11 No acceptable outcome is prescribed.						
PO12 An <i>Extractive industry</i> does not impact on the scenic qualities of the area and maintains significant vistas.	AO12 Extraction and processing activities are screened from view from any major road or any land included in a <i>residential zone</i> and adjacent <i>sensitive land uses</i> .						
Environmental Impacts							
PO13 Environmental management requirements for the <i>Extractive industry</i> are properly identified in an Environmental Management Plan prepared by a suitably qualified person and submitted to Council that demonstrates appropriate management practices to protect environmental standards, by addressing the following: (1) Air quality; (2) Stormwater; (3) Noise; (4) Waste; (5) Water quality including, erosion and sedimentation control; (6) Stream bed and bank stability; (7) Landscape and rehabilitation; (8) Workplace procedures; (9) Emergency and hazard procedures; (10) Flora and fauna protection; and (11) Auditing and review.	AO13 No acceptable outcome is prescribed.						
Noise and Vibration							
PO14 An <i>Extractive industry</i> provides for blasting, crushing, screening and loading to be carried out safely and in accordance with best practice management standards so that disturbance to the amenity of surrounding land uses is minimised.	AO14 Blasting and other operations are confined to the periods identified in Table 9.3.6.3.3 (Extractive Industry Operations Periods) . Table 9.3.6.3.3 Extractive Industry Operation Periods <table border="1"> <thead> <tr> <th>Column 1 Extractive Industry Activity</th><th>Column 2 Hours of Operation</th></tr> </thead> <tbody> <tr> <td>Blasting operations</td><td>9am to 5pm Monday to Friday. No operations Saturday, Sunday or public holidays.</td></tr> <tr> <td>Other operations</td><td>6am to 7pm Monday to Friday. 7am to 4pm Saturday No operations Sunday or public holidays.</td></tr> </tbody> </table>	Column 1 Extractive Industry Activity	Column 2 Hours of Operation	Blasting operations	9am to 5pm Monday to Friday. No operations Saturday, Sunday or public holidays.	Other operations	6am to 7pm Monday to Friday. 7am to 4pm Saturday No operations Sunday or public holidays.
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Performance Outcomes	Acceptable Outcomes
	<p>Note - maintenance of plant equipment and vehicles may occur outside of the hours of operation prescribed in the above table provided it can be demonstrated that the use will comply with the outcomes of the General Development Provisions Code.</p> <p>Note - Extractive industry operations, both permanent or temporary, may only occur outside of the hours of operation specified in the above table provided that it can be demonstrated that the use will comply with the outcomes of the General Development Provisions Code</p>
Water Quality	
<p>PO15 An <i>Extractive industry</i> provides on-site drainage that is designed, constructed and maintained so as to:</p> <ul style="list-style-type: none"> (1) avoid erosion; (2) prevent pollution of groundwater and surface water; (3) protect downstream water quality; and (4) provide opportunities to recycle water for reuse in processing, washing and/or screening materials, dust suppression and on product stockpiles, overburden stockpiles, revegetation or rehabilitation areas and wheel wash facilities. 	<p>AO15.1 Diversion channels are constructed to divert clean stormwater away from extraction and disturbed areas.</p>
	<p>AO15.2 Sediment basins are provided as required to detain stormwater from extraction and disturbed areas to ensure no off-site discharge causes <i>environmental harm</i>.</p>
	<p>AO15.3 Bunding, treatment and disposal of wastes ensures no <i>environmental harm</i> is caused.</p>
	<p>AO15.4 Lining or other suitable treatment of erosion prone areas is established and maintained at discharge points.</p>
Roads	
<p>PO16 The safety and amenity of <i>residential uses</i> fronting the haulage route is not compromised through dust and extracted materials on roads.</p>	<p>AO16 No acceptable outcome is prescribed.</p> <p>Note - Fulfilment of this performance outcome may include that:</p> <ul style="list-style-type: none"> (1) the load is covered; and (2) wheel cleaning equipment is used to prevent wastes, stone and soil adhering to wheels and being deposited on access roads.
<p>PO17 Vehicle access to, from, and within the <i>Extractive industry</i> site is provided to:</p> <ul style="list-style-type: none"> (1) be adequate for the type and volume of traffic generated; (2) not create or worsen any traffic hazard; (3) not have adverse effects on the amenity of the locality; and (4) ensure disturbance to surrounding land uses is minor and that impacts from emissions are minimised. 	<p>AO17.1 The proposed haulage route to and from the site is along sealed roads and does not require heavy vehicles to traverse residential or rural residential streets.</p>
	<p>AO17.2 The haulage route is on roads that are designed and constructed to a standard to meet the needs of the traffic generated by the use without compromising the safety and amenity of residential uses fronting the haulage route.</p>
Public Safety	
<p>PO18</p>	<p>AO18 Fencing that is 1.8 metre in height is erected and maintained to prevent unauthorised access to active areas including:</p>

Performance Outcomes	Acceptable Outcomes
An <i>Extractive industry</i> is designed and operated to minimise impacts on the safety of persons not associated with the use.	<ul style="list-style-type: none"> (1) roads; (2) excavation areas (excluding rehabilitated areas); (3) buildings and machinery; and (4) any areas which may pose a health or safety risk to persons.
Rehabilitation	
<p>PO19 Rehabilitation of an <i>Extractive industry</i> site achieves:</p> <ul style="list-style-type: none"> (1) restoration and rehabilitation of excavated areas progressively over the life of the development to achieve a stable and environmentally sustainable landform that is suitable for a future land use; (2) progressive/staged rehabilitation works that minimises the visual impact of large tracts of extracted areas; (3) appropriate clean-up works (taking particular account of areas of possible soil contamination); (4) an agreed landform and soil profiles; (5) suitable revegetation; (6) provision of suitable financial bonds to ensure rehabilitation works occur; (7) the rehabilitation, with native riparian vegetation, of streams, creeks and drainage lines; and (8) the removal and proper disposal of machinery, rubbish, stockpiles, site office and other infrastructure resulting from the use. 	<p>AO19.1 The <i>Extractive industry</i> provides for all rehabilitation works to be undertaken in accordance with an approved final landform design and site rehabilitation plan prepared by a <i>suitably qualified person</i> (Master Rehabilitation Plan).</p> <p>AO19.2 A Master Rehabilitation Plan will include:</p> <ul style="list-style-type: none"> (1) general rehabilitation actions and concepts; (2) indicative staging of proposed operations over the entirety of the area subject to approval; (3) criteria for preparation of Detailed Rehabilitation Plans for each stage including: <ul style="list-style-type: none"> (a) all technical aspects of rehabilitation including restoration works, earthworks and re-vegetation works including plant species and densities; (b) erosion and sediment control actions associated with restoration; (c) anticipated life of the stage and any progressive rehabilitation works planned; (d) any on-going maintenance for the applicable stage; and (e) accurate boundaries for each applicable stage; (4) Criteria for the provision of suitable financial bonds to ensure the effective return of disturbed areas to acceptable land use suitability including: <ul style="list-style-type: none"> (a) the submission of a rehabilitation bond prior to the commencement of each stage; (b) the bond to be based on an anticipated full rehabilitation cost for the stage area by a third party; and (c) provisions for the annual review of the bond taking into account CPI, actual excavated area and rehabilitation works completed; and (5) A process for the approval by Council of detailed Rehabilitation Plans prior to the commencement of each stage.

Performance Outcomes	Acceptable Outcomes
<p>PO20 Rehabilitation allows for:</p> <ul style="list-style-type: none"> (1) the use of any water bodies created through the extraction process, having regard to water quality, hydraulic conditions, land form and vegetation; (2) the safety of the public and native fauna; (3) appropriate water depth and batter slopes, which can support aquatic vegetation; <u>and</u> (4) water quality of a standard which can support aquatic vertebrates and invertebrates; and (5) the fringes of water bodies to be planted with wetland species such that a sustainable aquatic plant community is established. 	<p>AO20 No acceptable outcome is prescribed.</p>

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