



Orica Ammonia Nitrate Expansion Project Modification 4

State Significant Development Modification Assessment
(08_0129-Mod-4)

May 2021



Published by the NSW Department of Planning, Industry and Environment

dpie.nsw.gov.au

Title: Orica Ammonia Nitrate Project Modification 4

Subtitle: State Significant Development Modification Assessment

Cover image: *Orica Kooragang Island (Source: Orica Australia Pty Ltd).*

© State of New South Wales through Department of Planning, Industry and Environment 2021. You may copy, distribute, display, download and otherwise freely deal with this publication for any purpose, provided that you attribute the Department of Planning, Industry and Environment as the owner. However, you must obtain permission if you wish to charge others for access to the publication (other than at cost); include the publication in advertising or a product for sale; modify the publication; or republish the publication on a website. You may freely link to the publication on a departmental website.

Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (May 2021) and may not be accurate, current or complete. The State of New South Wales (including the NSW Department of Planning, Industry and Environment), the author and the publisher take no responsibility, and will accept no liability, for the accuracy, currency, reliability or correctness of any information included in the document (including material provided by third parties). Readers should make their own inquiries and rely on their own advice when making decisions related to material contained in this publication.

Glossary

Abbreviation	Definition
Applicant	Orica Australia Pty Ltd
BDAR	Biodiversity Development Assessment Report
CEMP	Construction Environmental Management Plan
CTMP	Construction Traffic Management Plan
Council	City of Newcastle
Department	Department of Planning, Industry and Environment
EPA	Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EP&A (ST&OP) Regulation	Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017) Regulation
HRP	Hunter Regional Plan 2036
Minister	Minister for Planning and Public Spaces
Planning Secretary	Secretary of the Department of Planning, Industry and Environment
SSD	State Significant Development
SEE	Statement of Environmental Effects
tpa	Tonnes per annum

Contents

1	Introduction	1
1.1	Background	1
1.2	Subject site	2
1.3	Approval history	3
2	Proposed modification	4
2.1	Proposed Modification	4
3	Strategic context	6
4	Statutory context	7
4.1	Scope of Modifications	7
4.2	Consent Authority	7
4.3	Part 3A transition to State significant development	7
4.4	Biodiversity Conservation Act 2016	8
5	Engagement	9
5.1	Department's engagement	9
5.2	Summary of Submissions	9
5.3	Additional information	9
6	Assessment	10
7	Evaluation	13
8	Recommendation	14
9	Determination	15
	Appendices	16
	Appendix A – List of Documents	16
	Appendix B – Instrument of Modification	17
	Appendix C – Consolidated Consent	18

1 Introduction

This report provides the NSW Department of Planning, Industry and Environment's (the Department's) assessment of an application to modify the consent for the Orica Ammonium Nitrate Facility, Kooragang Island. The modification application seeks approval to replace the existing nitrates effluent pond with a bunded tank.

The application was made by Orica Australia Pty Ltd (the Applicant) pursuant to section 4.55(1A) of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

1.1 Background

The Applicant owns and operates an ammonium nitrate manufacturing facility at 15 Greenleaf Road on Kooragang Island in the Port of Newcastle (see **Figure 1**).

When the site first began operations in 1969, it included an ammonia plant, a nitric acid plant and an ammonium nitrate plant, producing around 150,000 tonnes per annum (tpa) of ammonium nitrate for agricultural industries. A second nitric acid plant and ammonium nitrate plant was constructed in 1989 increasing the ammonium nitrate production to 365,000 tpa. In 1998, a third nitric acid plant was approved by the then Minister for Urban Affairs and Planning and was completed in 2004. This increased the approved ammonium nitrate production from the facility to 500,000 tpa. The facility has since been expanded as part of a 2009 approval, which included upgrades to existing infrastructure and plants on the site, including effluent and stormwater management. This approval has been modified several times and some phases of it are not yet operational. This is discussed in further detail in **Section 1.3**.



Figure 1 | Regional Context Map

1.2 Subject site

The site is located on Kooragang Island, which is located between the north and south arms of the Hunter River Estuary within the Port of Newcastle. The island was originally created during the 1950s and 1960s through extensive land reclamation activities and has grown steadily ever since. The southern part of the island supports heavy industrial uses, transport and distribution infrastructure, waste emplacement and a range of port-related facilities. The subject site is located within the land application area of the *State Environmental Planning Policy (Three Ports) 2013*, however is located outside of the lease area.

Orica's facility is located on Walsh Point, which covers the south-eastern tip of Kooragang Island. The site has good road connections with Heron Road to the west and Greenleaf Road to the east, both connecting with Cormorant Road to the north. The area of the site subject to this modification application can be seen in **Figure 2**.

The nearest residential community to the Orica facility is in Stockton, which is located on a peninsula some 800 metres (m) to the east. Other nearby residential areas include Fern Bay to the north-east, Carrington to the south-west and Mayfield to the west, which are located between 1 and 2 kilometres (km) away.



Figure 2 | Location of Proposed Works within the Site

1.3 Approval history

On 1 December 2009, the then Minister for Planning approved a Major Project Application (08_0129) from Orica for a major expansion of the facility. The expansion also involved modernising and upgrading older plant and infrastructure and implementing a series of risk reduction measures. The 2009 approval permitted Orica to increase overall production levels from:

- 500,000 to 750,000 tpa of Ammonium Nitrate
- 295,000 to 360,000 tpa of Ammonia
- 345,000 to 605,000 tpa of Nitric Acid.

The approval has been modified on three occasions (see **Table 1**), with several parts of the development not yet operational. The Applicant is required to update the Department annually regarding the status of works on site through an Annual Environmental Management Report.

On 22 January 2021, an order made by the Minister's delegate was published in the Gazette declaring the development to be State significant development. This is discussed in detail in **Section 4.3**.

Table 1 | Summary of Modifications

Mod No.	Summary of Modifications	Approval Authority	Approval Date
MOD 1	modify the existing layout of the expansion project and to carry out a series of risk reduction measures	Department	11 July 2012
MOD 2	install a higher capacity Nitric Acid storage tank on the site and relocate it to the western part of the site	Department	17 December 2014
MOD 3	increase the approved ammonia production rate from 360,000 tpa to 385,000 tpa	Department	17 December 2015

2 Proposed modification

2.1 Proposed Modification

On 15 March 2021, the Applicant lodged a modification application under section 4.55(1A) of the EP&A Act to modify the development consent 08_0129. The modification is described in full in the Statement of Environmental Effects (SEE) included in Appendix A and is illustrated in **Figure 3**.

The modification involves changes to the way nitrate effluent is managed on site. Currently, nitrate effluent is stored in an open air, in-ground clay pond, lined with a high density polyethylene membrane, approximately 1.2 m deep, which is nearing its end of life. The existing pond has a capacity of approximately 500 cubic metres (m³).

The modification application seeks to replace this pond with an above ground, enclosed nitrate effluent tank and bund system (see **Figure 4**), to be located approximately 30 m to the north-east of the existing pond on land that is currently cleared and unused. The Applicant has chosen the installation of a new tank over refurbishing the pond to reduce the risk of leakage, with the tank and bund method being considered to have a lower environmental risk. A tank will also allow for easier inspection of the system over an in ground pond.

The tank will have a capacity of 410 m³ and 5.5 m height and sit in a 12.7 square metre (m²) bund, providing a secondary detention. While it is noted the proposal sees a capacity reduction, the Applicant has stated that it still meets operational needs of the facility. The Applicant has stated the proposal would not result in an increase of production or operational staffing levels on site.

In addition, some minor associated infrastructure would be required to be installed including instrument power supply and 240 volt power, instrumentation, control and automation equipment. This infrastructure would connect into existing process lines.

After the installation of the new tank, the pond would be drained and decommissioned. Within 12 months of decommissioning, it is proposed to remove the liner and level the pond. No additional fill is proposed to be brought to the site as part of this operation.

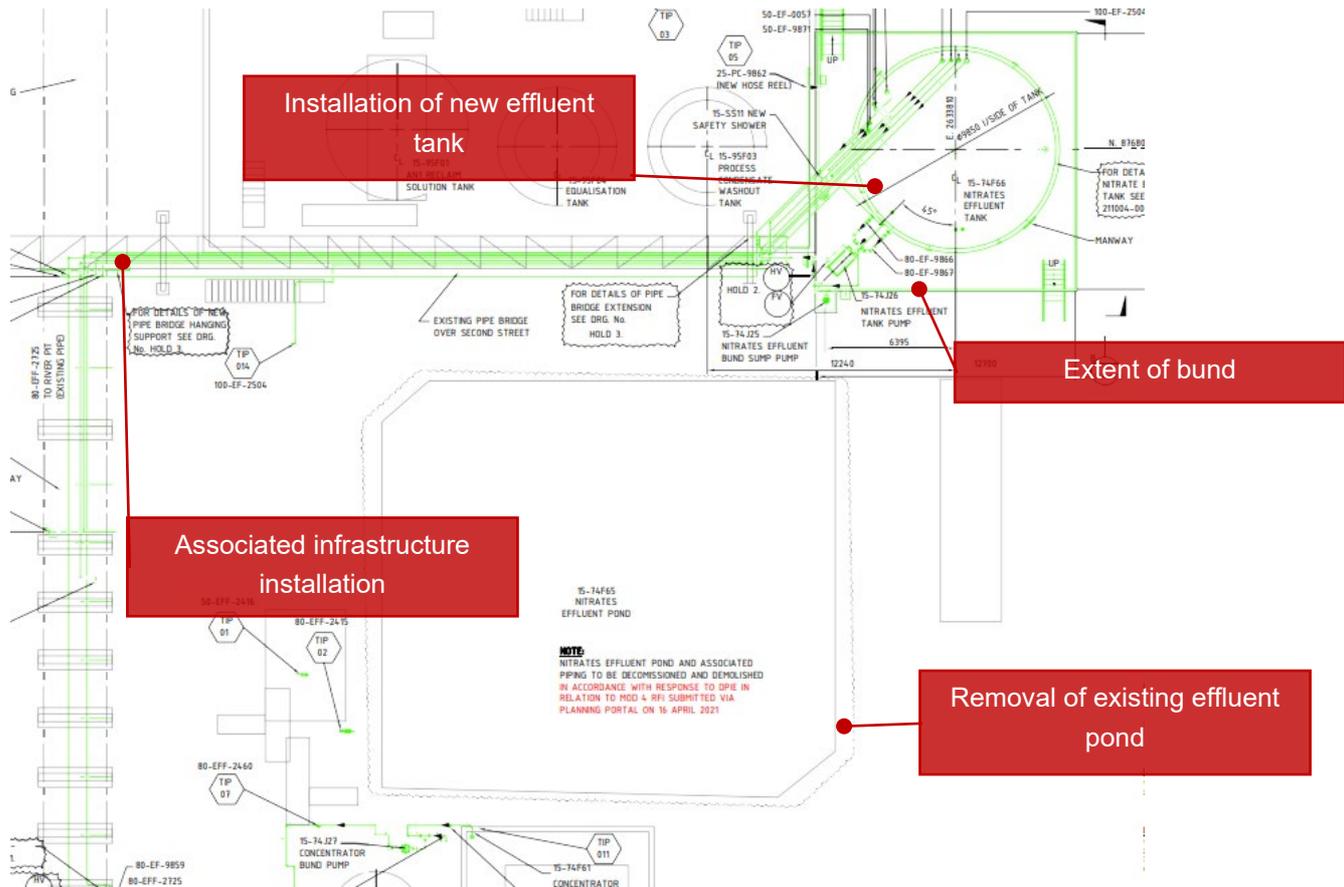


Figure 3 | Plan of changes

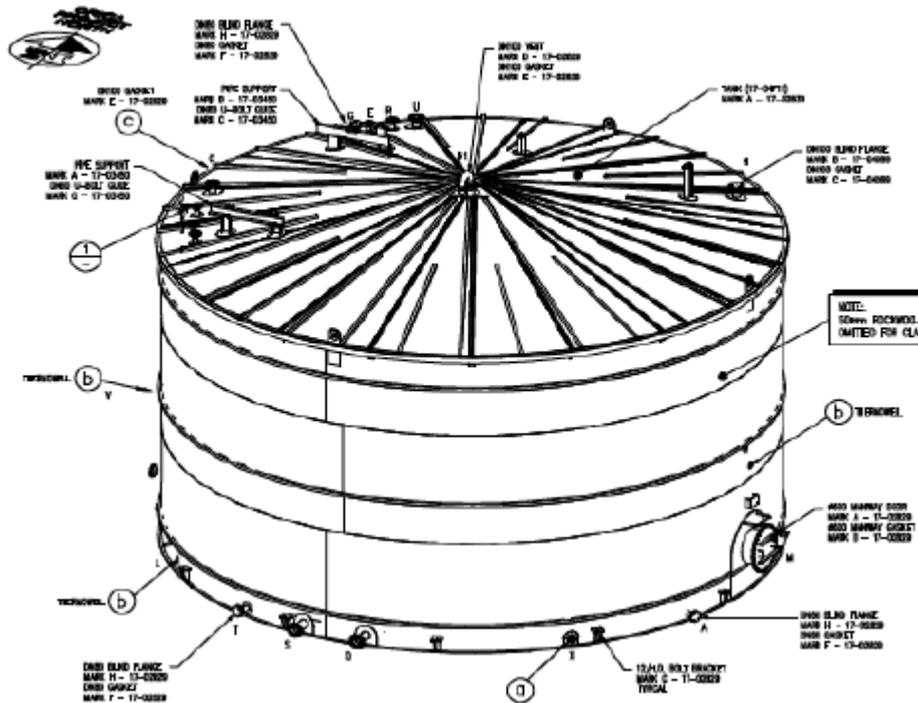


Figure 4 | Tank drawing

3 Strategic context

The Hunter Regional Plan 2036 (HRP) produced by the NSW Government, sets out land use planning priorities and strategies for Greater Newcastle and the Hunter region of NSW. The HRP sets goals and strategic directions to achieve the goals for the growth of the regional area. Goal 1 of the HRP is for the region to become Australia's leading regional economy. The HRP seeks to protect the economic functions of employment land, promoting industrial clusters close to existing global gateways, such as the Port of Newcastle.

The proposed modification to the Orica Ammonia Nitrate Project, Kooragang Island is considered to be consistent with Direction 24 of the HRP, as the development upgrades an existing industrial facility within close proximity to the Port of Newcastle.

4 Statutory context

4.1 Scope of Modifications

The Department has reviewed the scope of the modification application and considers that the application can be characterised as a modification involving minimal environmental impacts as the proposal:

- would not increase the environmental impacts of the project as approved
- the primary function and purpose of the approved development would not change as a result of the proposed modification
- any potential environmental impacts would be minimal and appropriately managed through the existing or modified conditions of consent
- the modification is of a scale that warrants the use of section 4.55(1A) of the EP&A Act
- is substantially the same development as originally approved
- would not involve any further disturbance outside the already approved disturbance areas for the project.

Therefore, the Department is satisfied the proposed modification is within the scope of section 4.55(1A) of the EP&A Act and does not constitute a new development application. Accordingly, the Department considers that the application should be assessed and determined under section 4.55(1A) 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 for Planning and Public Spaces (Minister) is the consent authority for the application under section 4.5(a) of the EP&A Act. Under the Minister's delegation of 26 April 2021, the Acting Director, Industry Assessments, may determine the application under delegation as:

- the Applicant has not disclosed a reportable political disclosure in connection with the application
- there are no public submissions in the nature of objections, and
- the Council has not made a submission by way of objection.

4.3 Part 3A transition to State significant development

This project was originally approved under the former section 75J of the EP&A Act and was a transitional Part 3A project under Schedule 2 of the *Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017* (EP&A (ST&OP) Regulation).

Following amendments to the EP&A Act and the commencement of the associated EP&A (ST&OP) Regulation on 1 March 2018, the power to modify Part 3A project approvals under former section 75W is no longer available for modifications submitted after 1 March 2018. In order to modify a transitional Part 3A project approval, the Minister for Planning and Public Spaces can declare the development to be SSD by order under clause 6 of Schedule 2 of the EP&A (ST&OP) Regulation. If a declaration is

made the project approval becomes a development consent which can be modified under Part 4 of the EP&A Act if it meets the relevant criteria.

On 14 January 2021 the Director, Industry Assessments (as delegate of the Minister for Planning and Public Spaces), made an order under clause 6 of Schedule 2 to the EP&A (ST&OP) Regulation declaring the development the subject of project approval to be SSD. The order was published in the NSW Government Gazette on 22 January 2021 and took effect from that date.

The effect of this order is that the project approval is taken to be a development consent under Part 4 of the EP&A Act for the carrying out of the development.

4.4 Biodiversity Conservation Act 2016

Clause 30A(2)(c) of the *Biodiversity Conservation (Savings and Transitional) Regulation 2017* specifies that if the determining authority is satisfied a modification will not increase the impact on biodiversity values, a biodiversity development assessment report (BDAR) is not required.

The Department is satisfied that there will be no additional clearing of native vegetation or habitat loss beyond that previous assessed and considered under the original 08_0129 approval and subsequent modifications.

For the reasons discussed above, the Department's assessment concludes a BDAR is not necessary for the proposed modification.

5 Engagement

5.1 Department's Engagement

Clause 117(3B) of the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation) specifies that the notification requirements of the EP&A Regulation do not apply to section 4.55(1A) modifications with minimal environmental impact applications. Accordingly, the application was not notified or advertised. However, it was made publicly available on the Department's website on 22 March 2021 and was referred to the Environment Protection Authority (EPA) and City of Newcastle (Council) for comment.

5.2 Summary of Submissions

EPA did not object to the proposal, noting the existing Environment Protection Licence satisfactorily aligns with this application.

Council did not object, noting the Applicant should engage with RAAF Base Williamstown should a tall crane be required during construction. Council recommended the Applicant provide a Cost of Development Report to the Department for infrastructure contribution purposes and provided two conditions relating to stormwater.

5.3 Additional information

On 9 April 2021, the Department requested the Applicant provide further details on the future of the existing pond and to respond to Council's comments on infrastructure contributions.

On 16 April 2021, the Applicant provide a response to the Department's request, detailing the process of pond decommissioning and updating plans to align with this information. A response to Council's contribution comments was also provided, confirming the development would meet an exemption in Section 7.12 Newcastle Local Infrastructure Contributions Plan 2019. The Applicant also confirmed cranes used on site will meet RAAF requirements.

6 Assessment

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

- the SEE and response to request for information provided to support the proposed modification (see **Appendix A**)
- the documentation and Department’s assessment report for the original application and subsequent modification application(s)
- submissions from the public, State government authorities and Council (**Appendix A**)
- relevant environmental planning instruments, policies and guidelines
- requirements of the EP&A Act, including the objects of the EP&A Act.

The Department’s assessment is provided in **Table 2**.

Table 2 | Assessment of Issues

Issue	Findings	Recommendations
Traffic	<ul style="list-style-type: none"> • The change to effluent management on site is not expected to impact on operational traffic, however, it has potential to increase vehicle movements to the site during the construction phase. • In the SEE, the Applicant stated that five additional light vehicle movements would occur per day during the six-month construction period, with an additional 20 heavy vehicles per month also expected for deliveries. The SEE concluded that due to the short construction timeframe and the limited number of additional vehicles, impacts can be appropriately managed through a Construction Traffic Management Plan (CTMP). • Council raised no objection, noting that the additional movements would have negligible impact. • The Department reviewed the consent, as modified and notes the Applicant was required to create a Construction Environmental Management Plan (CEMP) as well as a CTMP previously. Existing conditions would require the Applicant to review and update the CEMP and CTMP, in line with this modification. The Applicant has committed to updating its existing CTMP and CEMP to incorporate the modification. • The Department finds that due to the large existing operations on site, the limited amount of additional traffic generated during construction and the short construction time period, the traffic impacts caused by the modification are negligible and can be managed through a CTMP, as required by the existing conditions of consent. • The Department concludes the modification would not adversely impact on the local road network, subject to the conditions of the original consent. 	No amended conditions are required.

Issue	Findings	Recommendations
Construction Noise	<ul style="list-style-type: none"> The installation of the new effluent tank has potential to cause additional noise during the construction phase of the project. In its SEE, the Applicant noted the closest sensitive receiver is 800 m away from the site. Due to this, and the relatively small area that would be subject to construction, noise impacts were considered to be minimal. No objections were raised by the EPA or Council regarding noise impacts. The Department has reviewed the consent, as modified and notes that the Applicant is required to implement a CEMP dealing with several environmental issues, including noise. Existing conditions would require the Applicant to review and update the CEMP, in line with this modification. The Department considers the noise generated by the modification would be minimal due to the small scale of the construction activities, which are limited to only the construction of the foundations and bund, and the temporary nature of the works. As such, the works are unlikely to increase background noise levels in the vicinity of the site. Notwithstanding, noise impacts can be managed through the existing conditions, including those requiring the Applicant to update its CEMP and restricting construction hours to daylight hours. The Applicant has committed to updating its existing CEMP to incorporate the modification. The Department's assessment concludes the potential additional noise impacts are negligible due to the reasons above and can be managed through existing noise conditions. 	No amended conditions are required.
Development Contributions	<ul style="list-style-type: none"> In its submission, Council questioned whether the cost of the development would increase as a result of the modification and therefore warrant an increase to development contributions. The consent required Orica to pay \$272,000 in development contributions, which were paid by Orica in 2010 following agreement with Council. In its response to the RFI, Orica referred to 10.3(j) of the Section 7.12 Newcastle Local Infrastructure Contributions Plan 2019, which excludes costs associated with the refitting or refurbishing of the development. Orica confirmed the development would not increase the intensity of use of the site. The Department concludes that additional development contributions are not warranted as a result of the modification, as it does not increase jobs or demand on local services and meets Council's exemption criteria. 	No amended conditions are required.
Stormwater	<ul style="list-style-type: none"> In its submission, Council recommended two conditions requiring stormwater to be managed through existing drains and to ensure stormwater runoff does not occur to neighbouring sites. 	No amended conditions are required.

Issue	Findings	Recommendations
	<ul style="list-style-type: none"> • In its SEE, the Applicant stated that the proposed tank and existing pond are located in the same catchment area of the existing stormwater system, with stormwater runoff continuing to be managed through this system. • The existing pond will see the liner removed and some minor earthworks to level the 1.2m deep pond to ground level, resulting in the area becoming pervious. • The area of the new bunding and tank will be approximately 37% smaller in area, resulting in no increase in impervious area once the project is completed. • As part of the original conditions of consent, the Applicant was required to implement a Stormwater Management Plan. A condition requiring the review of management plans after a modification also forms part of the existing consent, ensuring that the Applicant will review and revise the existing Stormwater Management Plan if necessary, to align with the modification. • The Department considers the existing conditions requiring the implementation of a stormwater management system, and the need to review this management plan after modification, is sufficient in addressing Council's conditions. This combined with the bunded area surrounding the proposed effluent tank will ensure stormwater is appropriately managed. • The Department's assessment concludes that the stormwater produced by the modification application can be managed through the existing stormwater system. 	

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 basis that:

- the proposed modification will result in minimal environmental impacts beyond the approved facility
- proposed changes are consistent with the original consent
- changes in built form would not involve any further disturbance outside of the already approved disturbance areas for the development.

The Department is satisfied that the modification should be approved, subject to conditions.

8 Recommendation

It is recommended that the Acting Director, Industry Assessments, as delegate of the Minister for Planning and Public Spaces:

- **considers** the findings and recommendations of this report
- **determines** that the application 08_0129-Mod-4 falls within the scope of section 4.55(1A) of the EP&A Act
- **forms the opinion** under clause 30A(2)(c) of the *Biodiversity Conservation (Savings and Transitional) Regulation 2017* that a BDAR is not required to be submitted with this application as the application will not increase the impact on biodiversity values on the site
- **accepts and adopts** all of the findings and recommendations in this report as the reasons for making the decision to approve the modification
- **modify** the consent 08_0129
- **signs** the attached approval of the modification (**Appendix B**).

Recommended by:



Thomas Bertwistle
Environmental Assessment Officer
Industry Assessments

Recommended by:



10 May 2021

Pamela Morales
A/Team Leader
Industry Assessments

9 Determination

The recommendation is **Adopted** by:

 13 May 2021

Joanna Bakopanos

A/Director

Industry Assessments

as delegate of the Minister for Planning and Public Spaces

Appendices

Appendix A – List of Documents

Orica Kooragang Island – Statement of Environmental Effects (and drawings), Prepared by Orica, dated March 2021 - <https://www.planningportal.nsw.gov.au/major-projects/project/41531>

Response to Request for Information and attachment (drawings), prepared by Orica, dated 16 April 2021 - <https://www.planningportal.nsw.gov.au/major-projects/project/41531>

Submissions - <https://www.planningportal.nsw.gov.au/major-projects/project/41531>

Department's Assessment Report - <https://www.planningportal.nsw.gov.au/major-projects/project/41531>

Appendix B – Instrument of Modification

The modifying instrument for the subject modification may be found on the Department's website at:
<https://www.planningportal.nsw.gov.au/major-projects/project/41531>

Appendix C – Consolidated Consent