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MODIFICATION REPORT

Tomago Asphalt Batching Plant

for
COLAS New South Wales Pty Ltd

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Project	Tomago Asphalt Batching Plant
Client	COLAS New South Wales Pty Ltd
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Signature	
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Signature	

This report was prepared by Monteath & Powys Pty Ltd.

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1. INTRODUCTION

OVERVIEW

This Modification Report has been prepared by Monteath & Powys Pty Ltd on behalf of COLAS New South Wales Pty Ltd (COLAS) for submission to the NSW Department of Planning, Industry and Environment (DPIE) for assessment of the Modification Application following early consultation. The proposal seeks to increase the total output of the approved Asphalt Batching Plant located at 25 to 27 Kennington Drive, Tomago from 150,000 tonnes per year to up to 250,000 tonnes per year. The Modification Application seeks amendments to State Significant Development (SSD) 07_0031 pursuant to Section 4.55(2) of *the Environmental Planning and Assessment Act 1979* (EP&A Act).

BACKGROUND

COLAS own and operates the Tomago Asphalt Batching Plant in the suburb of Tomago, NSW which operates in conjunction with their Materials Storage and Processing Yard which is located adjacently to the site. Approvals for the sites date back to 2007 for the Asphalt Batching Plant and 2010 for the Materials Storage and Processing Yard.

As part of COLAS' overall business planning, they are seeking to increase the throughput of both the sites to allow for an increase in the output of asphalt from the Asphalt Batching Plant.

The Proposal will act to enable COLAS to meet future market demands and to provide adequate supply of asphalt to support local and regional development projects.

PROPONENT

COLAS New South Wales Pty Ltd
C/- Monteath & Powys
PO Box 2270
DANGAR NSW 2309

Contact:

Clint Forrester
Phone: 02 4926 1388

The Owner(s):

Land ownership of the site is detailed in **Table 1** below.

Table 1: *Land Ownership of the Site*

LOT	SECTION	DP	OWNER DETAILS
25 Kennington Drive, Tomago			
14	-	270494	COLAS, New South Wales Pty Ltd
27 Kennington Drive, Tomago			
15	-	270494	COLAS, New South Wales Pty Ltd

PURPOSE OF THIS REPORT

The purpose of the Modification Report is to assess the economic, environmental and social impacts of the proposed modifications and to help the community, government agencies and the consent authority make informed submissions or decisions on the merits of the modifications. The report also addresses 'Attachment A' of a letter prepared by DPIE outlining the assessment criteria for the modification. Refer to **Appendix A**.

The report describes the following:

- Description of the modification.
- Strategic and statutory context.
- Community and stakeholder engagement.
- Assessment of the modification.

2. DESCRIPTION OF MODIFICATION

SITE DETAILS

The subject site is located in the Port Stephens Local Government Area, in a Community Title Subdivision known as 'Hunter Industrial Park' located in the suburb of Tomago, being well placed within the Hunter Region (**Figure 1**). Adjoining land uses surrounding the site are also for the purposes of general industrial development.

The subject site consists of two lots being Lots 14 and 15 DP 270494 comprising an area of approximately 5,005m^2. The site is adjacent to a Materials Storage and Processing Yard which is also owned and operated by COLAS (**Figure 2**).

The layout of the subject site is outlined within the site plan prepared by Lindsay Dynan (**Figure 3**). Note – this is not the final construction plan. A review of the final Occupation Certificate (CN090313) dated 25 November 2010 includes a combined storage shed / garage along the frontage of the site.

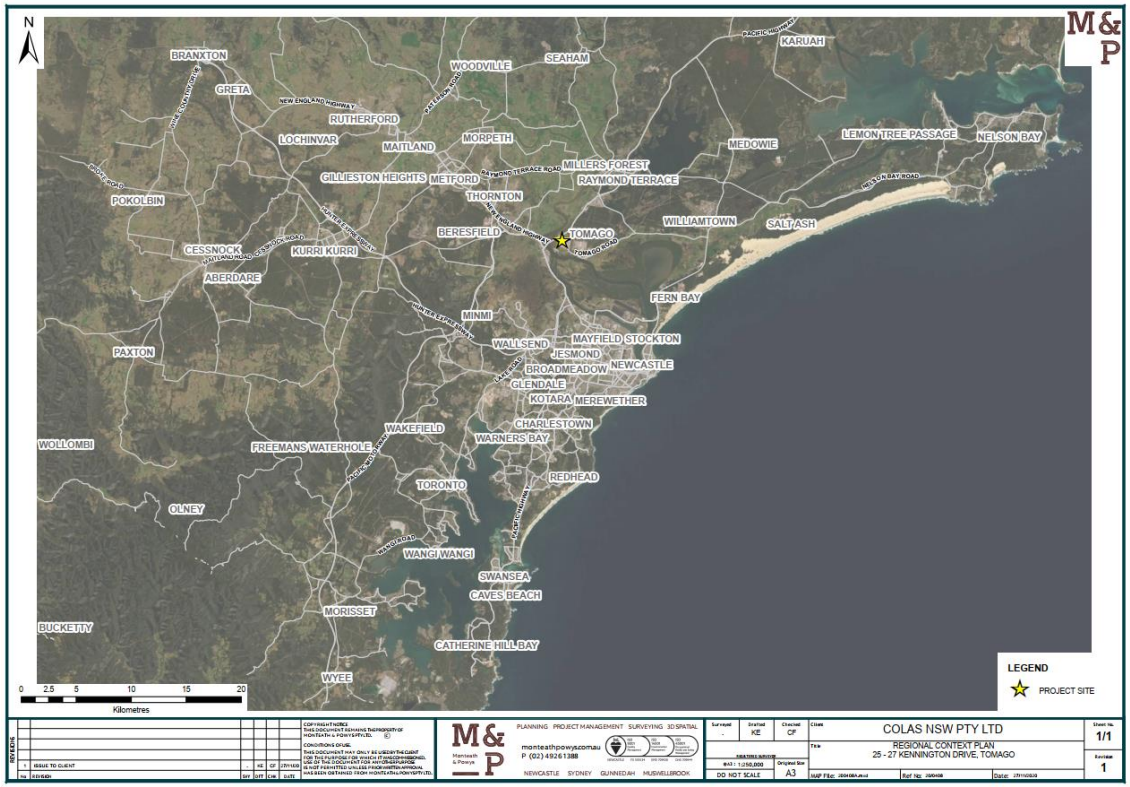

Figure 1: *Regional Plan*

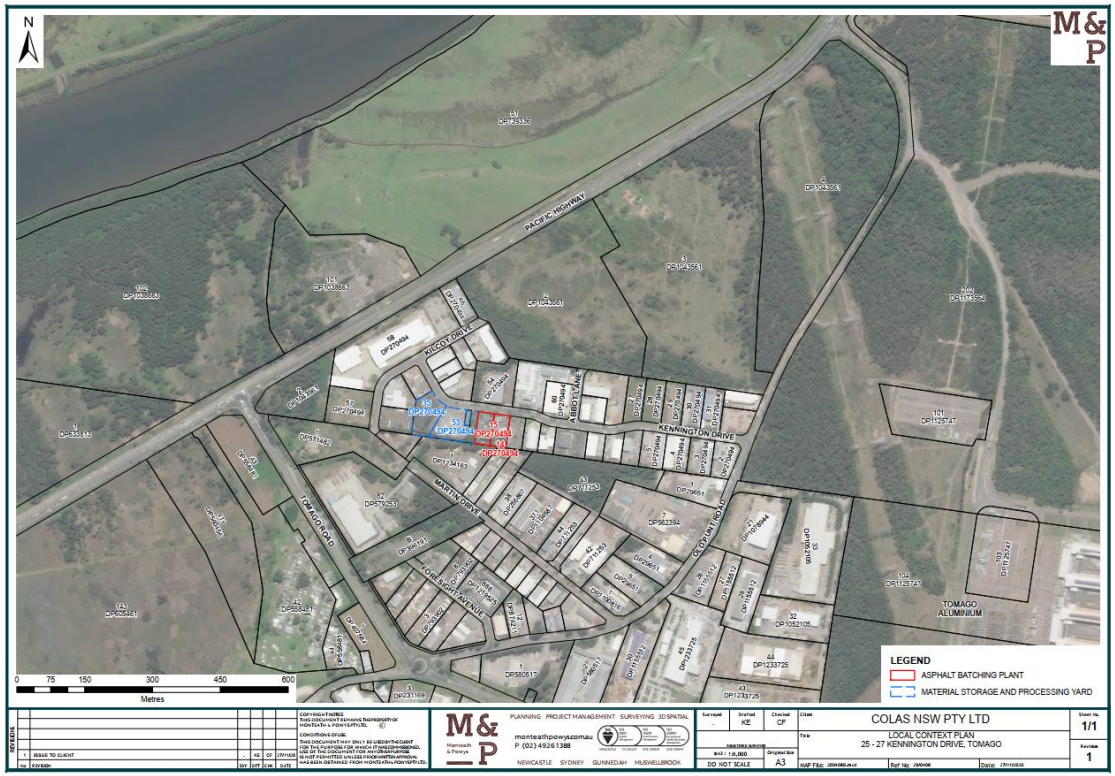

Figure 2: *Local Plan*

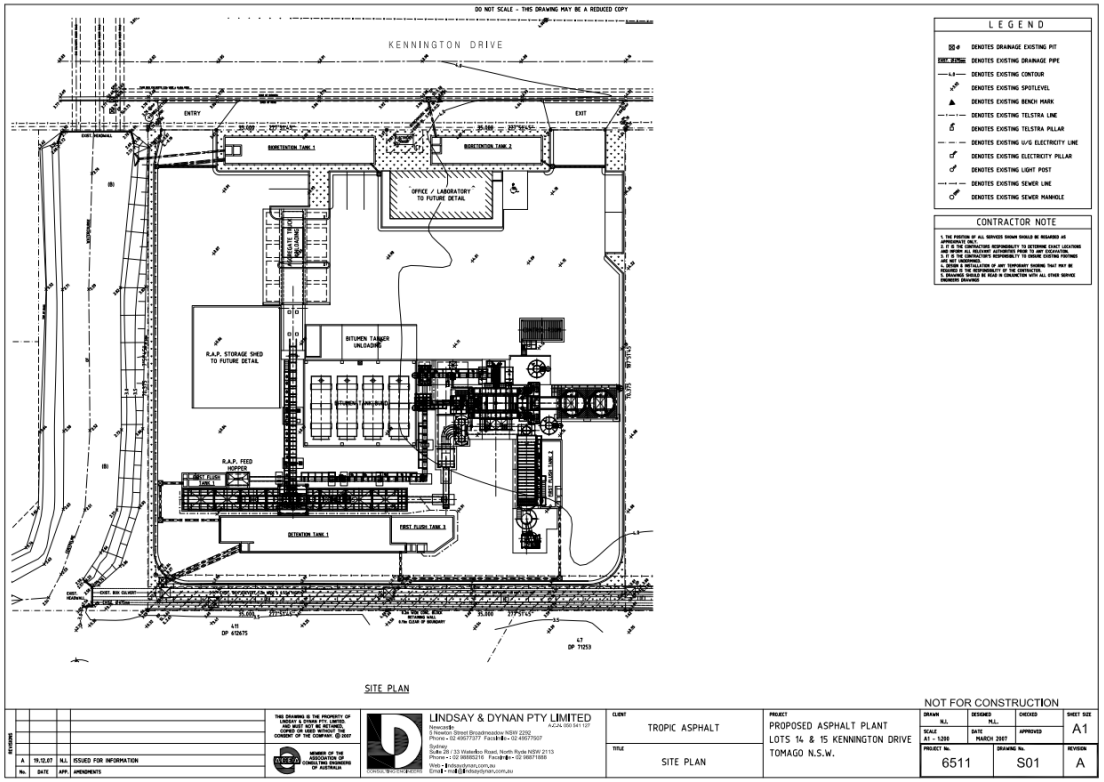

Figure 3: *Site Plan (Source: Lindsay Dynan - Not Final Construction Plan)*

ORIGINAL APPROVAL

The Asphalt Batching Plant was approved as a major project under Part 3A of the EP&A Act in 2007. This approval is attached as **Appendix B**. On 9 October 2020, the project was transitioned to SSD, refer to **Appendix C**.

The Asphalt Batching Plant currently has approval to produce 150,000 tonnes of asphalt per year. Refer to extract of the approval below.

Schedule 2, Administrative Conditions

Limits of Approval

5. The Proponent shall not produce more than 150,000 tonnes of asphalt per year.

Under Schedule 3 'Specific Environmental Conditions' of the approval, Condition 6 (Air Quality) and Condition 9 (Noise) required audits to satisfy certain identified environmental conditions. At the request of DPIE, these audits are attached as **Appendix D**. Additionally, as part of the Air Quality Impact Assessment prepared as part of this report, discussion is included within Section 1.2.1 (Air Quality Audit and Complaints) of the report, refer to **Appendix E**.

PROPOSED DEVELOPMENT

This Section 4.55(2) Modification Application seeks approval for the following (the Proposal):

- To increase the output of asphalt from 150,000 tonnes per year to up to 250,000 tonnes per year.

This increase does not involve an increase in size of the overall plant, rather seeks to increase the utilisation of the plant's existing capability.

No construction works or changes to the approved hours are sought as part of the proposal.

It is proposed to modify Condition 5 of Schedule 2 (Administrative Conditions) to read as noted below.

Limits of Approval

5. The Proponent shall not produce more than **250,000** tonnes of asphalt per year.

COLAS own and operates the Tomago Asphalt Batching Plant which operates in conjunction with their Materials Storage and Processing Yard which is located adjacently to the site. The Materials Storage and Processing Yard will be known as the Supporting Activity within this report. The Supporting Activity is a separate application to the Proposal in which Secretary's Environmental Assessment Requirements (SEARs) were requested with an EIS to be submitted to Port Stephens Council.

SUPPORTING ACTIVITY

The Supporting Activity involves the increase in throughput and thresholds of their Materials Storage and Processing Yard located at 31 to 33 Kennington Drive, Tomago. This increase is directly related to supporting the Asphalt Batching Plant to achieve the increase in asphalt output by providing a large proportion of the aggregate materials needed to produce asphalt. The Supporting Activity meets the criteria for designated development under Schedule 3, Part 1 (16) of the (EP&A) Regulations, being for 'crushing, grinding or separating works.' Again, this activity is a separate application to the Proposal.

The Supporting Activity seeks approval for the following:

- Increase the currently approved waste threshold from 29,500 tonnes per year to 67,500 tonnes per year. This threshold is to include approval for 57,500 tonnes of reclaimed asphalt pavement (RAP) material to be crushed, screened, and stored on the site. The approval will also allow for 10,000 tonnes of steel furnace slag to be stored on site per year.

- Increase the currently approved utilisation threshold of aggregate material on site from 120,000 tonnes per year to 220,000 tonnes per year.

NEED FOR THE PROJECT

The proposal is part of COLAS' overall business planning which seeks to ensure the company can meet future product demand. COLAS provides asphalt for numerous infrastructure operations within the locality. Clients currently include:

- City of Newcastle
- Lake Macquarie City Council
- Maitland Council
- Port Stephens Council
- Transport for NSW

Recent projects include:

- Ditchfield – Golden Highway 2019/20 70,000 tonnes; and
- KCE – Lochinvar 2019/20 11,000 tonnes.

The activities are well placed within the Hunter Region to continue to provide asphalt to their long-standing clients.

Analysis was completed by COLAS to determine the most appropriate pathway for their business operations. Overall, the site is existing and well positioned to provide an effective and efficient operations. An increase in utilisation of the existing operations will minimise construction and transport impacts.

COLAS has also investigated the alternative of utilising a conveyor system to span across the two adjoining sites to reduce traffic movements. Unfortunately, after cost analysis this pathway was determined to be currently cost prohibitive and would see the increase in output to be unviable.

3. STRATEGIC AND STATUTORY CONTEXT

This section deals with the proposal's consistency with the various statutory and non-statutory provisions that apply to the site. It also addresses the relevant matters for consideration under Section 4.55(2) and Section 4.15(1) of the EP&A Act.

COMMONWEALTH LEGISLATION

3.1.1 Environment Protection and Biodiversity Conservation Act 1999

The Commonwealth Environmental Protection and Biodiversity Conservation Act (EPBC) 1999, in conjunction with the Commonwealth Environmental Protection and Biodiversity Conservation Regulations 2000, provide the basis for national environmental protection and conservation. The EPBC Act specifically aims to:

- *Provide for the protection of the environment, especially matters of national environmental significance.*
- *Conserve Australian biodiversity.*
- *Provide a streamlined national environmental assessment and approvals process.*
- *Enhance the protection and management of important natural and cultural places.*
- *Control the international movement of plants and animals (wildlife), wildlife specimens and products made or derived from wildlife.*
- *Promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources.*
- *Recognise the role of Indigenous people in the conservation and ecologically sustainable use of Australia's biodiversity.*
- *Promote the use of Indigenous peoples' knowledge of biodiversity with the involvement of, and in cooperation with, the owners of the knowledge.*

The EPBC requires Commonwealth approval for development which significantly impacts upon matters relating to National environmental significance. The nine matters of national environmental significance protected under the EPBC Act include:

- *World heritage properties*
- *National heritage places*
- *Wetlands of international importance*
- *Listed threatened species and ecological communities*
- *Migratory species*
- *Commonwealth marine areas*
- *The Great Barrier Reef Marine Park*
- *Nuclear actions (including uranium mines)*
- *A water resources, in relation to coal seam gas development and large coal mining development*

The Proposal is considered an 'action' under Section 523 of the EPBC Act that aims to protect and manages matters of national environmental significance from actions that are likely to have a significant impact. The EPBC Act lists criteria that are used to determine whether an action is likely to have a significant effect on matters of national environmental significance (NES). An action may be referred to the Department of the Agriculture, Water, and the Environment for assessment to determine whether the likely environmental impacts are such that should be assessed under the EPBC Act. Should the Minister of the Department of the Agriculture, Water and the Environment decide the proposed action requires approval, the proposed action is called a 'controlled action' and is subject to a formal assessment and approval process.

A Protected Matters Search of NES Matters within a 5km radius of the proposed action site was undertaken on 3 March 2021 to determine what NES features may be present in the vicinity of the site. The results of the database search are provided within the attached database searches appendix and summarised in **Table 2.**

Table 2: *MNES Checklist*

NES MATTERS	COMMENT	SIGNIFICANT IMPACT (YES / NO)
Australia's World Heritage	There are no World Heritage properties within 5kms of the site.	No
National Heritage Places	There are no National Heritage Places within 5kms of the site.	No
Ramsar wetlands of international importance	There is one Ramsar wetland of international importance within 5kms of the site. The Hunter Estuary Wetlands Ramsar site is located on the northern edge of Newcastle and is in two parts: 1. Kooragang Nature Reserve (now part of Hunter Wetlands National Park). The subject site is located approximately 2.7kms north of Kooragang Nature Reserve; and 2. Hunter Wetlands Centre (Shortland Wetlands Centre) is an isolated section of the system. The subject site is located approximately 5.7kms north of the Hunter Wetlands Centre.	No
Listed threatened species and ecological communities	There are 5 listed threatened ecological communities and 69 listed threatened species within 5kms of the site. The activity is unlikely to impact on Commonwealth listed threatened species or ecological communities, the works will not require the removal of native vegetation as the site is an existing industrial area and is an existing approved Asphalt Batching Plant.	No
Migratory species listed under the EPBC Act	There are 63 listed migratory species within 5kms of the site. The activity is unlikely to impact on Commonwealth listed migratory species or species protected under international agreements.	No
Commonwealth Marine Areas	There are no Commonwealth Marine Areas within 5kms of the site.	No

NES MATTERS	COMMENT	SIGNIFICANT IMPACT (YES / NO)
Great Barrier Reef Marine Park	The Great Barrier Reef Marine Park is not located within 5kms of the site.	No
Nuclear actions, including uranium mining	The Proposal would not involve a nuclear action.	No
Water resources impacted on by a coal seam as or large coal mining development	The Proposal would not involve coal seam gas or coal mining.	No
Commonwealth land	Commonwealth land has been identified within 5kms of the subject site. This includes: • Commonwealth Land – Australian Telecommunication Commission; and • Commonwealth Land – Director of War Service Homes. The subject site is not located on Commonwealth land.	No

It should be noted that the site of the Proposal is an approved Asphalt Batching Plant located in an existing industrial area and is not situated on or near an area of environmental significance and does not contain any of the national environmental significance items.

Although the Protected Matters search has revealed the abovementioned matters surrounding the site, the activity will be undertaken wholly within the site boundaries as shown in **Figure 2** with existing mitigation measures in place to prevent any significant impact.

A search of the Office of Environment and Heritage Bio Net Atlas of NSW Wildlife was also conducted on 8 March 2021. The search result noted no threatened species or ecological communities are located within the subject site.

As a result of the above analysis, the action does not require referral to the Minister. Overall, it is considered that no further action is required under the EPBC Act.

REGIONAL AND LOCAL STRATEGIC PLANNING CONSIDERATIONS

3.1.2 Community Strategic Plan 2018 - 2028

The Community Strategic Plan (the Plan) is a cornerstone document of the NSW Government's Integrated Planning and Reporting (IP&R) Framework required for all local governments. It comprises Council's Delivery Program and Operational Plan.

It incorporates recent studies completed by Council, such as the Port Stephens Commercial and Industrial Land Study. The development of employment lands at Tomago is recognised as strategically and economically important for the locality, with the proposed development considered to further promote employment on the industrial land.

ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979 AND ENVIRONMENTAL PLANNING AND ASSESSMENT REGULATION 2000

The Proposal is being determined under the provisions of the EP&A Act.

3.1.3 Approval Pathway

The Modification Application seeks amendments to SSD 07_0031 pursuant to Section 4.55(2) of EP&A Act. The Modification Application is to be assessed by DPIE.

The following table (**Table 3**) outlines the compliance of Section 4.55(2) and refers to the relevant sections of this Modification Report.

Table 3: *Section 4.55(2) - Matters for Consideration*

4.55(2) – MATTERS FOR CONSIDERATION	
PROVISION	**CONSIDERED**
Section 4.55(2) ***Other modifications*** *A consent authority may, on application being made by the applicant or any other person entitled to act on a consent granted by the consent authority and subject to and in accordance with the regulations, modify the consent if—*	Complies. Subject of this Modification Application.
Section 4.55(2)(a) it is satisfied that the development to which the consent as modified relates is substantially the same development as the development for which consent was originally granted and before that consent as originally granted was modified (if at all), and	Complies. The modification is considered 'substantially the same development'. Analysis has been undertaken and is outlined within Section 3.3.2 of this report.
Section 4.55(2)(b) it has consulted with the relevant Minister, public authority or approval body (within the meaning of Division 4.8) in respect of a condition imposed as a requirement of a concurrence to the consent or in accordance with the general terms of an approval proposed to be granted by the approval body and that Minister, authority or body has not, within 21 days after being consulted, objected to the modification of that consent, and	Complies. The Modification Application has been submitted to DPIE to review and determine the proposed modification.
Section 4.55(2)(c) it has notified the application in accordance with— *(i) the regulations, if the regulations so require, or* *(ii) a development control plan, if the consent authority is a council that has made a development control plan that requires the notification or advertising of applications for modification of a development consent, and*	The Modification Application will be notified in accordance with the regulations.
Section 4.55(2)(d) it has considered any submissions made concerning the proposed modification within the period prescribed by the regulations or provided by the development control plan, as the case may be.	All reasonable concerns raised in any submissions will be considered by the applicant. The DPIE will consider any submissions.
Subsections (1) and (1A) do not apply to such a modification.	N/A

Overall, the proposed modification has considered and will comply with all matters for consideration outlined in Section 4.15(2).

3.1.4 Section 4.55(2)(a) Substantially the Same Development

Section 4.55(2)(a) requires the consent authority to be "*satisfied that the development to which the consent as modified relates is substantially the same development as the development for which consent was originally granted and before that consent as originally granted was modified (if at all),"*

In order to draw this conclusion, a proponent must have regard to the following considerations, which have been established through decisions of the NSW Land and Environment Court (LAC):

- ''Substantially'' means ''essentially or materially'' or ''having the same essence.''
- A development can still be substantially the same even if the development as modified involves land that was not the subject of the original consent (provided that the consent authority is satisfied that the proposal is substantially the same).
- If the development as modified, involves an ''additional and distinct land use'', it is not substantially the same development.
- Notwithstanding the above, development as modified would not necessarily be substantially the same solely because it was for precisely the same use as that for which consent was originally granted.
- To determine whether something is ''substantially the same'' requires a comparative task between the whole development as originally approved and the development as proposed to be modified. In order for the proposal to be ''substantially the same'', the comparative task must:
    - Result in a finding that the modified development is ''essentially or materially'' the same.
    - Appreciate the qualitative and quantitative differences in their proper context.
    - In addition to the physical difference, consider the environmental impacts of proposed modification applications to approved developments.
- The results of the comparative task ''does not eclipse or cause to be eclipsed a particular feature of the development, particularly if that feature is found to be important, material or essential.''

A quantitative and qualitative investigation has been completed below.

It must be acknowledged that determining whether a project change is within the Modification Application threshold through comparative analysis can be difficult because of the range of elements that need to be considered and the lack of a defining threshold.

It is for this reason that DPIE intentionally refrains from seeking to provide definitive thresholds for this test to avoid prejudicing the merits of any potential modification application.

Quantitative Assessment

The following table (**Table 4**) outlines a quantitative comparison of the original approval and the Proposal. The analysis has utilised a number of factors to demonstrate that the Proposal is considered substantially the same development.

Table 4: *Quantitative Comparison for Proposed and Original Approval*

ELEMENT	ORIGINAL	PROPOSED
General		
Development size, scale and footprint.	Lots 14 and 15 DP270494. Plant constructed as outlined within approval.	No change. The Proposal does not involve an increase in size of the overall plant, rather seeks to increase the utilisation of the plant's existing capability.
Originally estimated asphalt outputs (2007). Note, these estimates were derived from information from other operating asphalt batching plants and were not intended for specific determined limits.	Maximum per hour 150 tonnes	No change.
	Typical Daily Production 200-500 tonnes.	800 tonnes per day. This change is reflective of the increased utilisation of the Asphalt Batching Plant.
	Peak Daily Production (8 hours) 1,000.	1200. This change is reflective of the increased utilisation of the Asphalt Batching Plant.
	24 hour Peak Production 1,500 (24 hour shift).	3000. This change is reflective of the increased utilisation of the Asphalt Batching Plant.
Intersection Performance.	The Traffic Assessment prepared as part of the Environmental Assessment in 2007 (June 13) noted that there would be negligible effect on the level of service, level of safety or capacity of local road network.	The surrounding intersections all retain the same overall level of service under future conditions with minimal delays and additional capacity, indicating that there will be negligible impact on the existing road network as a result of the proposed development. This is further addressed under Section 5.2 of this report.
Schedule 2 - Administrative conditions		
(5) Approval limit - Limits of Approval.	Shall not produce more than 150,000 tonnes of asphalt a year.	Production of up to 250,000 tonnes of asphalt per year.

ELEMENT	ORIGINAL	PROPOSED
Schedule 3 - Specific Environmental Conditions		
Odour.	The proponent shall not cause or permit the emission of offensive odours from the site, as defined under Section 129 of the *Protection of the Environment Operations Act 1997.*	An Air Quality Impact Assessment was undertaken as part of this assessment which is further discussed in Section 5.3 of this report and is attached as **Appendix E**. As outlined within the Air Quality Impact Assessment, based on the current operation of the site, it is likely that this would be achieved following the modification.
Air Quality.	The proponent shall ensure that the stack emissions from the project comply with the relevant standards of concentrations under the *Protection of the Environment Operations Act 1997.* The proponent shall ensure that dust emissions generated by the project do not cause additional exceedances of the air quality impact assessment criteria listed within the approval.	The Air Quality Impact Assessment outlines the following assessment conclusions. The performance of the Proposal does not result in any exceedances of the annual average TSP or PM_{10}. impact assessment criteria. One minor exceedance of the annual average $PM_{2.5}$ concentration is predicted, although given the industrial nature of the relevant receptor, exposure over that averaging period is not likely. The performance of the Proposal does not result in any exceedances of the annual average dust deposition impact assessment criteria. The performance of the proposal does not result in any additional exceedances of the maximum 24-hour average PM_{10} impact assessment criteria at the identified sensitive receptor locations. The performance of the proposal does not result in any additional exceedances of the maximum 24-hour average $PM_{2.5}$ impact assessment criteria at the identified sensitive receptor locations.

<table>
<tr><th>ELEMENT</th><th>ORIGINAL</th><th colspan="2">PROPOSED</th></tr>
<tr><td>Noise.</td><td>The proponent shall ensure that the noise generated by the project does not exceed the noise impact assessment listed within Table 4 of Condition 7 of the approval.</td><td colspan="2">An Acoustic Assessment was undertaken as part of this assessment which is further discussed in Section 5.3 of the report and is attached as Appendix F.

Noise at the worst-case scenario at R1 safely complies with the condition and is noted below.

Note: Noise Policy for Industry (NPfI 2017) replaced NSW Industrial Noise Policy. This results in the following project noise triggers.</td></tr>
<tr><td></td><td>Project Noise Limits (NSW Industrial Noise Policy)</td><td>Project Noise Triggers</td><td>Results</td></tr>
<tr><td></td><td>Day: 50.5</td><td>Day: 52</td><td>Day: 36</td></tr>
<tr><td></td><td>Evening: 51.0</td><td>Evening: 48</td><td>Evening: 36</td></tr>
<tr><td></td><td>Night: 45.0</td><td>Night: 43</td><td>Night: 39</td></tr>
<tr><td>Operating Hours.</td><td>All days, anytime.</td><td colspan="2">No Change.</td></tr>
<tr><td>Transport – Vehicle Queuing.</td><td>The proponent shall ensure that the project does not result in any vehicles queuing on the public road network.</td><td colspan="2">The peak production rate of the site is not changing, rather, the site will run for longer to achieve the increase in volume such that no additional queues will result from the Proposal.

Adequate parking space on the site is provided to ensure no queuing on the public road network.</td></tr>
<tr><td>Transport – Parking.</td><td>Vehicles associated with the project shall not park on local roads in the vicinity of the site at any time.</td><td colspan="2">Adequate parking is provided within COLAS' operations to ensure compliance.</td></tr>
</table>

Qualitative Assessment

- Does not propose any changes of land use.
- Does not diminish the visual amenity of the industrial area.
- Does not propose any changes which would have a detrimental impact on Heritage Values.
- The proposal is for the same purpose as was approved and noted within the Director-General's Environmental Assessment Report December 2007. Being, *"Granted the project would produce up to 150,000 tonnes of **asphalt a year for the Newcastle and Port Stephens regions**, attract a capital investment of $1 million and **employ 6 people during operation**, the Department believes the project is in the public interest and should be approved subject to conditions."* (Page 12).

The proposal is consistent in that it will continue to produce asphalt for the Newcastle and Port Stephens regions and maintains employment for the local area. The Proposal will also act to increase the opportunity for increased employment.

Overall, the investigation has demonstrated that the modification is considered '*substantially the same development'* for which the consent was originally granted, taking in account the factors outlined within the established LAC criteria.

3.1.5 Section 4.15(1) Matters for Consideration

Section 4.55 (3) requires the consent authority to "take into consideration such matters referred to in Section 4.15(1) as are relevance to the development the subject of the application".

The following table (**Table 5**) outlines the compliance of Section 4.15 and refers to the relevant sections of this Modification Report.

Table 5: *Section 4.15(1) – Matters for Consideration*

4.15 – MATTERS FOR CONSIDERATION	
PROVISION	**CONSIDERED**
Section 4.15(1)(a)(i) – any environmental planning instrument.	Planning Instruments have been addressed in Section 3.6 and 3.7 of this report.
Section 4.15(1)(a)(ii) – Provisions of any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified by the consent authority.	No matters of relevance are raised in regard to the proposed modification.
Section 4.15(1)(a)(iii) – Provisions of any development control plan that apply to the land.	The Asphalt Batching Plant is an existing approved development within an industrial estate. As the proposal does not propose any works, it is considered that the Proposal will remain consistent with the Port Stephens development control plan.
Section 4.15(1)(a)(iiia) – Provisions of any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4.	No matters of relevance are raised in regard to the proposed modification.
Section 4.15(1)(a)(iv) – Provisions of the regulations that apply to the land.	No matters of relevance are raised in regard to the proposed modification.
Section 4.15(1)(b) – The likely Impact of the Development including environmental impacts on both the natural and built environments, and social and economic impacts in the locality.	The likely Impacts have been addressed in Section 5 of this report.
Section 4.15(1)(c) – The Suitability of the site for the development.	Suitability has been addressed in Section 6 of this report.
Section 4.15(1)(d) – Any Submissions made in accordance with this Act or the regulations.	Submissions have been addressed in Section 7 of this report.
Section 4.15(1)(e) – The Public Interest.	Public Interest has been addressed in Section 8 of this report.

Overall, the proposed modification has considered and complies with all matters for consideration outlined in Section 4.15(1).

PROTECTION OF THE ENVIRONMENT OPERATIONS ACT 1997

Port Stephens Council is considered to be a regulated area as it is part of the metropolitan levy area (MLA) according to the EPA.

Originally, the Asphalt Batching Plant had an Environment Protection License (EPL) which was later repealed in 2009 due to changes within the *Protection of the Environment Operations (General) Regulations 2009*. It is understood that this exemption would continue under Schedule 8, Part 1, Clause 3(b) of the *Protection of the Environment Operations (General) Regulations 2009*.

OTHER ACTS

As part of the original Environmental Assessment for the Asphalt Batching Plant, consideration was afforded to other acts and was approved under Part 3A.

ENVIRONMENTAL PLANNING INSTRUMENTS

The relevant Environmental Planning Instruments applicable to the land have been considered below.

3.1.6 Port Stephens Local Environmental Plan 2013

The site is zoned IN1 – General Industrial with General industries being permissible with consent.

General industry means a building or place (other than a heavy industry or light industry) that is used to carry out an industrial activity.

The objectives of the zone are:

- *To provide a wide range of industrial and warehouse land uses.*
- *To encourage employment opportunities.*
- *To minimise any adverse effect of industry on other land uses.*
- *To support and protect industrial land for industrial uses.*

It is considered that the proposal is consistent with the zone objectives and be considered General Industrial by Port Stephens Council.

As mentioned, the Asphalt Batching Plant and associated infrastructure was approved as a major project (07_0031) on 12 December 2007 under Part 3A of the EP&A Act.

3.1.7 State Environmental Planning Policy (State and Regional Development) 2011

The Asphalt Batching Plant is existing and has been previously assessed as part of its Part 3 approval. The modification does not trigger any thresholds under the provisions of the *State Environmental Planning Policy* (State and Regional Development) *2011*.

3.1.8 State Environmental Planning Policy (Infrastructure) 2007

The Proposal does not qualify as a traffic generating development with regard to relevant size and / or capacity under Clause 104 of *State Environmental Planning Policy* (Infrastructure) 2007 as the site area is less than 20,000m2 GFA. Accordingly, formal referral to Transport for New South Wales (TfNSW) is unnecessary, and the application can be assessed by DPIE officers accordingly.

3.1.9 State Environmental Planning Policy (Coastal Management) 2018

The subject site is not located within the boundaries of identified coastal management areas as outlined within the *State Environmental Planning Policy* (Coastal Management) *2018.*

3.1.10 State Environmental Planning Policy No. 33 – Hazardous and Offensive Development

The aim of the State Environmental Planning Policy No 33 – Hazardous and Offensive Development is:

- *To amend the definitions of hazardous and offensive industries were used in environmental planning instruments, and*
- *To render ineffective a provision of any environmental planning instrument that prohibits development for the purpose of a storage facility on the ground that the facility is hazardous or offensive if it is not a hazardous or offensive storage establishment as defined in this Policy, and*
- *To require development consent for hazardous or offensive development proposed to be carried out in the Western Division, and*
- *To ensure that in determining whether a development is a hazardous or offensive industry, any measures proposed to be employed to reduce the impact of the development are taken into account, and*
- *To ensure that in considering any application to carry out potentially hazardous or offensive development, the consent authority has sufficient information to assess whether the development is hazardous or offensive and to impose conditions to reduce or minimise any adverse impact, an*
- *To require the advertising of applications to carry out any such development.*

The SEPP defines "potentially hazardous industry" to mean a development for the purposes of any industry which, if the development were to operate without employing any measures (including, for example, isolation from existing or likely future development on other land) to reduce or minimise its impact in the locality or on the existing or likely future development on other land, would pose a significant risk in relation to the locality:

a) To human health, life or property; or

b) To the biophysical environment and includes a hazardous industry and a hazardous storage establishment.

Under the SEPP, consideration must be given to current circulars or guidelines published by the Department of Planning relating to hazardous or offensive development (see Clause 8). The Hazardous and Offensive Development Application Guidelines - Applying SEPP 33 (2011) is the current guideline. Under Clause 12 of the SEPP, a development for the purposes of a potentially hazardous industry must prepare a Preliminary Hazard Analysis (PHA) in accordance with the current circulars or guidelines published by the Department of Planning and submit the analysis with the development application.

Although not specifically identified as being a potentially hazardous or offensive industry under the SEPP or the guideline, the Proposal has undergone a screening assessment for completeness.

A SEPP 33 Screening Assessment was carried out to determine if a PHA was required. The results of the assessment indicate that the Proposal is not considered to be 'potentially hazardous' or 'potentially offensive'. Subsequently, the preparation of a PHA is not required. For further details of the assessment and the matters addressed refer to **Appendix G.**

3.1.11 State Environmental Planning Policy (Koala Habitat Protection) 2021

This Policy aims to encourage the conservation and management of areas of natural vegetation that provide habitat for koalas to support a permanent free-living population over their present range and reverse the current trend of koala population decline.

The Port Stephens Local Government Area Koala Habitat Planning Map (2007) was reviewed. The map indicated that the subject site is not situated within a Koala Habitat area.

As such, the proposed development is not likely to adversely impact any Koala Habitat within or surrounding the site.

3.1.12 State Environmental Planning Policy No. 55 – Remediation of Land

A search of the NSW EPA contaminated land register was conducted on 3 March 2021 and did not identify any order issued over the land under the Act. As the contaminated land register did not identify the site as being contaminated, no further investigations are therefore considered necessary.

DEVELOPMENT CONTROL PLANS (DCP)

3.1.13 Port Stephens Development Control Plan 2018

The Port Stephens DCP 2018 (DCP) provides detailed direction about aspects of development that must be considered prior to submitting a DA.

The Asphalt Batching Plant is an existing approved SSD within an industrial estate. As the proposal does not propose any works, it is considered that the proposal will remain consistent with these provisions.

4. COMMUNITY AND OTHER STAKEHOLDER ENGAGEMENT

COMMUNITY AND STAKEHOLDER ENGAGEMENT

Project notification in the form of a letter was hand delivered to nearby stakeholders that have potential to be impacted by the Proposal. The letter is attached as **Appendix H**.

A list of the stakeholders consulted, and a summary of the any correspondence and responses are identified in **Table 6.**

Table 6: *Stakeholder Engagement*

AGENCY / PARTY	DATE AND TYPE OF CONSULTATION	ISSUES RAISED	RESPONSE TO ISSUES RAISED
The surrounding landowners and occupiers that are likely to be impacted by the proposal:			
SGM Fabrication 24 / 26 Kennington Drive TOMAGO NSW 2322	Hand delivered letter 17th to 18th of May 2021.	No correspondence received at time of writing.	No response required.
Porter Equipment 28 Kennington Drive TOMAGO NSW 2322	Hand delivered letter 17th to 18th of May 2021.	No correspondence received at time of writing.	No response required.
Euroform 20 Kennington Drive TOMAGO NSW 2322	Hand delivered letter 17th to 18th of May 2021.	No correspondence received at time of writing.	No response required.
Bulkquip Unit 7 / 8 Kilcoy Drive TOMAGO NSW 2322	Hand delivered letter 17th to 18th of May 2021.	No correspondence received at time of writing.	No response required.
Allied Crane Hire 24 Martin Drive TOMAGO NSW 2322	Hand delivered letter 17th to 18th of May 2021.	No correspondence received at time of writing.	No response required.
Vinkem Packaging 19 Kennington Drive TOMAGO NSW 2322	Hand delivered letter 17th to 18th of May 2021.	No correspondence received at time of writing.	No response required.
Ex Testing & Certification 1 / 30 Kennington Drive TOMAGO NSW 2322	Hand delivered letter 17th to 18th of May 2021.	No correspondence received at time of writing.	No response required.
Hengl Transport 4 Kilcoy Drive TOMAGO NSW 2322	Hand delivered letter 17th to 18th of May 2021.	No correspondence received at time of writing.	No response required.

5. MATTERS AND IMPACT

AMENITY - ACOUSTIC

This Section presents a summary of the acoustic assessment and presents mitigation and management measures to minimise and reduce identified impacts.

Refer to **Appendix E** for the full Acoustic Assessment prepared by RAPT Consulting.

Methodology:

The Acoustic Assessment scope of work included:

- Initial desk top review to identify noise sensitive receptors from aerial photography.
- Undertake noise measurements to determine ambient and background noise levels.
- Establish project noise goals for the operation of the proposed project.
- Identify the likely principal noise sources during operation and their associated noise levels.
- Assessment of potential noise, vibration and sleep disturbance impacts associated with operation aspects of the project.
- Provide recommendations for feasible and reasonable noise and vibration mitigation and management measures, where noise or vibration objectives may be exceeded.

The relevant policies and guidelines for noise and vibration assessments in NSW that were considered during the preparation of this assessment include:

- Assessing Vibration: A Technical Guideline, Department of Environment and Conservation (DEC), 2006.
- British Standard BS7385.2 - 1993 Evaluation and Measurement for Vibration in Buildings, Part 2 - Guide to damage levels from ground borne vibration 1993.
- DIN 4150: Part 3-1999 Structural vibration – Effects of vibration on structures 1999.
- NSW Road Noise Policy (RNP), Department of Environment, Climate Change and Water (DECCW), 2011.
- Noise Policy for Industry (NPfI), Environment Protection Authority (EPA), 2017.

The assessment was completed by Greg Collins, Director of RAPT Consulting. Greg has over 26 years' experience in a wide range of Acoustics and Air Quality projects.

Existing Environment:

Receptors

The area surrounding the site is zoned IN1 General Industrial, E2 Environment Conservation and SP2 Infrastructure. While the area surrounding the proposal is industrial and closest receptors are industrial and / or Commercial, Closest residential and holiday maker receptors to the Proposal assessed in the Acoustic Assessment are identified in **Table 7** and **Figure 4**.

Table 7: *Receptors and Distance to Study Area (Source: RAPT Consulting)*

RECEIVER ID	ADDRESS	DISTANCE FROM PROJECT AREA	RECEPTOR TYPE	EASTING	NORTHING
R1	838 Tomago Road TOMAGO NSW 2322	360m	Residential	378148	6368176
R2	819 Tomago Road TOMAGO NSW 2322	475m	Holiday Accommodation / Permanent Resident Caravan Park	378109	6367954

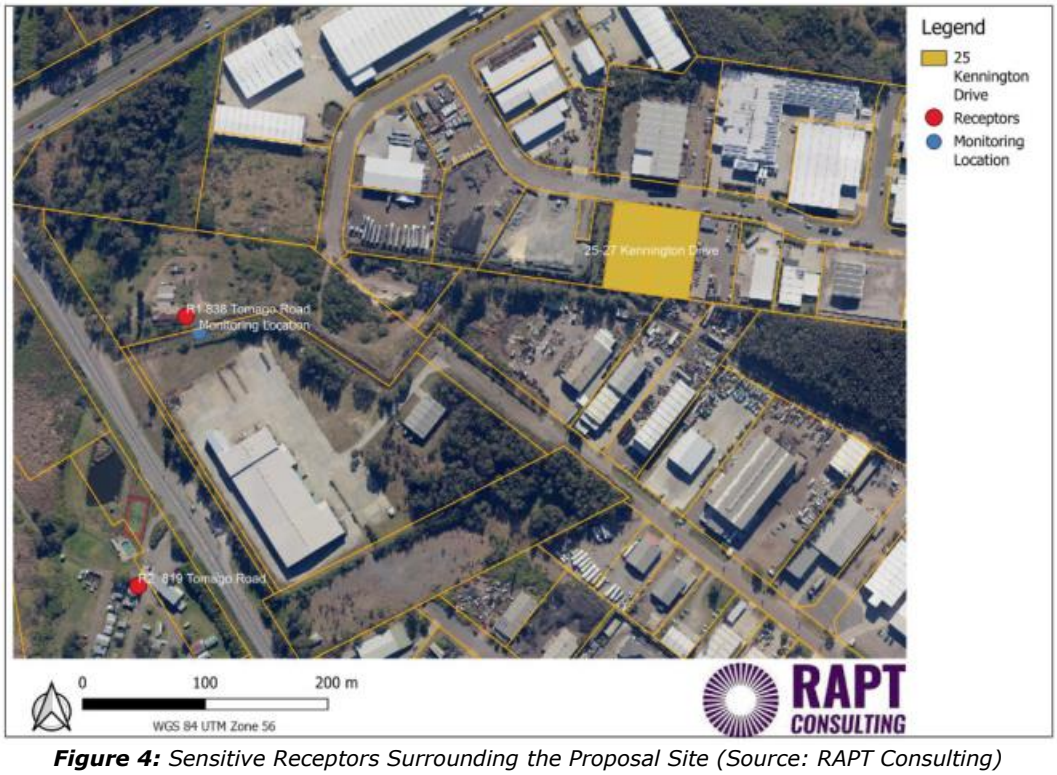

Figure 4: *Sensitive Receptors Surrounding the Proposal Site (Source: RAPT Consulting)*

While the nearest residential receptor R1 lies within the E2 zone, it is located in a complex noise environment and was classified as Urban for the purposes of the acoustic assessment for the approval undertaken by Hunter Acoustics *Acoustic Assessment for Proposed Asphalt Batching Plant Lot 14 and 15 Kennington Drive, Tomago 15 June 2007.*

Existing noise levels were measured through unattended and attended noise monitoring at the closest noise sensitive receivers are presented in **Figure 5** and **Figure 6** respectively.

Rating background level, L_{A90}, dB(A)			Ambient noise levels, L_{Aeq} dB(A)		
Day[1]	Evening[1]	Night[1]	Day[1]	Evening[1]	Night[1]
47	47[2] (50)	47[2] (48)	55	55	54

Note 1 Day: 7:00 to 18:00 Monday to Saturday and 8:00 to 18:00 Sundays & Public Holidays
Evening: 18:00 to 22:00 Monday to Sunday & Public Holidays
Night: 22:00 to 7:00 Monday to Saturday and 22:00 to 8:00 Sundays & Public Holidays

Note 2 As outlined in the NPfI, the evening and night criteria or management levels are set no louder than that daytime levels. Number in brackets (XX) represents actual measured RBL determined for assessment period.

Figure 5: *Background and Ambient Noise Monitoring Results (Source: RAPT Consulting)*

Noise Period	Noise Level dB(A)		Noise Sources dB(A)
	L_{Aeq}	L_{A90}	
3/05/2021 11:15am – 11:30am	53	47	Road Traffic Tomago Road 60-66 Underlying Traffic Noise M1 48-52 Birds 45–50 Colas Operations (imperceptible)

Figure: 6 *Attended Noise Monitoring Results (Source: RAPT Consulting)*

Operational Noise

Based on the measured and adopted noise levels, the intrusiveness noise levels for residential receivers are provided in **Figure 7**.

Period	RBL. L_{A90}, dB(A)	Intrusiveness noise level (RBL + 5), dB(A)
Day[9]	47	52
Evening[9]	47	52
Night[9]	47	52

Note 9 Day 7:00 to 18:00 Monday to Saturday and 8:00 to 18:00 Sundays & Public Holidays
Evening: 18:00 to 22:00 Monday to Sunday & Public Holidays
Night: 22:00 to 7:00 Monday to Saturday and 22:00 to 8:00 Sundays & Public Holidays

Figure 7: *Intrusiveness Noise Levels (Source: RAPT Consulting)*

Amenity Noise levels

The project amenity noise levels (LAeq,15min) for urban residences and other receptors applied for this project are shown in **Figure 8**.

Type of Receiver	Noise Amenity Area	Time of Day	Recommended Noise Level, dB(A)	
			$L_{Aeq, Period}$	$L_{Aeq, 15min}$
Residence	Urban	Day	60 – 5 = 55	55 + 3 = **58**
		Evening	50 – 5 = 45	45 + 3 = **48**
		Night	45 – 5 = 40	40 + 3 = **43**
Hotels, motels, caretakers' quarters, holiday accommodation, permanent resident caravan parks	All	Day	65 – 5 = 60	60 + 3 = **63**
		Evening	55 – 5 = 50	50 + 3 = **53**
		Night	50 – 5 = 45	45 + 3 = **48**
Commercial Premises	All	When in use	65 – 5 = 60	60 + 3 = **63**
Industrial premises	All	When in use	70 – 5 = 65	65 + 3 = **68**

Figure 8: *Project Amenity Noise Levels (Source: RAPT Consulting)*

Project Noise Trigger Levels

The project noise trigger level is the lower of the intrusiveness and the amenity noise levels. Provided in **Figure 9** are the established project noise trigger levels for the assessment locations within the study area. **Figure 9** presents the project noise trigger levels for the day, evening, and night-time periods.

Type of receiver	Assessment period	Intrusiveness noise levels, $L_{Aeq,15min}$, dB(A)	Amenity noise levels, $L_{Aeq,15min}$, dB(A)	Project noise trigger levels, $L_{Aeq,15min}$, dB(A)
Residential Urban	Day	52	58	**52**
	Evening	52	48	**48**
	Night	52	43	**43**
Hotels, motels, caretakers' quarters, holiday accommodation, permanent resident caravan parks	Day	-	63	**63**
	Evening	-	53	**53**
	Night	-	48	**48**
Commercial premises	When in use	-	63	**63**
Industrial Premises	When in use	-	68	**68**

Figure 9: *Project Amenity Noise Levels (Source: RAPT Consulting)*

Maximum Noise Level Assessment

The NPfI requires the potential for sleep disturbance to be assessed by considering maximum noise levels events during the night-time period. Based on the adopted background noise levels during the night, the sleep disturbance criteria for the nearest noise sensitive residential receivers are provided in **Figure 10**.

Receiver type	Assessment Level $L_{Aeq,15min}$, dB(A)	Assessment Level L_{AFmax}, dB(A)
Residential	52	62

- *Maximum internal noise levels below 50–55 dB(A) are unlikely to awaken people from sleep*
- *One or two noise events per night, with maximum internal noise levels of 65–70 dB(A), are not likely to affect health and wellbeing significantly.*

Figure 10: *Project Noise Trigger Levels (Source: RAPT Consulting)*

The above references identify that internal noise levels of 50 to 55 dB(A), are unlikely to cause awakenings. On the assumption that there is a 10 dB(A) outside-to-inside noise loss through an open window (see Section 2.6 of the NPfI, p15), this indicates that external noise levels of LAmax 60 to 65 dB(A) are unlikely to cause awakening reactions.

NSW Road Noise Policy (RNP)

The NSW Road Noise Policy (RNP) recommends various criteria for different road and residential developments and uses. Although it is not mandatory to achieve the noise assessment criteria in the RNP, proponents will need to provide justification if it is not considered feasible or reasonable to achieve them. Based on the definitions in the RNP, Tomago Road is considered to be a sub-arterial road. Noise goals for residences are provided in **Figure 11**.

Road Category	Day	Night
Existing residences affected by additional traffic on existing freeways/arterial/sub-arterial roads generated by land use development	60 $L_{Aeq(15hr)}$ External	55 $L_{Aeq(9hr)}$ External

Figure 11: *Road Noise Policy Goals (Source: RAPT Consulting)*

Assessment:

Operational Noise

A noise survey of the Asphalt Batching Plant was undertaken by RAPT Consulting on 29 October 2019 while the plant was fully operational inclusive of the Asphalt Plant itself, front end loader, forklift and haulage trucks using a RION NL-42 Sound Level Meter with Type 2 Precision. The measurement locations are shown in **Figure 12** below and the attended noise monitoring results are provided in **Figure 13** below.

Figure 12*: Noise Survey Locations (Source: RAPT Consulting)*

Location	Noise Level dB(A)	
	L_{Aeq}	L_{A90}
North Plant	73	70
South Plant	82	79
East Plant	66	65
West Plant	69	68

***Figure 13**: Noise Survey Results (Source: RAPT Consulting)*

Additional attended noise measurements were undertaken on 18 October 2021 outside the northern boundary of the plant while fully operational inclusive of the asphalt plant itself, front end loader, forklift and haulage trucks. The purpose was to measure/assess source contribution C- and A-weighted Leq,T levels over same time period to ascertain whether low frequency noise may be a factor associated with the noise emanating from the current facility. The results of the measurement are provided in **Figure 14**.

Location	Noise Level dB		
	L_{Aeq}	L_{Ceq}	Difference
North of Plant 2:50pm – 3:05pm	64.4	75.7	11.3

***Figure 14**: Plant Noise Measurement Results (Source: RAPT Consulting)*

All of the noise sources in were operating and have been assessed, based on the noise data available, for annoying noise characteristics. The proposed operational noise sources are generally broadband in nature and have not demonstrated annoying characteristics as per the guidance contained in Fact Sheet C of the NPfI.

Acoustic modelling was undertaken utilising the plant survey noise levels using Bruel and Kjaer's "Predictor" to predict the effects of operational noise. All items of plant were modelled operating simultaneously to simulate a worst-case scenario for day, evening and night-time periods.

The results of the modelling indicate compliance can be expected during day, evening and night-time at all nearest receivers even in the unlikely event that all of the abovementioned noise sources are operating simultaneously. The results of the assessment also indicate sleep disturbance noise goals are expected to be safely complied with.

Plant Operations

Plant operations data for the monitoring period was provided to RAPT Consulting. The plant was operational from 26 – 30 April from 12:00pm to 5:00am. Noise logging data was compared from 7:00am – 12:00pm (non-operational) and 12:00pm – 6:00pm (operational) during these dates. The recorded overall operational and non-operational ambient noise levels were utilised to derive the noise contribution from the asphalt plant at R1 through the logarithmic subtraction method.

The results of the calculated plant noise contribution show excellent correlation with the noise survey and modelling results and re-confirm compliance with project noise trigger levels.

Road Noise

Traffic information pertaining to the Proposal has been sourced from McLaren Traffic Engineering & Road Safety Consultants TRAFFIC AND PARKING IMPACT ASSESSMENT OF THE PROPOSED MODIFICATION TO THE EXISTING ASPHALT BATCHING PLANT AT 25 - 27 KENNINGTON DRIVE, TOMAGO.

The proposed development in relation to the peak production rate of the Asphalt Batching Plant is not changing, rather, the site will run for longer and more frequently to achieve the increase in volume such that the peak traffic associated with the site will not increase. Additionally, the proposed development in relation to the amount of materials stored on the Materials Storage and Processing Yard is not changing, rather, the site will operate for longer and more frequently to increase the utilisation threshold of materials per year.

Information regarding the existing situation indicates over a 12 month period, the peak daily trucks associated with the import of materials was 50 trucks and 37 trucks for exported materials. This means a peak of 87 truck movements under per day the current situation of 150,000 tonnes per year. The number of truck movements per day as mentioned above is not expected to increase, rather the site may operate more frequently. However, for the purposes of the assessment an assumption has been made that potentially mean peak daily movements could increase to 144 truck movements per day based on an approved 250,000 tonne per year limit. This would mean an increase of 57 movements per day.

Peak hour traffic survey information contained within the report is provided in **Figure 15**. A general rule of thumb is that the peak hour is 8-12% of the AADT. Therefore 10% has been adopted.

Road Situation	Peak Hour Traffic	AADT	Additional Vehicles
Intersection Kennington Dr and Old Punt Road	381	3,810	57
Intersection Pacific Hwy and Old Punt Road	2963	29,630	57
Intersection Pacific Hwy and Tomago Road	4236	42,360	57
Intersection Old Punt Road and Tomago Road	1559	15,590	57

***Figure 15**: Traffic Information (Source: RAPT Consulting)*

As can be seen from **Figure 15**, the associated road network is heavily trafficked. Site traffic will have blended in with local traffic by the time it goes past the nearest sensitive receivers. To increase noise levels by 2dB(A) one would have to increase the cumulative traffic volume by 60%. The number of vehicles on the road network is negligible and will not increase overall traffic noise levels on the surrounding road network. Therefore, compliance is expected.

Additionally, the existing site and traffic inclusive of other traffic sources in the area already contribute to deceleration and acceleration at traffic signals and other traffic control situations. Deceleration and acceleration noises differ from the cruising traffic noise that occurs in the absence of traffic control device. However, with RAPT Consulting's past experience where noise levels from vehicles were measured at an intersection for both free-flowing and stop-and-go conditions, and the levels were measured to fall within 1dB(A) for each scenario. This outcome can be explained by there being relatively quiet periods with very little to no traffic noise generated from stopped or slow moving vehicles at an intersection, while there is generally more noise generated from faster continuous moving vehicles found under free-flowing traffic conditions. Therefore, while accelerating and decelerating may alter the 'character' of noise, it will not significantly alter the absolute level of noise.

Construction Noise

No construction works are planned as part of the Proposal and therefore is not considered further in the assessment.

Vibration

Given the nature of the Proposal and distances of source to receivers, potential vibration impacts are considered negligible and were not considered further in the assessment.

Mitigation Measures:

As outlined above, the results of the modelling indicate compliance can be expected for the Proposal.

While compliance is expected to be achieved for the Proposal, it is recommended that the Proposal implement an operational noise management plan as part of its operations to deal with the unlikely occurrence of excessive noise emanating from operations.

Conclusion:

The results of the assessment suggest compliance with all noise and vibration goals outlined in the assessment can be achieved. Therefore, from an acoustic perspective, the Proposal is considered acceptable.

ACCESS – ROAD NETWORK

This Section presents a summary of the Traffic and Parking Impact Assessment and presents mitigation and management measures to minimise and reduce identified impacts.

Refer to **Appendix I** for the full Traffic and Parking Impact Assessment prepared by McLaren Traffic Engineering & Road Safety Consultants (McLaren).

Methodology:

McLaren Traffic Engineering was commissioned by Monteath & Powys Pty Ltd on behalf of COLAS New South Wales Pty Ltd to provide a traffic and parking impact assessment of the proposed modification to the existing Asphalt Batching Plant.

The traffic and parking impact assessment was undertaken with due consideration to the following documents:

1. RTA Guide to Traffic Generating Developments 2002.

2. RMS Traffic Modelling Guidelines 2013.

3. Austroads Guide to Traffic Management Part 6 – Intersections, Interchanges and Crossings Management 2020.

4. Austroads Guide to Traffic Management Part 12 – Integrated Transport Assessments for Developments 2020.

The assessment was prepared by the following key personnel:

- Daniel Walker (Traffic Engineer) - Bachelor of Engineering (Honours) (Scholar), Class I, Civil Engineering, University of Wollongong, 2018. Accredited Level 1 Road Safety Auditor, 2020.

- Thomas Steal (Senior Traffic Engineer) - Bachelor of Civil Engineering, University of Sydney, 2015 Accredited Level 2 Road Safety Auditor. Engineers Australia – Member. Australian Institute of Planning and Management – Member. Professional Engineers Australia – Member.

Existing Traffic and Parking Conditions:

The road network servicing the site has characteristics as described in the following subsections.

Road Hierarchy

Kennington Drive:

- Unclassified LOCAL Road.
- Approximately 11m wide carriageway facilitating one (1) traffic flow lane in both directions and kerbside parking along both sides of the road.
- No speed limit sign posted, 50km/h applies.
- Unrestricted kerbside parking permitted along both sides of the road.

Old Punt Road:

- Unclassified LOCAL Road.
- Approximately 12m wide carriageway facilitating one (1) traffic flow lane in both directions and kerbside parking along both sides of the road.
- Signposted 60km/h speed limit.
- Unrestricted kerbside parking permitted along both sides of the road.

Tomago Road:

- TfNSW Classified STATE Road (No. 302).
- Approximately 12m wide carriageway facilitating one (1) traffic flow lane in both directions and shoulders on both sides of the road.
- Signposted 80km/h speed limit to the east of Old Punt Road and 60km/h to the west of Old Punt Road.

Pacific Highway:

- TfNSW Classified STATE Road (No. 10).
- Approximately 27m wide carriageway (including median) facilitating two (2) traffic flow lanes in both directions and shoulders on both sides of the road.
- Signposted 80km/h speed limit.

Existing Traffic Management

- GIVE-WAY controlled intersection of Kennington Drive / Old Punt Road.
- Signal controlled intersection of Old Punt Road / Pacific Highway.

- Roundabout controlled intersection of Old Punt Road / Tomago Road.
- Signal controlled intersection of Pacific Highway / Tomago Road.

Existing Traffic Environment

Turning movement traffic surveys were conducted at the intersections of Kennington Drive / Old Punt Road, Pacific Highway / Old Punt Road, Pacific Highway / Tomago Road and Old Punt Road / Tomago Road from 7:00am to 9:00am and 3:00pm to 6:00pm on Tuesday the 16 February 2021 representing a typical operating weekday. The full results are shown in **Appendix I**.

Existing Road Performance

The relevant intersections are currently performing at a high level of efficiency, with a level of service "A" or "B" conditions in both the AM & PM peak hour periods. The level of service "A" and "B" performance is characterised by low approach delays and spare capacity. Results are further detailed under the heading 'assessment' below.

Public Transport

The subject site has access to existing bus stop (ID: 2322112) located approximately 500m walking distance to the east of site on Old Punt Road. The bus stop services existing bus Route 140 (Newcastle Interchange to Raymond Terrace) provided by Hunter Valley Buses.

Future Road and Infrastructure Upgrades

From the TfNSW Projects and Initiatives Map, an upgrade to the M1 Pacific Motorway is currently in the planning stage as part of the M1 Pacific Motorway extension to Raymond Terrace project. A concept interchange design was provided within the October 2020 project update which is reproduced in **Figure 16**. The proposed interchange will significantly improve the connectivity between the subject site and the M1 motorway.

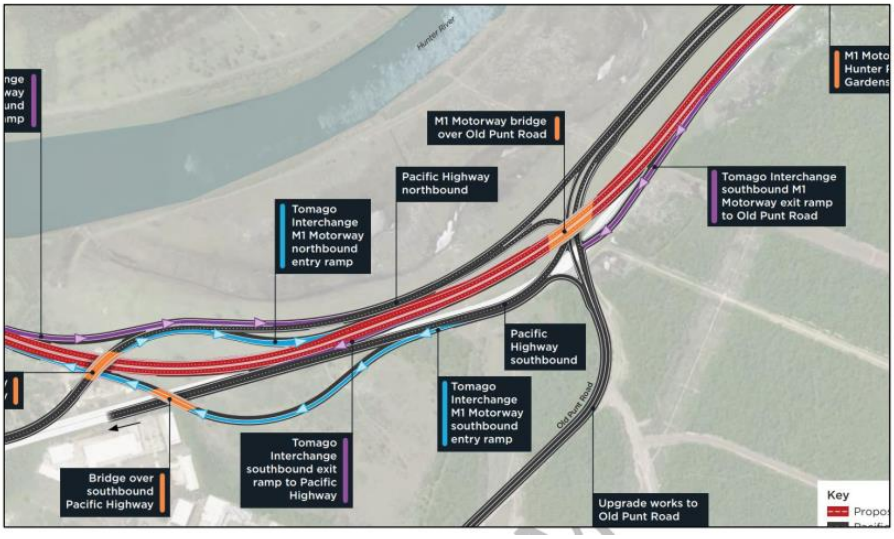

Figure 16: *M1 Pacific Motorway Extension to Raymond Terrace Concept (Source: McLaren)*

Assessment:

Parking Assessment

Council Parking Requirement:

The report gives reference to the Port Stephens Council Development Control Plan 2014 B8.B - Road Network and Parking which designates the following parking rates applicable to the proposed development:

20.2 Car Parking Provision and Service Facilities by Land Use

Heavy industrial storage establishments, heavy industry and general industry

1 car space per 100m2 floor area or 4 space per work bay
1 bike space per 20 employees
1 accessible car space per 30 car spaces

While Council's DCP provides the above parking rates, the existing operations are known and as such a first principles assessment can be undertaken of the development.

For work health and safety reasons, COLAS does not currently utilise the existing approved parking provisions within the Asphalt Batching Plant site (25 - 27) Kennington Drive. The parking of light vehicles on the site is restricted to ensure safety around the heavy vehicles and heavy equipment which operate on the site.

COLAS operates over multiple lots between 21 Kennington Drive and 33 Kennington Drive. A total of 12 staff work across the multiple sites when the site is operating and as such would require 12 car parking spaces, assuming each staff member drives to site. In addition, the COLAS operation requires storage of trucks and plant.

The staff car parking spaces for the COLAS operation are located at 21 Kennington Drive which provides for 12 car parking spaces (including 1 disabled parking space) accommodating the existing staff requirement of the site. Truck and plant storage occurs at 23 Kennington Drive under internal management.

No changes to the existing parking demand is proposed as part of this development application and therefore the proposed development is supportable in terms of parking impact.

Disabled and Bicycle and Motorcycle Parking Requirements:

The subject site satisfies the requirements of for Disabled and Bicycle and Motorcycle Parking Requirements.

Servicing and Loading:

No changes to the existing loading and servicing operation or layout of the site are proposed as part of this application. Currently, the largest sized vehicle required to access the site is a 26m long B-double with the site typically requiring access for 20m long truck and dogs. The site has been operating satisfactorily for many years and no changes are proposed to the ongoing operations apart from an increase in total annual output.

It is reiterated that the peak production rate of the site is not changing, rather, the site will run for longer to achieve the increase in volume such that no additional queues will result from the proposal.

Car Park Design and Compliance:

The existing layout has been approved as part of previous development approvals and does not require reassessing. Reference is given to final Occupation Certificate (CN090313) issued by DPIE.

Traffic Assessment

The impact of the expected traffic generation levels associated with the subject proposal is discussed in the following sub-sections. The subject asphalt batching plant operates in conjunction with the materials storage and processing yard located to the west of the site. Therefore, the traffic generation of both the batching plant and the storage yard has been assessed in together.

For the purpose of the traffic assessment, McLaren assumed that no truck movements to or from the site occurred during the survey period. It is likely that some truck movements to and from the site were captured by the surveys and this assessment therefore outlines a worst case.

Traffic Generation:

The traffic generation of the existing COLAS operation along Kennington Drive was determined using the ticketing system of the inbound materials between 1 March 2020 and 28 February 2021 and the export of asphalt between 1 September 2020 and 17 February 2021. The detailed ticketing results for the import and export are presented in Annexure E and Annexure F of the traffic assessment (**Appendix I**).

Inbound Materials:

The ticketing system for the import of material provided the daily heavy vehicle deliveries as shown in **Figure 17.** Over the 12-month period the peak daily trucks associated with the import of materials was 50 trucks. Removing the weekends and the days with no imported materials, the 85th percentile daily import of material was 25 trucks. To estimate a peak hour volume from the daily inbound traffic volumes, it has been assumed that 20% of the daily vehicle trips occur within the peak hour.

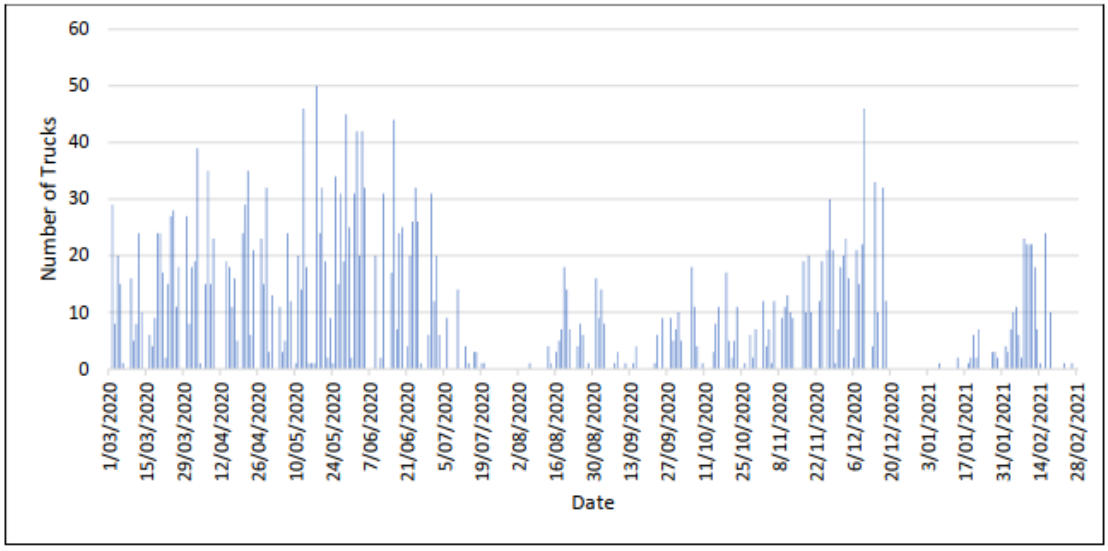

Figure 17: *Daily Import Trucks (Source: McLaren)*

Exported Materials:

The ticketing system for the export of asphalt provided more detailed timing of truck movements such that a peak hour volumes could be derived directly. Over the available 6-month period, the 85th percentile peak hour truck generation associated with export of asphalt was six trucks. A box and whisker plot for the AM and PM peak hour of each day that material was exported is presented in **Figure 18**. In addition, a heatmap diagram showing the daily variation hour-to-hour is presented in Annexure F of the traffic assessment **(Appendix I)**. The heat map shows the variation in hourly traffic generation over each day and extends for the full duration of the survey period (six months). It should be noted that the heatmap only shows days when asphalt was exported (i.e. days with no traffic generation have been removed). The heatmap shows that the site does not consistently generate truck traffic each day, rather the traffic generation is dependent on demand and production rate of the plant.

The peak daily trucks associated with the export of asphalt was 37 trucks as shown in **Figure 19**. The 85th percentile number of daily trucks associated with the export of asphalt was 28 trucks.

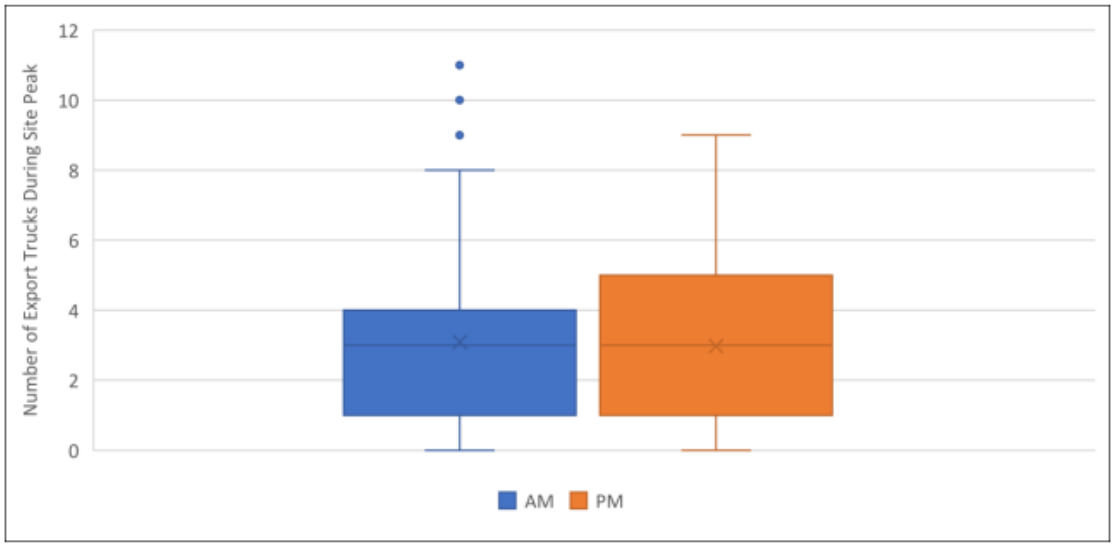

Figure 18: *AM and PM Peak Hour Truck Export Variation (Source: McLaren)*

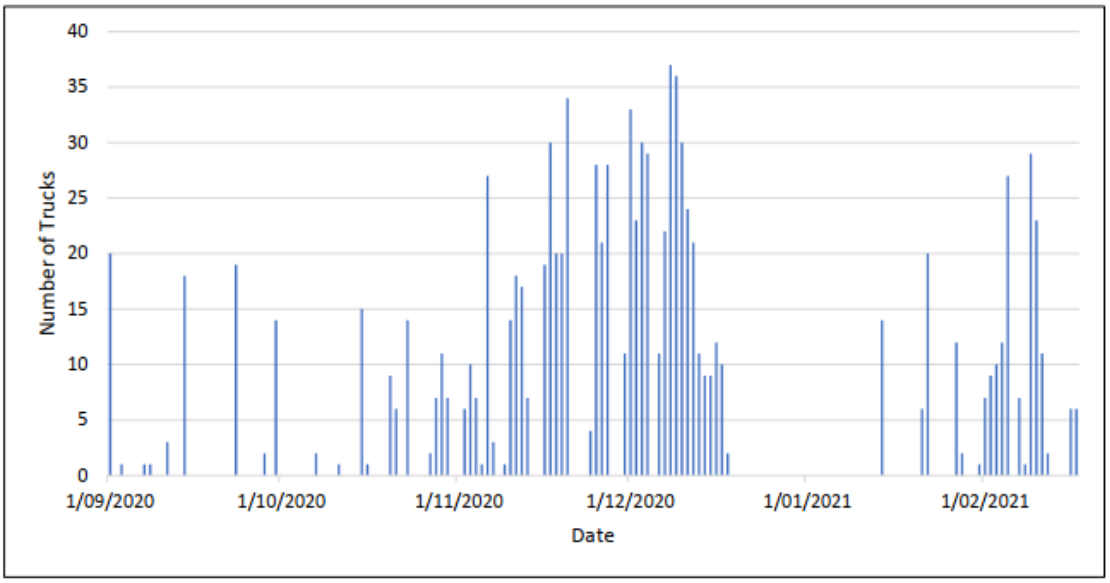

Figure 19: *Daily Asphalt Export Trucks (Source: McLaren)*

Staff Trips:

The number of staff that work at the materials storage yard and the asphalt plant while the plant is processing material is 12. For a conservative assessment it is assumed that each staff member arrives in their own vehicle in the AM peak hour and departs in the PM peak hour.

Local Transfer of Materials:

In addition to the above, to transport material between the storage yard and the plant at a production rate of 150 tonnes per hour a Heavy Rigid Vehicle transports material at 12.5 tonnes per load. This corresponds to traffic generation of 12 loads per hour during peak operation of the site. It should be noted that the transport of material between the storage yard and the plant does not increase the demand on the any of the surrounding intersections.

Summary of Traffic Generation for the Proposal:

The proposed development in relation to the peak production rate of the Asphalt Batching Plant is not changing, rather, the site will run for longer and more frequently to achieve the increase in volume such that the peak traffic associated with the site will not increase. Additionally, the proposed development in relation to the amount of materials stored on the Materials Storage and Processing Yard is not changing, rather, the site will operate for longer and more frequently to increase the utilisation threshold of materials per year.

The existing Asphalt Batching Plant is approved for a maximum production of 150 tonnes of asphalt per hour. There are no proposed changes to the equipment and hence, no changes to the maximum production rate of the site. Further, the traffic generation detailed above was related to a total annual production of 109,000 tonnes of asphalt in the 2020 calendar year. While this total production is less than the proposed production of 250,000 tonnes per year it is not expected to change the 85th percentile traffic generation of the site as the production rate is not changing.

Considering the above, the resulting traffic generation is summarised in **Figure 20.**

Use	Peak Hour[1]	85th Percentile Day[1]
Import (Storage Yard - Heavy Vehicles)	AM: 10[2] (5 in, 5 out) PM: 10[2] (5 in, 5 out)	50 (25 in, 25 out)
Export (Asphalt Plant - Heavy Vehicles)	AM: 12 (6 in, 6 out) PM: 12 (6 in, 6 out)	56 (28 in, 28 out)
Staff (Light Vehicles)	AM: 12 (12 in, 0 out) PM: 12 (0 in, 12 out)	-
Total[3]	**AM: 34 (23 in, 11 out) PM: 34 (11 in, 23 out)**	**106 (53 in, 53 out) Heavy vehicles**

Note: (1) Assumes 50/50 spilt of inbound and outbound traffic.
(2) Assumes 20% of daily traffic occurs during the peak hour.
(3) Assumes import peak and export peak occurs concurrently.

Figure 20: *Existing and Proposed COLAS Traffic Generation (Source: McLaren)*

As shown, the expected traffic generation for the existing and proposed development is in the order of 34 vehicle trips in the peak hour. The existing COLAS site was operational during the recorded traffic surveys and therefore, it is assumed that the 12 staff trips were recorded within the traffic surveys and as such have not be assessed further.

The number of import or export trips that occurred to / from the site during the survey period is unknown and therefore, for a conservative assessment, it has been assumed that the peak hourly traffic generation of the import and export trucks occurs at the same time and that this generation occurs during both the AM and PM network peaks. While this is unlikely to occur, it provides for a worst case traffic assessment of the proposed development.

Heavy Vehicle Classification:

The majority of vehicles entering the storage yard are Truck and Dog and Heavy Rigid Vehicles with the occasional requirement for semi-trailer trucks and B-doubles. It is also assumed that a similar truck classification is required for the export of material at for the asphalt plant.

Traffic Assignment:

The assumed traffic assignment of import, export and staff trips are outlined within **Figure 21** below.

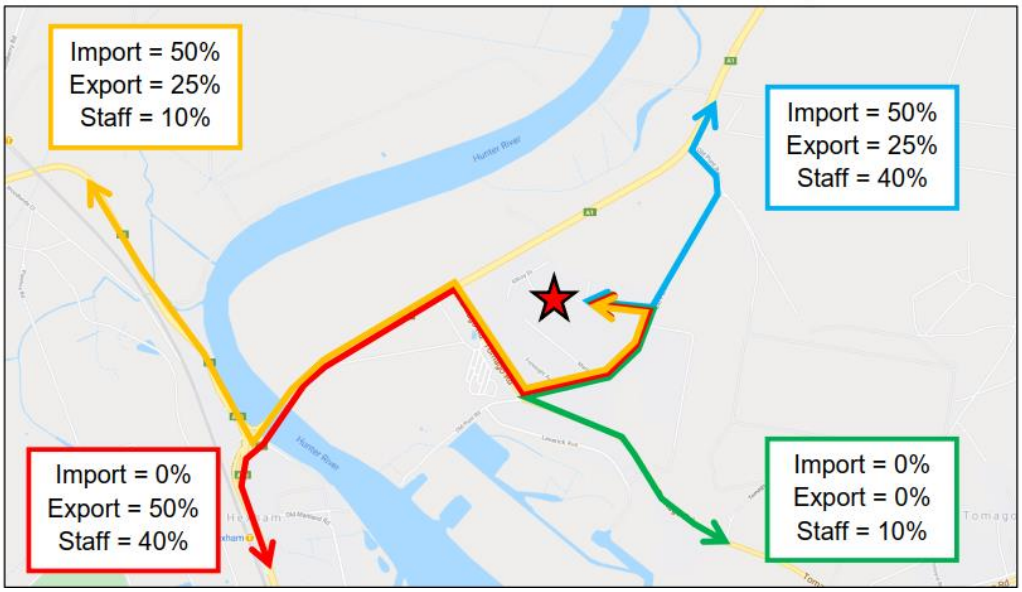

Figure 21: *Traffic Distribution Diagram (Source: McLaren)*

Traffic Impact:

The traffic generation was added to the existing traffic volumes recorded. SIDRA INTERSECTION 9.0 was used to assess the intersections performance. The purpose of this assessment is to compare the existing intersection operations to the future scenario under the 85th percentile operational day traffic load. The results of this assessment are shown in **Figure 22**.

Intersection	Peak Hour	Degree of Saturation[1]	Average Delay[2] (sec/veh)	Level of Service[3][4]	Control Type	Worst Movement	95th Percentile Queue
EXISTING PERFORMANCE							
Old Punt Rd /Kennington Dr	AM	0.07	3.6 (Worst: 6.2)	**NA** (Worst: A)	Give Way	RT from Old Punt Rd	0.2 veh (1.6m) Old Punt Rd
	PM	0.17	3.4 (Worst: 6.4)	**NA** (Worst: A)		RT from Old Punt Rd	0.6 veh (4.7m) Kennington Dr
Old Punt Rd /Tomago Rd	AM	0.30	5.1 (Worst: 16.6)	**A** (Worst: C)	Roundabout	UT from Old Punt Rd	2 veh (15.4m) Tomago Rd
	PM	0.46	7.9 (Worst: 17.3)	**A** (Worst: C)		UT from Old Punt Rd	3 veh (22.3m) Tomago Rd
Pacific Hwy /Tomago Rd	AM	0.70	16	**B**	Signals	RT from Pacific Hwy	21.3 veh (166.9m) Pacific Hwy
	PM	0.87	23.1	**B**		LT from Tomago Rd	32.9 veh (245.1m) Pacific Hwy
Old Punt Rd /Pacific Hwy	AM	0.54	7.4	**A**	Signals	RT from Old Punt Rd	19.5 veh (151.3m) Pacific Hwy
	PM	0.69	11.2	**A**		RT from Old Punt Rd	26.4 veh (196.7m) Pacific Hwy
FUTURE PERFORMANCE							
Old Punt Rd /Kennington Dr	AM	0.08	3.9 (Worst: 6.4)	**NA** (Worst: A)	Give Way	RT from Old Punt Rd	0.2 veh (2.3m) Old Punt Rd
	PM	0.19	3.7 (Worst: 6.8)	**NA** (Worst: A)		RT from Old Punt Rd	0.7 veh (5.5m) Kennington Dr
Old Punt Rd /Tomago Rd	AM	0.30	5.2 (Worst: 16.7)	**A** (Worst: C)	Roundabout	UT from Old Punt Rd	2 veh (15.4m) Tomago Rd
	PM	0.48	8 (Worst: 17.4)	**A** (Worst: C)		UT from Old Punt Rd	3.1 veh (23.4m) Tomago Rd
Pacific Hwy /Tomago Rd	AM	0.70	16.1	**B**	Signals	RT from Pacific Hwy	21.3 veh (166.9m) Pacific Hwy
	PM	0.87	23.6	**B**		LT from Tomago Rd	34.8 veh (259.7m) Pacific Hwy
Old Punt Rd /Pacific Hwy	AM	0.54	7.5	**A**	Signals	RT from Old Punt Rd	19.5 veh (151.4m) Pacific Hwy
	PM	0.67	11.4	**A**		RT from Old Punt Rd	27.5 veh (205m) Pacific Hwy

Figure 22: *Intersection Performance (Source: McLaren)*

As shown, the surrounding intersections all retain the same overall level of service under future conditions with minimal delays and additional capacity, indicating that there will be negligible impact on the existing road network as a result of the proposed development.

Mitigation Measures:

The existing Asphalt Batching Plant has been operating satisfactorily for many years and no changes are proposed to the ongoing operations apart from an increase in total annual output. The peak production rate of the site is not changing, rather, the site will run for longer to achieve the increase in volume such that no additional queues will result from the proposal.

As addressed above, COLAS do not currently utilise the existing approved parking provisions within the Asphalt Batching Plant site (25 - 27 Kennington Drive) for work health and safety reasons. The parking of light vehicles on the site is restricted to ensure safety around the heavy vehicles and heavy equipment which operate on the site.

Conclusion:

In view of the foregoing, the subject Asphalt Batching Plant proposal is fully supportable in terms of its traffic and parking impacts. The following outcomes of the Traffic Impact Assessment are relevant to note:

- No changes to the existing parking demand of the site will result of the proposed modifications, with adequate parking provided for staff based on a first principles assessment and consider the COLAS operation holistically.
- Bicycle parking can easily be accommodated informally on-site if required.
- Council's DCP does not require the provision of motorcycle parking facilities.
- The parking areas of the site have not been assessed against the relevant sections of AS2890.1:2004, AS2890.2:2018 and AS2890.6:2009 as no changes are proposed to the existing layout.
- The traffic generation of the proposed development in conjunction with the associated material storage and processing yard has been estimated to be some 34 trips in the AM peak period (23 in, 11 out) and 34 trips in the PM peak period (11 in, 23 out). The impacts of the traffic generation have been modelled using SIDRA INTERSECTION 9.0, indicating that cumulative traffic generation of the subject site and the Materials Storage and Processing Yard will result in no detrimental impact to the performance of the intersections as a result of the generated traffic.
- It is noted that the traffic assessment was completed on the basis that no trucks entered or exited the site during the traffic survey period. It is likely that some trucks travelling to and from the site were captured by the traffic surveys and that the results of the assessment represent a worst case.

AIR – PARTICULATE MATTER

This Section presents a summary of the Air Quality Impact Assessment and presents mitigation and management measures to minimise and reduce identified impacts.

Refer to **Appendix F** for the full Air Quality Impact Assessment prepared by Northstar Air Quality.

Methodology:

The Air Quality Impact Assessment scope was to examine and identify whether the impacts of the operation of the proposal may adversely affect local air quality.

To allow assessment of the level of risk associated with the Proposal in relation to air quality, the assessment was performed in accordance with and with due reference to:

- Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (NSW EPA, 2016).
- Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DEC, 2006).
- Technical Framework and Notes - Assessment and Management of Odour from Stationary Sources in NSW (NSW DEC, 2006).
- Protection of the Environment Operations Act 1997.
- Protection of the Environment Operations (Clean Air) Regulation 2010.

As required by NSW EPA, the contribution of all identified existing and recently approved developments should be accounted for in the cumulative assessment. To ensure that cumulative impacts have been appropriately quantified and assessed, a quantitative (dispersion modelling) assessment has also been performed for both COLAS' operations, and reported separately.

The assessment was completed by Dr Martin Doyle BSc(hons), PhD, AAQual. Martin is an Accredited Professional of the Clean Air Society of Australia and New Zealand (CASANZ) and holds a PhD from the University of East Anglia in the UK (Air Quality Meteorology, 2004).

Existing Environment:

The Proposal site is situated in an area of significant industrial activity with land immediately surrounding the site being zoned as E2 (General Industrial). The closest residential land uses are approximately 3 kilometres (km) to the north-east of the proposal site, a caravan park is located approximately 250m south-west and an individual residence approximately 380m to the south southwest of the proposal site.

A number of industrial facilities are located in the area immediately surrounding the proposal site. Tomago Aluminium Smelter is located approximately 1.1km to the east of the proposal site.

Land use surrounding the proposal site and discrete sensitive receptor locations used in the study are shown in **Figure 23** and **Figure 24** respectively.

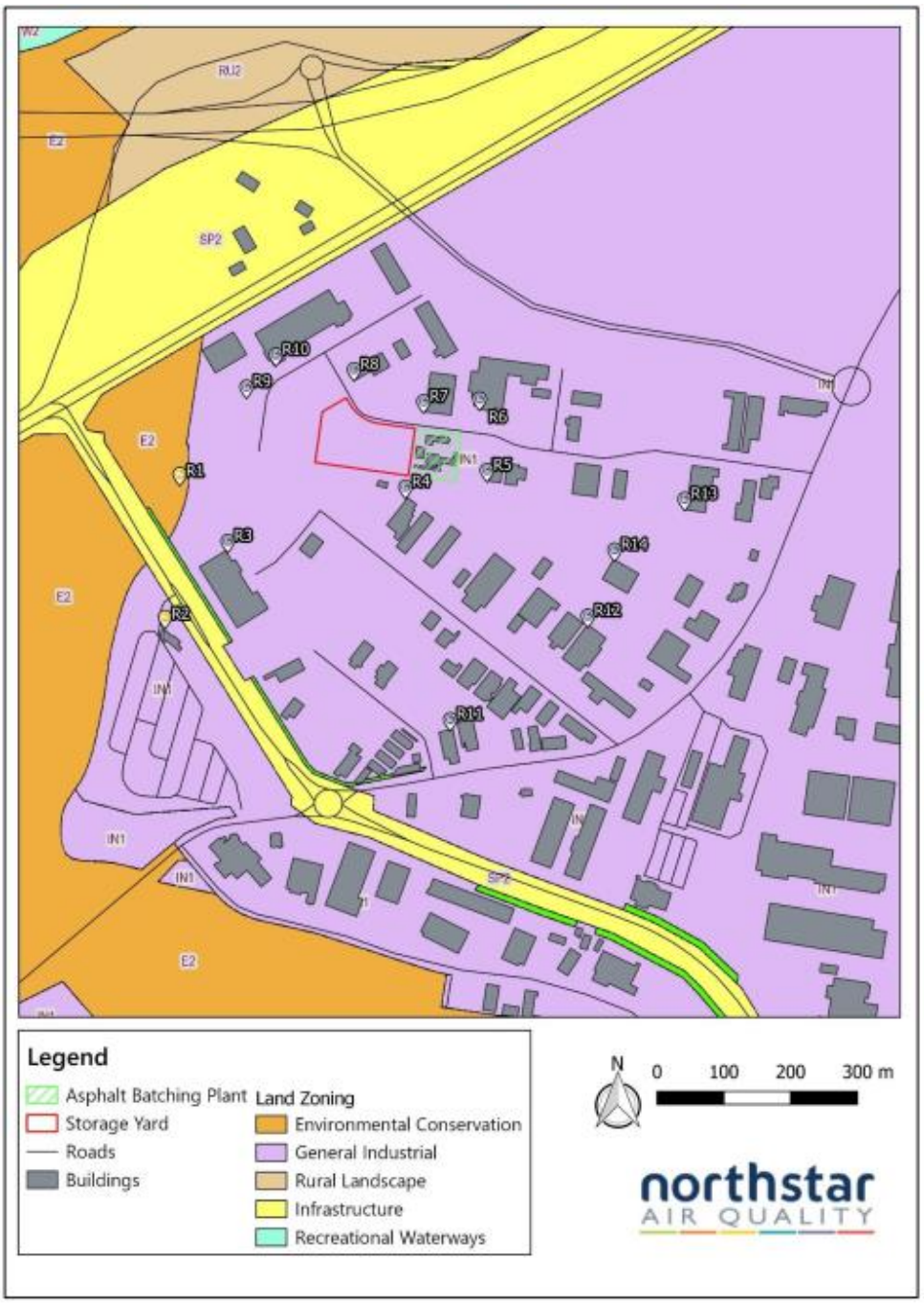

Figure 23: *Land use surrounding the Proposal site (Source: Northstar Air Quality)*

Rec. ID	Address	Land Use	Location (m, UTM 56)	
			Eastings	Northings
R1	838 Tomago Rd, Tomago	Residential	378 144	6 368 182
R2	Tomago Village Van Park	Residential	378 122	6 367 967
R3	21 Martin Dr, Tomago	Commercial	378 212	6 368 085
R4	24 Martin Dr, Tomago	Commercial	378 485	6 368 165
R5	21 Kennington Dr, Tomago (owned by Colas)	Commercial	378 606	6 368 190
R6	20 Kennington Dr, Tomago	Commercial	378 593	6 368 296
R7	24 Kennington Dr, Tomago	Commercial	378 510	6 368 292
R8	30 Kennington Dr, Tomago	Commercial	378 407	6 368 341
R9	7 Kilcoy Dr, Tomago	Commercial	378 241	6 368 314
R10	7 Kilcoy Dr, Tomago	Commercial	378 285	6 368 362
R11	2 Foresight Avenue, Tomago	Commercial	378 550	6 367 818
R12	6 Martin Drive, Tomago	Commercial	378 756	6 367 973
R13	5 Kennington Drive, Tomago	Commercial	378 901	6 368 148
R14	12 Old Punt Road, Tomago	Commercial	378 796	6 368 072

Figure 24: *Discrete sensitive receptor locations used in the study (Source: Northstar Air Quality)*

Impact Assessment:

Odour

The assessment indicated that the operation of the dryer stack results in minimal, and likely undiscernible, odour impacts at the nearest sensitive receptors.

Dispersion modelling was performed with the inclusion of a 'load-out' source, at a range of published proxy emission rates for 'similar' plant. However, the concentrations of odour predicted at the nearest sensitive receptors were predicted to be very high (> 40 OU) which would result in a substantial number of complaints, which is not reflected in actual complaints received (refer Section 1.2.1). Subsequently the modelling assumptions were not assessed as being reflective of existing operations based on ground-truth observations.

Given that the Proposal will not result in any changes to the maximum quantity of asphalt loaded into trucks in any one hour, it would be anticipated that the odour environment currently experienced in the area would not significantly change as a result of the Proposal. Increases in odour impacts may be experienced at the nearest (industrial) receptors should additional load out occur during the evening and night-time periods, although during those times, industrial units might reasonably be anticipated to be vacant.

The odour environment of the area might reasonably be expected to remain similar to that currently experienced, although with the additional annual throughout of the proposal site, any odours may be experienced more frequently, although as previously discussed, more likely during periods when people would not be present at the nearest receptors.

Furthermore, as required by Schedule 3, Condition 1 of the current Project Approval for the site operation, which will likely be retained in any modified approval conditions, COLAS will be required to 'not cause or permit the emission of offensive odours from the site, as defined under Section 129 of the *Protection of Environment Operations Act 1997*." Based on the current operation of the site, it is likely that this would be achieved following modification.

Air Quality

Particulate Matter - Annual Average Dust Deposition, TSP, PM10 and PM2.5:

The predicted annual average particulate matter concentrations (as TSP, PM_{10} and $PM_{2.5}$) resulting from the proposed operations at the proposal site are presented in **Figure 25**.

Receptor	Annual Average Concentration (µg·m^{-3})											
	TSP				PM_{10}				$PM_{2.5}$			
	Incremental Impact	Storage yard	Background	Cumulative Impact	Incremental Impact	Storage yard	Background	Cumulative Impact	Incremental Impact	Storage yard	Background	Cumulative Impact
R1	0.7	0.3	33.0	34.0	0.3	0.1	18.7	19.1	<0.1	<0.1	7.3	7.5
R2	0.6	0.1	33.0	33.8	0.2	<0.1	18.7	19.0	<0.1	<0.1	7.3	7.5
R3	1.0	0.3	33.0	34.2	0.4	<0.1	18.7	19.1	<0.1	<0.1	7.3	7.5
R4	7.0	1.8	33.0	41.8	2.3	0.6	18.7	21.6	0.4	0.1	7.3	7.8
R5	14.2	0.6	33.0	47.8	4.9	0.2	18.7	23.8	0.7	<0.1	7.3	8.1
R6	5.8	0.4	33.0	39.3	1.9	0.1	18.7	20.7	0.3	<0.1	7.3	7.7
R7	9.7	1.4	33.0	44.0	2.9	0.4	18.7	22.0	0.5	<0.1	7.3	7.8
R8	2.1	2.0	33.0	37.1	0.7	0.6	18.7	20.1	0.1	0.1	7.3	7.5
R9	0.9	0.6	33.0	34.5	0.3	0.2	18.7	19.3	<0.1	<0.1	7.3	7.5
R10	1.0	0.6	33.0	34.6	0.4	0.2	18.7	19.3	<0.1	<0.1	7.3	7.5
R11	0.4	0.1	33.0	33.5	0.1	<0.1	18.7	18.9	<0.1	<0.1	7.3	7.5
R12	1.4	0.2	33.0	34.6	0.5	<0.1	18.7	19.3	<0.1	<0.1	7.3	7.5
R13	0.9	0.1	33.0	34.1	0.4	<0.1	18.7	19.1	<0.1	<0.1	7.3	7.5
R14	2.0	0.2	33.0	35.2	0.7	<0.1	18.7	19.5	<0.1	<0.1	7.3	7.5
Criterion		-	90			-	25			-	8	

Figure 25: *Predicted annual average TSP, PM_{10} and $PM_{2.5}$ concentrations (Source: Northstar Air Quality)*

The performance of the proposal does not result in any exceedances of the annual average TSP or PM_{10}. impact assessment criteria. One minor exceedance of the annual average $PM_{2.5}$ concentration is predicted, although given the industrial nature of the relevant receptor, exposure over that averaging period is not likely.

The performance of the Proposal does not result in any exceedances of the annual average dust deposition impact assessment criteria. Refer to **Figure 26**.

Receptor	Annual Average Dust Deposition (g·m^{-2}·month^{-1})			
	Incremental Impact	Storage yard	Background	Cumulative Impact
R1	<0.1	<0.1	2.0	2.2
R2	<0.1	<0.1	2.0	2.2
R3	<0.1	<0.1	2.0	2.2
R4	0.4	<0.1	2.0	2.5
R5	1.2	<0.1	2.0	3.2
R6	0.3	<0.1	2.0	2.4
R7	0.8	<0.1	2.0	2.8
R8	0.2	0.1	2.0	2.3
R9	<0.1	<0.1	2.0	2.2
R10	<0.1	<0.1	2.0	2.2
R11	<0.1	<0.1	2.0	2.2
R12	<0.1	<0.1	2.0	2.2
R13	<0.1	<0.1	2.0	2.2
R14	0.2	<0.1	2.0	2.2
Criterion	2.0	2.0	-	4.0

***Figure 26**: Predicted annual dust deposition (Source: Northstar Air Quality)*

The predicted maximum 24-hour average PM_{10} and $PM_{2.5}$ concentrations resulting from the operation of the Proposal, with impacts associated with the storage yard and background included are presented in **Figure 27** and **Figure 28** respectively.

The left side of the tables show the predicted concentration on days with the highest predicted cumulative impacts (typically driven by the highest regional background concentrations), and the right side shows the highest predicted cumulative concentration on days with the highest predicted incremental concentrations respectively. The results are presented in this way to demonstrate the maximum cumulative impacts (increment plus background) and the likely cumulative impacts on the day of the maximum increment. The table is presented as per Section 11.2 of the Approved Methods (NSW EPA, 2017).

The analysis identifies two days that are predicted to exceed the 24-hour PM_{10} criterion, but these are driven by background concentrations already exceeding the criterion. The analysis indicates that no additional exceedances of the 24-hour average impact assessment criteria for PM_{10} are likely to occur as a result of the operation of the proposal at either residential receptor.

The performance of the proposal does not result in any additional exceedances of the maximum 24-hour average PM_{10} impact assessment criteria at the identified sensitive receptor locations.

The analysis identifies one day that is predicted to exceed the 24-hour $PM_{2.5}$ criterion, but this is also driven by the background concentration already exceeding the criterion.

The analysis indicates that no additional exceedances of the 24-hour average impact assessment criteria for $PM_{2.5}$ are likely to occur as a result of the operation of the proposal at the nearest sensitive receptor locations.

The performance of the proposal does not result in any additional exceedances of the maximum 24-hour average $PM_{2.5}$ impact assessment criteria at the identified sensitive receptor locations.

Date	24-hour average PM_{10} concentration ($\mu g \cdot m^{-3}$) – Receptor 2				Date	24-hour average PM_{10} concentration ($\mu g \cdot m^{-3}$) – Receptor 1			
	Incremental Impact	Storage yard	Background	Cumulative Impact		Incremental Impact	Storage yard	Background	Cumulative Impact
6/05/2015	0.3	<0.1	64.9	65.2	11/02/2015	8.0	8.1	21.7	37.8
26/11/2015	<0.1	<0.1	57.5	57.6	19/02/2015	7.1	5.1	21.0	33.1
19/11/2015	4.7	1.5	43.3	49.5	31/10/2015	5.0	2.6	12.3	19.9
6/10/2015	0.7	0.1	42.0	42.8	15/04/2015	4.8	2.7	19.4	26.9
20/11/2015	<0.1	<0.1	39.4	39.5	22/11/2015	4.8	3.0	22.8	30.6
7/10/2015	<0.1	<0.1	39.4	39.5	10/02/2015	4.0	2.4	13.5	19.9
9/03/2015	1.3	0.5	36.9	38.7	14/02/2015	4.0	2.8	14.1	20.9
11/08/2015	0.9	1.0	35.8	37.7	17/03/2015	3.9	3.9	18.7	26.5
21/08/2015	0.7	0.8	35.8	37.2	24/10/2015	3.7	1.9	13.0	18.5
5/10/2015	1.1	0.3	35.8	37.2	18/02/2015	3.4	4.1	17.8	25.3
These data represent the highest Cumulative Impact 24-hour PM_{10} predictions (outlined in red) as a result of the operation of the Proposal.					These data represent the highest Incremental Impact 24-hour PM_{10} predictions (outlined in blue) as a result of the operation of the Proposal.				

Figure 27: *Summary of contemporaneous impact and background – PM_{10} (Source: Northstar Air Quality)*

Date	24-hour average $PM_{2.5}$ concentration ($\mu g \cdot m^{-3}$) – Receptor 2				Date	24-hour average $PM_{2.5}$ concentration ($\mu g \cdot m^{-3}$) – Receptor 1			
	Incremental Impact	Storage yard	Background	Cumulative Impact		Incremental Impact	Storage yard	Background	Cumulative Impact
21/08/2015	0.1	0.1	25.9	26.1	11/02/2015	1.5	1.2	2.9	5.6
20/08/2015	0.2	0.1	20.2	20.5	19/02/2015	1.3	0.8	5.5	7.5
22/08/2015	0.2	0.2	19.7	20.1	31/10/2015	0.9	0.4	5.2	6.5
7/06/2015	<0.1	<0.1	19.6	19.7	22/11/2015	0.8	0.5	6.3	7.5
5/07/2015	0.1	0.1	17.8	18.1	15/04/2015	0.8	0.4	10.5	11.7
19/11/2015	0.8	0.2	16.8	17.9	14/02/2015	0.8	0.4	6.5	7.7
9/03/2015	0.2	<0.1	16.9	17.2	10/02/2015	0.7	0.4	4.3	5.4
19/03/2015	0.2	0.2	15.5	15.9	24/10/2015	0.7	0.3	4.2	5.2
9/07/2015	0.3	<0.1	15.2	15.6	17/03/2015	0.7	0.6	5.4	6.7
23/06/2015	<0.1	<0.1	15.1	15.2	1/04/2015	0.7	0.9	3.0	4.6
These data represent the highest Cumulative Impact 24-hour $PM_{2.5}$ predictions (outlined in red) as a result of the operation of the Proposal.					These data represent the highest Incremental Impact 24-hour $PM_{2.5}$ predictions (outlined in blue) as a result of the operation of the Proposal.				

Figure 28: *Summary of contemporaneous impact and background – $PM_{2.5}$ (Source: Northstar Air Quality)*

Carbon Monoxide, Nitrogen Dioxide and Sulphur Dioxide:

Concentrations of Carbon Monoxide, Nitrogen Dioxide and Sulphur Dioxide are predicted to be minimal and meet the relevant criterion as a result of the proposal operation.

Air Toxics:

The assessment considered the predicted incremental concentrations of air toxics at the nearest sensitive receptors. The results indicate that at the maximum affected receptor, for the pollutant representing the highest percentage of the relevant criterion (beryllium), incremental concentrations are a maximum of 7.7 % of the relevant criterion.

In relation to annual average lead (Pb) concentrations, the maximum impact at any receptor represents <0.001 % of the relevant criterion.

Mitigation Measures:

As part of the operations of the Asphalt Batching Plant the following mitigations measures are utilised:

- Aggregate is dribble fed from the delivery trucks into a receival hopper within a 3-sided and roofed enclosure with water sprays and transported by an enclosed conveyor to the appropriate cold storage bin where it is metered onto a conveyer and transferred to a rotary dryer.
- There is no external stockpiling of aggregate.
- Hot-mix is transported by skips to the hot storage bins or transferred directly to a delivery truck.
- Bitumen is delivered to the proposal site in sealed tankers and pumped into enclosed storage tanks which are fitted with carbon filters to capture volatile organic compounds (VOCs) and their odours as the tank is being filled and the internal air and vapour is displaced.
- The conveyor covers are hemispherical in shape and cover the conveyor on three sides, with a gap of approximately 300mm between the conveyor and the cover.
- A baghouse is used to capture particulate matter in the dryer stack emission and water sprays are used to control dust emissions at required points, for example, the truck unload area.
- RAP is delivered by truck to a separate area of the plant and stored in a shed.

Based on the findings of the Air Quality Impact Assessment it is considered that the existing control measures proposed to be implemented and assessed will be sufficient to ensure that exceedances of all relevant air quality criteria would not be experienced as a result of the Proposal operation.

Irrespectively, the hardstand road around the premises should be kept as free from silt as possible and track out onto local roads should be avoided.

Frequent observation of the road condition beyond the site entrance should be performed, and where trackout is observed, cleaning should be performed at the earliest convenience. Similarly, frequent visual inspection of the hardstand areas should be performed, and should those observations identify a build-up of silt and / or that resuspension of road dust is occurring (wheel generated dust), cleaning of the hardstand should be performed at the earliest convenience. Cleaning of the roads and hardstand areas should be performed through water spraying and / or road sweeping.

To ensure that the management measures included within the Air Quality Impact Assessment are adopted appropriately, it is recommended that an Air Quality Management Plan (AQMP) will be prepared prior to the operation of the Proposal.

The AQMP would include information on the management of complaints via a complaint register, implementation of the adopted management measures, and contingency measures should certain measures not be able to be adopted at any time.

Ongoing air quality monitoring is not considered to be required as part of the Proposal operation, although campaign monitoring may be required to enable the substantiation (or otherwise) of any complaints received.

Conclusion:

The Air Quality Impact Assessment concludes that should emission controls as assumed in the report be implemented, all impact assessment criteria would be achieved at all relevant sensitive receptor locations. No additional exceedances of the air quality criteria are predicted, and the emissions controls would act to minimise emissions of air pollutants, in accordance with best practice.

The results of the Air Quality Impact Assessment indicate that the granting of modification to the SSD Consent for the Proposal should not be rejected on the grounds of air quality.

6. SITE SUITABILITY

It is considered that the site is suitable for the proposed modification. The Proposal is in keeping with the existing and future character of the subject land. The modification to the existing approval will help strengthen employment in the locality, maintain sufficient supply of asphalt to key local infrastructure projects and ensure that the business can continue to operate to meet market demand.

7. SUBMISSIONS

The Modification Application will be notified in accordance with the regulations. All reasonable concerns raised in any submissions will be considered.

As part of the notification period for SSD modifications under Section 4.55(2), the application will be publicly exhibited for up to 28 days.

8. PUBLIC INTEREST

The public interest is best served through the orderly use of the land for purposes which it is zoned and in accordance with the relevant planning controls and policies.

The Proposal is permissible with consent and complies substantially with the relevant policies and controls governing the development of the site.

The Proposal is therefore considered to be in the public interest.

9. CONCLUSION

This Section 4.55(2) Modification Application to SSD 07_0031 seeks minor amendments to the existing approval to increase the total output of the Asphalt Batching Plant from 150,000 tonnes per year to up to 250,000 tonnes per year.

Given the above, DPIE may modify SSD 07_0031 pursuant to Section 4.55(2) of the EP&A Act as it complies with the following matters:

- The proposal represents substantially the same development for which the consent was granted.
- The environmental impacts arising from the modifications are acceptable with regard to Section 4.15(1) of the EP&A Act.

The proposal should be supported by DPIE.