

ASSESSMENT REPORT

Section 75W Modification Amcor Paper Mill, Matraville Site Layout Changes and Subdivision

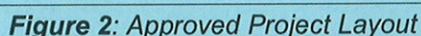
1. BACKGROUND

On 20 July 2007, the Minister granted project approval to Amcor Packaging (Australia) Pty Ltd (Amcor) for the construction and operation of a new paper mill at Amcor's Matraville plant in the Randwick Local Government Area (see Figure 1).



Figure 1: Site Location

- a new paper machine housed in a new industrial building;
- decommissioning of two existing paper machines;
- a new finished product store building;
- covered loading areas, a new engineering store and workshop;
- an expanded waste paper storage area;
- various storage silos, tanks, internal roads, stormwater and process water systems;
- offices, control room and landscaping; and
- demolition of some redundant buildings and infrastructure.



In addition, Amcor proposes to subdivide the site and sell the excess land (refer to figure 5) to fund development of the new paper mill. The modification application also seeks approval for the proposed subdivision.

2. PROPOSED MODIFICATION

Site Layout Changes

The proposed amendments are as follows:

McCauley Street Access Changes

- relocation of the engineering store vehicle access 100m further south along McCauley Street to opposite Raymond Avenue;
- construction and use of an additional B-double vehicle exit on McCauley Street for finished product vehicles, located approximately 70m south of the Raymond Avenue intersection;
- use of these two site access points onto McCauley street for exit of all Amcor heavy vehicle traffic in a southbound direction towards Botany Road; and
- upgrade of McCauley Street between Raymond Avenue and Botany Road to accommodate B-doubles and other heavy vehicles in a southbound direction. Upgrade works would include dedication of Amcor land to Council for provision of adequate road width, parking and a pedestrian footpath.

The proposed changes to site access and the McCauley Street upgrade works are shown on Figure 3.

Internal Site Layout Changes

- Increase the size of the finished product store from 5,000m² to 10,000m² and accommodate loading of finished product vehicles within the store building;
- Extend the new paper machine building by 45m to the east along the Botany Road frontage;
- Construct a new car park at the eastern end of the waste paper yard;
- Demolish part of the existing stock preparation plant, repave and use as the waste paper yard;
- Roof a section of the waste paper yard;
- Relocate the paper machine roll store to the western end of the paper machine building;
- Construct a fully enclosed annexe on the south side of the paper machine building to house vacuum blowers;
- Relocate the control room, offices and maintenance area further west on the northern side of the paper machine building;
- Relocate various stock and process water tanks to the eastern end of the paper machine building; and
- Relocate the engineering store adjacent to the finished product store.

The proposed site layout changes are shown in Figure 4.

Subdivision

Amcor is seeking to subdivide the site to enable excess land to be sold to fund development of the new paper mill. Amcor proposes to subdivide the largest land parcel, Lot 1 DP772737, into three lots, all zoned for industrial use and comprising:

- the Amcor site including the new paper machine building and other approved infrastructure;
- the McCauley Street development precinct, covering 1.99 hectares bound by McCauley Street and Australia Avenue and referred to as proposed Lot 1; and
- the Botany Road development precinct, 3.15 hectares, currently housing the existing paper machine buildings (No. 7 and 8) that would be demolished, referred to as proposed Lot 3.

A subdivision plan is shown in Figure 5. Note the separate lots to the east of the Energy Australia easement are not part of the modification application, as they are already on separate titles.

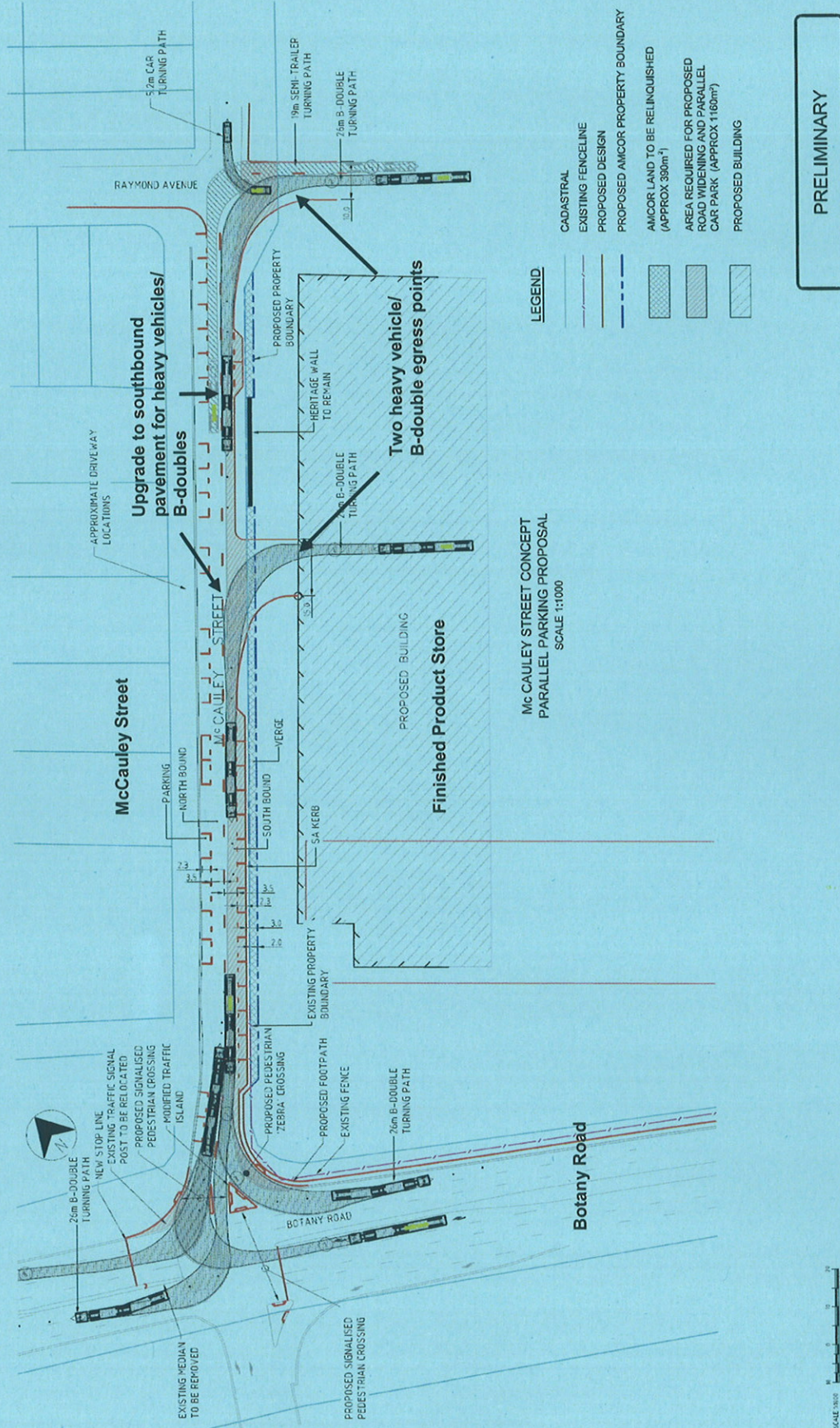


Figure 3: Proposed McCauley Street Access Changes

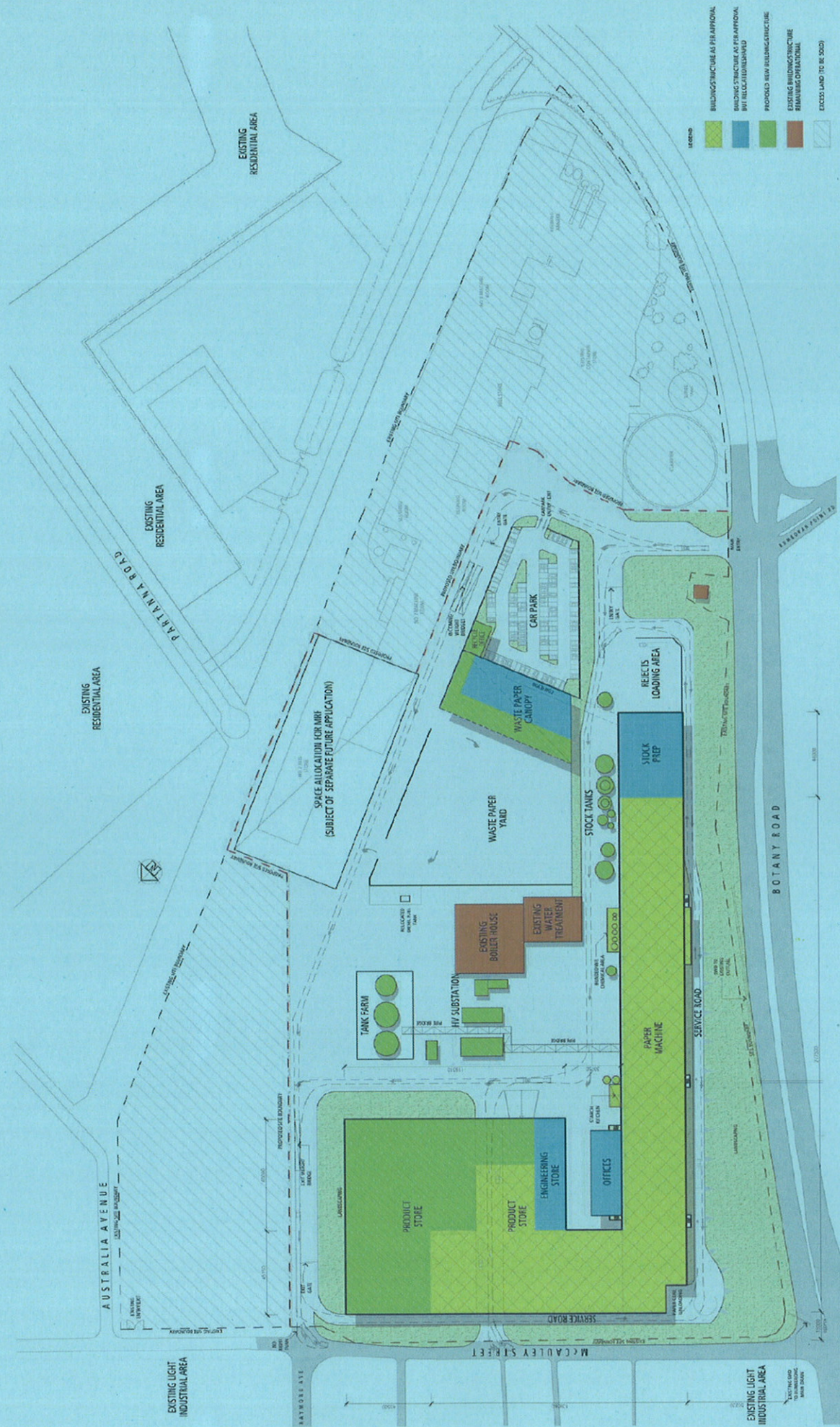


Figure 4: Proposed Site Layout

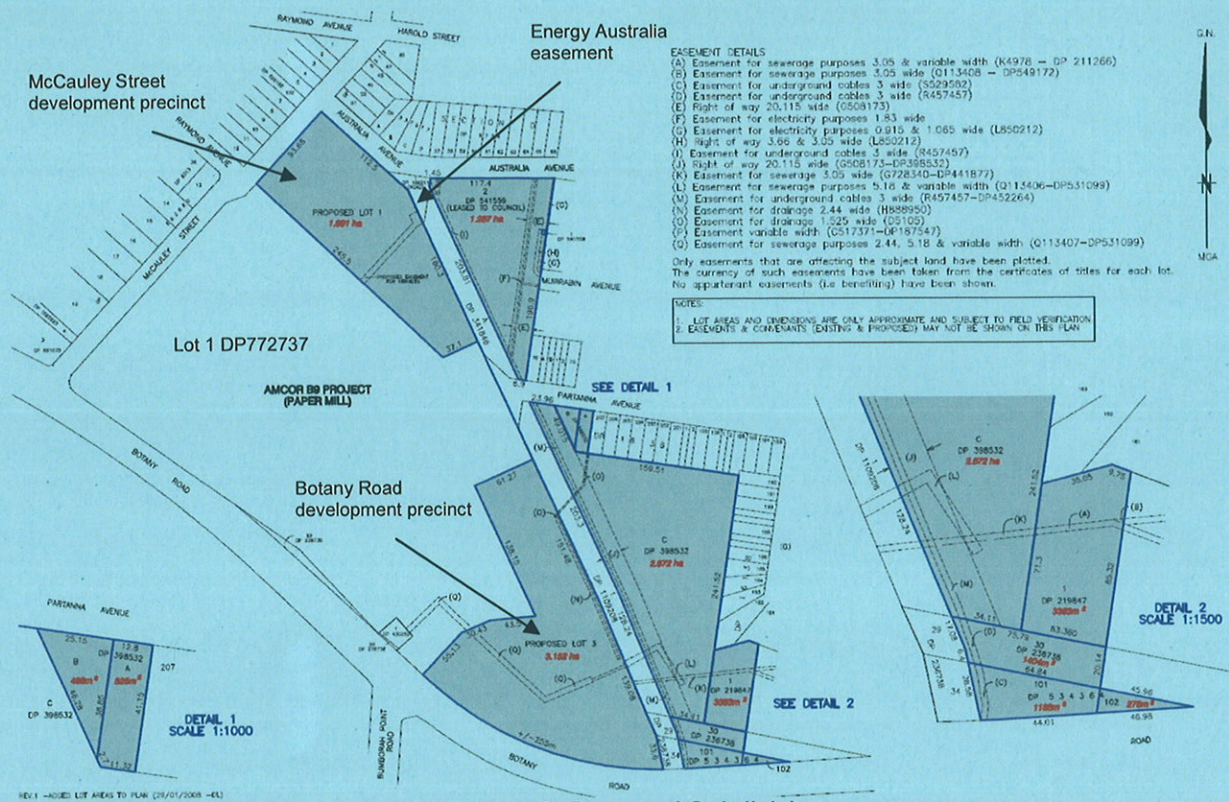


Figure 5: Proposed Subdivision

Operational Noise Limits and Noise Wall

The proposed modifications to the site layout would impact Amcor's ability to meet the operational noise limits in the project approval. The primary modifications influencing noise impacts include:

- allowing all B-doubles and heavy vehicles to exit the site via McCauley Street. This also alters internal site traffic movements;
- removal of significant shielding provided by the existing No. 7 and 8 paper machine buildings that are now proposed to be demolished; and
- altered location of key contributing noise sources, such as the stock preparation plant, fans, blowers and vacuum outlets.

As part of this modification, Amcor is seeking to increase the operational noise limits for the new paper mill. In addition, Amcor is seeking to construct a 5 metre high noise barrier along the northern site boundary shared with the new development precincts and a 7 metre high noise barrier around the waste paper storage yard to attenuate noise impacts from the project.

3. STATUTORY CONTEXT

Approval Authority

Section 75W of the EP&A Act confers on the Minister an implicit obligation to be satisfied that the modification request falls within this section of the EP&A Act.

The Department notes that:

- the proposed modification does not seek approval for a new and different project for which approval was granted; and
- any potential impacts would be appropriately managed through the existing and modified conditions of approval.

It is therefore recommended that the Executive Director, Major Projects Assessment, under the Ministers delegation of 25 January 2010, agree that the modification request falls within section 75W and the request can be determined.

Other Approvals

In addition to this application, Amcor is required to obtain:

- an environment protection licence (EPL) (or EPL variation) from the Department of Environment, Climate Change and Water (DECCW) under the Protection of the Environment Operations Act 1997 (POEO Act) for the project; and
- approvals from both the RTA and Randwick Council for the road works that are considered to be necessary for carrying out the project.

Under Section 75V of the EP&A Act, these approvals cannot be refused, and must be substantially consistent with the Part 3A approval.

Exhibition and Notification

Under Section 75W of the EP&A Act, the Department is not required to notify or exhibit the application. However, following a review of the modification application, the Department exhibited the application from 3 to 17 March 2010. The Department received 12 submissions on the proposal including five from government authorities and 7 from the public. The public submission from the Matraville Precinct Committee was accompanied by a petition with 400 signatures.

The Department also consulted extensively with Randwick City Council (Council), NSW Roads and Traffic Authority (RTA) and the Department of Environment, Climate Change and Water (DECCW) both prior to and following exhibition of the proposal.

The main concerns raised by Council related to management of operational traffic along McCauley Street and the potential impacts on residents to the north. Council provided recommended conditions of approval covering in detail their requirements for design of the McCauley Street road upgrade works, restriction on heavy vehicle access to the north beyond Raymond Avenue and detailed requirements for the provision of services to the subdivided lots. Attached to Council's submission was a submission from the Deputy Mayor of Council requesting the RTA reconsider the option to alter traffic signal phasing at the Botany Road site entrance to minimise the use of McCauley Street.

The RTA provided recommended conditions of approval detailing design requirements for the upgrade of the McCauley Street and Botany Road intersection.

DECCW had no objection to the proposed modification, provided recommended noise limits (that are recommended to be imposed) and requested preparation of a detailed noise management plan including management of road traffic noise. DECCW also reiterated that the modified project must continue to comply with the *Protection of the Environment Operations Act, 1997* in relation to the emission of offensive odour.

Sydney Ports has no concerns regarding the proposal and Sydney Water maintain stormwater must meet contemporary water quality discharge requirements.

The general public raised concerns relating to traffic, safety, noise and odour.

The Department has considered the issues raised in submissions in its assessment below.

4. ASSESSMENT

KEY ISSUES

The Department has reviewed the proposed modification and considers the key issues relate to traffic and noise. Other issues include odour, water management and visual impacts.

Traffic and Access

During early planning for the proposed subdivision, Amcor identified the need to provide suitable vehicle access for the new development precincts. Initially Amcor proposed to share the existing site access at Botany Road with any new development in the subdivided Botany

Road precinct. Consideration of vehicle volumes indicated that in order to retain an acceptable level of service at the Botany Road site access, the traffic signal phasing at the Botany Road and Bumborah Point Road intersection would need to be altered. The RTA advised that this was unacceptable as it would interfere with the flow of port related traffic on Botany Road. As such, Amcor revised the approach to traffic management and proposed to have the majority of Amcor related traffic entering the site via Botany Road and exiting the site via McCauley Street.

The altered traffic arrangements would:

- reduce the number of Amcor vehicles utilising the Botany Road site access thereby enabling future traffic from the Botany Road development precinct to be accommodated;
- facilitate the sale of the excess land by providing a suitable shared access;
- allow an acceptable level of service at the Botany Road site entrance and the McCauley Street/Botany Road intersection;
- reduce congestion on the Amcor site by allowing through flow of vehicles entering via Botany Road and exiting via McCauley Street; and
- separate wastepaper and finished product vehicle movements, thereby improving efficiency and safety on the Amcor site.

SKM undertook a traffic and access assessment for Amcor, to determine the potential impacts of the modification on road capacity, safety and intersection performance. The assessment considered the increase in traffic volumes as a result of the modified project, traffic from a future materials recycling facility to be located on the site (subject to separate development assessment), and estimated traffic from the subdivided development precincts. Table 1 shows the predicted increase in traffic volumes compared with existing volumes.

Table 1: Predicted traffic volumes compared to existing volumes

Location	Period	Modified project	Existing
Botany Road entrance	AM peak	199	58
	PM peak	204	42
McCauley Street	AM peak	378	213
	PM peak	339	208

Note: These volumes are for 2018, accounting for future traffic growth.

An analysis of intersection performance at the Botany Road/Bumborah Point Road and Botany Road/McCauley Street intersections concluded that with the predicted increased traffic volumes, both intersections would continue to operate at a satisfactory level of service.

Council and the RTA requested that Amcor identify the need for any infrastructure upgrades to maintain the existing levels of service. The modified traffic arrangements would require the following road upgrade works:

- upgrade of the road width and pavement on McCauley Street between Botany Road and Raymond Avenue to accommodate B-doubles and heavy vehicles;
- construction of a new site access on McCauley Street, 70m south of Raymond Avenue, for finished product vehicles leaving the Amcor site;
- upgrade of the Botany Road/McCauley Street intersection to provide adequate turning space for B-doubles and heavy vehicles;
- upgrade of the Botany Road site access on Amcor land to provide a shared access for the Amcor site and the Botany Road development precinct.

Considerable consultation has been undertaken with Council and the RTA regarding the design requirements for the upgrade works. Council, as the owner and roads authority for McCauley Street, has requested the following minimum requirements for the upgrade works between Botany Road and Raymond Avenue:

- detailed design to be approved by Council;
- Amcor to fund the full cost of the upgrade works; and
- Amcor to dedicate a 2m wide strip of land adjacent to McCauley Street to Council as a public road (excluding the heritage wall which is to be retained on Amcor land).

In addition, Council has requested to be consulted on:

- the design of the new shared access on McCauley Street opposite Raymond Avenue;
- the most appropriate traffic management measures for limiting heavy vehicle movements north of Raymond Avenue; and
- the preparation of a Construction Traffic Management Plan.

RTA, as the owner and roads authority for Botany Road has requested the following minimum requirements for the upgrade of the Botany Road/McCauley Street intersection:

- detailed design to be approved by the RTA;
- an independent Certified Auditor shall undertake a Stage 3 Road Safety Audit of the intersection design;
- Amcor should fund the full cost of the upgrade works; and
- Amcor should dedicate land at the intersection, if required for the upgrade works.

Amcor has agreed to the requirements and also committed to consult with the RTA on the design of the Botany Road shared site access and preparation of the Construction Traffic Management Plan.

Both Council and RTA's requirements have been incorporated into the modified conditions. However, the Department considers it appropriate that the Director-General maintain a final approval role in respect of the road upgrade works to ensure that the traffic related impacts of the modified project are minimised and any disputes can be promptly resolved.

The Department is satisfied that the traffic related impacts of the modification have been thoroughly assessed and appropriate measures would be implemented to ensure the safe and efficient flow of traffic to and from the Amcor site.

The Department further considers the proposed road and intersection upgrade works would ensure adequate access for the new development precincts, thereby facilitating their sale and ultimate development for industrial use.

Notwithstanding, the Department has recommended additional conditions of approval relating to traffic including the preparation of a detailed Traffic Management Plan that makes provision for measures such as a 'Driver Code of Conduct' to assist in the management of both construction and operational traffic.

Noise

The nearest residences to the Amcor site are located along the north-eastern boundary. Noise sources in the area include the Amcor paper mill and the Port Botany container terminal to the south, both operating 24 hours, and road traffic noise primarily from Botany Road.

The primary modifications to the approved project that have the potential to alter noise from the site include:

- allowing all B-doubles and heavy vehicles to exit the site via McCauley Street. This also alters internal site traffic movements;
- removal of significant shielding provided by the existing No. 7 and 8 paper machine buildings that are now proposed to be demolished; and
- altered location of key contributing noise sources, such as the stock preparation plant, fans, blowers and vacuum outlets.

Residential areas to the north-west at McCauley Street and Australia Avenue are most impacted by the proposed changes to traffic movements at the McCauley Street access. Residents at Murrabin, Partanna and Moorina Avenues are more affected by the proposed removal of the existing paper machine buildings which provide shielding from the new paper mill operations.

Paper Mill Operations

Benbow Environmental modelled noise emissions associated with the modified project for Amcor, which included a range of noise mitigation measures. The measures include:

- a 5 metre high noise barrier along the northern site boundary shared with the new development precincts;
- a 7 metre high noise barrier around the waste paper storage yard;
- retention of the existing B7 reel store to be used in future as a Materials Recovery Facility and to be redesigned to provide acoustic shielding;
- placement of ventilation fans on decks on the south side of the new paper machine building;
- engineering controls on fans and blowers to achieve 85dB(A) at 1m from the outlets;
- the ground floor level wall of the paper machine building facing residential areas to be constructed of concrete and a double clad metal system;
- the machine floor level wall of the paper machine building facing residential areas to be constructed of a double steel cladding system;
- design of the internal road system and traffic flow to be designed to prevent the sleep disturbance criteria being exceeded; and
- design of the finished product store to allow trucks to be loaded inside the building and exit the site via a separate access on McCauley Street further from residential areas.

DECCW's initial submission requested further noise impact assessment with implementation of an additional mitigation measure, namely, decreasing exhaust fan noise by a further 3.2dB(A) by use of more effective silencers.

The revised modelling concluded that even with noise mitigation in place, the modified site layout would be unable to achieve the operational noise limits in the project approval. Table 2 shows the predicted noise levels from the modified project with all mitigation in place, compared with the project approval limits. Amcor is seeking to alter the project approval limits to those predicted for the modified project.

Table 2: Noise Predictions v's Project Approval Limits

ID	Residence Location	Period	Predicted noise from modified project	Project approval limits	Predicted Exceedance
			L _{Aeq} (15 minute) dB(A)		
R1	McCauley St & Australia Ave	Day	46	46	-
		Evening	45	39	6
		Night	43	39	4
R2	Australia Ave	Day	45	47	-
		Evening	45	40	5
		Night	43	40	3
R3	Murrabin Ave	Day	45.5	45	0.5
		Evening	45	39	6
		Night	43	38	5
R4	Partanna Ave	Day	42	44	-
		Evening	41	39	4
		Night	41	36	5
R5	cnr Partanna & Moorina Aves	Day	42	-	-
		Evening	42	-	-
		Night	39	-	-
R6	Moorina Ave	Day	43	35	8
		Evening	42.5	35	7.5
		Night	39	35	4

The modelling did not include noise associated with the new development precincts that would be subdivided from the Amcor site as it is unknown what development would occur on these sites. It can be expected that when developed, these sites would generate noise, but they would also provide some shielding between the paper mill and the residential areas. Development on these sites would be subject to separate assessment and determination.

It should be noted that the predicted noise levels for the modified project, including mitigation are lower than the Environment Protection Licence limits on the existing paper mill, by 7-11dB(A). Therefore, the modified project would still provide a noise reduction for the nearest residences when compared to the existing facility.

Road Traffic Noise

SKM undertook a road traffic noise assessment to determine the likely impacts associated with increased traffic movements on McCauley Street. Several public submissions noted traffic noise on McCauley Street as a significant concern. The assessment concluded that day and night time road traffic noise would comply with the *Environmental Criteria for Road Traffic Noise* and therefore, no additional noise mitigation would be required due to operational traffic movements on McCauley Street.

The Department concludes that the minor increase in noise associated with the modified site layout would not result in significant impacts at the nearest residences. The modified project would still achieve noise reductions when compared with the existing operations. The modified site layout would improve the efficiency and safety of the new paper mill and enable significant excess land to be sold to fund development of the new mill.

The Department and the DECCW do not object to amending the noise limits in the project approval to the predicted levels for the modified project; provided all noise mitigation controls are implemented. The modified conditions include:

- new noise limits, including sleep disturbance limits prescribed by DECCW;
- a requirement to obtain the Director-General's approval for detailed design of the noise barriers proposed, including specification of a minimum material density requirement;
- an obligation to implement all noise mitigation controls prior to operation;
- a noise verification study to be completed within 3 months of commissioning to demonstrate compliance with noise limits; and
- a detailed noise management plan that covers operational and traffic noise and incorporates a noise monitoring program to assess the on-going effectiveness of noise mitigation and compliance with noise limits.

With implementation of the above conditions, the Department is satisfied that noise from the modified project would not adversely impact the nearest residences.

Other Issues

An assessment of other issues is provided in Table 3.

Table 3: Assessment of other issues

Issue	Impact	Recommendation
Odour	<ul style="list-style-type: none"> • The approved project predicted odour between 3 and 5 odour units (OU)/m³ at nearest residences and 5-6OU/m³ at the new development precincts. • The modification would not change production processes or waste management; therefore, there would be no change to predicted odour emissions or impacts. 	No change to the project approval. Amcor is required to comply with the existing condition regarding compliance with Section 129 of the <i>Protection of the Environment Operations Act, 1997</i> with respect to the emission of offensive odour. In addition, Amcor is required to undertake both annual reporting and an independent environmental audit of the facility (including an odour expert) to ensure compliance with the approval.
Water Management	<ul style="list-style-type: none"> • Council requested detailed consideration of flooding and stormwater management for the modified site layout and the subdivided lots. • Amcor provided a flood study to Council in 2009 in accordance with the project approval and maintains that there would be 	The project approval requires a detailed Stormwater Management Scheme for the project prior to operation and this condition would remain relevant for the modified project.

	<p>minimal change as a result of the modification.</p> <ul style="list-style-type: none"> • The Department is satisfied that requiring each subdivided lot to be connected to services, drainage and utilities prior to issuing the Subdivision Certificate provides sufficient certainty to all parties about the servicing of the project and subdivided lots. • However, stormwater management of the subdivided lots (e.g. exact overland flow paths) can not be sufficiently detailed until such time as future development uses are identified. As such, the Department considers that stormwater management for the subdivided lots could be adequately dealt with once development approval is sought for each lot. 	<p>The modified conditions require each subdivided lot to be connected to services, drainage and utilities prior to issuing the Subdivision Certificate. This would ensure that appropriate services are provided for the management of stormwater.</p>
Visual	<ul style="list-style-type: none"> • There would be a considerable change to the building structure along the Botany Road façade with construction of a separate annexe to house the vacuum blowers. This change was designed to minimise noise impacts for the residential areas to the north. In addition there will be construction of a noise wall to mitigate noise impacts. • The Botany Road façade is not visible from any residential areas and is located on a 6 lane road opposite the Port Botany container terminal. • The buildings will be the dominate visual feature of the site (as opposed to the noise wall). In addition, the noise wall will be softened by landscaping and partially screened by future developments on the subdivided lots. • The visual impact of additional structures along the Botany Road frontage would be minimal and consistent with both the approved project and the industrial development along Botany Road. 	<p>No change to the project approval with regard to detailed building design. Amcor is required to comply with existing conditions relating to building design, lighting and landscaping. Amcor also required to submit detailed design plans for the noise wall.</p>
Subdivision	<ul style="list-style-type: none"> • Council recommended numerous conditions relating to subdivision, primarily the provision of utilities and services to the new lots. 	<p>A number of conditions relating to provision of utilities and services to the subdivided lots have been included in the modified conditions.</p>

5. RECOMMENDED CONDITIONS OF APPROVAL

The proposed modifications would alter the traffic and noise impacts of the approved project due to changes in traffic management, site layout and subdivision. The Department considers that the proposed changes would not significantly alter the traffic and noise impacts of the approved project and that these changes can be appropriately managed via modified conditions of approval.

6. CONCLUSION

The Department has assessed the merits of the proposal in accordance with the requirements in Clause 8B of the *EP&A Regulation*.

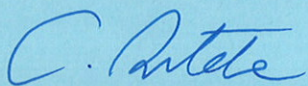
The assessment has concluded that the proposed modification would result in improved operation and efficiency of the new paper mill. The change in impacts would be acceptable and can be adequately managed via modified conditions. Amcor has committed to undertake and finance the required infrastructure upgrades imposing no burden of cost on Council or the RTA.

Consequently, the Department believes the proposed modification is in the public interest, and should be approved.

7. RECOMMENDATION

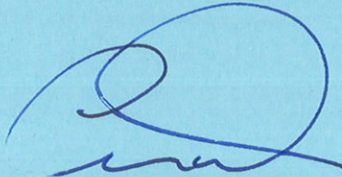
It is RECOMMENDED that the Executive Director, Major Projects Assessment:

- approve of the proposed modification under Section 75W of the EP&A Act; and
- sign the attached instrument (tagged A).



Chris Ritchie
Manager - Industry
Mining & Industry Projects

12/7/10.



Chris Wilson
Executive Director
Major Projects Assessment

12.7.10