



# ***Boral St Peters Concrete Batching Plant & Materials Handling Facility***

Section 75W  
Modification Assessment  
(DA 14/96 MOD 11)



January 2019

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# Glossary

Abbreviation	Definition
CIV	Capital Investment Value
Consent	Development Consent
Council	Inner West Council
Department	Department of Planning and Environment
DPI	Department of Primary Industries
EIS	Environmental Impact Statement
EPA	Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPI	Environmental Planning Instrument
EPL	Environment Protection Licence
LEP	Local Environmental Plan
Minister	Minister for Planning
MOD 10	Modification 10 to DA 14/96
MOD 11	Modification 11 to DA 14/96
OEH	Office of Environment and Heritage
RMS	Roads and Maritime Services
RtS	Response to Submissions
SEARs	Secretary's Environmental Assessment Requirements
Secretary	Planning Secretary of the Department of Planning and Environment
SEPP	State Environmental Planning Policy
SRD SEPP	<i>State Environmental Planning Policy (State and Regional Development) 2011</i>



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# 1. Introduction

This report assesses a modification request by Boral Resources (NSW) Pty Ltd (the Proponent) to expand its concrete batching plant (CBP) and materials handling facility operations at St Peters. The modification works include upgrading the CBP to facilitate an increase in concrete production from 280,000 cubic metres (m<sup>3</sup>) per annum to 750,000 m<sup>3</sup> per annum, and changing the layout and function of the materials handling facility to enable an increase in throughput from 760,000 tonnes per annum (tpa) to one million tpa. The request has been lodged pursuant to the former section 75W of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The project was originally approved under Part 4 of the EP&A Act and is a transitional Part 3A project under Schedule 2 to the *Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017* (EP&A (STOP) Regulation). The power to modify transitional Part 3A projects under the former section 75W of the Act, as in force immediately before its repeal on 1 October 2011, is being wound up – but as the request for this modification was made before the ‘cut-off date’ of 1 March 2018, the provisions of Schedule 2 (clause 3) continue to apply. Consequently, this report has been prepared in accordance with the requirements of Part 3A and associated regulations, and the Minister (or his delegate) may approve or disapprove the modification of the project under the former section 75W of the EP&A Act.

## 1.1 Background

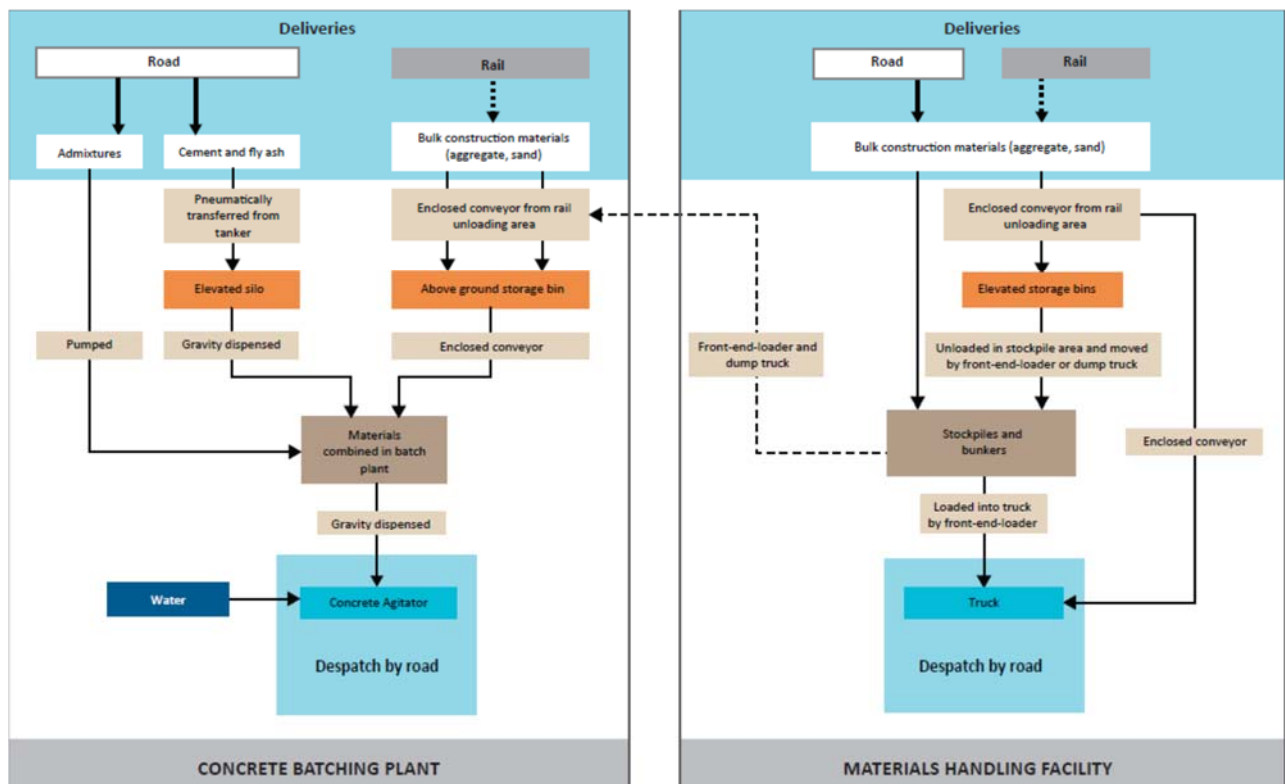
The Proponent operates a CBP and materials handling facility at 25 Burrows Road South, St Peters, approximately seven kilometres (km) south-west of the Sydney Central Business District (CBD), in the Inner West local government area (see **Figure 1**). The development has operated since 1997.



**Figure 1** | Site Location

The site is zoned IN1 General Industrial under the *Marrickville Local Environmental Plan 2011* (Marrickville LEP) and is primarily surrounded by industrial land uses also zoned IN1 General Industrial. The site is bordered by Burrows Road South to the north-east, Alexandra Canal along the south-east, the Botany Goods rail line to the south-west and industrial land uses to the north-west, including the Boral Recycling facility. The nearest residences are in Tempe and Sydenham on the Princes Highway, approximately 600 metres (m) to the north-west of the site.

The majority of bulk construction materials (aggregate, sand and cement) are currently received by rail via the Botany Goods Line from Boral's Peppertree and Dunmore Quarries and the Berrima Cement Works. The materials are used to make concrete at the CBP or are temporarily stored at the handling facility for later distribution to other CBPs and asphalt plants within the Sydney metropolitan area. The remaining bulk construction materials for the handling facility as well as cement, fly ash and admixtures for the CBP are delivered to the site by road. All concrete and construction materials are despatched from the site by concrete agitators and trucks, respectively. **Figure 2** provides a flow diagram of the current operations at the site.

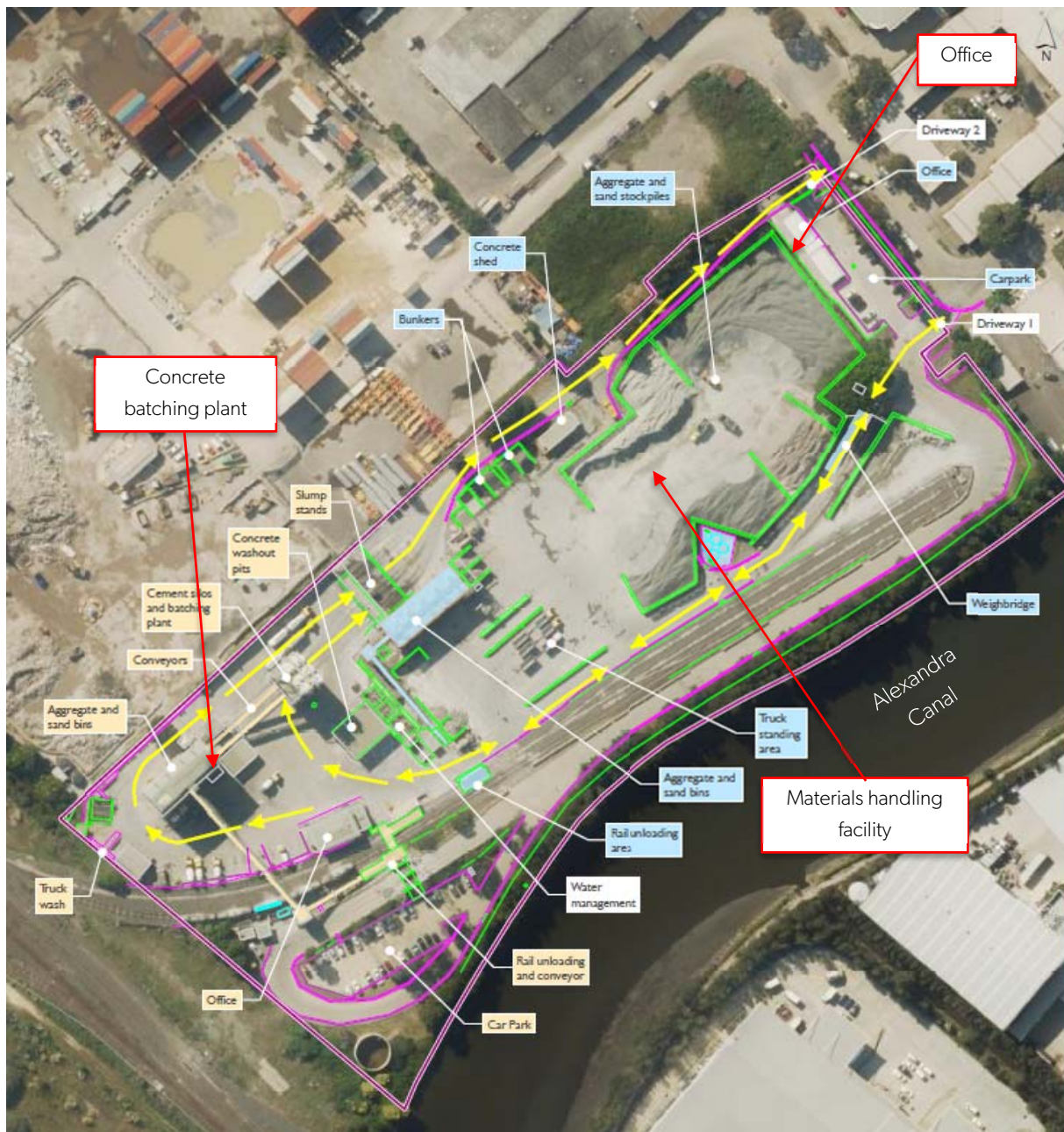


**Figure 2 – Site Operations**

The CBP has approval to produce 280,000 m<sup>3</sup> of concrete per annum. The current approved bulk construction material throughput of aggregates and sand at the handling facility is 760,000 tonnes per annum. The handling facility is located in the centre and north-eastern part of the site. An office and carpark are in the north-eastern corner, adjacent to Burrows Road South, sited between the main entry and exit driveways.

A rail siding runs along the south-eastern side of the site adjacent to the Alexandra Canal. There are two train unloading areas, one for the CBP and one for the handling facility. The current site layout is illustrated in **Figure 3**.





**Figure 3** – Existing Site layout

Access to and egress from the site for both heavy and light vehicles is via two driveways off Burrows Road South. Internal roads allow for all vehicles to enter and exit the site in a forward direction. The majority of site traffic travels to and from the site via Canal Road and the Princes Highway. Key intersections include:

- Princes Highway and Canal Road
- Burrows Road South, Canal Road and Ricketty Street.

The WestConnex Interchange is located to the north of the site on the corner of The Princes Highway and Canal Road. The interchange is currently under construction. The road network surrounding the site is illustrated in **Figure 4**.



**Figure 4 – Site access and surrounding road network**

## 1.2 Approval History

On 6 September 1996, the then Minister for Planning granted development consent for the construction and operation of the CBP, an asphalt plant and the handling facility (DA 14/96) under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and *State Environmental Planning Policy No.34 – Major Employment-Generating Industrial Development* (SEPP 34) (now repealed). The asphalt plant was decommissioned and demolished in 2002.

Since the development consent was granted in 1996, the consent has been modified ten times. The modifications primarily relate to site layout changes to improve operational efficiency. The most recent modification, approved in November 2016, simplified the development consent by removing redundant conditions relating to construction and operation of the asphalt plant, established a production limit for the CBP and a throughput limit for the materials handling facility and allowed a minor increase in concrete production from 254,200 m<sup>3</sup> to 280,000 m<sup>3</sup> per annum.

The development consent includes the following conditions relevant to the modification request:

- Condition 5 - The annual production of the concrete batching plant must not exceed 280,000 m<sup>3</sup> and the annual throughput of the construction materials handling facility must not exceed 760,000 tonnes
- Condition 36a - Prior to any increase in production at the concrete batching plant (as approved under MOD 10 to this consent), an off-site dust deposition monitor shall be established on Burrows Road South in the vicinity of sensitive receptors R3 and R4 (as identified in Figure 6.1 of the Environmental Assessment for MOD 10). The location of the monitor shall be approved by the EPA.





## 2. Proposed Modification

The Proponent has lodged a modification request under the former section 75W of the EP&A Act to modify the Boral CBP and materials handling facility at St Peters to increase concrete production and increase the throughput of the materials handling facility. The modification is described in full in the Environmental Assessment (EA) included in **Appendix B**, outlined in **Table 1** and illustrated in **Figure 5**.

The modification is proposed to:

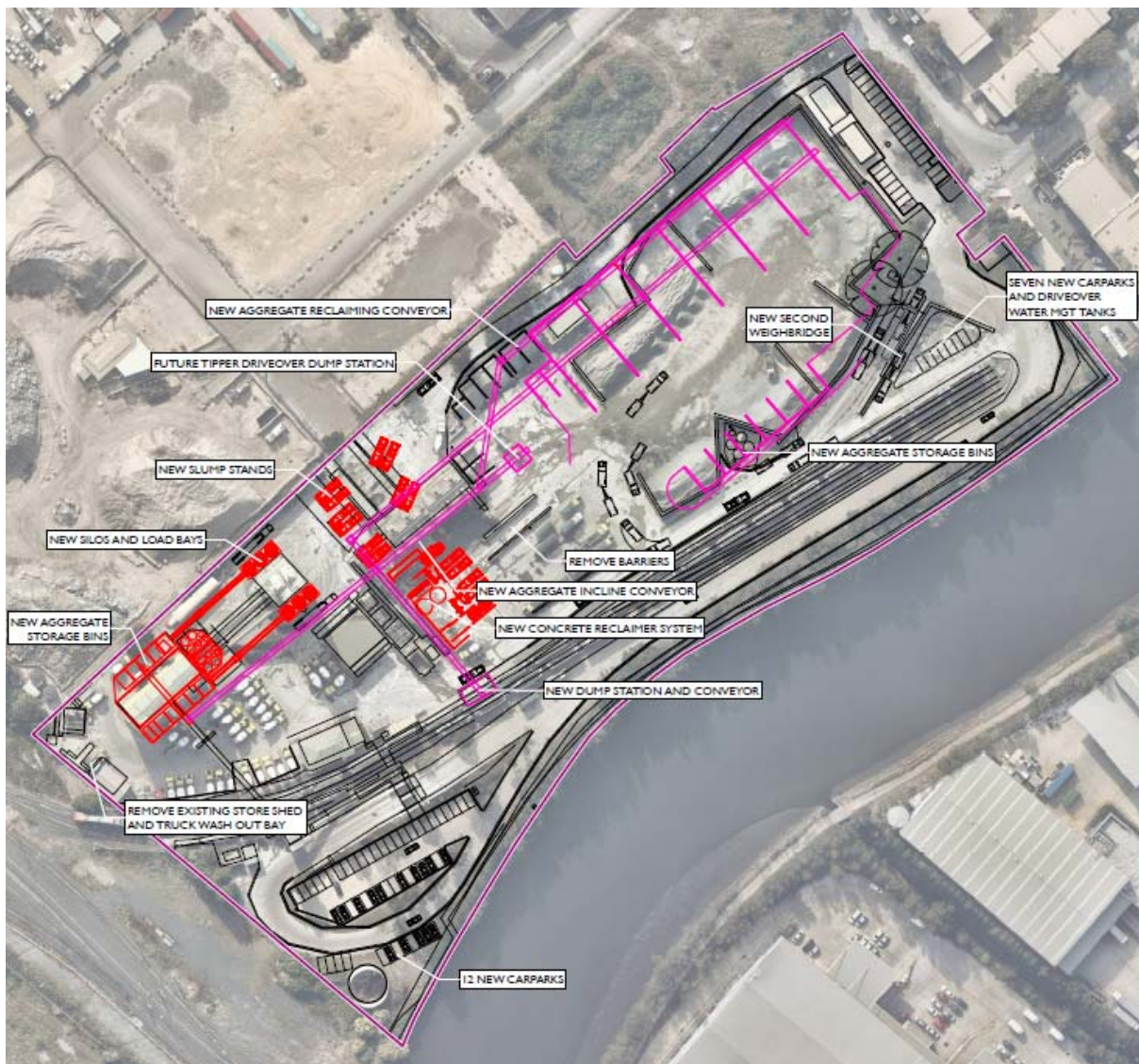
- upgrade the CBP to facilitate an increase in concrete production from 280,000 m<sup>3</sup> per annum to 750,000 m<sup>3</sup> per annum
- make changes to the layout and function of the materials handling facility to facilitate an increase in throughput from 760,000 tpa to one million tpa
- construct a new aggregate reclaiming conveyor, upgrade the site's surface water management system and install a second weighbridge.

Details of the existing site infrastructure and the proposed works and infrastructure is outlined in **Table 1** below.

**Table 1** | Modification Details

Materials Handling Facility	
Existing infrastructure	Proposed Works and Infrastructure
Rail unloading area	<ul style="list-style-type: none"><li>• New rail unloading station and conveyor</li></ul>
Aggregate and sand storage bins	<ul style="list-style-type: none"><li>• Demolish existing elevated storage bins</li><li>• Five additional open aggregate storage bins</li></ul>
Aggregate and sand stockpiles	<ul style="list-style-type: none"><li>• Reconfiguration of stockpiles into bunkers with 10-17m high walls</li><li>• Two overhead aggregate reclaiming conveyors</li><li>• Two tipper drive over dump stations</li><li>• Aggregate incline conveyor from dump station to aggregate storage bins</li></ul>
Weighbridge	<ul style="list-style-type: none"><li>• Additional weighbridge</li></ul>
27 car spaces	<ul style="list-style-type: none"><li>• Seven additional car spaces</li></ul>
Concrete Batching Plant	
Existing infrastructure	Proposed Works and Infrastructure
40 car spaces	<ul style="list-style-type: none"><li>• 12 additional car spaces</li></ul>
12 elevated aggregate storage bins	<ul style="list-style-type: none"><li>• Widening of existing storage bins</li></ul>
Six elevated cement and flyash silos Two load bays	<ul style="list-style-type: none"><li>• Six additional cement and flyash silos</li><li>• Two additional load bays</li><li>• Two new conveyors</li></ul>
Two double position slump stands	<ul style="list-style-type: none"><li>• Three additional double position slump stands</li></ul>
4 agitator wash out bays	<ul style="list-style-type: none"><li>• Concrete reclaimer system</li></ul>

Construction is anticipated to take approximately nine months and will be carried out during standard construction hours. The construction works are proposed to be staggered in stages to minimise disruption to production. The proposed expansion of site operations will generate three jobs during construction and 29 operational jobs.



**Figure 5** | Proposed Site Layout

The Proponent is seeking approval of the modification request as it has identified a need to meet the increasing demand for concrete and other construction materials (aggregate and sand) for Sydney’s housing market and major transport infrastructure construction activities, including WestConnex, Sydney Light Rail and Sydney Metro. Boral advises it has undertaken a review of its existing facilities within the Sydney area to identify where improvements can be made to increase efficiency and production. Given the St Peters CBP and materials handling facility is close to Sydney’s CBD with good connections to major roads and rail, Boral considers the St Peters facility is an ideal site for upgrading to meet these efficiency and production needs.

Boral advises it has also lodged separate development applications with Willoughby and Bayside Councils to increase concrete production and hours of operation at its Artarmon and Botany CBPs, respectively, to supply concrete to major developments in the Sydney area.



## 3. Strategic Context

### 3.1 Greater Sydney Region Plan

In March 2018, the Greater Sydney Commission released the 'Greater Sydney Region Plan: A Metropolis of Three Cities' (the Plan). The Plan is built on a vision of three cities, the Western Parkland City, the Central River City and the Eastern Harbour City. The 40-year vision to 2056 brings new thinking to land use and transport patterns to boost Greater Sydney's liveability, productivity and sustainability by spreading the benefits of growth. The Boral St Peters site is located within the Eastern City District.

The proposed modification is consistent with the Plan's direction of 'A city supported by infrastructure: Infrastructure supporting new developments' and 'An efficient city: Using resources wisely' and supports Planning Priority E1 – 'Planning for a city supported by infrastructure' and Planning Priority E19 – Reducing carbon emissions and managing energy, water and waste efficiently'.

The proposed expansion of the Boral St Peters site would contribute toward the delivery of transport infrastructure for connections within each of the three cities and for making connections between the three cities. It will also contribute to a reduction in carbon emissions through the provision of new public transport infrastructure and utilising rail for the transport of construction materials.



## 4. Statutory Context

### 4.1 Scope of Modifications

Under clause 8j(8)(b) of Schedule 4 to the *EP&A (STOP) Regulation*, a development consent granted by the Minister under SEPP 34 is to be modified under the former section 75W of the EP&A Act. Despite the repeal of Part 3A of the EP&A Act on 1 October 2011, the effect of section 75W is continued for such consents by the operation of clause 12 of Schedule 2 to the *EP&A (STOP) Regulation* until the cut-off date established in clause 3BA of schedule 2 to the *EP&A (STOP) Regulation*.

The Department notes that:

- the primary function and purpose of the approved project would not change as a result of the proposed modification
- the modification is of a scale that warrants the use of former section 75W of the EP&A Act
- any potential environmental impacts would be appropriately managed through the existing or modified conditions of consent.

Therefore, the Department is satisfied the modification request is within the scope of the former section 75W of the EP&A Act and does not constitute a new development application. Accordingly, the Department considers the request should be assessed and determined under the former section 75W of the EP&A Act rather than requiring a new development application to be lodged.

### 4.2 Consent Authority

#### Minister's delegate as consent authority

The Minister is the approval authority for the request. Under the Minister's delegation of 11 October 2017, the Executive Director, Key Sites and Industry Assessments, may determine the request under delegation as:

- the relevant local council has not made an objection and
- a political disclosure statement has not been made and
- there are less than 25 public submissions in the nature of objections.





## 5. Engagement

### 5.1 Department's Engagement

Under the former section 75W of the EP&A Act, the Department is not required to notify or exhibit the modification request. However, due to the complex nature of the proposal and the potential for public interest, the Department exhibited the request from 31 July 2018 to 13 August 2018:

- on the Department's website
- at Inner West Council's (Council's) offices.

The modification request was advertised in the *Sydney Morning Herald*, *The Daily Telegraph* and the *Inner West Courier*. All landowners in the vicinity of the site were notified by letter. The Department also notified and invited comment from relevant State government authorities, Council and the City of Sydney Council.

### 5.2 Summary of Submissions

During the exhibition period, 28 submissions were received, including eight from public authorities, 13 from the public and seven from local businesses. Of the 20 public and local business submissions received, 18 objected to the request.

### 5.3 Key Issues – Government Authorities

**Council** did not object to the modification request but raised concern regarding the intensification of the production of concrete and the resulting increase in truck movements. Specifically, concerns were raised regarding traffic generation and pedestrian and cycling safety, car parking requirements, air quality impacts from increased dust generation, cumulative noise impacts on nearby residential areas, flood emergency response, inadequate treatment of stormwater runoff and potential impacts on the heritage values of the Alexandra Canal.

**Roads and Maritime Services (RMS)** did not object to the modification request but sought additional advice regarding the effect of increased delays and the length of queues on the traffic network at and along the Princes Highway, Ricketty Street and Gardeners Road, interim restrictions or network changes prior to the commencement of operation of WestConnex and clarification on various traffic modelling assumptions. The SIDRA modelling files were requested for a detailed review.

**Environment Protection Authority (EPA)** did not object to the modification request and noted that CBPs are not a 'scheduled activity' under the *Protection of the Environment Operations Act 1997* (POEO Act) and therefore an Environment Protection Licence (EPL) is not required. The EPA advised it is and will remain, the Appropriate Regulatory Authority (ARA) for the site given the existing and proposed capacity of the CBP exceeds 30,000 tpa. The EPA also advised it does not support the removal of condition 36a from the consent which requires an off-site dust deposition monitor to be established and recommended the implementation of vibration management measures. The EPA recommended amendments to existing conditions to address these matters.

**Office of Environment and Heritage (OEH)** did not object to the modification request but raised concern that the EA did not provide an adequate assessment of heritage impacts on the State Heritage Register listed values of the Alexandra Canal. OEH recommended the Proponent prepare a more detailed and comprehensive assessment in accordance with Heritage NSW's guideline for preparing a Statement of Heritage Impact.

**Sydney Airport Corporation Limited (SACL)** did not object to the modification request but noted the site lies within an area defined in schedules of the *Civil Aviation (Buildings Control) Regulations* which limit the height of structures to 7.62 m above existing ground height (AEGH) without approval from the Civil Aviation Safety Authority (CASA). As an

authorised person of the CASA, the Airfield Design Manager gave approval for the erection of the development to a maximum height of 22.0 m AHD. SACL also advised that approval to operate construction equipment (i.e. cranes) should be obtained prior to construction.

**Department of Industry Lands and Water Division** (DoI (L&W)) did not object to the modification request and recommended conditions relating to dewatering and groundwater monitoring and a requirement to consider the 'Guidelines for Riparian Corridors on Waterfront Land' (2018) when undertaking works within 40 m of the top of the bank of the Alexandra Canal.

**Transport for NSW (TfNSW)** did not object to the modification request and stated it had no comments on the proposal.

**Transgrid** did not object to the modification request and stated it had no comments on the proposal.

**WaterNSW** did not object to the modification request and stated it had no comments on the proposal.

**City of Sydney Council** did not make a submission on the proposal.

## 5.4 Key Issues – Community and Local Businesses

### Community Issues

A total of 13 submissions were received from the public, including 11 objections and two providing comments on the proposed modification. Key issues raised in the public submissions included:

- air quality and dust, including dust deposition and human health impacts
- traffic impacts, including congestion on the surrounding road network and safety concerns regarding movement of trucks on narrow local roads
- noise impacts, particularly from the new concrete reclaimer

### Local businesses

A total of seven submissions were received from local businesses, all objecting to the modification request. Key issues raised in the submissions included:

- dust, including impacts on materials, machinery, vehicles and products
- traffic impacts, including congestion on Burrows Road South, safety concerns regarding movement of trucks on narrow local roads, the need for an upgrade to the road surface of Burrows Road South, impacts on access to local business
- health impacts on staff and visitors
- adverse impacts on local business productivity

A summary of the key issues raised in submissions received from the public and local businesses is provided below in **Table 2**.

**Table 2** | Issues raised in public and local business submissions

Issue	% of Submissions
Dust	90
Traffic	80
Health impacts	50
Business productivity	30
Noise	25

## 5.5 Response to Submissions

On 11 September 2018, the Proponent submitted a Response to Submissions (RtS) report responding to the issues raised during the exhibition of the modification request. The RtS included the following:

- additional mitigation and monitoring measures for dust management
- additional predicted dust emission data
- additional SIDRA traffic modelling analyses of the Burrows Road South/Canal Road/Burrows Road/Ricketty Street intersection
- a proposal to extend the 'no stopping' zones on Burrows Road South and Burrows Road (to the north of the intersection) to alleviate congestion on Burrows Road South as a result of the modification
- a commitment to contribute toward the cost to repair/resurface Burrows Road South
- MUSIC stormwater quality modelling
- additional details on flood management
- further details on the potential impacts on the heritage listed Alexander Canal.

The RtS was made publicly available on the Department's website and was provided to key government authorities to consider whether it adequately addressed the issues raised. A summary of responses is provided below:

- **Council** maintained its concerns regarding traffic generation and impacts on the surrounding road network. Concerns were also raised regarding loss of car parking on Burrows Road South and Burrows Road as a result of the proposed extension of the 'no stopping' zone. Council sought more information on cyclist safety and flooding and recommended best practice dust and noise mitigation measures to manage amenity impacts.
- **RMS** advised that previous concerns regarding traffic modelling had not been adequately addressed and reiterated concerns regarding the impacts of the development on the surrounding road network both before and after the commencement of operation of West Connex. RMS requested the Proponent revise the traffic modelling to ensure the traffic impacts of the proposal are adequately assessed and appropriately mitigated.
- **OEH** advised the RtS had not addressed its previous request for a Statement of Heritage Impact (SOHI), including a comprehensive assessment of potential impacts of the proposed development on the Alexandra Canal. OEH requested a SOHI and Vibration Management Plan (VMP) be provided prior to determination.
- **EPA** advised the RtS addressed many of the issues raised and recommended modified conditions of consent to address dust monitoring and management, including the preparation of a revised air quality management plan for the development and a requirement for the preparation of an annual report.
- **Sydney Water** did not make a submission on the EA during the exhibition period, however, comments were received on the RtS. Sydney Water sought additional information on the water and wastewater demand for the proposed modification. Following its review of additional information provided by Boral, Sydney Water subsequently advised there is sufficient water servicing and wastewater infrastructure capacity to service the proposed expansion of the site operations.

The Department requested the Proponent provide revised traffic modelling, a timetable of likely peak production periods between now and the commencement of operation of West Connex, further details of dust mitigation and management measures and a comprehensive SOHI.

To facilitate the resolution of outstanding traffic-related issues, the Department co-ordinated a meeting between the Proponent, RMS and Council. Additional information was subsequently provided by Boral to satisfy the outstanding concerns.

The Department has considered the issues raised in submissions, the RtS and the supplementary concerns raised, in its assessment of the modification. The RtS is provided at **Appendix D** to this report.





## 6. Assessment

The Department has assessed the merits of the modification request. During this assessment, the Department has considered the:

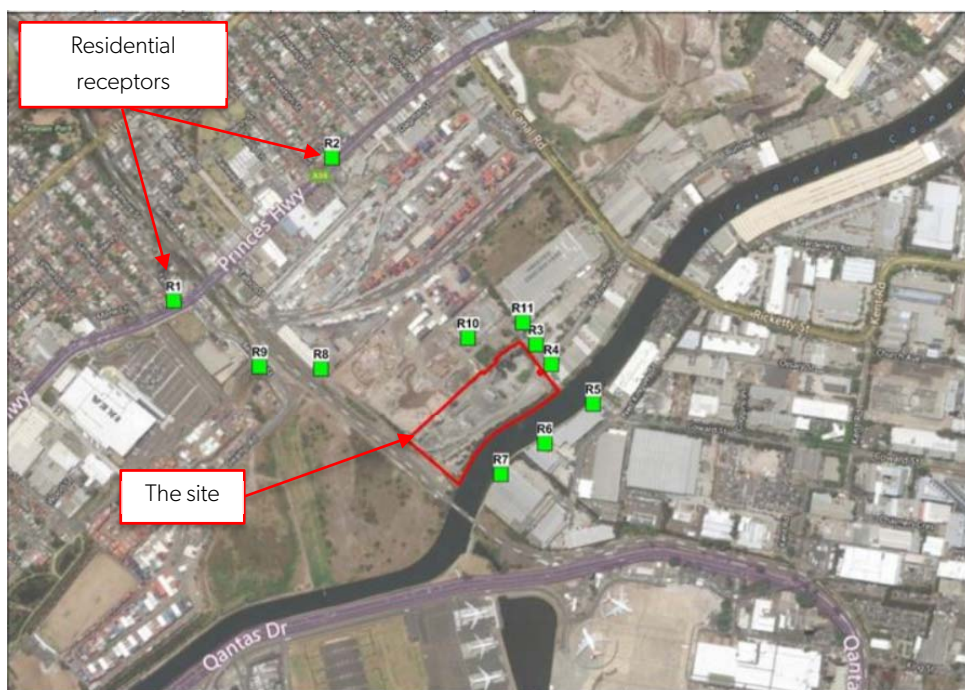
- EIS and assessment report for the original application
- existing conditions of consent (as modified)
- the EA supporting the proposed modification (**Appendix B**)
- submissions from State government authorities and Council (**Appendix C**)
- the Proponent's response to issues raised in submissions
- relevant environmental planning instruments, policies and guidelines
- requirements of the EP&A Act, including the objects of the EP&A Act.

The Department considers the key assessment issues are air quality and traffic. The Department's assessment of other issues is provided in **Table 6**.

### 6.1 Air Quality

The proposed expansion of the CBP and materials handling facility operations has the potential to generate nuisance air quality impacts around the site, particularly airborne particulates (dust). To assess the impacts of the proposed modification, the Proponent prepared an air quality impact assessment (AQIA) in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales* (the 'Approved Methods') (EPA, 2016).

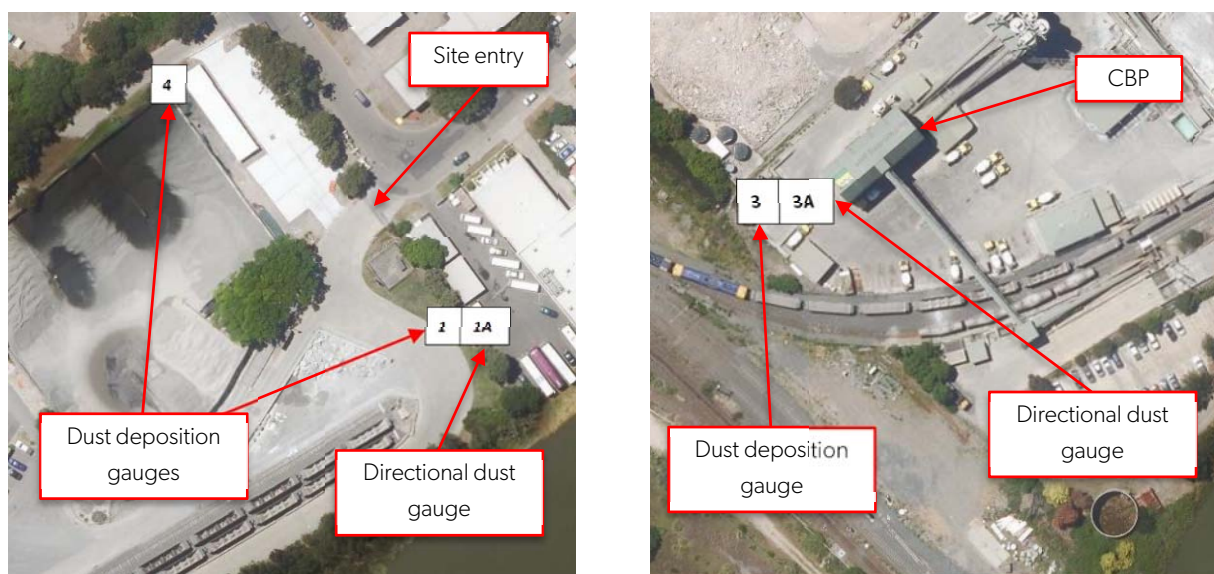
As the site is in an existing industrial estate, the surrounding area consists primarily of commercial and industrial receptors (R3 to R11). The closest residential sensitive receptors (R1 and R2) are located approximately 600 m to the north-west of the site adjacent to the eastbound lane of the Princes Highway (see **Figure 6**).



**Figure 6** | Location of Receptors

Particulate matter is generated by several fugitive sources across the site, including delivery, transfer and handling of cement, aggregate and sand, loading of concrete to agitator trucks, wheel generated dust, wind erosion and diesel combustion by trucks, mobile plant and trains. The Proponent advised it currently employs several dust control measures at the site to minimise dust from operational activities. This includes underground unloading of material from trains fitted with water sprays, enclosed aggregate and sand storage silos, dust filters and dust extraction systems in the CBP, covered conveyors and storage bins, covered loads, truck wheel washing at the slump stands, water sprays for stockpiles, loading areas and sales area at the materials handling facility and the use of a water cart and street sweeper on paved surfaces.

In accordance with the existing approved Environmental Management and Monitoring Plan (EMMP) for the site, the Proponent undertakes monthly monitoring of three dust deposition gauges (gauges 1, 2 and 3) and two directional dust gauges (gauges 1A and 3A) at various locations within the site boundary (see **Figure 7**). As the site is close to other major sources of particulate matter emissions, such as the Boral Recycling facility immediately to the north-west of the site, the data from these gauges is analysed to determine the influence/source of emissions. Where the Boral CBP and materials handling facility site has exceeded the EPA's dust deposition criteria, corrective actions, including identification of the contributing emissions source or activity and a review of management practices, are undertaken.



**Figure 7** | Location of on-site dust deposition gauges

To reduce dust and improve pedestrian safety on the site, Boral has recently reduced vehicle speeds to 20 kilometres per hour (km/hr), revised sweeper scheduling and re-designed on-site vehicle paths. A vibration grid was installed in September 2018 in compliance with a requirement of the most recent modification (MOD 10). The Proponent is also investigating the installation of a wheel wash for aggregate trucks exiting the materials handling facility site. More recently, the Proponent has also sought approval from SACL for an additional 40 truck parking spaces on neighbouring SACL land to minimise traffic movements on the site. This application is currently under assessment.

#### The Proponent's Assessment

The Proponent's AQIA estimated both the incremental and cumulative emission concentrations for Total Suspended Particles (TSP), PM<sub>10</sub><sup>1</sup> and PM<sub>2.5</sub><sup>2</sup>. Particulate matter emissions in the vicinity of the site are influenced by a number of sources, including activities at the site, the neighbouring Boral Recycling facility, heavy vehicle movements, Sydney Airport, the St Peters Container Terminal, WestConnex construction activities and the Visy Recycling Facility.

Dust deposition levels monitored at the site boundary are influenced by emissions generated by activities at the site and the neighbouring Boral materials recycling facility. The Proponent's AQIA therefore focused on the incremental

<sup>1</sup> Particulate matter with an aerodynamic diameter of less than 10 µm.

<sup>2</sup> Particulate matter with an aerodynamic diameter of less than 2.5 µm.

contribution to dust deposition levels from site-only emissions, assessed against the NSW EPA incremental criterion of 2 g/m<sup>2</sup>/month, expressed as an annual average.

Operations at the site also generate fuel combustion related pollutants such as oxides of nitrogen, sulphur dioxide, carbon monoxide and volatile organic compounds from mobile plant and trucks. However, the Proponent considered these emissions and their impacts were minor and did not address these further in the assessment.

The Proponent's assessment predicted only minor increases in the annual average and maximum 24-hour incremental concentrations of TSP, PM<sub>10</sub> and PM<sub>2.5</sub> and predicted the incremental dust deposition criteria of 2 mg/m<sup>2</sup>/month would be met at all receptors. The proposed modification is not predicted to exceed the relevant EPA ground level assessment criteria for the cumulative annual average and maximum 24-hour concentrations of TSP and PM<sub>10</sub> and the National Environment Protection Measure (NEPM) standard for PM<sub>2.5</sub>. The highest cumulative concentrations were predicted at the commercial sensitive receptors R4 and R7 immediately to the north-east and south of the site, respectively (shaded orange) (refer to **Table 3**).

The Proponent's assessment concludes the proposed modification is unlikely to result in exceedances of the EPA's ground level assessment criteria for TSP, PM<sub>10</sub>, PM<sub>2.5</sub> and dust deposition at all nearby receptors. The Proponent acknowledges that dust deposition rates are high, however, considers the assessment to be conservative as the dust removal effect of rainfall was not accounted for in the modelling.

**Table 3** | Predicted concentrations of particulate matter (proposed operations)

	<b>TSP</b>	<b>PM<sub>10</sub></b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>	<b>PM<sub>2.5</sub></b>	<b>Dust Deposition</b>
	Annual average	Maximum 24-hour	Annual average	Maximum 24-hour	Annual average	Annual average
<b>Concentration</b>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	g/m <sup>2</sup> /month
<b>Criteria</b>	<b>90</b>	<b>50</b>	<b>25</b>	<b>25</b>	<b>8</b>	<b>2 **</b>
<b>Receptor ID</b>	<b>Cumulative Results</b>					<b>Incremental results</b>
R1*	38.2	43.7	18.3	23.9	7.0	<0.1
R2*	38.3	43.8	18.4	23.9	7.0	0.1
R3	40.9	44.7	19.5	24.3	7.3	1.9
R4	40.5	45.0	19.3	24.3	7.3	1.5
R5	38.9	44.3	18.6	24.1	7.1	0.4
R6	39.5	44.7	18.9	24.2	7.2	0.7
R7	39.8	45.0	19.1	24.4	7.4	0.8
R8	38.8	43.9	18.5	24.0	7.1	0.2
R9	38.4	43.8	18.4	24.0	7.1	0.1
R10	40.9	44.9	19.5	24.2	7.3	1.7
R11	40.2	44.3	19.2	24.1	7.2	1.5

\* R1 and R2 are the only residential receptors.

\*\* NSW EPA incremental dust deposition criteria as specified in the Approved Methods.

The Proponent notes the most significant source of particulate emissions associated with the proposed modification are the material handling and transfers associated with the tripper car conveyor (44%), front end loader and truck movements (27%) and material handling activities (21%).

### Submissions

Air quality was raised in 90% of the public submissions (individuals and local businesses), particularly with respect to dust deposition and the subsequent impacts on local businesses, including potential increased health risks for employees and increased maintenance costs for their premises.

The EPA acknowledged the potential for the development to cause off-site environmental impacts, particularly with respect to dust. The EPA also confirmed its regulatory powers as the ARA for the CBP and its ability to take enforcement action in regulating the plant under the POEO Act.

Council raised concern regarding cumulative impacts from the future particulate matter pollution generated by the two future WestConnex ventilation stacks at the St Peters interchange and requested the Proponent's air quality modelling be revised to include these additional sources. Additional analysis was undertaken by the Proponent to address this and there was found to be no exceedance of the applicable EPA ground level criteria at the worst affected receptor (receptor R2). Council subsequently accepted this response.

### Removal of Condition 36a – Dust Monitoring

Concerns regarding dust deposition impacts at industrial receptors R3 and R4 on Burrows Road South was raised by the Department and EPA during the assessment of MOD 10. Therefore, the Department required Boral to review and improve dust control measures at the site (Condition 33a), revise the existing EMMP to include a contingency plan to manage unpredicted impacts (Condition 36) and establish an off-site dust deposition monitor within the vicinity of receptors R3 and R4 to monitor impacts from the increase in operations approved under MOD 10 (Condition 36a).

As part of the current modification (MOD 11) Boral advised it was unable to identify a dust monitoring location compliant with the Australian Standards AS/NZS 3580.1.1: *2016 Methods for Sampling and Analysis of Ambient Air - Part 1.1 Guide to Siting Air Monitoring Equipment* and therefore requested this condition (condition 36a) be removed from the consent.

As the incremental dust deposition rate at industrial receptor R3 (1.9 mg/m<sup>2</sup>/month) as a result of the modification is very close to the EPA's ground level criteria of 2 mg/m<sup>2</sup>/month, the Department and EPA did not support the removal of condition 36a and requested Boral investigate another means of off-site dust monitoring. As part of the RtS, the Proponent proposed to prepare an Air Quality Management Plan (AQMP) and install one to three real-time dust monitors on roof tops or suitable available locations, to monitor TSP and PM<sub>10</sub>. The data would be linked to weather station data, such as the Sydney Airport Weather station, for analysis and subsequently inform Boral of any increase in site-related dust deposition. While the dust monitors would not comply with the Approved Methods requirements for placement, they would enable Boral to escalate on-site dust management measures should certain trigger levels be exceeded.

Boral advised the AQMP would describe the measures to be implemented at the site to ensure compliance with the EPA's air quality criteria, best practice dust management and minimisation of air quality impacts during adverse meteorological conditions. The Plan would also include an air quality monitoring program to evaluate the performance of the development and inform management decisions.

The EPA considers the Proponent's proposal to prepare an AQMP, including the placement of real-time dust monitors, are appropriate measures for dust management on site, subject to the new air quality monitoring equipment allowing upwind and downwind measurements, retaining the existing depositional dust gauges, providing all historical data and an annual report (including an assessment of monitoring data) to the EPA. The EPA recommended these matters be incorporated into the modified consent.

Council recommended best practice pollution and dust minimisation strategies be enacted on site to limit nuisance air quality impacts.



### Department's Assessment

The Department, Council and EPA consider the Proponent's AQIA provides a reasonable estimation of the predicted air quality impacts associated with the expansion of the Boral St Peters site operations. The predicted cumulative concentrations of TSP, PM<sub>10</sub>, PM<sub>2.5</sub> and incremental dust deposition are below the EPA's ground level assessment criteria at all surrounding receptors. Council and EPA did not raise any concerns regarding the Proponent's assessment of air quality, however, acknowledged the cumulative impacts from surrounding industrial activities, heavy traffic and aircraft exhaust is a concern and as such, recommended best practice pollution and dust minimisation strategies be enacted on site to limit the contribution of the site to cumulative off-site impacts. The Department concurs with the recommendations made by EPA and Council and has included them in the modified conditions of consent.

The use of new conveyors on-site will reduce the potential for fugitive dust impacts. However, the Proponent's analysis found that the main contributing source to TSP and dust deposition impacts from the modification is predicted to be emissions from the new tripper car conveyor transfer at the material storage area (44%). It is therefore important that the performance of the new infrastructure and the overall expansion of operations is closely monitored.

Although the proposed real-time dust monitors cannot be used as a tool for measuring compliance, it would provide a means for the Proponent to know when dust deposition levels are increasing off-site and take appropriate action and review practices on-site to ensure best practice dust control measures are being implemented. The Department is satisfied the Proponent's proposed monitoring measures are appropriate and has included the requirement for these additional real-time dust monitors as a condition of consent in addition to a requirement for an AQMP. The AQMP must include an air quality monitoring program which specifies TSP and PM<sub>10</sub> trigger levels at the off-site dust monitors and response procedures. The existing on-site dust monitors and the new real-time off-site dust monitors will identify any increase in particulates in the vicinity of the site and will trigger appropriate action by Boral to review on-site dust management measures, as required.

The Department has also recommended that the existing EMMP for the site be reviewed and updated following the determination of this modification, including a requirement to incorporate the new AQMP. To address Council's recommendations regarding dust management, the Department has recommended a new condition of approval requiring the new AQMP to include a program for reviewing dust control practices on site to ensure continual improvement in dust management and implementation of best practice dust mitigation and management measures. This program will need to be approved by the Secretary as part of the AQMP.

An existing condition of consent requires the Proponent to prepare an Annual Review. This condition will be retained to ensure the environmental performance of the modified development is evaluated on an annual basis. The Department has also required all documents relevant to the development, such as statutory approvals, approved strategies, plans and programs and a comprehensive summary of the monitoring results of the development, to be made available on the Boral website. These two new requirements satisfactorily address the EPA's recommendations.

The Department supports the Proponent's recent improvements to dust management on-site and recommends the proposed wheel wash system for aggregate trucks at the eastern site entrance be installed within six months of the determination of this modification.

The Department considers the Proponent currently employs several effective dust management and mitigation measures and has also proposed several additional mitigation actions to address residual dust impacts associated with the modification. These have been required through the recommended conditions. The Department is satisfied additional monitoring requirements will be incorporated into an AQMP and reported through an Annual Review to verify and monitor the environmental performance of the site operations which will be published on a dedicated Boral website. The

Department's assessment concludes the air quality impacts of the proposed modification are manageable and acceptable.

## 6.2 Traffic Impacts

The proposed increase in processing capacity will also increase the volume of traffic generated, which has the potential to impact on the safety and capacity of the surrounding road network.

The modification request included a Traffic Impact Assessment (TIA) prepared by EMM in accordance with the RMS's 'Guide to Traffic Generating Developments' (RTA, 2002), to quantify and assess the impact of operational traffic on nearby key intersections and the surrounding road network. Key transport routes for the movement of heavy vehicles from the site are via Burrows Road South then north via Burrows Road (approximately 25% of vehicles), to the west via Canal Road to The Princes Highway (approximately 35% of vehicles) or east via Ricketty Street (approximately 40% of vehicles). Key intersections impacted by the proposed expansion are:

- Burrows Road South, Canal Road, Ricketty Street and Burrows Road
- Canal Road and Talbot Street (the Maritime Container Services terminal access)
- The Princes Highway, Canal Road and Mary Street (refer **Figure 4** for location of key transport routes and intersections).

Access to the existing operations is off Burrows Road South, which is a no through road. All construction and operational traffic will continue to utilise Burrows Road South to enter and exit the site.

### The Proponent's Assessment

#### Construction

Construction would generate limited additional light and heavy vehicle movements over a period of nine months, with works carried out in stages to minimise disruption to production. The Proponent considered the impacts of construction traffic would be lower than operational traffic impacts and therefore did not undertake a detailed assessment of construction traffic.

The RMS and Council did not raise any concerns regarding potential construction traffic impacts. The Department is satisfied construction traffic can be managed by a Construction Traffic Management Plan (CTMP) to be prepared as part of a Construction Environmental Management Plan (CEMP) for the proposed site expansion works. The CTMP must detail the measures that are to be implemented to ensure road safety and network efficiency during construction, detail heavy vehicle routes, access and parking arrangements, include a Driver Code of Conduct, a program to monitor the effectiveness of these measures and, if necessary, detail procedures for notifying residents and the community of any potential disruptions to routes.

The preparation of a CTMP has been included as a recommended condition of which must be approved by the Secretary prior to the commencement of construction. The Department is satisfied that with the implementation of a CTMP, there will be minimal traffic impacts during construction.

#### Operation

The Proponent's analysis of traffic impacts found that operational traffic will result in a significant increase in heavy vehicle movements on the surrounding road network. The proposed modification is predicted to generate 1066 additional daily truck movements on a future maximum production day (the worst-case scenario). This equates to 106 additional truck movements during the morning and afternoon peak hours. There would also be approximately 50 additional daily light vehicle traffic movements associated with the proposed expansion of the site. The additional traffic will result in a 42.9% increase of daily traffic movements on Burrows Road South (from 2600 to 3716 vehicle movements), with only minor increases on Canal Road (1.3%), Ricketty Street (1.1%), Burrows Road (4.5%), Canal Road (1.4%) and The Princes Highway (0.4%) as the trucks disperse throughout the surrounding road network.

The TIA concluded the 42.9% increase in traffic on Burrows Road South would not be out of character for this road as it already has a relatively high proportion of truck traffic (approximately 33% of all current traffic). Existing traffic flow conditions on other traffic routes are not expected to be significantly impacted and would only be in the order of 0.4% to 4.5%.

An assessment of intersection performance was undertaken by the Proponent using the SIDRA intersection traffic model. The Proponent's initial analysis as presented in the TIA was deemed to be inadequate by the RMS and Council. Following further revisions to the modelling, the RMS advised the revised modelling satisfactorily represented the existing and predicted performance of all key intersections and no intersections upgrades were required. The model included the cumulative impact of traffic associated with the construction of WestConnex Stage 2 and the nearby St Peters interchange.

The Proponent's analysis found the Burrows Road South/Canal Road/Rickety Street intersection is currently operating at a LoS B (good) in the morning (AM) peak and a LoS D (near capacity) in the afternoon (PM) peak. The Canal Road/Princes Highway intersection was found to currently be operating at a LoS E (at capacity) in the AM peak and LoS D (near capacity) in the PM peak. The level of service at both intersections was predicted to be reduced by the proposed modification traffic in the AM and PM peak periods, as summarised in **Table 4**. The Talbot Road Container Terminal access was found to be operating at LoS A (very good) even with the additional modification traffic, with average traffic delays of less than five seconds.

**Table 4** | Intersection performance

Intersection		AM peak existing traffic	AM peak proposed traffic	PM peak existing traffic	PM peak proposed traffic
Burrows Road South / Canal Road / Rickety Street	LoS	B	C	D	F
	Delay (seconds)	20.1	36.2	43.4	77.9
Canal Road / Princes Highway	LoS	E	F	D	E
	Delay (seconds)	69.1	108.2	48.2	65.7

With the exception of the PM peak period at the Burrows Road South/Canal Road/Rickety Street intersection, there is an increase in intersection delays resulting in a reduction of one Level of Service at the two key intersections. The predicted future Level of Service in the PM peak period at the Burrows Road South/Canal Road/Rickety Street intersection is reduced by two Levels of Service from D (near capacity) to F (over capacity), with intersection delays increasing by 34.5 seconds (43.4 to 77.9 seconds).

Turning storage lanes were found to adequately accommodate all existing and future predicted queue lengths.

Following the completion of WestConnex Stages 1 and 2 in 2023, the Proponent advised the traffic reductions on Canal Road and Rickety Street are predicted to be in the order of 10,000 vehicles. A further reduction of 5,000 daily vehicles is expected following the completion of WestConnex Stage 3. The Proponent argues the future forecast intersection Levels of Service for the Canal Road/Princes Highway and Burrows Road South/Canal Road/Rickety Street intersections were already foreshadowed by the WestConnex Stage 2 construction stage traffic impact assessment which forecast that both these intersections would operate at LoS F during the PM peak period and the Canal Road/Princes Highway intersection would operate at LoS F during the AM peak period, during the construction work for WestConnex Stage 2.

The Proponent's assessment of traffic impacts concluded that no road or intersection upgrades or additional traffic safety improvements would be required. Existing site car and truck parking areas and the site's accessibility for walking, cycling and public transport users were also found to be satisfactory. The future intersection peak hour traffic performance, including consideration of the intersection traffic delays and queue lengths, is considered acceptable in terms of the normal RMS operating criteria for intersection traffic queues, as the forecast future traffic queues will not exceed the

capacity of the existing turn bays and will not extend beyond any adjoining nearby intersection. The Proponent argued that following the commencement of operation of WestConnex Stages 1 and 2, there would be a reduction in traffic using the Burrows Road South/Canal Road/Ricketty Street and Canal Road/Princes Highway intersections and therefore upgrades to these intersections were not warranted.

#### Submissions

Approximately 80% of public submissions (individual and local businesses) raised concerns regarding the impact of additional traffic on the surrounding road network. Concerns were raised regarding the condition of the road surface of Burrows Road South, congestion on Burrows Road South and the Canal Road/Ricketty Street intersection, pedestrian safety and impacts on local businesses with respect to parking and access.

The Department, RMS and Council raised concerns regarding the significant increase in traffic and the potential impacts on the surrounding road network. The RMS deemed the Proponent's SIDRA traffic modelling to be inadequate on three occasions as it did not adequately represent the existing or proposed intersection performance. However, following its final acceptance of the traffic model, RMS advised it raised no objection to the modification subject to a condition restricting any increase in truck movements in the AM and PM peak periods (between 7 am to 10 am and between 4 pm and 7 pm Monday to Friday) until the completion of WestConnex Stage 3, which would mitigate the impact to the State road network.

Council also raised concerns regarding impacts on local public transport movements, cyclist safety and the condition of and impacts on the Burrows Road South road pavement. Council requested additional information to address these matters and recommended Boral be required to re-construct the pavement of Burrows Road South at no cost to Council.

#### Department's Assessment

The Proponent's TIA and revised traffic modelling provides a reasonable estimation of the predicted worst-case traffic impacts from the proposed modification. It is acknowledged the future traffic changes in the St Peters area following completion of WestConnex Stages 1 and 2 will significantly reduce traffic numbers on Canal Road and Ricketty Street in the year 2023, which will improve the operation of key intersections.

Notwithstanding, the Department agreed with the RMS that the reduction in Levels of Service at the Canal Road/Princes Highway and Burrows Road South/Canal Road/Ricketty Street intersections is a significant concern for the ongoing safe and efficient operation of these key intersections over the next five years (until WestConnex becomes operational). The Department therefore requested the Proponent reduce heavy vehicle numbers during the morning (7 am to 9 am) and afternoon (4 pm to 6 pm) peak periods to reduce the impacts on these intersections. The Proponent agreed to this and revised the traffic modelling to reflect a decrease from an additional 106 heavy vehicle movements (as originally proposed) to an additional 70 movements in the peak periods. This improved future intersection performance at both key intersections as outlined in **Table 5** below.

**Table 5** | Revised intersection performance

Intersection		AM peak existing traffic	AM peak proposed traffic	PM peak existing traffic	PM peak proposed traffic
Burrows Road South / Canal Road / Ricketty Street	LoS	B	C	D	D
	Delay (seconds)	20.1	31.2	43.4	44.1
Canal Road / Princes Highway	LoS	E	F	D	D
	Delay (seconds)	69.1	74.0	48.2	48.9

The Proponent advised it would accept a condition that limited truck movements during the morning and afternoon peak periods and would report on this to verify compliance.



The RMS advised it was satisfied with the revised modelling and proposed restrictions on traffic movements, subject to the Proponent preparing a heavy vehicle management plan from the commencement of any increase in truck movements under this modification and providing a quarterly report on truck volume numbers until the final completion of WestConnex Stage 3. The restriction on heavy vehicle movements and the RMS' recommendations have been recommended as conditions of consent to ensure the safe and efficient operation of the key intersections and verification of the traffic movements from the site expansion.

In addition, RMS recommended the 'No Stopping' zone is extended from the intersection of Burrows Road South/Canal Road/Ricketty Street along Burrows Road South to improve safety and efficiency of this intersection. The Department concurs with this recommendation and has recommended a condition that requires the Proponent to submit this proposal to the Bayside Traffic Committee within three months of the determination of MOD 11 and provide evidence of this to the Secretary.

In response to concerns raised in public submissions regarding traffic impacts on Burrows Road South, the Department also recommends Boral be required to prepare an Operational Traffic Management Plan (OTMP) for the site, prepared in consultation with Council and the RMS.

Council advised the additional information provided satisfied the concerns raised regarding the traffic modelling, cyclist safety and local public transport movements. Council recommended a new condition be included in the consent to ensure Boral trucks, either inbound to or outbound from the site do not utilise Mary Street, Unwin's Bridge Road (north of Railway Road) or May Street in St Peters, as these are all residential areas that can easily be avoided.

Boral objected to the restrictions on heavy vehicle movements on May Street and Unwins Bridge Road as this would restrict access to potential industrial customers in that area and such a restriction has not been placed on other CBPs. The Department agrees with the Proponent's views and has not applied any restrictions on vehicle routes. The restriction on Mary Street was accepted as this street already has a tonnage restriction limiting the use of this road.

The Proponent has accepted the additional heavy vehicle traffic will have an impact on the condition of Burrows Road South and has committed to contributing \$145,000 to Council for the re-surfacing of this road. A letter of offer has been accepted by Council and will be formalised through a Voluntary Planning Agreement (VPA) between Council and Boral. A recommended condition of consent requires the Proponent to enter into the VPA within six months after the date of the commencement of construction.

Existing conditions require the Proponent to:

- maintain off-street car and truck parking spaces to cater for peak demand
- ensure no queuing or parking on the local road or footpaths
- undertake all loading and unloading on the site
- require all vehicles to enter and leave the site in a forward direction.

These conditions will be retained in the modified consent and are also required to be incorporated into the new operational TMP.

The predicted increase in traffic movements are not expected to impact the surrounding road network in a manner which requires intersection upgrades. The level of service at the Burrows Road South intersection with Canal Road/Ricketty Street and Burrows Road would be reduced but not to a level considered at or over capacity. The Canal Road intersection with The Princes Highway is already over capacity and would continue to operate at this level even with the additional traffic generated by the expansion of the Boral site operations.

The Department's assessment concludes the increase in operational traffic on Burrows Road South is considered significant with an additional 1066 daily heavy vehicle movements. However, this is a worst-case scenario and the Proponent's assessment has demonstrated the additional traffic generated by the modification would have minimal

impact on the surrounding road network and can be managed, subject to conditions. The Department's assessment concludes that proposed expansion of site operations can proceed without any unacceptable traffic impacts.

### 6.3 Other Issues

**Table 6** | Summary of other issues raised

Issue	Findings	Recommended Conditions
Heritage	<ul style="list-style-type: none"> <li>The proposed modification has the potential to result in vibration impacts on the Alexandra Canal during construction and from truck movements along Burrows Road South (approximately 70 m from the Canal) during operation.</li> <li>The Proponent prepared a Statement of Heritage Impact (SOHI) to assess the impact of the proposed modification on the Canal.</li> <li>The Alexandra Canal Conservation Management Plan (Sydney Water, 2004) specifies a 3 m curtilage from the Canal capping stones. No works associated with the proposed modification are within the 3 m curtilage.</li> <li>The Proponent's SOHI concluded the proposed construction works and increase in operational truck movements are unlikely to have an impact on the Canal. With the exception of the new bio-retention ponds in the south-west corner of the site, all proposed construction works are beyond the recommended safe working distances specified in Transport for NSW's 'Construction Noise Strategy' (2012).</li> <li>To address potential vibration impacts, the Proponent has prepared a Vibration Monitoring Plan (VMP) to monitor and manage construction vibration impacts to ensure the Canal is not inadvertently impacted during construction.</li> <li>The OEH advised they are satisfied with the Proponent's assessment of impacts on the Alexandra Canal and proposed VMP, subject to conditions.</li> <li>The Department has also recommended a condition that limits construction related vibration impacts outside the site to relevant vibration guidelines for structural damage and human exposure.</li> <li>The Department concludes the proposed modification will not have adverse impacts on the heritage values of the Alexandra Canal subject to the implementation of the VMP during construction.</li> </ul>	<p>Require the Proponent to:</p> <ul style="list-style-type: none"> <li>incorporate the VMP into the CEMP for the site</li> <li>implement the VMP for the duration of construction</li> <li>comply with relevant vibration limits as specified in the latest version of DIN 4150-3 (1992-02) <i>Structural vibration - Effects of vibration on structures</i> (German Institute for Standardisation, 1999) for structural damage and the <i>Environmental Noise Management Assessing Vibration: a technical guideline</i> (DEC, 2006) for human exposure.</li> </ul>
Water management	<ul style="list-style-type: none"> <li>The existing stormwater management system results in the discharge of untreated stormwater off-site to the piped stormwater system, to overland flows on Burrows Road South or to the Alexandra Canal.</li> <li>Concrete washout water from the slump stands and other washout water is collected and stored on site for re-use.</li> <li>The Proponent proposes to upgrade the existing water management system to prevent runoff to Burrows Road South, improve the separation between washout water and clean runoff, prevent the discharge of untreated stormwater and harvest stormwater for re-use on-site in concrete production.</li> </ul>	<p>Require the Proponent to:</p> <ul style="list-style-type: none"> <li>place a positive covenant on the title of the land within 12 months of the determination of MOD 11 to ensure maintenance of the upgraded water management system</li> <li>install and operate the upgraded stormwater management system prior to the commencement of</li> </ul>

Issue	Findings	Recommended Conditions
	<ul style="list-style-type: none"> <li>Following a review of the Proponent's MUSIC water quality model, Council advised it was satisfied the proposal would comply with the pollutant load reductions in the Marrickville Development Control Plan 2011.</li> <li>Council requested Boral place a covenant on the land to ensure maintenance of all elements of the stormwater drainage and treatment system. Boral agreed to the covenant and this has been required as a recommended condition of consent.</li> <li>The EPA noted the proposed changes are expected to improve the environmental performance of the site which will continue to be monitored at the two discharge locations into the Alexandra Canal.</li> <li>All management and monitoring requirements for the upgraded system will be required to be incorporated into the updated EMMP for the site.</li> <li>The Department concludes the proposed upgrades to the water management system will improve the management of stormwater and process water on the site and improve the quality of off-site discharges.</li> </ul>	<p>operation of any works associated with MOD 11</p> <ul style="list-style-type: none"> <li>design the upgraded stormwater management system generally in accordance with the conceptual design in the EA and applicable Australian Standards and relevant EPA guidelines</li> <li>update the EMMP to include all management and monitoring requirements for the upgraded water management system.</li> </ul>
Flooding	<ul style="list-style-type: none"> <li>The Proponent's flood assessment found, with the exception of the entrance driveways, the site is not prone to flooding during the 1% annual exceedance probability (AEP) event, as confirmed by the Alexandra Canal Flood Study 2017.</li> <li>Council requested the Proponent also consider flood levels from the Cooks River Floodplain Risk Management Plan as peak flood levels from the Cooks River may also influence flood levels in the Canal.</li> <li>The Proponent provided a further assessment of flooding in the Rts and concluded Probable Maximum Flood (PMF) flood levels may result in flood depths of up to 1.2 m of slow flowing floodwaters across the site, however, the proposed modification works would not contribute to additional flooding or change in flood behavior.</li> <li>Council is satisfied the existing conditions of consent require appropriate flooding proofing of structures and buildings on the site.</li> <li>The proposed modification, subject to conditions will not result in any additional flooding off the site and will not impede the flow of floodwaters.</li> </ul>	<p>Require the Proponent to:</p> <ul style="list-style-type: none"> <li>update the existing Flood Emergency Response Plan for the site.</li> </ul>
Groundwater	<ul style="list-style-type: none"> <li>Excavation of the site for construction of new infrastructure has the potential to intercept groundwater. The site will be excavated to depths of up to 5 m with piling to extend to depths of up to 20 m.</li> <li>The Proponent's groundwater assessment reported groundwater to be at a depth of 1.3 m below ground level flowing toward the Alexandra Canal. Works will require a total dewatering requirement of approximately 2.9 megalitres.</li> <li>The Proponent has committed to completing each excavation within 10 days to ensure the total predicted groundwater take remains low and concludes the</li> </ul>	<p>Require the Proponent to:</p> <ul style="list-style-type: none"> <li>undertake daily groundwater monitoring during dewatering activities</li> <li>obtain the relevant licences and approvals for dewatering</li> <li>prepare a dewatering report</li> <li>consider the requirements of the</li> </ul>

Issue	Findings	Recommended Conditions
	<p>proposed development will not have a significant impact on groundwater resources.</p> <ul style="list-style-type: none"> <li>Dol (L&amp;W) raised concerns regarding the disturbance of soil and potential for contamination of groundwater and recommended daily groundwater monitoring during dewatering, licensing of all water take, a dewatering report and consideration of the 'Guidelines for Riparian Corridors on Waterfront Land' (2018) for all works within 40 m of the top of bank of the Alexandra Canal.</li> <li>Dewatering can be managed through appropriate conditions of consent, as recommended by Dol. The Department concludes the impacts to groundwater will be monitored and are likely to be minimal.</li> </ul>	<p>'Guidelines for Riparian Corridors on Waterfront Land' (2018) during all works within 40 m of the Alexandra Canal</p>
Noise	<ul style="list-style-type: none"> <li>The site is in an industrial area with relatively high ambient background noise levels, including road traffic noise from the Princes Highway and aircraft noise.</li> <li>The proposed expansion of the development has the potential to generate additional noise impacts at nearby sensitive receivers during construction and operation.</li> <li>The Proponent prepared a Noise and Vibration Impact Assessment (NVIA) in accordance with the 'Noise Policy for Industry' (NPI) (EPA, 2017), 'Assessing Vibration: a technical guideline' (DEC, 2006) and the 'Interim Construction Noise Guideline' (ICNG) (DECC, 2009).</li> <li>Noise impacts during construction are predicted to satisfy the Noise Management Levels (NMLs) at all receptors. No out of hours work is proposed. The Proponent proposes to employ best practice construction noise mitigation measures in accordance with the ICNG.</li> <li>Operational noise is predicted to comply with the existing noise limits for the site during day and night time periods.</li> <li>The NIA predicts any change in noise impacts at the closest residential receivers will be less than 1 dB under calm conditions. Under adverse meteorology, any change would also be in the order of no more than 1 dB when compared to current operations.</li> <li>A 1dB increase in noise levels is deemed 'typically indiscernible' to the human ear, and the proposed modification will not significantly increase the existing noise emissions. There will be no perceptible change to the noise catchment.</li> <li>The Proponent's EMMP includes annual noise monitoring incident response and complaints procedures.</li> <li>The Department's assessment concludes the predicted noise impacts of the modification, being a worst case 1 dB increase at some commercial and industrial sensitive receptors and below the noticeable threshold, are minor and acceptable.</li> <li>No additional conditions are required to manage residual operational noise impacts as a result of the modification.</li> </ul>	<p>Require the Proponent to:</p> <ul style="list-style-type: none"> <li>comply with the standard construction hours and achieve the construction noise management levels specified in the ICNG.</li> </ul> <p>Existing conditions require the implementation of the site EMMP which includes annual noise monitoring and compliance with the existing noise limits for the site.</p>

Issue	Findings	Recommended Conditions
Hazard and Risk	<ul style="list-style-type: none"> <li>The proponent carried out a preliminary screening for the proposed modification against the requirements of State Environmental Planning Policy – Hazardous and Offensive Development (SEPP 33). The Proponent concluded the modification is not potentially hazardous or offensive development.</li> <li>The Department concurs with the Proponent's assessment and a PHA is not required for the modification.</li> <li>The proposed expansion of the site will not involve the storage or transportation of dangerous goods that exceed the thresholds in the Department's Applying SEPP 33 (2011) guideline.</li> <li>To ensure the development does not become potentially hazardous under SEPP 33 and to ensure continual safety of the development, the Department has recommended a condition that requires the quantity of dangerous goods present on site or transported to and from the development to remain below the screening threshold quantities in the Applying SEPP 33 guidelines.</li> <li>The Department's assessment concludes the site is not potentially hazardous or offensive development.</li> </ul>	<p>Require the Proponent to:</p> <ul style="list-style-type: none"> <li>ensure the quantities of dangerous goods present on site and transported to and from the site remain below relevant thresholds</li> <li>store all chemicals, fuels and oils in accordance with relevant Australian Standards and EPA guidelines.</li> </ul>
Contemporise Conditions of Consent	<ul style="list-style-type: none"> <li>The consent for the CBP and materials handling facility was issued in 1996 and has been modified on ten occasions.</li> <li>The Department has undertaken a review of the consent to contemporise the conditions and structure of the consent.</li> <li>The Proponent has accepted the recommended modified conditions and re-structured consent.</li> </ul>	Not applicable





## 7. *Evaluation*

The Department has assessed the proposed modification in accordance with the relevant requirements of the EP&A Act. The Department considers the proposed modification is appropriate on the following basis:

- the surrounding road network has the capacity to cater for the traffic generated by the proposal without need for any road or intersection upgrades
- the Proponent has implemented and committed to a range of best practice dust management and mitigation measures and will undertake dust monitoring both on and off the site to ensure compliance with relevant amenity criteria
- it will improve the management of stormwater on the site through on-site treatment and re-use and improve the quality of stormwater discharged from the site to the Alexandra Canal.
- it is consistent with the directions of the Greater Sydney Region Plan by contributing toward the delivery of transport infrastructure and reducing carbon emissions

The modification should be approved, subject to conditions.



## 8. Recommendation

It is recommended that the Executive Director – Key Sites and Industry Assessments, as delegate for the Minister:

- **considers** the findings and recommendations of this report
- **determine** that the request (DA 14/96 MOD 11) falls within the scope of former section 75W of the EP&A Act
- **determine** that the environmental assessment requirements have been addressed
- **accepts and adopts** all of the findings and recommendations in this report as the reasons for making the decision to grant approval to the application
- **modify** the consent DA 14/96
- **signs** the attached modification of approval (**Appendix A**).

Prepared by:  
Sally Munk  
Principal Planner  
Industry Assessments

Recommended by:

**Kelly McNicol**  
**Acting Director, Industry Assessments**



## 9. Determination

The recommendation is: **Adopted by:**

*Sargeant*

Anthea Sargeant 31/1/19

Executive Director

Key Sites and Industry Assessments



# ***Appendices***

**Appendix A – Notice of Modification**

**Appendix B – Environmental Assessment**

**Appendix C – Submissions**

**Appendix D – Submissions Report**

**Appendix E – Consolidated Consent**