



## » *Extractive and associated industries in Ballina Shire*

*A review of the regulatory framework and controls applicable to  
extractive and associated industries located in Ballina Shire*

2018 V1 (18/43628)

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## 1. Introduction

This report examines the policy framework applicable to extractive and associated industries in Ballina Shire. The report also contains research relating to buffer and separation distance controls applied to extractive and associated industries within other Northern Rivers councils as well as within other States.

This report has been prepared in response to activity HE3.1s contained within the Council endorsed 2018/2022 Delivery Program and Operational Plan and nominated for completion during the 2018/19 Financial Year.

HE3.1s	Review policy framework in relation to extractive industry in the Ballina Shire
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This report also examines the issues raised in the following resolution of the Council at its Ordinary Meeting held on 20 February 2018 [Minute No 200218/29]:

1. *That as part of the 2018/19 Operational Plan Council include an action to investigate the merits of implementing a policy position that is consistent with the current NSW planning legislation and EPA requirements that seeks to address current and future impacts of extractive industries (eg. quarries) on residential areas.*
2. *This is to include a review of relevant provisions in the Ballina Shire Development Control Plan 2012 and specifically consider the introduction of a provision requiring that asphalt-producing industry be located at least 1,000m away from any residential development having regard to the health and amenity of our residents.*

## 2. Legislative Context

State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 is the primary land use legislative mechanism applicable in NSW which regulates the permissibility and operation of extractive and associated industries. The following section examines key SEPP provisions and how some of these provisions link back to the Ballina Shire LEPs (1987 & 2012).

### 2.1 State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 (SEPP)

#### Aims of the SEPP

The aims of the SEPP are to:

- (a) to provide for the proper management and development of mineral, petroleum and extractive material resources for the purpose of promoting the social and economic welfare of the State, and*
- (b) to facilitate the orderly and economic use and development of land containing mineral, petroleum and extractive material resources, and*
  - (b1) to promote the development of significant mineral resources, and*
- (c) to establish appropriate planning controls to encourage ecologically sustainable development through the environmental assessment, and sustainable management, of development of mineral, petroleum and extractive material resources, and*

*(d) to establish a gateway assessment process for certain mining and petroleum (oil and gas) development:*

*(i) to recognise the importance of agricultural resources, and*

*(ii) to ensure protection of strategic agricultural land and water resources, and*

*(iii) to ensure a balanced use of land by potentially competing industries, and*

*(iv) to provide for the sustainable growth of mining, petroleum and agricultural industries.*

#### **Relevant Definitions**

The SEPP contains the following definitions relating to extractive industry, extractive material, and mining:

***extractive industry*** means the winning or removal of extractive materials (otherwise than from a mine) by methods such as excavating, dredging, or quarrying, including the storing, stockpiling or processing of extractive materials by methods such as recycling, washing, crushing, sawing or separating, but does not include:

*(a) turf farming, or*

*(b) tunnelling for the purpose of an approved infrastructure development, or*

*(c) cut and fill operations, or the digging of foundations, ancillary to approved development, or*

*(d) the creation of a farm dam if the material extracted in the creation of the dam is used on site and not removed from the site.*

***extractive material*** means sand, gravel, clay, soil, rock, stone or similar substances but does not include turf.

***mining*** means the winning or removal of materials by methods such as excavating, dredging, or tunnelling for the purpose of obtaining minerals, and includes:

*(a) the construction, operation and decommissioning of associated works, and*

*(b) the stockpiling, processing, treatment and transportation of materials extracted, and*

*(c) the rehabilitation of land affected by mining.*

The major difference between an extractive industry and mining is that mining relates to minerals whereas extractive industry relates to extractive material as defined. No mines have been identified within Ballina Shire and therefore the remainder of this report relates primarily to extractive industries.

#### **2.2 Permissibility of Extractive Industry within Ballina Shire**

The SEPP permits *extractive industries* with development consent on all land where agriculture or industry may be carried out (with or without development consent). Refer to clause 7(3)(a) of the SEPP.

*Extractive industries* are also permitted with development consent within any part of a waterway, an estuary in the coastal zone or within coastal waters that are not located within a conservation zone. Refer to clause 7(3)(b) of the SEPP.

The SEPP also permits the co-location of the following industrial activities, subject to development consent, on land where an *extractive industry* is operating with development consent:

- (a) *the processing of extractive material,*
- (b) *the processing of construction and demolition waste or of other material that is to be used as a substitute for extractive material,*
- (c) *facilities for the processing or transport of extractive material,*
- (d) *concrete works that produce only pre-mixed concrete or bitumen pre-mix or hot-mix.*

The provisions of the SEPP take precedence over the provisions contained within a local environmental plan (Ballina LEPs 1987 and 2012). The effect of the SEPP is therefore to permit extractive industries, and a range of associated industries with development consent, on land within Ballina Shire that permits agriculture or industry as well as within certain waterways, estuaries and coastal waters.

**2.3 Which LEP Zones Permit Extractive Industries?**

Ballina Shire LEPs 1987 and 2012 (the LEPs) have been examined to determine which zones permit mining, extractive industries, agriculture and industries with or without consent. The following permissibility matrix tables indicate by a ✓ where a use is permitted or an X where it is not permitted.

**Table 1 - Permissibility Matrix Ballina LEP 2012**

Zone	Mining	Extractive Industry	Agriculture	Industry
RU1 Primary Production	✓	✓	✓	X
RU2 Rural Landscape	✓	✓	✓	X
R2 Low Density Residential	X	X	✓	X
R3 Medium Density Residential	X	X	✓	X
B1 Neighbourhood Centre	X	X	✓	X
B2 Local Centre	X	X	✓	X
B3 Commercial Core	X	X	X	X
B4 Mixed Use	✓	✓	X	X
B5 Business Development	X	X	X	X
B6 Enterprise Corridor	X	X	X	X
IN1 General Industrial	X	X	X	✓
SP2 Infrastructure	X	X	X	X
RE1 Public Recreation	X	X	✓	X
RE2 Private Recreation	X	X	✓	X
E1 National Parks and Nature Reserves	*	*	*	*
W1 Natural Waterways	X	X	✓**	X
W2 Recreational Waterways	X	X	✓**	X

\*Permits uses authorised by the *National Parks and Wildlife Act 1974* without consent. No other uses permitted.

\*\* Permits Aquaculture which is a form of Agriculture.

**Table 2 - Permissibility Matrix Ballina LEP 1987 (Rural and Environmental Zones Only)**

Zone	Mining	Extractive Industry	Agriculture	Industry
1(a1) Rural (Plateau Lands Agriculture)	✓	✓	✓	X
1(a2) Rural (Coastal Lands Agriculture)	✓	✓	✓	X
1(b) Rural (Secondary Agricultural Land)	✓	✓	✓	✓
1(d) Rural (Urban Investigation)	✓	✓	✓	X
1(e) Rural (Extractive and Mineral Resources)	✓	✓	✓	✓
7(a) Environmental Protection (Wetlands)	X	X	✓	✓
7(c) Environmental Protection (Water Catchment)	X	X	✓	✓
7(d) Environmental Protection (Scenic/Escarpment)	X	✓	✓	X
7(d1) Environmental Protection (Newrybar Scenic/Escarpment)	X	X	✓	X
7(f) Environmental Protection (Coastal Lands)	X	X	✓	X
7(i) Environmental Protection (Urban Buffer)	X	X	✓	X
7(l) Environmental Protection (Habitat)	X	X	✓	X

It has been concluded through an examination of the LEP (1987 and 2012) and SEPP provisions that it is only within certain business zones (B3, B5, B6) and the Infrastructure zone (SP2), under the provisions of Ballina LEP 2012, that *extractive industries* are not permitted within Ballina Shire. Of particular relevance is the fact that within all of the areas zoned for residential, rural or environmental purposes under the LEPs, extractive industries are considered to be permitted with development consent. This results either because extractive industries are permitted with consent within the zone, or because the zone permits agriculture, and as a consequence extractive industries are then permitted (with consent) by the SEPP.

#### 2.4 Can an LEP be amended to Prohibit Extractive Industries in Certain Zones?

Council may resolve to prepare a planning proposal which seeks to prohibit future extractive industries in certain zones or areas. If this were to occur then a Gateway determination would need to be obtained from the Department of Planning and Environment as the first step in the LEP amendment process.

The preparation of a planning proposal which sought to prohibit extractive industries in certain zones or areas is problematic from the following perspectives:

- The SEPP permits extractive industries with consent in zones that permit agriculture and or industry. Therefore an objective of the planning proposal would relate to the SEPP not having applicability within Ballina Shire. The Department of Planning and Environment may find it difficult to agree to such a proposal given the precedent that such action would create. Therefore it is considered to be highly unlikely that a Gateway determination, which would allow the proposal to proceed, would be issued.
- A planning proposal that sought to prohibit extractive industries in certain zones or areas may be held to be inconsistent with the Minister for Planning's Direction [s117(2) now s9.1] 1.3 *Mining, Petroleum Production and Extractive Industries*. This direction applies when a planning proposal would have the effect of prohibiting or restricting (amongst other matters) the winning or obtaining of extractive materials. In such cases Council must seek advice from and consult with the Director General of the Department of Primary Industry. A copy of the direction is contained within Appendix Four.



Notwithstanding the above issues, it is open to the Council to commence the process of attempting to prohibit extractive industries within certain zones or areas.

**2.4 Can the SEPP be amended to Prohibit Extractive Industries in Certain Zones or Areas?**

The SEPP contains a mechanism through which extractive industries or mining could be prohibited within certain areas (Clause 9 and Schedule 1).

No land within Ballina Shire is currently contained within Schedule 1 of the SEPP. Only one site located at Somersby (near Gosford) is referenced as prohibiting extractive industry (sand mining) due to proximity to a school and residential area. That site was excluded from the operation of the SEPP via an amendment initiated by the Department of Planning in 2010.<sup>1</sup>

In addition to the prohibition provisions the SEPP contains provisions for a Gateway approval to be required to be obtained for mining or petroleum development on land shown on the Strategic Agricultural Land Map. Land within Ballina Shire predominantly designated as State Significant Farmland is shown on the map. These provisions do not relate to *extractive industries*.

Map 1 below is an extract from the Strategic Agricultural Land Map (Sheet STA\_051) of the SEPP which shows the location of Biophysical Strategic Agricultural Land on the Alstonville Plateau. The boundaries of this land appear to correspond with the limits of State Significant Farmland as identified through the Northern Rivers Farmland Protection Project in 2005.

**Map 1 - Strategic Agricultural Land Map (Sheet STA\_051)**



If it is Council's intent to prohibit extractive industries on certain land then the issue of whether it would be possible to exclude State Significant Farmland, or other significant agricultural land from the SEPP provisions could be further explored.

A review of extractive industries operating with development consent within Ballina Shire

<sup>1</sup> Refer Department of Planning Circular PS 10-012 dated 31 May 2010

found that only one extractive industry is located on land designated as State Significant Farmland. That extractive industry is the Council owned facility located in Gap Road, Alstonville. For a list of approved extractive industries located within Ballina Shire, refer to the information contained in Section 3 of this report and the map contained within Appendix Two.

The process of amending the SEPP was discussed with an officer of the Department of Planning and Environment with specific reference to the site of the previously proposed Newrybar Swamp Road sand mine (DA2017/670). This DA was one that would have been required to be determined by the Joint Regional Planning Panel (JRPP) had it not been withdrawn by the proponent on 18 July 2018.

The JRPP is the determining authority for extractive industries which meet the requirements for designated development under clause 19 of Schedule 3 to the *Environmental Planning and Assessment Regulation 2000*. This is brought about as a result of provisions contained within the State Environmental Planning Policy (State and Regional Development) 2011. Appendix 3 contains an extract from Schedule 3 of the *Environmental Planning and Assessment Regulation 2000* which relates to extractive industry which is designated development.

Advice was provided by the Department of Planning Officer that until such time that the DA was determined it was considered to be extremely unlikely that the Department would consider an approach to amend the SEPP so as to exclude the site of the proposed Newrybar sand mine from the SEPP provisions. If, however, the JRPP refused the sand mine then it opened the door to the Council making a written submission seeking to incorporate the site of the proposed sand mine within Schedule 1 of the SEPP.

The withdrawal of DA 2017/670 may assist the Council in making a submission to include the site of the proposed extractive industry (Lot 3 DP 803962, Lot 10 DP 1010302, and Lot 1 DP 1028883), and or other lots within the broader Newrybar Swamp Road locality, within Schedule 1 of the SEPP and thereby prohibit extractive industries within the identified lots / areas.

### **2.5 What is the Role of the EPA in Regulating Extractive Industries?**

Under the provisions of the *Protection of the Environment Operations Act 1997* (POEO Act) certain activities are scheduled activities. If an activity is scheduled under the provisions of the POEO Act then it is required to be licensed by the Environment Protection Authority (EPA).

Land based extractive activity which extracts more than 30,000 tonnes of extractive material, or in the case of water based extractive activity 30,000m<sup>3</sup>, are scheduled activities under the POEO Act and therefore require EPA licensing. Of the ten extractive industries located within Ballina Shire, with current DA consent, eight are licensed by the EPA.

There are also premises which at one time were licensed by the EPA which, as a result of a change in legislative requirements, are no longer required to be licensed under the provisions of the POEO Act. These premises are referred to as delicensed premises and are still regulated by the EPA. The Bitupave, pre-mix or hot-mix production facility in Gap Road, Alstonville is an example of a delicensed premises regulated by the EPA.

### **3. Location of Extractive Industries in Ballina Shire**

Table 3 below lists the location of extractive industries located within Ballina Shire which are considered to have a current approval to operate, or in the case of Eaton's Pit have entered into the rehabilitation phase following approved extractive limits having been reached. The location of the extractive industries listed in Table 3 is shown on the map contained within Appendix Two to this report.

**Table 3 – Approved Extractive Industries in Ballina Shire**

Quarry Name	Location	EPA Licensed	Farmland Designation & Zoning	Comments
1. Ballina Sands	Lot 34 DP 1220221  91 Newrybar Swamp Road, Kinvara	Yes  L No 20639 3/9/2015  Licence relates to Lot 32 DP 1151612. Now resubdivided into Lot 34 & 35 DP 1220221	Mostly Regionally Significant Farmland  RU1	JRPP approved – DA2013/162.  This consent authorises a total extraction of 610,000m <sup>3</sup> at a maximum annual extraction rate of 80,000m <sup>3</sup> and permits quarrying for not more than fifteen (15) years, whichever is achieved first. Quarrying commenced 21 April 2015.  Consent expires on 21 April 2030 unless extraction limit reached prior to this time.
2. Holcim (Australia) Pty Ltd – Teven (Fox's) NSW Quarry.	Lots 1 to 3 DP 732288, 129 Stokers Lane, Teven	Yes  L No 3293	Minor Regional Significant Farmland affectation for Lot 1 only  RU1 & 1 (e)	State Significant DA approved by Minister.  The Applicant may carry out quarrying operations on the site until 30 June 2045. The Applicant shall not extract more than 6.6 million tonnes of quarry products from the site. The Applicant shall not: (a) transport more than 500,000 tonnes of quarry products from the site in any calendar year; (b) accept and recycle more than 10,000 tonnes of clean, surplus concrete in any calendar year; and (c) dispatch more than 73 laden trucks from the site per day, averaged over the total number of dispatch days in any calendar month.  Consent expires on 30 June 2045 unless extraction limit reached prior to this time.
3. Boral Resources (Country) Pty Ltd – Boral (Teven)	Lot 105 DP 1038360348 North Teven Road, Teven	Yes  L No 2261  Cushing, grinding or separating. Land based extraction up to 500,000T	Partly Regionally Significant Farmland  RU1	Council approved DA 1995/292.  The total amount of material which can be removed from the site shall not exceed 500,000 tonnes in any calendar year. Overburden or quarry spoil additional to the 500,000 tonnes can only be removed from the site in accordance with Section 4.5 of the EIS.  Consent expires 27 June 2026 (s96 modification November 2016).
4. South Ballina Sand Quarry (Trading as Ballina Investments)	Lot 4 DP 263643  Lot 20 DP 1150395  Lot 40 DP 1240905  South Ballina Beach Road,	Yes  L No 13081  75,000 tonnes per annum"	Lot 20 minor Regionally significant farmland affectation.  RU2 and various Div zones 1(b ), 1(a2), 1(e) 7(l)	State Significant DA approved by Minister.  Modification approved April 2018 by DPE allowing an additional 2.68ha to be quarried.  The proponent shall not transport more than 30,000 tonnes of product from the site in a year. EPA Licence allows up to 75,000 tonnes per annum to be transported from site per annum. Refer consent granted 11 April 2018.

Quarry Name	Location	EPA Licensed	Farmland Designation & Zoning	Comments
	South Ballina			Consent expires 31 August 2033.
5. Stokers Quarry (BSC)	Lot 10 DP 712025  Bruxner Highway, Alstonville	No	Not significant farmland  RU1 and minor 1(b)	Council consent – DA 1995/274.  This consent enables a total extraction of 330,000 cubic metres or the quarrying on site for no more than 30 years, whichever is achieved first. DA Proposal states: Extractive Industry – continued operation of Stoker’s Quarry for the extraction of coarse gravel. Extraction rates will be approximate 14,000 cubic metres per annum, with an average annual growth rate of 2 per cent.  Consent expires March 2025.
6. BSC Tuckombill Quarry (BSC)	Lot 2 DP 1130300  540 Gap Road, Alstonville	Yes  L No 3856	State Significant Farmland  1 (e ) Rural Extractive Industry	Council issued consent DA 1995/276 for the continued operation of the quarry.  Information contained in the 1995 EIS indicates that the quarry commenced in 1908.  The annual rate of extraction is to take place in accordance with Table 2 (Section 3.4.3) of the EIS. Prior formal development consent is to be obtained from Council for any proposed extraction in excess of this amount.  This consent enables the total extraction of 450,000m <sup>3</sup> (1.3 million tonnes). This approval is contingent upon satisfactory re-appraisal of the Environmental Management Plan at the five (5) year period. DA Proposal states: Extractive Industry - Continued operation of hard rock quarry and associated crushing plant, with extraction rates of 100,000 tonnes per annum, with expected incremental increases in extraction rates of 3%-5%, reaching a maximum extraction rate of 150,000 tonnes per annum.  No expiry date (appears that original date for expiry set at 10 years deleted by Council Resolution at October 2004 Ordinary Council Meeting).
7. Monti’s Pit – McGeary Bros (Quarry Solutions)	Lots 1 and 2 DP 1222557  Was Lot 1 DP 787102, Old Baggotville Road, Wardell.	Yes  L No 20769. Land based extraction must not exceed 56,000T pa  Approval for max 1,500,000T or to Jan 2025	Not significant farmland  RU2	Council issued consent DA 1996/30  The annual rate of extraction not to exceed 56,000 tonnes. Details of actual extraction rates are to be submitted to Council on a quarterly (3 monthly) basis. Prior formal development consent is to be obtained from Council for any proposed extraction in excess of this amount.  This consent enables a total extraction of 1,500,000 tonnes or permits quarrying on the site for not more than 27 years, whichever is achieved first. This approval is contingent upon satisfactory re-appraisal of the Plan of

9.5 Policy (Review) - Extractive Industry.DOC

Quarry Name	Location	EPA Licensed	Farmland Designation & Zoning	Comments
				<p>Management at the five (5) year period.</p> <p>NB: Quarry subject of resumption by RMS for Ballina to Woodburn Highway upgrade. Matter currently subject of legal action.</p> <p>Consent appears to expire in 2036 based on comments contained in the report to Councils Ordinary Meeting on 26 April 2012 (ie "extractive operations have been conducted for some 13 years".</p>
8. Westbridge Lane Quarry	<p>Lot 2 DP 830884</p> <p>Lot 21 DP 712026</p> <p>Gap Road, Uralba</p>	<p>Yes</p> <p>L No 20742 land based extraction activities</p> <p>200,000pa (commencing Jan 2010).</p> <p>Quarrying to cease 30 April 2032 20 years after CC or once 1,300,000 T extracted</p>	<p>Lot 2 only partly affected by Regional Farmland affectation</p> <p>RU1 &amp; 1(b) Secondary Agriculture</p>	<p>L and E Court approval DA 2008/377</p> <p>Extraction and processing operations may take place for a maximum of twenty (20) years from the date of issue of the initial construction certificate for civil works.</p> <p>Condition 6.2 requires that the proponent/developer or any subsequent operator of the quarry shall not extract process and transport more than 200,000 tonnes of product from the site in any one year (commencing from January 2010).</p> <p>Consent Expires: April 2036</p>
9. Monti's Pit North	<p>Lot 2 DP 1192234</p> <p>Old Bagotville Road, Bagotville</p>	<p>No</p> <p>May be extracting &lt; 30,000T pa</p> <p>12 months to 31/3/18 extracted 25,282T</p>	<p>Not significant farmland</p> <p>RU2</p>	<p>Council issued consent DA 2006/718</p> <p>No consent conditions limiting either annual extraction rate or total resource. DA Consent Proposal states: Extractive Industry (Shale Quarry) with Maximum Extraction Rates of 50,000m<sup>3</sup> per Annum and an operating life of 20 Years or until 700,000m<sup>3</sup> is extracted, whichever occurs first.</p> <p>Consent expires in January 2032</p>
10. Airport Sand Pit (BSC)	<p>Part Lot 374 DP 755684 &amp; Part Lot 264 DP 1195313</p> <p>Corks Lane, Ballina</p>	<p>Yes - L No 5948</p>	<p>Not significant farmland</p> <p>RU2 – area occupied by pit</p>	<p>Council issued consent –DAs 1996/215 &amp; 2011/320.</p> <p>Consent permits change to the method of extraction from dry (excavation) to wet (dredging) comprising a total volume of 220,000 m<sup>3</sup>. All of the extracted material is to be piped directly to the Southern Cross Industrial Estate approved expansion area for filling of that land (approx half of the total extraction volume) with the remaining extracted material stockpiled on the filled industrial site for future use elsewhere.</p> <p>Condition 3 of consent 2011/320 dated 23 April 2014 requires all extraction to be undertaken within one continuous operation, or within 12 months from commencement of</p>

Quarry Name	Location	EPA Licensed	Farmland Designation & Zoning	Comments
				<p>extraction.</p> <p>Consent will expire on 23 April 2019 unless commencement has occurred.</p>
11. Eatons Pit McGeary Bros (Quarry Solutions)	Lot 3 DP 619233  Old Bagotville Road, Wardell	Yes L No 20794	Not significant farmland  Part RU2 and part 1(e )	<p>Council issued consent – DA1996/29</p> <p>The annual rate of extraction not to exceed 50,000 tonnes. Details of the actual extraction rates are to be submitted to Council on a quarterly (3 monthly) basis. Prior formal development consent is to be obtained from Council for any proposed extraction in excess of this amount.</p> <p>This consent enables a total extraction of 975,000 tonnes or permits quarrying on the site for not more than twenty (20) years, whichever is achieved first. This approval is contingent upon satisfactory re-appraisal of the Plan of Management at the five (5) year period.</p> <p>NB: Quarry subject of resumption by RMS for Ballina to Woodburn Highway upgrade. Matter currently subject of legal action.</p> <p>Consent expired Jan 2018 or once 975,000T extracted whichever comes first</p> <p>Applicant withdrew a review of determination request (to the refusal of a quarry modification proposal to extend the quarry operating life) on 12 July 2018. The quarry will now enter the rehabilitation phase as required by the consent.</p>

It is noted that only one extractive industry, the Tuckombil Gap Road Quarry, is located on State Significant Farmland and in close proximity to residential zoned properties. This is a Council owned quarry in respect to which continued extraction was approved by Ballina Shire Council on 11 September 1995.

**4. Location of State or Regionally Significant Extractive Resources in Ballina Shire**

The following text has been extracted from the *Ballina Shire Growth Management Strategy* adopted by the Council on 26 July 2012 and subsequently endorsed by the Department of Planning and Environment:

*The NSW Department of Industry and Investment has undertaken an audit of mineral resources within Ballina Shire (NSW Industry & Investment 2011). This audit addressed existing and potential mineral resources, with these resources shown on the mapping that follows.*

*The mapping identifies three categories of land:*

- *Identified Resource Areas - areas that are subject to current or recent active mineral extraction activities;*
- *Transition Areas - land adjacent to identified resource areas; and*
- *Potential Resource Areas - areas that have the potential for resource extraction by virtue of the geology of the area. This designation does not consider other constraints that may affect the capacity to exploit such potential.*

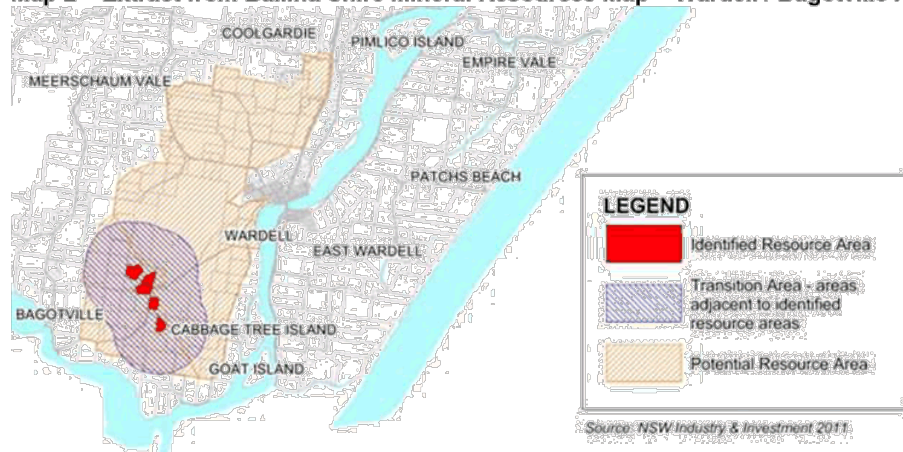
*Lands identified by the above categorization are affected by Ministerial Direction No.1.3 which seeks to:*

*"to ensure that the future extraction of State or regionally significant reserves of coal, other minerals, petroleum and extractive materials are not compromised by inappropriate development."*

*Consequently, the land affected cannot be rezoned without consultation with the NSW Government agencies responsible for mineral resources.*

An extract from the Mineral Resources Map contained within the Ballina Shire Growth Management Strategy appears below with the full map reproduced in Appendix Five.

**Map 2 – Extract from Ballina Shire Mineral Resources Map – Wardell / Bagotville Area**



### **5. Ballina Shire Development Control Plan 2012 - Managing Land Use Conflict Requirements**

*Chapter 2 – General and Environmental Considerations* contains guidelines / recommendations for minimum buffer distances between rural and non-rural land uses. The planning objectives relating to the land use conflict provisions of the DCP are:

- a. *Minimise conflicts between land uses (including from residential / urban expansion towards rural lands);*
- b. *Provide for lawful agricultural and associated rural industry uses that take precedence over other land uses in rural zones; and*
- c. *Protect significant environmental and natural resources.*

It can be seen from the planning objectives that the emphasis is on protecting the rural resource from inappropriate uses likely to give rise to a conflict (eg noise, dust, smell etc). This is as opposed to burdening rural uses with buffer requirements as a consequence of the encroachment of potentially incompatible uses. Therefore if a dwelling were proposed to be built next to an established agricultural use, such as macadamia plantation, it would be the dwelling proposal that would be assessed against the buffer requirements.

The specific buffer requirements contained within the DCP largely reflect the requirements contained within the publication *Living and Working in Rural Areas – a handbook for managing land use conflicts on the NSW North Coast (Handbook)*. The *Handbook* was produced in 2007 by NSW Department of Primary Industry staff in collaboration with staff from Southern Cross University and the Northern Rivers Catchment Management Authority.

The *Handbook* contains a number of principles which are recommended to be used when the potential for a proposal to result in land use conflicts or impact on the environment is being assessed. Principles of particular relevance to extractive resource development include the following:<sup>2</sup>

- *Decisions about new development should ensure that the natural and built resources of importance to the local, regional or State economy are not unreasonably constrained, impacted or sterilized by the location of incompatible land uses.*
- *It is the responsibility of the encroaching development to provide the necessary setbacks and buffer to incompatible land uses. The extent of the buffer should not extend beyond the boundary of the property required to provide the buffer except via negotiation and agreement.*
- *Potential risks of conflict created by residential expansion towards rural lands should be systematically assessed as early as possible in the planning process.*
- *New development next to or near farmland, extractive resources, waterways, wetlands, and areas of high biodiversity value should incorporate buffers to avoid land use conflict.*
- *In rural zones, rural land uses should take precedence over non rural land uses.*

The *Handbook* recommends a variety of buffer distances between rural uses and some more sensitive land uses so as to reduce the risk of land use conflict and impacts between incompatible land uses through separation of land uses.<sup>3</sup>

The *Handbook* also indicates that it is not possible to prescribe a minimum buffer distance for all interface situations. In such cases an alternative approach such as site specific assessment (Land Use Conflict Risk Assessment) may be required.<sup>4</sup>

Ballina Shire DCP 2012 - Chapter 2 (the DCP) incorporates the Land Use Conflict Risk Assessment (LUCRA) process recommended in the *Handbook*. The DCP provides that the LUCRA process may be used to demonstrate that an alternative buffer arrangement, to the minimum nominated in the DCP, is suitable to manage potential land use conflict.

The buffer distances promoted by the *Handbook* and the DCP for extractive and related industries, and some more sensitive land uses, are detailed in Tables 4 and 5 below.

**Table 4 – Extract of Minimum Buffer Distances Specified for Selected Land uses in**

<sup>2</sup> *Living and Working in Rural Areas – a handbook for managing land use conflicts on the NSW North Coast*, NSW DPI, 2007, p83

<sup>3</sup> *Living and Working in Rural Areas – a handbook for managing land use conflicts on the NSW North Coast*, NSW DPI, 2007, p87

<sup>4</sup> *Living and Working in Rural Areas – a handbook for managing land use conflicts on the NSW North Coast*, NSW DPI, 2007, p87



*Living and Working in Rural Areas– a handbook for managing land use conflicts on the NSW North Coast*

Land Use	Residential areas & urban development	Rural dwellings	Rural tourist accommodation
Mining, petroleum, production & extractive industry or mining <sup>1</sup>	500m	500m	500m
	1000m	1000m	1000m

<sup>1</sup> The larger minimum distance is required when blasting is involved.

**Table 5 – Extract of Minimum Buffer Distances Specified in Ballina Shire DCP 2012 – Chapter 2**

Land Use	Urban residential areas	Dwelling-house, Dual occupancy or Rural workers dwelling	Rural tourist facilities
Extractive industry or mining <sup>1</sup>	500m	500m	500m
	1000m	1000m	1000m

<sup>1</sup> The larger minimum distance is required when blasting is involved.

The buffer distances recommended in the *Handbook* and then consequently incorporated within the DCP are considered not to be based on any scientific analysis or process. Rather the *Handbook* acknowledges that:

*Buffer distances represent the recommendations of the North Coast Land Use Conflict Working Group following a synthesis of existing guidelines and policies. In some cases, specific and relevant guidelines require larger buffers or lesser buffers than those prescribed may be appropriate in the circumstances.*<sup>5</sup>

There are no buffer distances recommended within the *Handbook* or the DCP for asphalt plants.

The Tuckombil quarry commenced operations in 1908. It is not known when the asphalt plant originally commenced, however, in 1995 consent was granted to replace the existing asphalt plant with a new higher capacity plant.

Residential subdivision commenced in close proximity to the quarry site in 1989 (Tanomera Drive 200m and Granada Parade 300m to quarry site).

There is reference within the 1995 quarry EIS that the buffer distances at that time to nearby residential land was 400 metres. It is assumed that the buffer at that time was from quarry operation as opposed to the boundaries of the site used for quarrying. This buffer distance appears to be in accordance with the requirements applicable at that time.

**6. Extractive Industry Land Use Buffer Distances Applicable in other Northern Rivers LGAs**

This section examines other Northern Rivers council DCP requirements as they relate to land use conflict and the buffer distance recommendations relating to extractive industries.

<sup>5</sup> *Living and Working in Rural Areas – a handbook for managing land use conflicts on the NSW North Coast*, NSW DPI, 2007, p92

**6.1 Lismore City Council DCP Chapter 18 – Extractive Industries**

The Lismore DCP recognises that the extent of the buffer required for an extractive industry is related to the location, size and nature of the quarry. The following extract from the DCP highlights this point:

*The extent of buffer required depends on the size of the quarry, whether blasting is utilised, nature of production methods, extent of crushing and screening operations, topography and site conditions and the intensity of surrounding development and land uses. A two level buffer standard has therefore been implemented, with a primary and a secondary buffer area established.<sup>6</sup>*

Table 6 below summarises the buffer requirements for extractive industries contained within the Lismore DCP:

<b>Quarry Size</b>	<b>Primary Buffer Zone</b>	<b>Secondary Buffer Zone</b>
Large Quarries (10,000m <sup>3</sup> pa)	500 metres	800 metres
Medium Quarries (5,000m <sup>3</sup> – 10,000m <sup>3</sup> pa)	400 metres	600 metres
Minor Quarries (<5000m <sup>3</sup> pa)	300 metres	400 metres
Quarries with blasting	800m to 1000m (Could be reduced to 400 – 500m depending on blasting technique and frequency)	(As above depending on size of quarry)

The DCP indicates that urban/village-residential and rural-residential development is excluded from both the primary and secondary buffer area. Farmhouses on agricultural holdings may be permitted in the secondary buffer area (but generally not in the primary buffer area) if no alternative suitable location is available. All other non-residential land uses are permitted in the secondary buffer area. As a general rule only bushland, rural industries, or agricultural and forestry uses and rural outbuildings will be permitted in the primary buffer area.<sup>7</sup>

The Lismore DCP controls are different to the controls contained within the Ballina Shire DCP in so far as the concept of primary and secondary buffer is introduced together with differing land use permissibility requirements. The buffer distances, noting the combination of primary and secondary buffers, are more restrictive than those applicable in Ballina Shire for development of a residential nature.

**6.2 Byron DCP 2014 – Chapter B6 - Buffers & Minimising Land Use Conflicts**

Byron Shire has devoted a whole chapter to the issue of buffers and minimising land use conflicts. The requirements contained within this DCP chapter are based on the buffer requirement nominated in the *Handbook*. The minimum buffer recommended for mining, petroleum production & extractive industries is 500 metres and 1000 metres where blasting is involved. These buffer distances are set for residential areas and urban development, rural dwellings, education facilities and preschools and rural tourist accommodation.

The DCP also outlines the Land Use Conflict Risk Assessment (LUCRA) process which is applicable in the same way as it applies in the Ballina Shire DCP.

<sup>6</sup> Lismore Development Control Plan Part A – Chapter 18 Extractive Industries, p4

<sup>7</sup> Lismore Development Control Plan Part A – Chapter 18 Extractive Industries, p4

### **6.3 Tweed DCP 2008**

The Tweed DCP does not appear to contain specific provisions relating to buffers and Land Use Conflict Risk Assessment.

### **6.4 Richmond Valley Development Control Plan 2015**

The DCP (Part I 11) contains Land Use Conflict Risk Assessment (LUCRA) provisions. Recommended buffer distances are sourced from the *Handbook* as is the case with the Ballina and Byron Shire DCPs.

### **6.5 Kyogle Council DCP 2014**

Chapter 1 of the DCP - *Non Residential Development in Rural Zones RU1, RU2, RU3 and RU4*, references the *Handbook* and the LUCRA process.

In respect to land use conflict the DCP provisions are structured by nominating the following performance criteria, "*The development is not likely to impact on, or be impacted by, current and likely future land uses in the surrounding area*", together with an acceptable solution. The nominated acceptable solution being the achievement of certain buffers sourced from the *Handbook*. A buffer distance for extractive industries is, however, not nominated. This would then require the LUCRA process to be followed to determine what would be applied.

### **6.6 Conclusion – Northern Rivers Council Buffer and Land Use Conflict Risk Assessment Requirements for Extractive Industries**

It is concluded from an examination of Northern Rivers council controls that the majority of councils (Ballina, Byron, Kyogle and Richmond Valley) source their land use conflict controls from the recommendations contained within the *Handbook*. The majority also nominate the minimum buffer distances prescribed by the *Handbook*.

The *Handbook* is considered to still represent current best practice in NSW relating to land use conflict risk assessment in rural environments. Departing from its provisions is considered to make it more difficult for Council to defend its decision making relating to rural land use conflict issues. Given that the *Handbook* does not make recommendations relating to minimum buffer distances applicable to asphalt plants, the examination of buffer controls applicable in other States may be appropriate.

An alternative to nominating a minimum buffer distance would be to rely on the LUCRA process. Buffers would then be determined having due regard to site specific factors such as location, size, topography and other factors.

## **7. Buffer Distance Recommendations of Relevance in Selected Australian States**

This section examines applicable guidelines relating to buffers and separation distances for extractive and related industries as applies by Environmental Protection Authorities in Victoria, South Australia and Western Australia.

### **7.1 Western Australia – Environment Protection Authority (EPA)**

The Western Australia EPA draft Environmental Assessment Guidelines recommend a minimum 1000 metre separation distance between asphalt manufacturing (hot or cold mix asphalt production) and sensitive land uses.

Sensitive land uses are defined as places where people live or regularly spend time and which are therefore sensitive to emissions from industry. They include residences, hospitals or nursing homes, short stay accommodation, schools, child care facilities, shopping centres, playgrounds and some public buildings.<sup>8</sup>

The draft Guidelines also recommend the separation distances for extractive industries listed in Table 7.

**Table 7 Extractive Industry Separation Distances Recommended by the Western Australia EPA in Draft 2015 Guidelines**

Industry Type	Recommended Separation Distance to Sensitive Land Uses
Hard rock quarrying (including blasting), crushing and screening	1500m
Other rock quarrying, blasting, grinding and milling works – material processed by grinding, milling or separated by sieving, aeration etc	1000m
Grinding and milling works – material processed by grinding, milling or separated by sieving, aeration etc, but no blasting	500 - 1000m
Sand limestone and clay extraction with no grinding or milling works	300 – 500m

**7.2 Environment Protection Authority Victoria – Recommended Separation Distances for Industrial Residual Air Emissions (Publication No 1518 March 2013)**

Table 8 lists the recommended separation distances of relevance from the EPA Victoria publication between an industrial use and a sensitive land use such as a dwelling. These separation distances are intended to minimise the impact of odours and dust. Specifically the document has not considered noise, vibration, ambient and hazardous pollutants.<sup>9</sup>

**Table 8 – Extract from Victorian EPA Publication 1518 Recommended Separation distances for industrial residual air emissions – March 2013**

Land Use	Specific Details	Conditions	Distance to sensitive land use
Quarry	Quarrying, crushing, screening, stockpiling and	Without blasting	250m
		With blasting	500m

<sup>8</sup> Draft Environmental Assessment Guideline No. X Separation distance between industrial and sensitive land uses, Western Australia EPA, September 2015.

<sup>9</sup> Environment Protection Authority Victoria – Recommended Separation Distances for Industrial Residual Air Emissions, Publication No 1518 March 2013, p3

9.5 Policy (Review) - Extractive Industry.DOC

	conveying of rock	With respirable crystalline silica	500m
Asphalt plant	Production of asphalt	>100 tonnes per week	500m

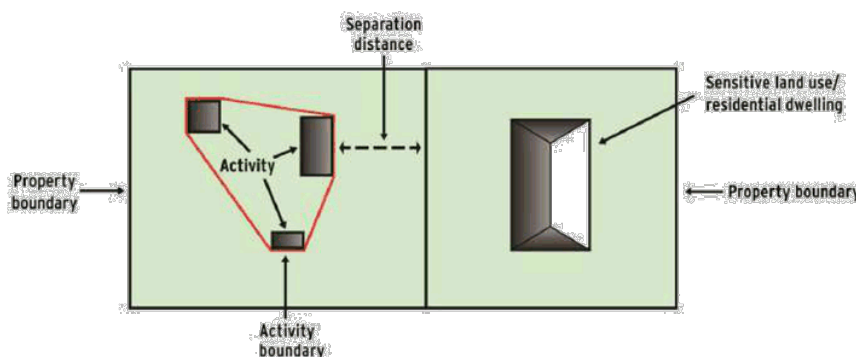
It is noted that the EPA Victoria separation distances are significantly less than recommended in the *Handbook* and applied in Ballina Shire. This may be because the recommended distances relate only to mitigating the impacts of odour and dust whereas the *Handbook* buffer distances are designed to mitigate broader impacts.

Of interest, the publication nominates two methods for measuring separation distance depending on the location and size of the lot containing the sensitive land use.<sup>10</sup> By way of comparison the *Handbook* does not provide guidance on whether the minimum recommended buffer distances should be applied from the specific location of the industry or activity, or whether it applies from the property boundary. Generally in Ballina Shire buffer distances have been applied from the boundary as opposed to the specific location of the industry or activity.

Method 1 recommended by EPA Victoria measures the separation distance from the activity boundary of the industry to the boundary of the nearest sensitive land use. This method is applied where the nearest sensitive land use is either:

- In an urban area or township
- On a site less than 0.4ha, or in a zone allowing subdivision to be less than 0.4ha.

**Diagram 1 – EPA Victoria Method 1 Separation Distance Calculation Diagram**

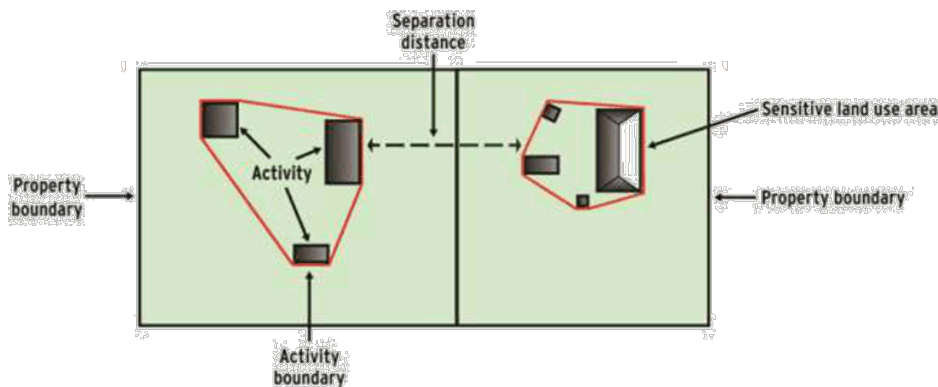


<sup>10</sup> Environment Protection Authority Victoria – Recommended Separation Distances for Industrial Residual Air Emissions, Publication No 1518 March 2013, Refer pages 12 & 13

Method 2 recommended by EPA Victoria is applied in circumstances where the sensitive land use is both:

- Not in an urban area or township
- On a site at least 0.4ha, or in a zone requiring subdivisions to be at least 0.4ha.

**Diagram 2 – EPA Victoria Method 2 Separation Distance Calculation Diagram**



**7.3 EPA South Australia Guideline for Separation and Evaluation Distances**

The draft guidelines were intended to protect the amenity of sensitive land uses which includes dwellings, offices, nursing homes, childcare centres and caravan parks. The draft guidelines were also developed on the assumption that Best Available Technology Economically Achievable (BATEA) is implemented.

The separation distances recommended by EPA South Australia, for air emissions, of relevance are contained within Table 9.

**Table 9 – Separation Distances for Air Emissions Select Industry Types**

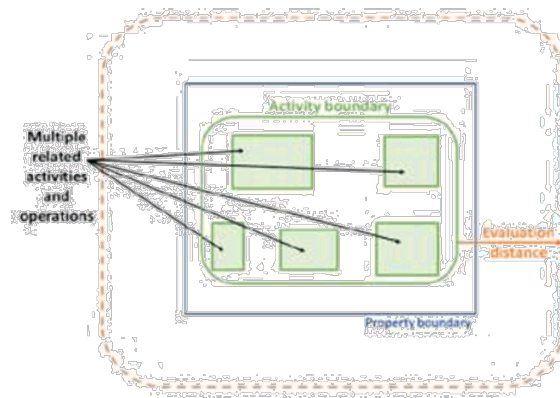
Industry	Recommended Separation Distance
Bitumen batch plants	500m
Quarry / processing / no blasting	300m
Quarry/processing/ blasting	500m

A later publication by EPA South Australia published in August 2016, *Evaluation distances for effective air quality and noise management*, introduced the concept of an evaluation distance as opposed to a buffer. The evaluation distance provides an envelope around an activity (or multiple activities) within which environmental risks need to be assessed against current knowledge, technologies and practices. The term ‘evaluation distance’ also

embodies other terminologies such as buffer distances, buffer areas or separation distance.<sup>11</sup>

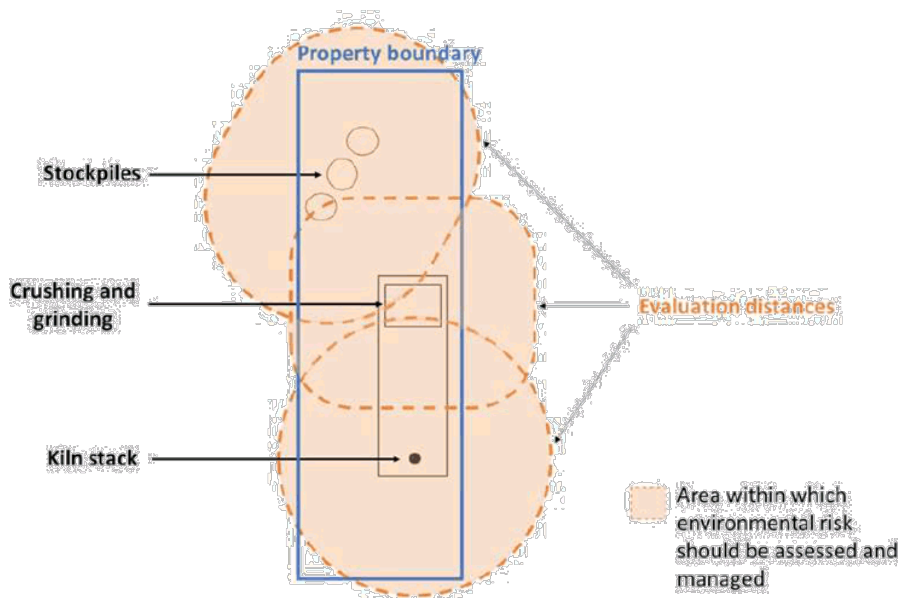
Diagram 3 below shows graphically how evaluation distances are intended to be applied.

**Diagram 3 - Evaluation Distance Application Guide Diagram<sup>12</sup>**



A particular use may also have multiple evaluation areas associated with different activities that are located on a site. This concept is shown graphically in Diagram 4 below.

**Diagram 4 – Evaluation distances applied to components of an activity<sup>13</sup>**



<sup>11</sup> EPA South Australia, *Evaluation distances for effective air quality and noise management, August 2016, p5*  
<sup>12</sup> EPA South Australia, *Evaluation distances for effective air quality and noise management, August 2016, p9*  
<sup>13</sup> EPA South Australia, *Evaluation distances for effective air quality and noise management, August 2016, p10*

9.5 **Policy (Review) - Extractive Industry.DOC**

The evaluation distances recommended by EPA South Australia, of relevance are contained within Table 10 below.

**Table 10 – Evaluation Distances for Select Activities Recommended by EPA South Australia<sup>14</sup>**

Industry	Recommended Separation Distance	Comments
Hot mix asphalt preparation (new technology)	500m	<p>Typical asphalt plants now provide a method of direct truck delivery and have gas reclaim systems to ensure odour emission rates are significantly lower than older plants. Odour is a main concern, where the odours are usually aliphatic organic chemicals.</p> <p>There are also concerns with dust generated from truck and forklift movements, the storage and handling of raw material, and where bitumen reclamation occurs. These also have an inherent noise impact.</p>
Hot mix asphalt preparation (older technology)	1000m	Applicable to new residential development proposed in the vicinity of existing industry.
Crushing, grinding or milling of rock ores	500m	
Extractive Industries	Subject to individual assessment	The main concerns are noise and dust, which are generated at sites from excavation areas, haul roads, raw feed and product stockpiles, processing and screening plants, blasting, rock crushers, mobile screening plants, crushing, grinding and milling.

<sup>14</sup> EPA South Australia, *Evaluation distances for effective air quality and noise management*, August 2016, Extracted from Appendix 1



## 8. Conclusion

This report has examined the legislative context applicable to land use planning decision making as it relates to extractive and associated industries. The report has also examined applicable buffer distance requirements applied by other Northern Rivers councils as well as by some other State EPAs.

It is considered not to be practical to attempt to prohibit extractive industries in Ballina Shire as such an approach is unlikely to gain support from the Department of Planning and Environment. Such an approach would also substantially impede access to extractive resources which are required to accommodate the future growth and development of the shire as envisaged under Council's endorsed land release and infrastructure strategies as well as State planning policies.

Council may recall that in 2015 an attempt was made to regulate *private native forestry* by implementing uniform requirements for development consent through a planning proposal. A Gateway determination was not granted for this proposal as it was deemed to conflict with existing and proposed State legislation. Attempting to restrict extractive industries through an LEP amendment or an amendment to the SEPP is considered highly likely to also fail.

Extractive industries, whilst they do have significant environmental impacts, also give rise to significant benefits for our communities. These benefits include providing a local source of building and road making materials as well as local jobs. It is in this context that controls need to be devised which provide an appropriate balance between the mitigation of impacts and the continued ability for extractive industries to be able to operate.

Council's DCP provisions relating to land use conflicts and associated buffer distances are based on those contained within the *Handbook*. It is considered that when the *Handbook* land use risk mitigation strategies, LUCRA process and recommended buffer distances are compared with other contemporary guidelines, they largely represent best practice in the field of rural land use conflict mitigation. It is therefore considered that there is no case for the adoption of alternative guidelines or strategies related to rural land use conflict risk mitigation.

Improvement suggestions for Council's DCP provisions that are considered to warrant examination relate to the following matters:

- Defining how buffer distances from sensitive locations to rural activities should be measured, and
- Incorporating minimum buffer distances for asphalt plants.

The review of the SEPP and a number of development consents, granted by the Council, and or the Minister for Planning, has also highlighted various inconsistencies in respect to how matters which relate to the following issues are approached:

- Prevention, minimisation, and or offset of adverse environmental impacts;
- Standards and performance measures related to acceptable environmental performance;
- Requirements for monitoring and reporting;
- Ongoing environmental management of the development;
- The manner in which extractive resources are described eg tonnes or cubic metres, wet or dry weight;
- Reconciliation of volumetric resource estimates against product leaving the quarry;

- Rehabilitation – restoration requirements, and the requirements for rehabilitation bonds and how such bonds are estimated;
- Independent audit requirements, their subject matter and frequency; and
- Impacted person consultation requirements before and after consent.

It has been concluded that there may be benefit in the Department of Planning and Environment preparing best practice development assessment guidelines for extractive industries. Such guidelines once prepared could be referenced within the SEPP and could require consideration during the assessment of the extractive industry development proposals.

### **9. Recommendations**

1. Diagrams be prepared and incorporated within Ballina Shire DCP 2012 *Chapter 2 General and Environmental Considerations* which detail how buffer distances referenced in Table 2.1 of Part 3 are intended to be calculated.
2. Minimum buffer distances for asphalt or hotmix plants be incorporated within Table 2.1 of Part 3 of Ballina Shire DCP 2012 *Chapter 2 General and Environmental Considerations*. The buffer distances be in line with the evaluation distances recommended by the EPA South Australia, in the publication *Evaluation distances for effective air quality and noise management*.
3. A submission be forwarded to the Department of Planning and Environment which seeks to have the Department prepare best practice guidelines for the assessment of extractive industries and mines in NSW and the referencing of such guidelines within *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007*.

**Appendix One – Letters from Government Authorities re Boral Asphalt Plant – Gap Road Alstonville**



Our Reference: DOC17/643630-04  
Contact: Graeme Budd (02) 6640 2500  
Date: 10 January 2018



The General Manager  
Ballina Shire Council  
PO Box 450  
BALLINA NSW 2478

Attention: Kerni Watts

Dear Ms Watts

**BORAL ASPHALT PLANT, 540 GAP ROAD, ALSTONVILLE**

I refer to Council's letter of 15 December 2017 and to previous letters in relation to odour and noise emissions from the Boral Asphalt Plant at Alstonville (the plant).

As you are aware the EPA, as the appropriate regulatory authority (ARA) under the *Protection of the Environment Operations Act 1997* for the plant, has required Bitupave Limited (Boral) to complete a noise impact assessment and Bitumen Odour Management Plan to identify if noise and odour control measures are necessary to ensure compliance with the relevant criteria at the plant.

It is clear that the location of the plant near residential areas means that under certain operational and weather conditions, impacts from noise and/or odour are possible. The purpose of the noise impact assessment and BOMP are to determine if exceedance of the EPA's accepted noise and/or odour criteria are occurring, and if so, what controls are possible/necessary to ensure compliance with these criteria. It should be noted that compliance with EPA criteria will not necessarily mean that residents will not hear, or detect odour, from the plant.

These types of landuse conflicts can be very difficult to resolve, however the EPA is committed to ensuring that the plant operates in a way that minimises its impact on nearby residents. As the consent authority under the *Environmental Planning and Assessment Act 1979*, Council is the appropriate regulatory authority for noise from truck movements on public roads and general enforcement of development consent conditions. Given our joint regulatory roles in managing the plant it is important that we continue to collaborate and ensure that the community is aware of our responses to their complaints.

While the EPA acknowledges the invitation to present to Council and the community on its regulation of the plant, it would be useful for regulatory staff from EPA and Council to meet to agree on a joint approach to managing these ongoing issues in the first instance. Mr Graeme Budd at the EPA's Grafton Office will contact you to arrange this meeting.

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[www.epa.nsw.gov.au](http://www.epa.nsw.gov.au)

If you have any questions regarding this matter, please contact Graeme Budd on (02) 66402500.

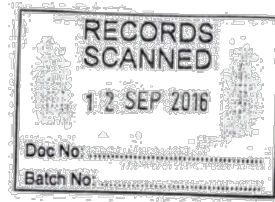
Yours sincerely



**KAREN MARLER**  
A/Regional Director North  
Environment Protection Authority



Our Reference: DOC16/444584  
Contact: Peter Lynch (02) 6640 2502  
Date: 5 September 2016



The General Manager  
Ballina Shire Council  
PO Box 450  
Ballina NSW 2478

- 7 SEP 2016

Attn: Ms Kern Watts

Dear Ms Watts,

**Potential Health Impacts of Emissions - Boral Asphalt Plant, 540 Gap Road, Alstonville**

I refer to Ballina Shire Council's letter of 10 August 2016 concerning potential health impacts of Emissions from Boral Asphalt Plant, 540 Gap Road, Alstonville.

**Historical Background Odour Management**

In 2014 Boral Asphalt Plant implemented an Air Quality Management Plan (AQMP) and Bitupave installed activated carbon filtration systems on the bitumen kettles and the bitumen holding tanks. The EPA notes that there have been verified odour complaints from the existing premises associated with asphalt handling and production since these works were completed.

**Development of a Bitumen Odour Management Plan (BOMP)**

The EPA notes that the section 96 (2) application to modify consent 1995/127 for Bitupave Ltd (Boral Property Group) was approved on 10 August 2016. Although not considered a part of the modification application, Boral has provided advice to Council that a Bitumen Odour Management Plan (BOMP) will be prepared in accordance with previous EPA advice as set out below.

Boral Asphalt Plant must prepare and implement a BOMP that includes, but is not limited to the following:

1. The implementation of best environmental practice to ensure odours are reduced to the maximum extent achievable for all odour generating activities on site.
2. Development of a routine odour survey/monitoring program and reactive management strategy, including meteorological monitoring and the implementation of appropriate triggers to further develop the reactive management strategy for odour mitigation; and
3. Details of all proposed odour control measures including:
  - Timeframe for implementation of all identified odour controls;
  - Key performance indicator(s) for odour controls;
  - Responsibilities for demonstrating and reporting achievement of key performance indicator(s); and
  - Record keeping and complaints response register.

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**Sampling and analysis of Emissions from the Boral Asphalt Plant**

Development of an effective BOMP should be informed by a knowledge of the emissions discharged from the premises gathered via:

**1. Sampling and Analysis**

The Approved Methods for the Sampling and Analysis of Air Pollutants (January 2007) lists the statutory methods that are to be used to sample and analyse air pollutant emissions from stationary sources. A copy can be obtained from <http://www.epa.nsw.gov.au/resources/legislation/07001amsaap.pdf>

**2. Modelling and Assessment**

The Approved Methods for the Modelling and Assessment of Air Pollutants (August 2005) lists the statutory methods that are to be used to model and assess emissions of air pollutants from stationary sources in NSW. A copy of the Guideline can be obtained from <http://www.epa.nsw.gov.au/resources/air/ammodelling05361.pdf>

An Air Quality Impact Assessment will assist the understanding of the discharge of emissions from the site and the potential impact of any emissions discharged from the site. The BOMP would then use the information obtained through sampling and analysis as well as modelling and assessment to provide an appropriate management framework.

In the letter of 10 August 2016 Ballina Shire Council requested that the EPA conduct sampling and analysis of emissions from the *Boral Asphalt Plant*. As advised in the EPA's letter of 6 July 2016 the development of monitoring program is a key component of a BOMP and so will necessarily be carried out on behalf of the company as part of the development of the BOMP. The EPA does not normally carry out sampling and analysis of emissions as requested by Council.

The EPA is prepared to provide further details regarding the development of the proposed BOMP for the site but does not have a role in the approval of such documents.

If you have any questions regarding the above, please contact Peter Lynch on (02) 6640 2502.

Yours sincerely



**GRAEME BUDD**  
Head, Environmental Management Unit – North Coast  
Environment Protection Authority

Cc: 'Jeffery, Nathan' [Nathan.Jeffery@boral.com.au](mailto:Nathan.Jeffery@boral.com.au)  
Cc: Johnson, Rod [Rod.Johnson@boral.com.au](mailto:Rod.Johnson@boral.com.au)



Our Reference: DOC18/147206-02  
Contact: Janelle Bancroft  
Date: 12 March 2018

The General Manager  
Attention: Lucy Bennett  
Ballina Shire Council  
PO Box 450  
BALLINA NSW 2478

Dear Ms Bennett:

**Development Application 2017/679, General Referral, Demolition of existing House and Shed and Torrens Title Subdivision to Create 10 Residential Lots, 77 Teven Road, Alstonville**

I refer to the general referral to the EPA for the development consisting of demolition of existing house and shed and torrens title subdivision to create 10 residential on Lot 83 DP 239781, 77 Teven Road, Alstonville.

The EPA notes that the proposed subdivision is near to an existing quarry (Tuckombil Quarry) and asphalt plant (Boral Asphalt) operating at the corner of Gap Road and Teven Road (Lot 2 DP1130300). The EPA notes that the subject site is approximately 440m from the Tuckombil Quarry and 350m from Boral Asphalt.

The site is well within the recommended buffer limits of 1000m to a quarry with blasting (as provided by both *Living and Working in Rural Areas Handbook*, Dept. of Primary Industries et al 2007 and Development Control Plan 2012, Ballina Shire Council). Whilst there is no specific buffer for the asphalt plant, I understand that EPA Victoria recommends a separation distance of 500m and EPA WA recommends a separation distance of 100m between residential premises and asphalt plants.

In light of the proximity of the proposed subdivision to the quarry and asphalt plant it is apparent that should development consent be granted, land use conflict is likely between any new sensitive receiver and the existing approved quarry and bitumen plant.

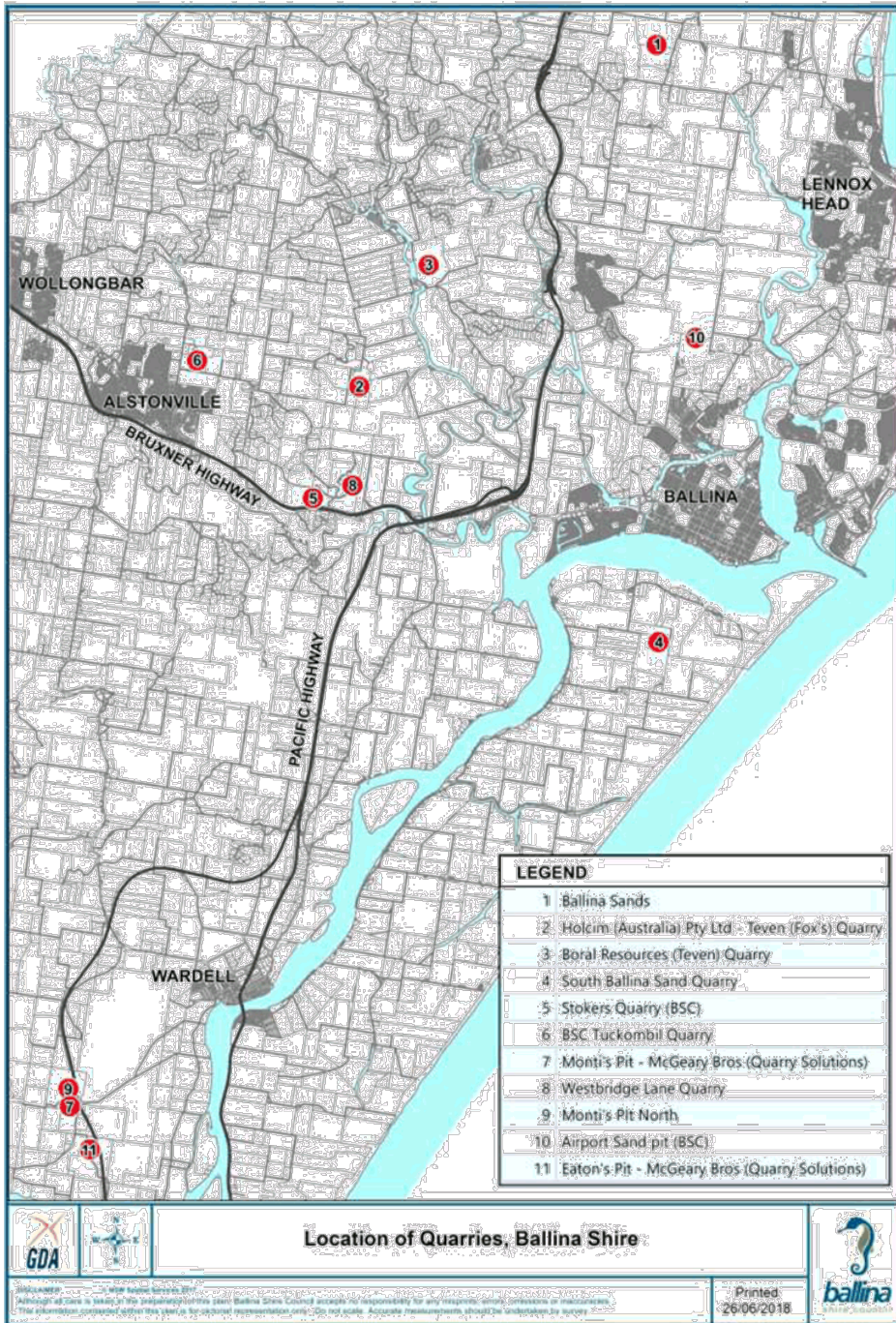
Under certain operational and weather conditions, impacts from noise and/or odour are likely. It should be noted that compliance with EPA criteria will not necessarily mean that residents will not hear or detect odour from the quarry and/or asphalt plant. Aspects of asphalt plant and quarry operations and traffic movements have the potential to cause odour and noise impacts but further amelioration of impact may not be reasonable.

Should EPA identify that the Tuckombil Quarry is complying with licence conditions or the asphalt plant is meeting an accepted industry standard, compliance action would not be possible.

With the separation distances identified between the proposed subdivision and existing quarry and asphalt batching plant, it would appear that the two land uses are incompatible. Once a land use conflict has arisen, the EPA or Council (depending on the scale of the activity) will be responsible for investigating complaints and enforcing compliance or further regulating off-site emissions.

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Appendix 2 – Map showing location of approved quarries in Ballina Shire





**Appendix 3 – Extract from Environmental Planning and Assessment Regulation 2000  
– Schedule 3 List of Designated Development**

**Extractive industries**

(1) Extractive industries (being industries that obtain extractive materials by methods including excavating, dredging, tunnelling or quarrying or that store, stockpile or process extractive materials by methods including washing, crushing, sawing or separating):

(a) that obtain or process for sale, or reuse, more than 30,000 cubic metres of extractive material per year, or

(b) that disturb or will disturb a total surface area of more than 2 hectares of land by:

(i) clearing or excavating, or

(ii) constructing dams, ponds, drains, roads or conveyors, or

(iii) storing or depositing overburden, extractive material or tailings, or

(c) that are located:

(i) in or within 40 metres of a natural waterbody, wetland or an environmentally sensitive area, or

(ii) within 200 metres of a coastline, or

(iii) in an area of contaminated soil or acid sulphate soil, or

(iv) on land that slopes at more than 18 degrees to the horizontal, or

(v) if involving blasting, within 1,000 metres of a residential zone or within 500 metres of a dwelling not associated with the development, or

(vi) within 500 metres of the site of another extractive industry that has operated during the last 5 years.

(2) This clause does not apply to:

(a) extractive industries on land to which the following environmental planning instruments apply:

(i) *Sydney Regional Environmental Plan No 11—Penrith Lakes Scheme*,

(ii) *Western Division Regional Environmental Plan No 1—Extractive Industries*, or

(b) maintenance dredging involving the removal of less than 1,000 cubic metres of alluvial material from oyster leases, sediment ponds or dams, artificial wetland or deltas formed at stormwater outlets, drains or the junction of creeks with rivers, provided that:

(i) the extracted material does not include contaminated soil or acid sulphate soil, and

(ii) any dredging operations do not remove any seagrass or native vegetation, and

(iii) there has been no other dredging within 500 metres during the past 5 years, or

(c) extractive industries undertaken in accordance with a plan of management (such as river, estuary, land or water management plans), provided that:

(i) the plan is prepared in accordance with guidelines approved by the Secretary and includes consideration of cumulative impacts, bank and channel stability, flooding, ecology and hydrology of the area to which the plan applies, approved by a public authority and adopted by the consent authority and reviewed every 5 years, and

- (ii) less than 1,000 cubic metres of extractive material is removed from any potential extraction site that is specifically described in the plan, or
- (d) the excavation of contaminated soil for treatment at another site, or
- (e) artificial waterbodies, contaminated soil treatment works, turf farms, or waste management facilities or works, specifically referred to elsewhere in this Schedule, or
- (f) development for which *State Environmental Planning Policy No 52—Farm Dams and Other Works in Land and Water Management Plan Areas* requires consent, or
- (g) maintenance dredging of alluvial material from oyster leases and adjacent areas in Wallis Lake, but only if the dredging is undertaken in accordance with the document entitled *Protocol for Wallis Lake Oyster Lease Maintenance Dredging* approved by the Secretary and published in the Gazette, as amended by the Secretary from time to time by publication of an amended Protocol in the Gazette.

**Appendix Four – Extractive Industry s117 Direction**

**LOCAL PLANNING DIRECTIONS**

*Section 117(2) of the Environmental Planning and Assessment Act 1979*

**1.3 Mining, Petroleum Production and Extractive Industries**

**Objective**

- (1) The objective of this direction is to ensure that the future extraction of State or regionally significant reserves of coal, other minerals, petroleum and extractive materials are not compromised by inappropriate development.

**Where this direction applies**

- (2) This direction applies to all relevant planning authorities.

**When this direction applies**

- (3) This direction applies when a relevant planning authority prepares a planning proposal that would have the effect of:
- (a) prohibiting the mining of coal or other minerals, production of petroleum, or winning or obtaining of extractive materials, or
  - (b) restricting the potential development of resources of coal, other minerals, petroleum or extractive materials which are of State or regional significance by permitting a land use that is likely to be incompatible with such development.

**What a relevant planning authority must do if this direction applies**

- (4) In the preparation of a planning proposal affected by this direction, the relevant planning authority must:
- (a) consult the Director-General of the Department of Primary Industries (DPI) to identify any:
    - (i) resources of coal, other minerals, petroleum or extractive material that are of either State or regional significance, and
    - (ii) existing mines, petroleum production operations or extractive industries occurring in the area subject to the planning proposal, and
  - (b) seek advice from the Director-General of DPI on the development potential of resources identified under (4)(a)(i), and
  - (c) identify and take into consideration issues likely to lead to land use conflict between other land uses and:
    - (i) development of resources identified under (4)(a)(i), or
    - (ii) existing development identified under (4)(a)(ii).
- (5) Where a planning proposal prohibits or restricts development of resources identified under (4)(a)(i), or proposes land uses that may create land use conflicts identified under (4)(c), the relevant planning authority must:
- (a) provide the Director-General of DPI with a copy of the planning proposal and notification of the relevant provisions,
  - (b) allow the Director-General of DPI a period of 40 days from the date of notification to provide in writing any objections to the terms of the planning proposal, and
  - (c) include a copy of any objection and supporting information received from the Director-General of DPI with the statement to the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General) before undertaking community consultation in satisfaction of section 57 of the Act.

**Consistency**

- (6) A planning proposal may be inconsistent with the terms of this direction only if the relevant planning authority can satisfy the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General), that the provisions of the planning proposal that are inconsistent are of minor significance.

Direction 1.3 – issued 1 July 2009

Appendix 5 – Ballina Shire Mineral Resources Map

