

Report for Orica Kooragang Island

Orica Kooragang Island Audit

7 June 2018

Project Delivered for:

Antony Taylor

Orica Kooragang Island

15 Greenleaf Road

Kooragang NSW 2304 - antony.taylor@orica.com

Project Delivered by:

Jon Panic - Senior Sustainability Consultant

Edge Environment

Level 5, 39 East Esplanade, Manly, NSW 2095, AUSTRALIA

0423787661 - jon.panic@edgeenvironment.com.au

Revision	Revision Details	Author	Approved by	Date Approved
Draft	Initial draft	Jimmy Thomas / Jon Panic	Jon Panic	12 September 2017
Final	Final - Client Issue	Jon Panic	Client	19 September 2017
Final	Correction to Condition 48 finding	Jon Panic	Client	26 September 2017
Final	Addresses comments from DoPE	Jon Panic	Client	7 June 2018

Executive Summary

Edge Environment (Edge) was commissioned by Orica Australia Pty Ltd (Orica) to undertake this independent environmental audit of compliance as required under Project Approval 08_0129, first approved on 1 December 2009.

This independent environmental audit was conducted in accordance with Condition 52, prescribed in Schedule 4 of the Project Approval.

Of the 73 conditions audited, the audit identified 42 compliant conditions, four non-compliant conditions and administrative non-compliance against two conditions. 25 conditions were unable to be assessed as the condition had not been triggered or did not require re-audit.

Non-compliances were considered to generally be technical in nature; that is, they related to the submission timing of regulatory reports and Department of Planning approval of management plans.

A small number of non-compliances were also identified with respect to the implementation of commitments detailed in construction management plan documentation, namely the undertaking of and recording of weekly environmental inspections during periods of construction associated with the site's expansion project. These inspections provide an effective way of minimising the potential for environmental incidents and responding promptly to minor issues.

Executive Summary 3

1 Introduction 1

 1.1 Limitations 3

2 Audit Findings 4

 2.1 Summary of Audit Findings 4

 2.2 Interviews 7

3 Conclusion..... 7

 3.1 Recommendations..... 7

 3.2 Opportunities for Improvement 7

Appendix A..... 10

1 Introduction

Edge Environment Pty Ltd (Edge) was commissioned by Orica Australia Pty Ltd (Orica) to undertake this independent environmental audit of compliance as required under Project Approval 08_0129 first approved on 1 December 2009.

This independent audit was conducted in accordance with conditions prescribed in Schedule 4 of the Project Approval. Condition 52 of Schedule 4 states:

Within 2 years of the commencement of operations of the Project, and every 3 years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the Project. This audit must:

- a) be conducted by a suitably qualified, experienced, and independent team of experts whose appointment has been endorsed by the Director-General;*
- b) assess the environmental performance of the Project, and its effects on the surrounding environment;*
- c) assess whether the Project is complying with the relevant standards, performance measures, and statutory requirements;*
- d) review the adequacy of any strategy/plan/program required under this approval; and, if necessary,*
- e) recommend measures or actions to improve the environmental performance of the Project, and/or any strategy/plan/program required under this approval.*

Note: This audit team must include experts in the field of noise and air quality.

1.1 Overview of the development

Orica operates an ammonia nitrate manufacturing facility on Kooragang Island, NSW. The facility commenced operations in 1969 and has undergone several projects aimed at increasing the ammonium nitrate production capability of the site since. The current site operations consist of an Ammonia Plant, three Nitric Acid Plants, two Ammonium Nitrate Plants and associated despatch and support infrastructure (Existing Operations).

An approval for the expansion of the Kooragang Island site (the expansion Project) was granted by the Department of Planning and Infrastructure (DoPI) on 1 December 2009 allowing ammonium nitrate production to increase from 500 kilo tonnes per annum (ktpa) to 750ktpa. The expansion project broadly involves the uprate of the existing ammonia plant, construction of an additional Nitric Acid (NAP4) and Ammonium Nitrate Plants (AN3) and the upgrade and expansion of the site's ammonium nitrate storage and ancillary infrastructure.

Since the approval was granted in 2009, Orica has applied to the DoPI to modify the approval on three occasions.

Modifications to the 2009 approval includes:

Project Modification 1 (approved 11 July 2012)

- The relocation of plant and equipment further away from the closest residential properties located in Stockton;
- Relocation of the No. 3 Ammonium Nitrate Plant closer to the No. 4 Nitric Acid Plant in order to reduce the pipeline distance in which ammonia is required to be transported;

Project Modification 2 (approved 17 December 2014)

- Rationalisation and upgrade of ammonia storage and distribution infrastructure including a reduction in ammonia inventories stored in plant ammonia storage tanks;
- The construction and operation of three ammonia flares; and
- Instrumentation and integrity improvements to ammonia handling and storage systems

- The relocation and increase in storage quantity of a previously approved nitric acid tank.

Project Modification 3 (approved 17 December 2015)

- Increase the allowable annual production limit relating to the manufacture of ammonia at the site from 360,000t to 385,000t.

1.2 Audit Scope

The scope of the audit included an assessment of compliance against all relevant conditions in the approval for works carried out under the Orica Ammonium Nitrate Expansion Project (the Project). To date, works have not yet commenced on several phases (though some pre-construction documentation has been, or is being prepared).

The audit period covers the period since the completion of the March 2014 Independent Environmental Audit to August 2017. Progress made on addressing actions arising from the previous audit was also reviewed.

1.3 Audit approach

The audit included a desktop review and a one-day site visit. The site component of the audit was undertaken by Jon Panic, an RABQSA / Exemplar accredited Lead Auditor (and approved by the Department of Planning), and Jimmy Thomas on 7th of August 2017 and involved a walk-around of the site and interviews with key staff. The audit team also included experts in the fields of noise and air quality – Tom Cockings (Noise) and Martin Doyle (Air), who assisted in the review of Noise and Air Quality conditions. The audit report was quality-reviewed by Edge Auditor Ken Lundy.

Table 1 lists the personnel interviewed during the site visit component of the audit.

Table 1 Personnel Interviewed During the Audit

Name	Title
Antony Taylor	Major Projects Statutory Manager
Sheree Woodroffe	SHEC Manager Kooragang Island
Bruce Volkiene	Manager Maintenance Kooragang Island

1.3.1 Compliance Assessment Criteria

The compliance status for each requirement was assessed in accordance with the DoPE audit guidelines.

Table 2 Personnel Interviewed During the Audit

Assessment	Criteria
Compliant	Where the auditor has collected sufficient verifiable evidence to demonstrate that the intent and all elements of the requirement of the regulatory approval have been complied with within the scope of the audit.
Not verified	Where the auditor has not been able to collect sufficient verifiable evidence to demonstrate that the intent and all elements of the requirement of the regulatory approval have been complied with within the scope of the audit. In the absence of sufficient verification the auditor may in some instances be able to verify by other means (visual inspection, personal communication, etc.) that a requirement has been met. In such a situation, the requirement should still be assessed as not verified. However, the auditor could note in the report that they have no reasons to believe that the operation is non-compliant with that requirement.
Non-compliant	Where the auditor has collected sufficient verifiable evidence to demonstrate that the intent of one or more specific elements of the regulatory approval have not been complied with within the scope of the audit.

Administrative non-compliance	A technical non-compliance with a regulatory approval that would not impact on performance and that is considered minor in nature (e.g. report submitted but not on the due date, failed monitor or late monitoring session). This would not apply to performance-related aspects (e.g. exceedance of a noise limit) or where a requirement had not been met at all (e.g. noise management plan not prepared and submitted for approval).
Not triggered	A regulatory approval requirement has an activation or timing trigger that had not been met at the time of the audit inspection, therefore a determination of compliance could not be made.
Observation	Observations are recorded where the audit identified issues of concern which do not strictly relate to the scope of the audit or assessment of compliance. Further observations are considered to be indicators of potential non-compliances or areas where performance may be improved.
Note	A statement or fact, where no assessment of compliance is required.

1.3.2 Agency consultation

The Department of Planning and Environment (DoPE) was consulted on and provided input into the audit and audit report. The NSW Environmental Protection Authority (EPA) was provided a copy of this report for comment. Refer

1.4 Limitations

This report has been prepared for Orica to fulfil the requirements of the Independent Environmental Audit as specified in the Project Approval.

The scope of the audit, and subsequent report was limited and should not be used for any purpose other than that described above.

The following should be considered when reading and using this report:

1. A site visit was undertaken during this audit, the purpose of which was to familiarise the auditors with the site layout, site conditions and natural environment. Whilst the auditors requested to be shown all features of the sites that are impacted (environmentally) by the operations, the auditors have relied on information provided by Orica representatives during these site visits, including the selection of the areas of the site for the site inspection.

Orica provided at their sole discretion all the documentation that has been accessible to the auditors. The auditors have relied on the information and documentation provided and have relied on Orica to provide all relevant and pertinent information

2 Audit Findings

2.1 Summary of Audit Findings

Table 3 shows a summary of the findings of the audit.

Table 3 – Summary Table of Compliance with 08_0129

Schedule	Conditions Audited	Compliant	Not Triggered	Non-Compliant	Administrative Non-Compliance
Schedule 2	18	11	6	0	1
Schedule 3	46	24	19	3	0
Schedule 4	9	7	0	1	1
Total	73	42	25	4	2

Table 3 presents a summary of the non-compliance and the relevant comments and recommendations for each.

Table 4 – Non-Compliant Conditions

Schedule	Condition	Requirement (summary)	Auditors Comment	Auditors Recommendation
Schedule 2	7C	The Proponent shall review and if necessary update and submit a revised Staging Report for the Project which has been prepared to the satisfaction of the Secretary	The revised Staging Plan was not submitted two months prior to the commencement of construction of the flares (June 2015). An updated staging plan is submitted annually as part of the Annual Environmental Management Report.	Ensure the submission requirements relating to new stages in the Project are fully complied with
Schedule 3	17	Three months after the commencement of operation of each Project stage, the Proponent shall submit to the Secretary, a Post-Start-up Compliance Report	A post-start up report for operation of the flares was not submitted to the Secretary.	Ensure the submission requirements relating to new stages in the Project are fully complied with
Schedule 3	45	Prior to commencement of operations of the Project, the Proponent shall submit to the Secretary a landscape plan providing details of native screening plants to be planted along the eastern boundary of the Project Site	The Landscape Plan has not been implemented	Gain approval for a staged implementation of landscaping required under the approval, potentially tied to the broader staging plan submitted annually.
Schedule 3	48	The Proponent shall prepare and implement a Waste Management Plan for the project to the satisfaction of the Secretary	Weekly environmental inspection required during construction were not undertaken.	Commence implementation of a weekly environmental inspections program when undertaking

				construction activities associated with the project.
Schedule 4	49B/C	The Proponent shall prepare and implement an Operational Environmental Management Plan for the Project to the satisfaction of the Secretary	The Operational Environmental Management Plan was not prepared prior to operation of the flares.	Prepare and implement an Operational Environmental Management Plan for the flares.
Schedule 4	53	The Proponent shall, unless otherwise agreed to in writing by the Secretary make the following information publicly available on its website:	Not all documents required by the condition are displayed on the website.	Ensure all post approval and audit documents are available on the website

2.1.1 Progress on actions from 2014 audit

There remain a number of recommended actions from the 2014 audit that have not been implemented. None of these has led to impacts on the environment, however they remain valid recommendations to improve both the administrative management of compliance with the approval and actual environmental management and so should be prioritised for implementation.

Table 5 – Outstanding actions from 2014 audit

Auditors Recommendation	Action taken
Ensure all submission and re-submission requirements are entered into compliance tracking systems to ensure they are followed through on in the prescribed timeframes.	Action has been taken to ensure submission requirements are captured in compliance tracking systems, however several instances of missed submissions deadlines occurred during this audit period.
Ensure weekly environmental inspections are undertaken, and records of each inspection kept, as required in the Construction Environmental Management Plan during future periods of construction associated with the project.	Weekly environmental inspections are still not undertaken on a regular basis.
Consider including in subsequent revisions of the Construction Environmental Management Plan description of the types of triggers that may result in a requirement to implement a control (e.g. a water cart) and how the assessment of its effectiveness is determined.	The CEMP has not been updated to include triggers for implementation of controls.

2.2 Management Plan compliance

Orica was found to be generally complying with the commitments in approved management plans for the site. The following non-compliances were recorded with respect to either the development of plans or the implementation of approved plans:

- The Landscape Plan was not being implemented
- Weekly inspection required by the CEMP during construction were not being undertaken
- The Operational Environmental Management Plan was not prepared prior to operation of the flares.

2.3 Comparison with predictions in the EA / EIS

The audit considered whether the project has appropriately completed a comparison of predicted environmental impacts in EA's / EIS with actual impacts identified from monitoring. Giving due consideration to the staging of the project (only Stage 1 and 4 are complete), this review considered Stage 1 and 2.

2.3.1 Stage 1

Air Quality

The audit reviewed the comparison of air quality parameters detailed in the EA with actual data after the ammonia plant uprate (being the Air Quality Verification study). That report identified that air quality monitoring from the two NOx discharge locations (Reformer and Pre-Reformer) were based on a stack discharge concentration of 350mg/m3 (no2 equivalent) concentration. A comparison of EA and actual discharge flowrates found that flowrates were lower than what was modelled in the EA which again was favourable to compliance with the EA'S predictions. Following the verification report, Orica has continued to undertake stack monitoring, with results detailed in the Annual Environmental Monitoring Report (AEMR), in compliance with Condition 50. On one occasion the reformer Stack concentration was monitored as exceeding the 350mg/m3 EPL limit, however the other data points remained below the EA modelled 350mg/m3 concentration value. The Pre-Reformer NOx discharge concentration was relatively steady throughout the review period and below 350mg/m3, which is significantly below the modelled EA NOx concentration.

Noise

The audit reviewed the comparison of noise monitoring since ammonia plant uprate against the noise survey completed prior (being the results detailed in the AEMR). Prior to the uprate of the Ammonia Plant the site undertook a noise survey in compliance with Condition 31 of the Consent, that was to be utilised for compliance purposes. A noise monitoring plan was subsequently developed and approved by the DPE, which included ongoing noise monitoring requirements to further demonstrate compliance with the EA noise requirements, primarily reliant on the site undertaking annual noise monitoring. Noise results again are detailed in the AEMR, with all noise monitoring results conforming compliance with the EA's requirements

2.3.2 Stage 2

Air Quality

No monitoring to compare actual emissions against those reported in the air quality assessment has been undertaken. There are no EPL limits applied to the flares and direct measurement is not possible. The site has not undertaken an air quality verification study for the flares following the commencement of their operations, however it is recognised that there are no EPL air quality concentration limits applied to the flares and direct measurement is not possible. Confirmation of natural gas flowrates and stack design parameters, along with air quality monitoring and meteorological data from the Stockton monitoring station could be utilised in any future air quality verification study to confirm compliance.

Noise

The noise assessment did not identify ongoing noise sources

2.4 Interviews

In some cases, information obtained and statements recorded during the interviews conducted whilst on site at the Kooragang Island facility were directly recorded as evidence (see Appendix A). More broadly, the auditor also used the interviews as an opportunity to gain an appreciation of the extent to which the systems in place to manage environmental impacts from site operations were understood and being implemented by key staff.

The interviews conducted allowed the auditor to form the opinion that the approach to environmental management (and operations more broadly) is well understood by staff and is considered by staff to be effective at improving the extent to which the business can manage risks proactively.

3 Conclusion

Of the 73 conditions audited, the audit identified 42 compliant conditions, four non-compliant conditions and administrative non-compliance against two conditions. 25 conditions were unable to be assessed as the condition had not been triggered or did not require re-audit.

Non-compliances were considered to generally be technical in nature; that is, they related to the submission timing of regulatory reports and Department of Planning approval of management plans.

A small number of non-compliances were also identified with respect to the implementation of commitments detailed in construction management plan documentation, namely the undertaking of and recording of weekly environmental inspections during periods of construction associated with the site's expansion project. These inspections provide an effective way of minimising the potential for environmental incidents and responding promptly to minor issues.

3.1 Recommendations

The following recommendations (**Table 6**) related to non-compliances, are made to assist in responding to the issues raised in this audit.

Table 6 – Audit Recommendations

Recommendation	Justification
Ensure the submission requirements relating to new stages in the Project are fully complied with	Improved compliance with Project Approval
Prepare and submit to the Secretary an updated landscape plan and gain approval for a staged implementation of landscaping required under the approval, potentially tied to the broader staging plan submitted annually.	Improved compliance with Project Approval
Commence implementation of a weekly environmental inspections program when undertaking construction activities associated with the project.	Reduce risk of harm to environment
Prepare and implement an Operational Environmental Management Plan for the flares.	Improved compliance with Project Approval and ensuring reducing risk of harm to environment
Ensure all relevant post approval and audit documents are available on the website	Improved compliance with Project Approval
Update the CEMP to ensure the requirements of Condition 49A (h) and (j) are fully met.	Improved compliance with Project Approval

3.2 Opportunities for Improvement

Table 7 summarises additional opportunities for improvement suggested for consideration by Orica to aid in environmental management on site and reduce the risk for potential environmental harm.

Table 7 – Additional Recommendations and Opportunities for Improvement

Opportunity	Justification
Noting the infrequent use of the flares (one reported activation between April and June 2017) it is recommended that Secretary confirmation be sought that an update to the Air Quality Management Plan is not required and that volumetric flow determination remains a suitable method for describing the emissions at points 24-36.	Clarification around compliance requirements with the Approval

The Noise and Vibration Management Plan should include LAeq and LMax noise management for the site following the addition of the boiler.	Improved compliance with Project Approval and ensuring reducing risk of harm to environment
Once the boiler is constructed and operational, conduct noise verification assessment to ensure noise levels from operation are below 10db. Low frequency components of boilers may require special attention.	Ensure management and mitigations in place are effective during operation.
Whilst there have been no complaints regarding traffic management, it is recommended that weekly inspections are undertaken during construction and recorded and that occasional review of this requirement is included.	Ensure continued minimisation of disruption to other road users and the community.
The Water Efficiency Plan should be updated after the boiler is operational.	Ensure the Water Efficiency Plan covers all operational aspects of the site

3.3 Independent Audit Certification

Table 7 – Independent Audit Certification Form

Independent Audit Certification Form	
Development Name	Orica Ammonium Nitrate Expansion Project
Development Consent No.	08_0129
Description of Development	Ammonium nitrate plant expansion at Kooragang Island facility
Development Address	Kooragang Island
Operator	Orica
Operator Address	PO Box 80 Mayfield NSW 2304
Independent Audit	
Title of Audit	2017 Independent Environmental Audit
<p>I certify that I have undertaken the independent audit and prepared the contents of the attached independent audit report and to the best of my knowledge:</p> <ul style="list-style-type: none"> The audit has been undertaken in accordance with relevant approval condition(s) and in accordance with the auditing standard AS/NZS ISO 19011:2014 and Post Approval Guidelines – Independent Audits The findings of the audit are reported truthfully, accurately and completely; I have exercised due diligence and professional judgement in conducting the audit; I have acted professionally, in an unbiased manner and did not allow undue influence to limit or over-ride objectivity in conducting the audit; I am not related to any owner or operator of the development as an employer, business partner, employee, sharing a common employer, having a contractual arrangement outside the audit, spouse, partner, sibling, parent, or child; I do not have any pecuniary interest in the audited development, including where there is a reasonable likelihood or expectation of financial gain or loss to me or to a person to whom I am closely related (i.e. immediate family); Neither I nor my employer have provided consultancy services for the audited development that were subject to this audit except as otherwise declared to the lead regulator prior to the audit; and I have not accepted, nor intend to accept any inducement, commission, gift or any other benefit (apart from fair payment) from any owner or operator of the development, their employees or any interested party. I have not knowingly allowed, nor intend to allow my colleagues to do so. <p><i>Note.</i></p>	

a) *The Independent Audit is an 'environmental audit' for the purposes of section 122B(2) of the Environmental Planning and Assessment Act 1979. Section 122E provides that a person must not include false or misleading information (or provide information for inclusion in) an audit report produced to the Minister in connection with an environmental audit if the person knows that the information is false or misleading in a material respect. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000.*

b) *The Crimes Act 1900 contains other offences relating to false and misleading information: section 192G (Intention to defraud by false or misleading statement—maximum penalty 5 years imprisonment); sections 307A, 307B and 307C (False or misleading applications/information/documents—maximum penalty 2 years imprisonment or \$22,000, or both).*

Signature	
Name of Lead / Principal Auditor	Jon Panic
Address	Edge Environment Level 5 39 East Esplanade Manly NSW 2095
Email Address	jon@edgeenvironment.com.au
Auditor Certification (if relevant)	Exemlar (RABQSA) Lead Environmental Auditor
Date:	5 June 2018

APPENDIX A

Table 8 – Administrative Conditions

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
Administrative Conditions				
Obligation to minimise harm to the environment				
1	The Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction and/or operation of the Project			Compliant Throughout the audit, the Proponent was able to demonstrate consistent compliance with the requirements of this approval and a comprehensive approach to environmental management in general.
Terms of Approval				
2	The Proponent shall carry out the project generally in accordance with the: a) EA; EA MOD1 EA MOD2 site layout plans b) statement of commitments; c) Submissions Report; d) Modification Application (08_0129 MOD 1) with supporting documentation titled Kooragang Island Facility Update Modification Request, prepared by AECOM for Orica Australia Pty Ltd and dated 20 April 2011; e) report titled Orica Mining Services Report for Kooragang Island Update PHA MOD 1 Report, prepared by GHD for Orica Australia Pty Ltd and dated March 2012; and f) conditions of this approval.			Compliant The Project is being carried out generally in accordance with the requirements of this condition, notwithstanding the non-compliances (mostly technical) raised in this audit.
3	If there is any inconsistency between the above plans and documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.			Not triggered No inconsistency between the documents was identified. Notwithstanding, the conditions of the approval are used as the basis for

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
				managing compliance on site.
4	The Proponent shall comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of: a) any post approval documents that are submitted in accordance with this approval; and b) the implementation of any actions or measures contained in these post approval documents.			Compliant Orica demonstrated that they are generally complying with specific requests made by the Secretary.
Limits on Approval				
5	The Proponent shall not produce more than the following at the Project Site: a) 360,000 tpa of ammonia product; (up to 385000tpa in 1 Dec) b) 605,000 tpa of nitric acid product; c) 750,000tpa of ammonium nitrate product (up from 500000tpa until 17 Dec)		Viewed annual tonnages in "Production data" spreadsheet. a) 333404 tpa of ammonia produced b) 324498 tpa of nitric acid produced c) 409510 tpa of ammonium nitrate produced	Compliant Production tonnages are below the limits of the approval.
6	Should the works covered by this approval be significantly delayed, or only partially completed, the Secretary may direct the Proponent to conduct the studies outlined in this approval for the completed works.		Viewed "Annual Environmental Management Report 2016: section 4" which includes a description of the current project status.	Compliant Studies and plans required by this approval are being submitted for approval as required by the Secretary.
Project Staging				
7A	Unless otherwise agreed to in writing by the Secretary, the Proponent shall stage the carrying out of the Project generally in accordance with the approved Staging Plan.		Viewed "Annual Environmental Management Report 2016" which includes updated Staging Plan.	Compliant Updated staging plans are submitted annually in the AEMR and are approved by the Secretary

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
7B	<p>Prior to the commencement of construction of the next Project stage following the commencement of operation of Phase 1 or within an alternative timeframe agreed to in writing by the Secretary, the Proponent shall prepare a Staging Report for the Project to the satisfaction of the Secretary. The Report shall:</p> <p>a) summarise the scope and sequence of development that will be carried out under each Project stage;</p> <p>b) include plans and a description of the nature, duration and likely timing of development that will be carried out as part of each Project stage;</p> <p>c) demonstrate how the conditions of this approval are being complied with as each Project stage is progressively constructed, commissioned and becomes operational;</p> <p>d) report on the status of all post approval documents including which of these documents will be staged and/or combined (see Condition 7D); and</p> <p>e) include triggers for reviewing and updating the Staging Report, including the triggers referred to in Condition 7C.</p>		<p>Viewed letter from Stewart McLachlan from DoPE to Antony Taylor From Orica dated 20 January 2017 which states approval of 2016 AEMR.</p> <p>Viewed "Annual Environmental Management Report 2016: page 7" which summarises scope and sequence of development.</p> <p>Viewed "Annual Environmental Management Report 2016: table 2" which includes description, duration and timing of development.</p> <p>Viewed "Annual Environmental Management Report 2016: page 26" which outlines conditions and compliance status.</p> <p>Viewed "Annual Environmental Management Report 2016: page 30" which includes all submitted post-startup compliance reports.</p>	<p>Compliant</p> <p>The Staging Plans submitted in the AEMRs meet the requirements of this condition.</p>
7C	<p>The Proponent shall review and if necessary update and submit a revised Staging Report for the Project which has been prepared to the satisfaction of the Secretary (or advise the Secretary in writing that no changes to the Staging Report are required):</p> <p>a) no later than 2 months prior to the commencement of construction, commissioning and operation of development within each Project stage;</p> <p>b) within 3 months of any modifications to this approval; and/or</p> <p>c) when directed to do so by the Secretary.</p>	<p>Antony Taylor:</p> <p><i>"We do that annually as part of the AEMR. Our submission period is 1/12. This was done 2 months prior to the relocation of the boiler. Construction was in June and the staging report was completed in August."</i></p> <p><i>"Orica notes that no change was required from the Staging Plan submitted in December 2014."</i></p>	<p>Viewed "Annual Environmental Management Report 2016" which includes updated Staging Plan.</p>	<p>Administrative non-compliance</p> <p>The revised Staging Plan was not submitted two months prior to the commencement of construction of the flares (June 2015).</p> <p>Recommendation:</p> <p>Ensure the submission requirements relating to new stages in the Project are fully complied with</p>

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
	<p>Notes:</p> <ul style="list-style-type: none"> · These conditions do not relate to staged development within the meaning of Section 83B of the EP&A Act and are only required to be complied with at the time and to the extent that they are relevant to the specific stage(s). · Where post approval documents and/or hazard studies have approval to be staged and/or combined under Condition 7D, then each approved document and/or study must clearly describe the specific stage to which the document or study applies, the relationship of this stage to any future stages and the trigger for updating these documents or studies. 			
Staged Submission of Post Approval Documents and Hazard Studies				
7D	<p>With the written approval of the Secretary, the Proponent is permitted to:</p> <ol style="list-style-type: none"> submit any post approval documents on a progressive basis; and/or combine any post approval documents required by this approval. 	<p>Antony Taylor: <i>"We are not combining any post approval documents, we submit in accordance with the staging plan. We have assumed that by the Secretary approving the AEMR each year, which includes the staging plan, that the staging plan is also approved."</i></p>	<p>Viewed email from Nick Hall from DoPE to Antony Taylor from Orica dated 11 July 2014 issuing approval of phase 1 of Mod 2 without need for Secretary approval.</p>	<p>Compliant The regular submission and approval of the Staging Plan as part of the AEMR is satisfying the intent of this condition.</p>
7E	<p>With the written approval of the Secretary, the Proponent is also permitted to progressively submit and/or combine certain hazard studies provided that the scope of these studies has been agreed to by the Secretary and that they are tied to and form part of the Staging Report required by Condition 7B.</p>	<p>Antony Taylor: <i>"Hazard studies are conducted and submitted for each stage."</i></p>		<p>Compliant Hazard studies are being submitted in accordance with the requirements of the approval.</p>
	<p>Notes:</p> <ul style="list-style-type: none"> · Whilst any post approval documents and/or hazard studies may be submitted on a progressive basis, the Proponent must ensure that operations being carried out on the Project site are covered by approved post-approval documents and/or hazard studies at all times. · Until they are replaced by equivalent approved post-approval documents and/or hazard studies required under the terms of this approval, the Proponent must continue to implement all existing post-approval documents and/or hazard studies for the Initial Operations. · There must be a clear relationship between the approved post-approval documents and/or hazard studies to be combined. 			
Minor Design Variations				

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
7F	At the written request of the Proponent, the Secretary may approve in writing, minor design variations to the plans approved in Condition 2d) in relation to ancillary infrastructure but only if the Secretary considers the variations to be minor.	Antony Taylor: <i>"The boiler relocation was submitted as a minor design variation and was approved by the Secretary."</i>	Viewed email from Deana Burns from DoPE to Antony Taylor from Orica dated 11 June 2015 which states <i>"The Department approves the boiler relocation as a minor design variation in accordance with Condition 7(f)."</i>	Compliant The requirements of this condition are being met.
Structural Adequacy				
8	The Proponent shall ensure that all new buildings and structures on the site are constructed in accordance with the relevant requirements of the BCA.	Antony Taylor: <i>"No new buildings or structures have been built which required occupation certificates during this audit period."</i>		Not triggered This condition has not been triggered.
	Notes: • Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works. • Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.			
Protection of Public Infrastructure				
9	The Proponent shall: (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the Project; and (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the Project.)	Antony Taylor: <i>"No new works have been completed which damaged or required relocating of public infrastructure during this audit period."</i>		Not triggered This condition has not been triggered as there has been no damage to public infrastructure
10	Prior to commencement of construction, the Proponent shall prepare a dilapidation report of the public infrastructure in the vicinity of the Project Site (including roads, gutters, footpaths), in consultation with Newcastle Port Corporation and submit a copy of this report to the Director-General.	Antony Taylor: <i>"There has been no additional requirement to provide an updated dilapidation report approved in 2011."</i>		Not triggered There has been no change since this condition was audited in 2014.
11	Prior to the construction of any utility works, the Proponent shall obtain the relevant approvals from service providers, including Hunter Water Corporation.	Antony Taylor: <i>"There has been no new construction of any utility works."</i>		Not triggered The requirements of this condition have not been triggered.
Operation of Plant and Equipment				
12	The Proponent shall ensure that all plant and equipment used on the site is:			Compliant

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
	<p>(a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.</p>	<p>Bruce ____: <i>"SAP is our computer maintenance management system in which all equipment functional locations are set up. We generate maintenance routines according to reliability centred maintenance. Critical equipment is classified either as required by risk assessment, required by statutory inspections or required by model procedures (corporate standards). For example, there are no legal requirements around checking of machines, however our corporate procedures indicate that we need inspections and that we have maintenance routines "</i> <i>"For SI's inspections, we apply a quantitative based risk assessment using a system called CAPSTONE. We used to do qualitative based risk assessments."</i> <i>"At the moment 9 inspections across the plant have a deferral on them. For those inspection that are due now, we're looking for a risk assessment on them to see if we can move the inspection to next week or when there is a shutdown etc.</i> <i>"Our philosophy is to have routines for all general inspections. If an issue is raised then we do a FOMECA, then we feed data in to a CAPSTONE process. This is the quantitative process."</i> <i>"We have approximately 15 maintenance staff in nitrates, 8 in ammonia and a team of welders, painters, scaffolders and pipe work inspectors and structural inspectors."</i> <i>"The transport system authorisation process is in place so that you can't deviate from it without approval. All operating equipment is operating in accordance with operating procedures or CAPSTONE.".</i> For SI's we know</p>	<p>Viewed "Cooling Tower Microbiology Final Report" by Sonic Food & Water dated 19 May 2017 and 21 July 2017 which shows levels below acceptable threshold. Viewed "Maintenance Scheduling Overview List" and "PM Notification: Maintenance Request" which show regular maintenance of plant and equipment.</p>	<p>All aspects of the plant viewed during the site visit were observed to be kept clean and tidy, and records reviewed show that regular maintenance is being undertaken as required. Sufficient resources have been deployed by Orica to ensure maintenance is regular.</p>

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
		<p>what is due in the next 30 days, so we plan for that and then deliver. If there is anything we know we will be unable to do we do a risk assessment to work out what we can defer."</p>		
Section 94 Contributions				
13	<p>Prior to the operation of the Project, the Proponent shall pay Council \$272,000 in Section 94 contributions. Notes: This contribution is subject to indexation to reflect quarterly variations in the Consumer Price Index All Group Index Number for Sydney, as published by the Australian Bureau of Statistics.</p>			<p>Not triggered This was assessed as compliant in the previous audit and is not required to be re-assessed this audit.</p>

Table 7 – Specific Environmental Conditions

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
Specific Environmental Conditions				
Hazards				
14	At least one month prior to the commencement of construction of each Project stage (except for construction of those preliminary works that are outside the scope of the hazard studies), or within such further period as the Secretary may agree, the Proponent shall prepare and submit for the approval of the Secretary the studies set out under subsections (a) to (d) (the pre-construction studies).	Antony Taylor: "Construction of MOD2 commenced in August 15"	Viewed letter from Deana Burn from DoPE to Antony Taylor from Orica dated 23 June 2015 for MOD2 pre-construction approval which states "The Department approves the pre-construction documentation and notes that Orica has satisfied all pre-construction requirements of the project approval 06_0129 MOD 2."	Compliant The requirements of this condition are being met.

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
	<p>(a) A Fire Safety Study to include the Initial Operations and each project stage. This study shall cover the relevant aspects of the Department's <i>Planning's Hazardous Industry Planning Advisory Paper No.2 - Fire Safety Study Guidelines</i> and the New South Wales Government's <i>Best Practice Guidelines for Contaminated Water Retention and Treatment Systems</i>. The study shall also be submitted for approval, to the NSW Fire Brigade;</p>	<p>Antony Taylor: <i>"We do one fire safety study for each stage as required. Each study is updated for each phase and a site-wide fire safety study was updated to include the new boiler. If we build a new plant or do a major change to the site we do a new fire safety study."</i> <i>"The update in 2016 included additional LPG quantities for the flares, the boiler location change and the gas inventory."</i> <i>"In order to get approval for each stage we submit a new fire safety study which is ultimately incorporated into the site wide fire safety study."</i> <i>"Since 2014 AMI and boiler projects were found to be adequate for necessary fire as the referencing was changed but the analysis was valid."</i></p>	<p>Viewed letter from Deana Burn from DoPE to Antony Taylor from Orica dated 23 June 2015 for MOD2 pre-construction approval which states <i>"Orica confirmed that the FSS dated 21 June 2011 has been reviewed and is still valid for the AMI Project...The Department has no further requirements in relation to condition 14(a)."</i> Viewed letter from Deana Burn from DoPE to Antony Taylor from Orica dated 27 July 2015 for boiler relocation pre-construction approval which states <i>"Orica has confirmed that the FSS dated 16 July 2013 has been reviewed and remains valid for the boiler relocation... The Department has reviewed your letter dated 9 July 2015 and has no further requirements in relation to Condition 14(a)."</i></p> <p>Viewed "Fire Safety Study, Orica Australia Pty Ltd, Kooragang Island Site" by Pinnacle Risk Management dated 14 February 2016 which includes updates to include AMI and boiler projects.</p>	

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
	<p>(b) A Hazard and Operability Study, chaired by a qualified person, independent of the Project approved by the Secretary prior to the commencement of the study (for each project stage). The study shall be consistent with the Department of Planning's Hazardous Industry Planning Advisory Paper No.8 - HAZOP Guidelines. The study report must be accompanied by a program for the implementation of all recommendations made in the report. If the Proponent intends to defer the implementation of a recommendation, reasons must be documented;</p>	<p>Antony Taylor: <i>"AMI had HAZOP approved in pre-construction, amendments were asked to be made and we re-submitted for boiler relocation approval."</i></p>	<p>Viewed letter from Deana Burn from DoPE to Antony Taylor from Orica dated 23 June 2015 for MOD2 pre-construction approval which states <i>"The Department therefore approves the HAZOP, subject to:</i></p> <ul style="list-style-type: none"> - submission of an action plan for the outstanding recommendations to the Department within one month of the approval of the study... - implementation of the outstanding recommendations in a timely manner." <p>Viewed letter from Deana Burn from DoPE to Antony Taylor from Orica dated 27 July 2015 for boiler relocation pre-construction approval which states <i>"A supplementary HAZOP report was submitted for the boiler relocation dated 22 June 2015 .The Department therefore approves the HAZOP , subject to:</i></p> <ul style="list-style-type: none"> - submission of an action plan for the outstanding recommendations to the Department within one month of the approval of the study... - implementation of the outstanding recommendations in a timely manner." <p>Viewed "Hazard Audit 2016" dated 11 November 2016 which refers to The Department of Planning's "Industry Planning Advisory Paper No. 8" which states <i>"The majority of actions have been completed however there are some open actions as appropriate to the stage projects.</i></p>	

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
	<p>(c) A Final Hazards Analysis (FHA) of the Project as modified, consistent with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis. The Final Hazard Analysis shall: report on the implementation of the recommendations of the Preliminary Hazard Analysis;</p> <ul style="list-style-type: none"> · re-evaluate and reconfirm the relevant data and assumptions from the Preliminary Hazard Analysis; · re-evaluate and reconfirm all control measures for prevention and mitigation of incidents; and · evaluate all relevant findings and recommendations from the official investigation report(s), as available, relating to the accident at West, Texas in April 2013. 	<p>Antony Taylor: <i>"AMI FHA submitted and approved. The Boiler approval stated that no additional changes to the FHA originally submitted were required "</i></p>	<p>Viewed letter from Deana Burn from DoPE to Antony Taylor from Orica dated 23 June 2015 for MOD2 pre-construction approval which states <i>"The Department advises that Orica has adequately satisfied Condition 14 (c)."</i></p> <p>Viewed letter from Deana Burn from DoPE to Antony Taylor from Orica dated 27 July 2015 for boiler relocation pre-construction approval which states <i>"The Department advises that Orica has adequately satisfied Condition 14 (c)."</i></p>	
	<p>(d) A Construction Safety Study consistent with the Department's Hazardous Industry Planning Advisory Paper No.7 - Construction Safety Guidelines for each project stage. For a project in which the construction period exceeds six (6) months, the commissioning portion of the Construction Safety Study may be submitted two months prior to the commencement of commissioning.</p>	<p>Antony Taylor: <i>"Construction Safety Studies were completed for AMI and the boiler relocation"</i></p>	<p>Viewed letter from Deana Burn from DoPE to Antony Taylor from Orica dated 23 June 2015 for MOD2 pre-construction approval which states <i>"The CSS is consistent with the Department's Hazardous Industry Planning and Advisory Paper No.7 and satisfies the requirements of Condition 14(d)."</i></p> <p>Viewed letter from Deana Burn from DoPE to Antony Taylor from Orica dated 27 July 2015 for boiler relocation pre-construction approval which states <i>"The Department has reviewed the CSS and notes that it is consistent with the Department's Hazardous Industry Planning and Advisory Paper No.7 and satisfies the requirements of Condition 14(d)."</i></p>	
Pre-commissioning				

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
15	<p>The Proponent shall develop and implement the plans and systems set out under subsections (a) to (c), no later than two months prior to the commencement of commissioning of each Project stage, or within such further period as the Secretary may agree. The Proponent shall submit, for the approval of the Secretary, documentation describing those plans and systems. Commissioning shall not commence until approval has been given by the Secretary.</p>	<p>Antony Taylor: <i>"The safety of people outside the facility who may be at risk from the Project is considered in the site Emergency Response Plan"</i></p>	<p>Viewed letter from Deana Burn from DoPE to Antony Taylor from Orica dated 2 September 2015 which states <i>"The Department approves the pre-commissioning documents and notes that Orica has satisfied all pre-operation requirements of the project approval 08_0129 as modified for construction of the ammonia flares."</i></p> <p>Viewed email from Antony Taylor from Orica to Deana Burn from DoPE dated 13 September 2015 which shows submission of pre-commissioning documentation within 2 months prior to commencement of commission of flares.</p>	<p>Compliant The requirements of this condition are being met.</p>

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
	<p>(a) Transport of Hazardous Materials Plan – arrangements covering the transport of hazardous materials including details of routes to be used for the movement of vehicles carrying hazardous materials to or from the site (Initial Operations and Project). The routes selected shall be consistent with the Department of Planning's Hazardous Industry Planning Advisory Paper No 11, 'Route Selection'. Suitable routes identified in the study shall be used except where departures are necessary for local deliveries or emergencies.</p>	<p>Antony Taylor: <i>"Since last time we've completed the THMP on 22/4/13, the boiler project and AMI don't change the transport of hazardous as both stages aren't associated with the manufacture of Ammonium Nitrate."</i></p>	<p>Viewed letter from Deana Burn from DoPE to Antony Taylor from Orica dated 2 September 2015 which states <i>"The operation of the ammonia flares will not result in a change of the transport movements therefore this condition is not applicable."</i> Viewed email from Antony Taylor from Orica to Deana Burn from DoPE dated 13 September 2015 which shows submission of pre-commissioning documentation within 2 months prior to commencement of commission of flares.</p>	
	<p>(b) Emergency Plan – The Proponent's Emergency Plan and detailed procedures shall be updated to include the Project as modified and must be maintained for the life of the Project. The plan shall include detailed procedures for the safety of all people including consideration of the safety of all people outside of the facility who may be at risk from the Project. The Plan shall be consistent with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 1, 'Industry Emergency Planning Guidelines'.</p>	<p>Antony Taylor: <i>"Emergency plan is updated annually in line with our WorkCover safety plan. The WSP is reviewed by SafeWork every 5 years, the last review was 18/12/15. Changes to ERP due to AMI were incorporated into the plan that was done in pre-start-up report on 7/8/15. We do four emergency exercises a year."</i></p>	<p>Viewed letter from Deana Burn from DoPE to Antony Taylor from Orica dated 2 September 2015 which states <i>"It is noted that Orica has updated the Emergency Response Plan to account for the operation of the flares. The Department considers this information as sufficient to satisfy the requirements of Condition 15(b)."</i> Viewed "Safety Management System August 2015" which states <i>"The ERP details for the notification of emergency services, agencies, adjacent neighbours and other stakeholders in the event of an emergency," however does not include detailed procedures for the requirements stated in this condition.</i></p>	
	<p>(c) Safety Management System – The Proponent's Safety Management System shall be updated to include the Project as modified and must be maintained for the life of the Project. The document shall clearly specify all safety related procedures,</p>	<p>Antony Taylor: <i>"Updated for AMI in August 2015." "All were updated for AMI."</i></p>	<p>Viewed letter from Deana Burn from DoPE to Antony Taylor from Orica dated 2 September 2015 which states <i>"The Department advises that Orica has adequately satisfied Condition 15(c) as it relates to the ammonia flares and the report is approved."</i> Viewed "Safety Management System August</p>	

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
	<p>responsibilities and policies, along with details of mechanisms for ensuring adherence to the procedures. The procedures shall ensure that the testing frequencies of all safety critical equipment and systems are consistent with the frequencies applied in the fault tree analyses undertaken in the Preliminary Hazard Analysis/Final Hazard Analysis. Records shall be kept on-site and shall be available for inspection by the Secretary upon request. The Safety Management System shall be developed in accordance with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 9, 'Safety Management'.</p> <p><i>Note: If a medication does not require an update of the studies listed in Conditions a) and above, the Proponent shall provide written justification to the satisfaction of the Secretary</i></p>		<p>2015" which has been updated to include procedures for AMI</p>	
Pre-Start-up				
16	<p>One month prior to the commencement of operation of each Project stage, the Proponent shall submit to the Secretary, a Pre-Start-up Compliance Report detailing compliance with conditions 14 and 15, including:</p> <p>(a) dates of study/plan/system submission, approval, commencement of construction and commissioning;</p> <p>(b) actions taken or proposed, to implement recommendations</p>	<p>Antony Taylor: <i>"Since last audit only the AMI project triggered the requirements of this condition, as the boiler has yet to be commissioned."</i></p>	<p>Viewed letter from Deana Burn from DoPE to Antony Taylor dated 2 September 2015 which states <i>"The Report fulfils the requirements of Condition 16 and it is accepted."</i></p> <p>Viewed <i>"Pre-Start-up Compliance Report Phase 4: Ammonia Flare Installation August 2015"</i> which outlines submission and approval dates, actions taken to implement recommendations from DoPE, and responses to requirements from the Secretary.</p>	<p>Compliant The requirements of this condition are being met</p>

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
	made in the studies/plans/systems; and (c) responses to any requirement as imposed by the Secretary under condition 20A.			
Post-Start-up				
17	Three months after the commencement of operation of each Project stage, the Proponent shall submit to the Secretary, a Post-Start-up Compliance Report verifying that: (a) transport routes specified under condition 15a) are being followed; (b) the Emergency Plan required under condition 15b) is effectively in place and that at least one emergency exercise has been conducted; and (c) the Safety Management System required under condition 15c) has been fully implemented and that records required by the system are being kept.	Antony Taylor: <i>"Pre-and post-start-up documents were done together for AMI and this was approved together by DoPE."</i> Antony Taylor: <i>"The secretary approval is not required for this condition. A post startup report, specific to the operation of the flares, has not been submitted to the Secretary. "</i> <i>"The operation of the Ammonia Plant flare occurred on 20 April 2017 and only minor modifications to the site's existing (and operational) SMS and emergency plan were required to include the flares. The site undertakes a minimum of 4 emergency exercises a year. Exercising held in the last year included 3/4/2016, 20/5/2016, 21/5/2016, 9/8/2016, 23/2/2017."</i>		Non-compliant A post-start up report for operation of the flares was not submitted to the Secretary. Recommendation: Ensure the submission requirements relating to new stages in the Project are fully complied with
Risk Reduction Program				

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
18	<p>Within 12 months of the commencement of Final operations of the Project the Proponent shall prepare a program for further risk reduction to the neighbouring land uses. The program shall:</p> <p>(a) be approved by the Director General;</p> <p>(b) identify the overpressure propagation risk from the Project as per Figure 10.5 of the EA;</p> <p>(c) Identify the main risk contributors and analyse the appropriate measures to be implemented to reduce the risk; and</p> <p>(d) include an implementation schedule with due dates and a person responsible for the implementation of each measure.</p> <p><i>Note: In the case that the propagation risk from the Project is reduced earlier than anticipated in the EA, and it meets the NSW criteria, this condition will be satisfied and the risk reduction program will not be required.</i></p>	<p>Antony Taylor: <i>"Final operations have not commenced."</i></p>		<p>Not triggered This condition has not been triggered.</p>
Hazard Analysis Update				
19	<p>Three years after the commencement of Final operations of the Project, or as otherwise agreed to by the Secretary, the Proponent shall undertake a Hazard Analysis of the Existing Operations and the Project to update the hazard analysis contained in the Preliminary Hazard Analysis and the Final Hazard Analysis.</p>	<p>Antony Taylor: <i>"Final operations have not commenced."</i></p>		<p>Not triggered This condition has not been triggered.</p>
Hazard Audit				

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
20	Twelve months after the commencement of operations of Phase 1 of the Project and every three years thereafter, or at such intervals as the Secretary may agree, the Proponent shall carry out a comprehensive Hazard Audit of the Existing Operations and the Project as modified and within one month of each audit submit a report to the Secretary.	Antony Taylor: The final hazard audit report was issued on the 11 November 2016 and submitted to the DoPE on the 14 November 2016." <i>"We have just completed a new Hazard Audit in 2016. This was undertaken by SHERPA Consulting and completed on 11 Nov 2016. We were required to respond to feedback from Lilia Doncova at DoPE and did so."</i>	Viewed "Hazard Audit 2016" issued by Sherpa Consulting on 11 November 2016 Viewed email from Antony Taylor from Orica to Deana Burns of DoPE dated 14 November 2016 which shows submission of "Hazard Audit 2016" Viewed email From Lilia Doncova from DoPE to Antony Taylor from Orica dated 24 July 2017 which states acceptance of the updated Hazard Audit which incorporated necessary amendments.	Compliant The requirements of this condition are being met.
	(a) The audits shall be carried out at the Proponent's expense by a qualified person or team, independent of the Project, approved by the Secretary prior to commencement of each audit. Hazard Audits shall be consistent with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 5, 'Hazard Audit Guidelines'.		Viewed letter From Chris Ritchie from DoPE to Antony Taylor from Orica dated 16 June 2016 which states approval of the nominated auditor for the Hazard Audit.	
	(b) The audit report must be accompanied by a program for the implementation of all recommendations made in the audit report as well as any outstanding recommendations from previous hazard audit reports (if applicable). If the Proponent intends to defer the implementation of a recommendation, reasons must be documented.		Viewed "Hazard Audit 2016 Section 7." dated 23 May 2017 which outlines all actions and recommendations made in the audit report including outstanding recommendations from previous audits.	

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
	<p>c) first site hazard audit report and all subsequent reports shall cover the entire facility and include all Project stages that are in operation at the time of the hazard audit and shall (in addition to the general requirements detailed in Department of Planning's Hazardous Industry Planning Advisory Paper No. 5, 'Hazard Audit Guidelines'):</p> <ul style="list-style-type: none"> · evaluate all relevant findings and recommendations from the official investigation report(s), as available, relating to the accident at West, Texas in April 2013. If necessary, the hazard audit report shall make appropriate recommendations to address any shortfalls; and · report on the findings of the audit in relation to compliance with the current version of AS 4326 and the relevant provisions of the current version of the SAFEX International Good Practice Guide: Storage of Solid Technical Grade Ammonium Nitrate. 		<p>Viewed "Hazard Audit 2016" by Sherpa Consulting dated 11 Nov 16 which states "The audit was undertaken in accordance with a protocol developed from the NSW Hazardous Industry Planning Advisory Paper 9" and "The audit focused on changes in operations at KI since the 2013 Hazard Audit and included specific review of:</p> <ul style="list-style-type: none"> - The site plant modifications in association with the AMI project. - Degree of implementation of recommendations from the CSB Texas West investigation report. - Compliance of AN storage arrangements with relevant sections of AS4326 (2008) Storage and Handling of Oxidising Agents. - Assessment against the recommended practices in the industry guidance SAFEX Good Practice Guide: Storage of Solid Technical Grade AN 	
Further Requirements				
20A	<p>The Proponent shall comply with all reasonable requirements of the Secretary in respect of the implementation of any measures arising from the hazard studies submitted in respect of conditions 14 to 20 inclusive, within such time as the Secretary may agree.</p>	<p>Antony Taylor: <i>"The Secretary requested revisions to the Hazard Report completed in November 2016. The report was revised to comply with these requirements."</i></p>	<p>Viewed email From Lilia Doncova from DoPE to Antony Taylor from Orica dated 24 July 2017 which states acceptance of the updated Hazard Audit which incorporated necessary amendments.</p>	<p>Compliant The requirements of this condition are being met</p>

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
20B	The Proponent shall ensure that the risk associated with increased shipping operations is reduced to so far as is reasonably practicable (SFARP), consistent with the <i>Work Health and Safety Regulation 2011</i> requirements and compliant with the land use criteria detailed in the NSW Department of Planning's <i>Hazardous Industry Planning and Advisory Paper 4</i> (HIPAP4) during each stage of the Project. Records of the risk reduction identification and implementation process shall be maintained.	Antony Taylor: <i>"For MOD 3 the only thing raised was compliance with SAFEX requirements. As part of the modification we submitted a technical note, completed by GHD, on 6 March 2015 showing that there was no increase (actually a decrease) in the risk profile as a result of shipping additional ammonia shipments to Yarwun."</i>		Compliant The requirements of this condition are being met

Table 8 – Air Quality

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
Air Quality				
Design				
21	<p>The Proponent shall implement the emission control measures identified in the EA (Section 7.8.1) prior to the commencement of operations of the Project. These shall include:</p> <p>(a) absorption columns in the new Nitric Acid Plant No.4 (NAP4) to reduce the NOx;</p> <p>(b) catalytic reduction from the NAP4 stack to reduce the NOx;</p> <p>(c) air scrubbing and recirculation technology in the new Prill Tower as part of the new Ammonium Nitrate Plant No. 3 (ANP3) to minimise particulates, including PM10</p> <p>(d) a refrigeration purge gas scrubber to be installed in the existing Ammonia Plant to reduce NOx</p> <p>(e) scrubbers on the new NAP4 and APN3 to remove ammonia</p>	<p>Antony Taylor: "This has not been triggered aside from the scrubber which is operational in the ammonia plant. Performance is monitored with stack emission monitoring which is detailed in the AEMR."</p>	<p>Viewed "Annual Environmental Management Report 2016" which shows annual NOx readings. The report showed annual emissions taken as per the requirements of the EPL, and showed exceedances in 2012 and 2015.</p> <p>Viewed document available on website (http://www.orica.com/Sustainability/Environmental-Monitoring-Data/Kooragang-Island/Air-Monitoring#data) "Orica Kooragang Island Monitoring Points 3-4, 16-21 and 29" that included annual emissions testing for Point 20 (Ammonia Plant Reformer Stack) and Point 29 (Ammonia Plant Pre Reformer Stack).</p> <p>The refrigeration purge gas scrubber was installed in the existing Ammonia Plant to reduce NOx in 2011. NAP4 and AN3 yet to be constructed</p>	<p>Compliant</p> <p>Only part (d) of this condition has been triggered and Orica are complying with the requirements of this condition.</p> <p>NAP4 not built NAP4 not built ANP3 not built NAP4 and ANP3 not built</p>
Ammonia and Nitrate Flares				
21A	<p>The Proponent shall ensure that the ammonia and nitrate flares are operated in a proper and efficient manner in accordance with the requirements of the EPL for the premises.</p>	<p>Antony Taylor: "The EPL requires flares to be operational 24/7 when ammonia is present and we report on EPL compliance in our annual return. The flare is designed so that there is enough redundancy to ensure full operational availability."</p> <p>The auditor physically viewed all flares during the site visit.</p>	<p>Viewed folder showing procedures in place for KIW-3685, 3683, 3682, 3688 which include instructions for abnormal, normal, shut-down work and start-up work operations.</p> <p>Viewed Hazard Audit 2016 prepared by Sherpa Consulting which stated that "Equipment was in excellent condition" in relation to flares.</p>	<p>Compliant</p> <p>The requirements of this condition are being met.</p>

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
Monitoring				
22	The Proponent shall undertake air emission monitoring as required by the EPL for the Project.	<p>Antony Taylor:</p> <p>"The ammonia flares are designed to treat non-routine ammonia releases therefore activation is not planned. To measure emissions from the flares we determine the volumetric flow which describes the emissions at points 34-36. We prepare and submit a flare activation summary every three months"</p>	<p>Viewed "Annual Environmental Management Report 2016" which shows annual NOx readings. The report showed emissions monitoring performed as per the requirements of the EPL, and showed exceedances in 2012 and 2015. The AEMR reports continuous monitoring data for Points 3,4 and 22 as required by the EPL, however it does not report data for Points 34-36 which are required under the EPL.</p> <p>Viewed documents available on website (http://www.orica.com/Sustainability/Environmental-Monitoring-Data/Kooragang-Island/Air-Monitoring#data) "Orica Kooragang Island Monitoring Points 3-4, 16-21 and 29" that included annual stack emissions for Point 20 (Ammonia Plan Reformer Stack) and Point 29 (Ammonia Plant Pre-Reformer Stack).</p> <p>Viewed letter from Stewart McLachlan from DoPE to Antony Taylor from Orica which states "<i>The Department has reviewed the AEMR and considers it to be generally in accordance with the approval.</i>"</p> <p>Viewed 2016 Annual Return which reported that flowrate was continuous for monitoring Points 3,4 and 22.</p> <p>Viewed "Nitrates monthly flare data" which shows continuous monitoring of ammonium nitrate flares.</p>	<p>Compliant The requirements of this condition are being met.</p> <p>Recommendation: Noting the infrequent use of the flares (one reported activation between April and June 2017) it is recommended that Secretary confirmation be sought that an update to the Air Quality Management Plan is not required and that volumetric flow determination remains a suitable method for describing the emissions at points 24-36.</p>
Air Quality Verification Study				

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
23	<p>The Proponent shall undertake an air quality verification study each relevant stage of the Project to the satisfaction of the Secretary and the EPA. The study shall:</p> <p>(a) be prepared by a suitably qualified expert whose appointment has been agreed to in writing by the Secretary;</p> <p>b) be based on a minimum of 12 months of monitoring data and be completed during the initial 18 months of operation or as otherwise agreed to in writing by the Secretary;</p> <p>c) include a verification of actual monitored emissions performance against the assumptions adopted within the EIS, including:</p> <ul style="list-style-type: none"> · point source pollutant concentrations; · point source pollutant mass emission rates; and <p>d) confirm, through direct measurement, that applicable EPL air emission limits are being complied with; and</p> <ul style="list-style-type: none"> · point source emission parameters as relevant to plume dispersion. <p>e) confirm, using reasonable means, the effectiveness of the implemented emission controls in minimising air quality impacts.</p>	<p>Antony Taylor: <i>"There has been no relevant stage to require new air quality verification."</i></p> <p><i>"Nitrate flare and ammonia flares have just started. There is no way of directly measuring the performance of the flare as it is simply just a flame at the end of a pipe. This is likely to be relevant when the boiler is running."</i></p>		<p>Not triggered Condition not triggered since last audit</p>
24	<p>Should the air quality verification study or routine monitoring required by the EPL indicate that emissions from the Project exceed the relevant regulatory criteria, the Department may request that Orica implement all reasonable and feasible measures to minimise emissions.</p>			<p>Not triggered The condition has not been triggered.</p>
Mitigation				

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
25	The Proponent shall carry out all reasonable and feasible measures to minimise dust generated by the Project.	Antony Taylor: "Site has a CEMP that includes dust control measures. All our roads are sealed but and we sweep them regularly. We seed areas after use so there is not a lot of barren land." The auditor did not observe any issue with dust generation during the site inspection.	Viewed "Orica Kooragang Island, Construction Environmental Management Plan, section 6.3.1" which outlines on-site dust suppression measures.	Compliant The requirements of this condition are being met.
26	During construction, the Proponent shall ensure that: (a) all trucks entering or leaving the Project Site with loads have their loads covered; and (b) trucks associated with the Project do not track dirt onto the public road network.	Antony Taylor: "Site procedures require that all loads are covered." "Orica is unable to provide training records to support compliance of this requirement."	Viewed "Construction Environmental Management Plan 2016" which states "Trucks entering and leaving the premises carrying loads of dust generating materials must have their loads covered at all times, except during loading and unloading." Viewed "Construction Environmental Management Plan 2016" which states "Trucks associated with the Project do not track dirt onto the public road network."	
Further Emissions Reductions				
27	The Proponent shall investigate and report on the progress to reduce PM ₁₀ emissions from the existing Prill Tower on the Ammonium Nitrate Plant No. 1. The report shall: (a) be provided annually, and can be reported through the Annual Environmental Management Report required by condition 50; and (b) provide an update on the timeframe for implementation of emission controls.		Viewed "Annual Environmental Management Report 2016, Table 7" which outlines the Particulate Minimisation Program and progress against tasks. Viewed "Annual Environmental Management Report 2016, 2015 and 2014" which show reports on annual PM10 and PM2.5 emissions data. Viewed "Annual Environmental Management Report 2016, 2015 and 2014" which show reports on annual PM10 and PM2.5 emissions data.	Compliant The requirements of this condition are being met.
Air Quality Management Plan				

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
27A	<p>The Proponent shall prepare and implement an Air Quality Management Plan for the Project to the satisfaction of the Secretary. The plan shall:</p> <p>a) be prepared by a suitably qualified and experienced expert whose appointment has been agreed to in writing by the Secretary;</p> <p>b) be approved by the Secretary (see Conditions 49A and 49B for scope and timing and Condition 49C for management plan requirements);</p> <p>c) describe the measures that will be implemented to minimise the potential risks to adverse air quality in the regional air-shed including:</p> <ul style="list-style-type: none"> · reasonable and feasible measures being employed on the Project site; · plant and equipment being maintained to ensure that it is in good order; · how the air quality impacts of the Project will be minimised and managed; and · identification of the likely nature and timing of Project-related activities and works that could generate potential elevated air emissions and a description of the mitigation measures that will be implemented to ensure compliance with the relevant conditions of this approval and the EPL. 	<p>Antony Taylor: <i>"This has not been updated from what was completed at last audit but all that has come on line is the flares."</i></p> <p><i>"An AQMP was developed following the uprate of the ammonia plant and submitted to the DoP on 28 February 2013. An update to the AQMP has not been completed for the operation of the flares."</i></p> <p><i>"We would argue the regional air shed has not been affected. This will be applicable with construction of NAP4 and AN3 which will be the major sources of emissions."</i></p>		<p>Compliant The requirements of this condition are being met.</p> <p>Recommendation: Noting the infrequent use of the flares (one reported activation between April and June 2017) it is recommended that Secretary confirmation be sought that an update to the Air Quality Management Plan is not required and that volumetric flow determination remains a suitable method for describing the emissions at points 24-36.</p>
27B	<p>The Proponent shall consult with the operators of the proposed IPL AN facility adjacent to the Project Site, with the objective of developing an Air Quality Risk Management Strategy suitable for incorporation into the Air Quality Management Plan. The objective of this strategy is to minimise the potential for cumulative air quality impacts from any air emissions from the Project and the proposed IPL facility. This strategy is expected to include protocols for the communication and planning of planned non-routine operations such as plant start-up, shutdown</p>	<p><i>This hasn't started yet therefore is not relevant."</i></p>		<p>Not triggered The condition has not been triggered.</p>

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
	and commissioning events between the Project and the proposed IPL facility.			
27C	The Proponent shall provide evidence to the Secretary that it has made genuine and reasonable attempts to consult with the operators of the proposed IPL facility in order to develop a suitable Air Quality Risk Management Strategy for both it and the proposed IPL facility to follow. Note: Conditions 27B and 27C only apply if SSD-4986 is approved and if the proposed IPL AN facility becomes operational.			Not triggered The condition has not been triggered.

Table 9 – GHG Emissions

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
GHG Emissions				
Emission Reductions for the Project				
28	Prior to the commencement of operation of each relevant stage of the Project, the Proponent shall implement the emissions reduction technology identified in the EA including: (a) N2O abatement technology on the new Nitric Acid Plant (NAP4); and (b) energy efficiency improvements to the Ammonia Plant	Antony Taylor: <i>"This is not relevant as NAP4 hasn't been built." "We have implemented the energy efficiencies improvements which are monitored in the Daily Report. Natural gas composition and weather both complement the efficiency."</i>	b) Viewed <i>KI Daily Production Report</i> dated 5 August 2017. Energy efficiency measures installed 2011. NAP4 yet to be constructed.	Not triggered NAP4 has not yet been constructed.

Emission Reductions for the Existing Site				
29	Within 6 months of the commencement of operations of NAP4, the Proponent shall implement N ₂ O abatement technology on the three existing Nitric Acid Plant (NAP1, 2 and 3)		NAP4 yet to be constructed	Not triggered NAP4 has not yet been constructed.

Table 10 – Noise Limits

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
Noise Limits				
Noise Limits				
30	The Proponent shall ensure that noise levels from the operation of the Project are at least 10dB(a) below noise levels from the initial Operations as specified by conditions 31 &32 below	Antony Taylor: " <i>The initial noise management plan was done before the previous audit. 10dB is from the original program. We did quarterly samples for 12 months then modified with approval to annually.</i> "	Viewed "Orica Australia Environmental Noise Audit" by Atkins Acoustics dated May 2017 which states "Noise contributions from the Project satisfied the project noise criteria."	Compliant The requirements of this condition are being met. Recommendation: Once the boiler is constructed and operational, conduct noise verification assessment to ensure noise levels from operation are below 10db. Low frequency components of boilers may require special attention.
	Note: Ammonia flaring events are excluded from the noise limits and levels referred to in conditions 30 and 31.	"No onsite generating activities have commenced since the inclusion of this condition however commencement of the boiler will trigger this."	"Attended night audits confirmed that Orica related maximum (LAmax) noise levels were not observed to cause exceedances greater than 5dBA above the measured levels at any of the reference monitoring locations."	
INITIAL Operations – Noise Verification Program				
31	Prior to the commencement of construction, the Proponent shall prepare and implement an Existing Operations Noise Verification Program to the satisfaction of the Secretary. The Program shall: (a) be undertaken by a suitably qualified and experienced person; (b) identify future reference points that will be used to demonstrate compliance; (c) collect new or review existing data, and report on the seasonal background levels for the noise catchment; and; (d) confirm the noise levels from Initial Operations. <i>Note: Some construction activities may occur under the Project Approval provided that such activity are not undertaken during the monitoring period of that the proponent can demonstrate that the activity would not contribute to the background noise level, to the satisfaction of the Secretary.</i>			Not triggered Ammonia flaring events are excluded from the noise limits and levels referred to in conditions 30 and 31.
Noise AND VIBRATION Management Plan				

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
32	<p>The Proponent shall prepare and implement a Noise and Vibration Management Plan for the Project to the satisfaction of the Secretary. The Plan shall:</p> <p>(a) be undertaken by a suitably qualified and experienced expert whose appointment has been agreed to in writing by the Secretary</p> <p>(b) be approved by the Secretary (see Conditions 49A and 49B for scope and timing and Condition 49C for management plan requirements);</p> <p>(c) demonstrate how noise levels from the Project would be managed to ensure noise levels would be 10dB(A) below noise levels from the Proponents Initial Operations (see conditions 30 & 31);</p> <p>(d) include a detailed monitoring program for reporting on ongoing compliance. The monitoring program shall:</p> <ul style="list-style-type: none"> · Outline the proposed receiver sites at Stockton and sites on Kooragang Island that would be monitored; · Include both attended and unattended noise monitoring; · Verify that actual noise levels from the Project are consistent with the predictions made in the EA; and · Verify that noise levels from the Project are 10dB(A) below the noise levels identified in condition 31 for the Proponents Initial Operations; <p>(e) provide details of any complaints received in the preceding year relating to noise generated by the Project, and action taken to respond to those complaints;</p> <p>(h) be updated annually, unless otherwise agreed to by the Secretary; and</p> <p>(f) detail procedures for implementing additional reasonable and feasible noise mitigation measures for the Project in response to exceedances of limits and/or noise complaints;</p> <p>h) describe the measures that will be implemented to prevent and minimise potential adverse noise and vibration impacts from the Project, including:</p> <ul style="list-style-type: none"> · reasonable and feasible measures being employed on the Project site; · plant and equipment being maintained to ensure that it is in good order; · how potential noise and vibration impacts will be minimised and managed; and · identification of the likely nature and timing of Project-related activities and works that could generate potential elevated noise emissions and a description of the mitigation measures that will be 	<p>Antony Taylor: <i>"A Noise and Vibration Management Plan was submitted and approved in 2011 with new additions put in during MOD2."</i></p> <p><i>"Since then no noise generating activities have been updated and the plan is to update the Plan once the boiler is operational."</i></p> <p><i>"Complaints are logged in Enablon and reviewed annually in the noise monitoring report. A summary of complaints is also detailed in the site's AEMR."</i></p>	<p>Viewed <i>"Annual Environmental Management Report section 5.2"</i> which provides all community complaints however doesn't include actions taken to respond to those complains.</p> <p>Other ongoing implementation requirements reviewed included:</p> <ul style="list-style-type: none"> - Ongoing monitoring - Community complaints are appropriately managed - Plant is being operated appropriately (efficiently) (refer c12 in this report) 	<p>Not triggered No requirement for changes to the Plan since the last audit.</p> <p>Recommendation: The plan should include LAeq and LAmax noise management for the site following the addition of the boiler.</p>

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
	implemented to ensure compliance with the relevant conditions of this approval and the EPL.			

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
Ports Precinct Noise Management				
32A	The Proponent shall use its best endeavours to participate in the development and implementation of a precinct wide noise map for the Port of Newcastle should one be developed to the satisfaction of the Secretary.			Not triggered The precinct wide noise map has not yet been developed.
	Note: The aim of a noise map is to establish an efficient, equitable and cumulative noise management, monitoring and reporting framework across the precinct.			
Hours of construction and operation				
33	<p>The Proponent shall comply with the restrictions in Table 2, unless otherwise agreed by the Secretary.</p> <p>Table 2: Construction hours for the Project and Operation hours for the Project</p> <p>Activity Construction Operation</p> <p>· Notes: Construction activities may be conducted outside the hours in Table 2 provided that the activities are not audible at any residence beyond the boundary of the Project Site.</p>	<p>Antony Taylor: "Construction work completed onsite is undertaken in compliance with the site Construction Environmental Management Plan. The plan clearly identifies the permitting working hours detailed in the development consent (page 40). The construction plan which formed part of the contract between Orica and the construction contractor for AMI details the requirements." "The condition does not exclude construction activities that are not audible at the nearest residence from occurring. During the construction period, no noise complaints were received."</p>	<p>Viewed "Construction Environmental Management Plan 2016" which outlines controls and responsibilities for adhering to construction times however no previous records are included.</p> <p>Viewed "Ammonia Management Improvement Project Construction Management Plan" by ThyssenKrupp Industrial Solutions dated 11 November 15 which refers to Orica's CEMP.</p>	Compliant The requirements of this condition are being met.

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
33A	<p>Construction works outside of the work hours identified in Table 2 above may be undertaken in the following circumstances:</p> <p>a) works (excluding piling) that generates airborne noise that is inaudible at any residence beyond the boundary of the Project site or is no more than 5 dB(A) above rating background level at any residence in accordance with the Interim Construction Noise Guideline (DEC, 2009);</p> <p>b) works that are consistent with the Proponent's existing maintenance procedures and are in accordance with the existing EPL;</p> <p>c) for the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons;</p> <p>d) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm; or</p> <p>e) exceptional circumstances with the written agreement of the Secretary.</p>	<p>Antony Taylor: <i>"The condition does not exclude construction activities that are not audible at the nearest residence from occurring. During the construction period, no noise complaints were received."</i></p>		<p>Not triggered The requirements of the condition were not triggered.</p>

Table 11 – Transport

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
Transport				
Design of Site Access, Internal Roads and Parking				
34	The Proponent shall ensure that new site access points, internal roads and parking associated with the Project are designed, constructed and maintained in accordance with the latest versions of the Australia Standard AS 2890.1:2004 and AS 2890.2:2002.	Antony Taylor: <i>"No new site access points have been added within the last three years."</i>		Not triggered This condition has not been triggered, new entrances yet to be constructed.
Vehicle Queuing and Parking				
35	The Proponent shall ensure that all vehicles associated with the Project do not impede traffic flow on Greenleaf Road and Heron Road.	Antony Taylor: <i>"We haven't received any complaints regarding the use of the road."</i> <i>"The Construction Traffic Management Plan from 2010 is still relevant."</i> <i>"Additional off-road parking is made available during major maintenance periods to reduce peak demand. This has been obtained from Port of Newcastle in the past".</i>		Compliant The requirements of this condition are being met. Recommendation: Whilst there have been no complaints regarding traffic management, it is recommended that weekly inspections are undertaken during construction and recorded and that occasional review of this requirement is included.
Construction Traffic Management				
	Prior to the construction of the Project, the Proponent shall prepare and implement a Construction Traffic Management Plan, consistent with the requirements of the RM. The plan shall be prepared in consultation with NPC and submitted to the Secretary as part of the environmental management strategy for the Project, as required by condition 49.	Antony Taylor: <i>"This report was submitted in 2011 and hasn't changed."</i>		Not triggered This condition has not been triggered.

Table 12 – Water Efficiency

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
Water Efficiency				No change since last audit
Water Efficiency				
37	<p>The Proponent shall prepare and implement a Water Efficiency Plan for the Project to the satisfaction of the Secretary. The plan must:</p> <p>(a) be submitted to the Secretary within 12 months of this approval or as otherwise agreed to by the Secretary;</p> <p>(b) be prepared with reference to the Guidelines for Water Savings Action Plans (DEUS 2005); and</p> <p>(c) include a report on the progress of investigations to receive recycled water from Hunter Water Corporations' recycled water scheme.</p>	<p>Antony Taylor: "There haven't been any updates to the Water Efficiency Plan because the flares don't use any water."</p>	<p>The requirement for a water efficiency study corresponding to each stage is detailed in the Projects staging plan. The plan identifies that a water efficiency plan is required for Phase 1 and Phase 3 of the project. Both plans have been submitted to DPE.</p> <p>Phase 1 – 14 June 2011 Phase 3 – 16 July 2013</p> <p>No additional plans were submitted during the audit timeframe.</p> <p>Assessed as compliant in 2014 audit and measures required in the Plan were implemented at that time. Additional implementation requirements were not audited in this audit.</p> <p>Water efficiency Plan (developed by Warley Parsons) submitted to DPE in April 2011 references the Guidelines for Water Savings Action Plans (DEUS 2005)</p>	<p>Compliant</p> <p>Recommendation: The Water Efficiency Plan should be updated after the boiler is operational.</p>

Table 13 – Contamination

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
Contamination				
Contamination				
38	Prior to construction of the Project, the Proponent shall provide to the Secretary a detailed Project Site Plan showing the location of known soil and groundwater contamination areas. If the plan identifies that construction of the Project is likely to impact on known contamination areas, the Proponent shall prepare and implement a Remedial Action Plan (RAP), or update the existing RAP, to manage and remediate contaminated material in accordance with the requirements of the Contaminated Land Management Act 1997 and the recommendations of the RAP.	Antony Taylor: <i>"Acid Sulphate Soil testing is conducted when soil is being removed from site." "We test all soil before it goes off site regardless of quantity. If large enough quantities, we will test for Acid Sulphate Soils. We have not found any reactive soils."</i>		Not triggered This condition has not been triggered.
39	Prior to construction of the Project, the Proponent shall prepare an Acid Sulphate Soil Management Plan in accordance with the Acid Sulphate Soils Manual, Acid Sulphate Soils Management Advisory Committee 1998.	Antony Taylor: <i>" Acid Sulphate Soil testing is conducted when soil is being removed from site."</i>	The soil management plan submitted in January 2010 includes an Acid Sulphate Soil Management Plan which references the Acid Sulphate Soils Manual, Acid Sulphate Soils Management Advisory Committee 1998	Not triggered This condition has not been triggered.

Table 14 – Stormwater

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
Stormwater				
Discharges				

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
40	The Proponent shall ensure the Project meets the EPL requirements for stormwater and effluent discharges to the Hunter River	Antony Taylor: <i>"We are still using existing discharge points at the time of the last audit. Stormwater and effluent are monitored in accordance with EPL."</i>	Viewed "Annual Environmental Management Report 2016" which states <i>"The site's effluent and stormwater was monitored in accordance with the requirements in the EPL."</i> Viewed letter from Stewart McLachlan from DoPE to Antony Taylor from Orica dated 20 January 2017 which states, <i>"The Department has reviewed the AEMR and considers it generally in accordance with the Approval."</i> Viewed document available on website (http://www.orica.com/Sustainability/Environmental-Monitoring-Data/Kooragang-Island/Stormwater-Monitoring#data) <i>"Orica Kooragang Island Stormwater Monitoring Points 10-15" that showed Points 10-15 were measured in accordance with EPL.</i> Viewed document available on website (http://www.orica.com/Sustainability/Environmental-Monitoring-Data/Kooragang-Island/Water-Monitoring#.WY00xFEjGUK) <i>"Orica Kooragang Island Water Monitoring Points 23-24, 30-33" that showed Points 23, 24, 30-33 are measured in accordance with EPL</i>	Compliant The requirements of this condition are being met.

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
41	The Proponent shall comply with Section 120 of the <i>Protection of the Environment Operations Act 1997</i> .	Antony Taylor: <i>"There have been non-compliances for the site, but not attributed to the project (algae build up in the pipes for example). All reported to EPA in annual return and penalty notices but not attributed to project."</i> <i>"An aspects and impacts register considers all potential risk from activities that may harm the environment."</i>		Compliant The requirements of this condition are being met.
Stormwater Management Plan				
42	Prior to the commencement of construction of the Project the Proponent shall prepare and implement a Stormwater Management Plan for the Project in consultation with the NPC and to the satisfaction of the Secretary. The plan must: (a) include detailed plans of the stormwater management system for the Project, incorporating the requirements for a retention system as specified in the Fire Safety Study; (b) include an engineering assessment of the capacity of the Walsh Point stormwater system to accept additional flows; (c) describe the procedures for the installation, inspection and maintenance of the stormwater system for the Project; and (d) ensure that water sensitive design options avoid infiltration in areas of known soil and groundwater contamination	Antony Taylor: <i>" There have been no updates to the plan since last audit. We haven't changed the flow of water on site."</i>	Plan assessed as adequate in 2014 audit. Implementation of the Plan was assessed as compliant in 2014. Ongoing implementation requirements in the plan are limited to maintenance of systems audited as compliant under condition related to operating site in efficient matter. The stormwater management plan primarily relates to stormwater improvements required for Phase 2 and Phase 3 of the Project, which is yet to be constructed and therefore considered outside the scope of this audit. The retention system (first flush 7) is yet to be installed as it is required for the new bulk and bag stores (not yet constructed). The only aspect of the Project that would require the implementation of the stormwater management plan is Phase 1 of the Project being the ammonia Plant uprate. No alterations to the site's existing stormwater system was required for this stage. The build-up of algae is related to the effluent discharge pipeline not stormwater and is not attributed to the project. Condition 42 (c) – the site inspects stormwater pits and removes sediment from stormwater sampling pits on a 1-month	Not triggered There have been no changes to site requiring revision of the plan referenced in this condition.

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
			frequency. (Considered outside the audit scope). Condition 42(d) – no alterations to the site's existing stormwater management system have been required by the Project to date, therefore this requirement is not yet active.	
Bunding				
43	The Proponent shall ensure that all chemicals, fuels and oils associated with the Project are stored in appropriately banded areas, with impervious flooring and sufficient capacity to contain 100% of the largest container stored within the bund. The bund(s) shall be designed and installed in accordance with: (a) the requirements of all relevant Australian Standards; and (b) the DECC's Storing and Handling Liquids: Environmental Protection, Participants Manual.	Antony Taylor: <i>"There is no new bunding associated with the project on site since the last audit. We have a plan in place to upgrade everything that is banded as per condition in EPL."</i> The auditor viewed chemicals, fuels and oils in banded storage during the site component of the audit.		Compliant The requirements of this condition are being met.
Erosion and Sediment Control				
44	Prior to construction of the Project, the Proponent shall prepare an Erosion and Sediment Control Plan in accordance with Landcom's 2004 <i>Managing Urban Stormwater: Soils and Construction</i> .	Antony Taylor: <i>"We haven't had a project trigger a requirement for an ESCP. In the updated CEMP, there are requirements around sandbagging drains etc."</i> <i>"Normally if there is a large construction site there would be a plan however the projects have had such a small footprint that we just refer to the CEMP."</i>	Viewed <i>"Orica Kooragang Island, Construction Environmental Management Plan 2016"</i> which outlines control measures designed to minimise the impact associated with construction activities on the quality of stormwater discharged from the site in section 7.3.2; and 7.3.3 which outlines control measures for increased levels of soil erosion and consequent sediment pollution of waterways. GHD prepared an Erosion and Sediment Control Plan in 2010 which referenced Landcom's 2004 <i>Managing Urban Stormwater: Soils and Construction</i> guidelines	Compliant The requirements of this condition are being met.

Table 15 – Visual

Condition		Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
Visual					
Visual					
45	Prior to commencement of operations of the Project, the Proponent shall submit to the Secretary a landscape plan providing details of native screening plants to be planted along the eastern boundary of the Project Site. The plan shall demonstrate that the landscaping does not compromise on-site security and shall include a program for implementation.	Antony Taylor: <i>"This has not been implemented."</i>			Non-compliant The Landscape Plan has not been implemented. Recommendation: Gain approval for a staged implementation of landscaping required under the approval, potentially tied to the broader staging plan submitted annually.
Lighting					
46	The Proponent shall ensure that lighting associated with the Project: (a) complies with the latest version of Australian Standard AS 4282(INT)-Control of Obtrusive Effects of Outdoor Lighting; and (b) is mounted, screened and directed in such a manner that it does not create a nuisance to surrounding properties or the public road network.	Antony Taylor: <i>"Essentially we can't point lights to Stockton with no complaints about lighting. No new lights have been installed since the last audit. We do have temporary lighting occasionally from construction purposes but haven't received complaints."</i>			Not triggered No new lights have been installed in the audit period.

Table 16 – Waste

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
Waste				
Operating Conditions				
47	The Proponent shall ensure that all waste generated by the Project during construction and operation is classified in accordance with the DECC's <i>Waste Classification Guidelines 2008</i> and if required, disposed of to a facility that may lawfully accept the waste.	Antony Taylor: <i>"We have a waste contract with JR Richards, they come and collected waste and recyclables."</i> <i>"The increase in waste generation in March was due to an extra 600 people on site for the shutdown."</i>	Viewed waste records for March 2017 from <i>JR Richards</i> which shows quantities of waste collected and licensed disposal sites. Viewed "NSW Environment Protection Authority - Online Waste Tracking System" certificates showing collection of "J120 - Waste oil/hydrocarbons mixture/emulsions in water" by JR Richards and disposed of at Renewable Oil Services PTY LTD disposal site. Viewed online license of Renewable Oil Services PTY LTD online (http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=33265&SYSUID=1&LICID=13092) which shows facility's license.	Compliant Waste materials were found to be generally managed in accordance with the requirements of this condition.
Waste Management Plan				
48	The Proponent shall prepare and implement a Waste Management Plan for the project to the satisfaction of the Secretary. This plan must: (a) be submitted to the Secretary for approval within 1 year of the commencement of operations of the Project; (b) characterise the various waste streams of the Project and include details of the quantities and destinations of all waste materials; (c) describe what measures would be implemented to reuse, recycle or minimise the waste generated by the project; and (d) identify a waste reduction target for the Project and detail procedures for measuring the Projects performance against the target; (e) include a program to monitor the effectiveness of these measures.	Antony Taylor: <i>"The Ammonia Plan details the measures in place"</i> <i>"The period of construction during this audit was only a couple of weeks".</i>	Viewed " <i>Construction Environmental Management Plan</i> " dated 8 November 2016 which included a range of waste management measures. Documentation verifying completion of weekly inspections remains outstanding. Viewed the " <i>Ammonia Management Improvement Project Construction Management Plan</i> " by ThyssenKrupp Industrial Solutions. The plan refers to Orica's CEMP.	Non-compliant Weekly environmental inspection required during construction were not undertaken. Recommendation: Commence implementation of a weekly environmental inspections program during construction activities.

Table 17 – Site Security

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
Site Security				
Site Security				
48A	The Proponent shall ensure that: a) the site is secured by a perimeter fence and security gates; and b) the perimeter fence and security gates are under surveillance at all times.			Compliant Site is fully secured by perimeter fence and security gates. Site is under 24h surveillance with motion detecting cameras.

Table 18 – Aviation Safety

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
Aviation Safety				
Site Security				
48B	The Proponent must obtain all necessary approvals from the Air Base Command Post of RAAF Base in Williamstown and the Directorate of External Land Planning within the Defence Support Group of the Department of Defence for the erection of all structures that constitute transient/temporary or permanent obstructions in accordance with the Operation of cranes and tall structures in the vicinity of Newcastle Airport (Department of Defence, 2013).	Antony Taylor: <i>"We notified the Air Base Command Post for the cranes used when construction the boiler."</i> <i>"The flares are not high enough to require notifying the Air Base Command Post."</i>	Viewed email from Jamie Brown at RAAF Base Williamtown dated 15 July 2015 which states approval to use a 60m AGL crane on site between 1 August 2015 and 30 November 2015.	Compliant The requirements of this condition are being met.

Table 19 – Environmental Management

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
Environmental Management				
Construction Environmental Management Plan				
49A	<p>The Proponent shall prepare and implement a Construction Environmental Management Plan for the construction of the Project to the satisfaction of the Secretary. The Plan must:</p> <p>a) be prepared by a suitably qualified and experienced expert or team of experts;</p> <p>b) be submitted to the Secretary for approval no later than 4 weeks prior to the commencement of each construction stage of the Project, or within an alternative timeframe agreed to in writing by the Secretary (see Condition 49C for management plan requirements);</p> <p>c) identify the statutory licences, permits and approval/consents that apply to the Project;</p> <p>d) include a copy of all relevant management plans and monitoring programs required by this approval;</p> <p>e) incorporate all relevant management and mitigation measures outlined in Appendix C of this approval;</p> <p>f) outline all environmental management practices and procedures to be followed during construction and demolition works associated with the Project;</p> <p>g) describe all activities to be undertaken on the site during construction of the Project, including a clear indication of construction stages (see Condition 7 and 8);</p> <p>h) detail how the environmental performance of the construction of the Project will be monitored, and what actions will be taken to address identified adverse environmental impacts and issues, including (but not limited to):</p> <ul style="list-style-type: none"> · Air Quality (see Conditions 21 to 27C); · Noise and Vibration (see Conditions 30 to 33A); · Transport (see Conditions 34 to 36); · Soil and Water (see Conditions 37 to 44); · Visual (see Conditions 45 and 46); · Waste (see Conditions 47 and 48); · Site Security (see Condition 48A); and · Aviation Safety (see Condition 48B). <p>i) describe the roles and responsibilities for all relevant employees involved in construction and demolition works associated with the Project;</p> <p>j) include arrangements for community consultation at key stages of the Project;</p>	<p>Antony Taylor: <i>"The CEMP has been updated to meet all these requirements. It has been Submitted to DoPE but we haven't heard back yet. The changes were made to ensure projects that have an impact on the environment have a specific plan."</i></p>	<p>Viewed "Orica Kooragang Island, Construction Environmental Management Plan." Viewed "Orica Kooragang Island, Construction Environmental Management Plan section 3" which identifies licenses and existing approvals. Viewed "Orica Kooragang Island, Construction Environmental Management Plan section 11" which outlines relevant management plans and monitoring programs. Not sure what is required from Appendix C Viewed "Orica Kooragang Island, Construction Environmental Management Plan section 4" which outlines environmental management practices to be followed during construction. Viewed "Orica Kooragang Island, Construction Environmental Management Plan section 12" which outlines all monitoring, reporting and reviewing processes. Viewed "Orica Kooragang Island, Construction Environmental Management Plan section 4" which outlines roles and responsibilities of relevant employees. Viewed "Orica Kooragang Island, Construction Environmental Management Plan section 13" which states "A communication and consultation process will advise and liaise with the community regarding relevant projects via the Kooragang Island Community Reference Group." Viewed "Orica Kooragang Island,</p>	<p>Compliant The requirements of this condition are being met.</p> <p>Recommendation: Update the CEMP to ensure the requirements of (h) and (j) are fully met.</p>

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
	<p>k) include a complaints handling procedure during construction; and, l) include appropriate procedures to allow the regular review of the requirements of each plan to ensure that they are effective and allow for adaptive management to address contingencies that may arise over the life of the Project.</p> <p>The approval of a Construction Environmental Management Plan does not relieve the Proponent of any requirement associated with this approval. If there is an inconsistency with an approved Construction Environmental Management Plan and the conditions of this approval, the requirements of this approval prevail.</p>		<p><i>Construction Environmental Management Plan section 14" which outlines complaints and enquiries management process.</i></p> <p><i>Viewed "Orica Kooragang Island, Construction Environmental Management Plan section 14" which states "CEMPs require ongoing review and will be amended, as necessary, to allow new or changing environmental risks relating to the projects to be addressed."</i></p>	
Operational environmental Management plan				
49B	<p>The Proponent shall prepare and implement an Operational Environmental Management Plan for the Project to the satisfaction of the Secretary. This Plan must:</p> <p>a) be submitted to and approved by the Secretary prior to the commencement of operation of each stage of the Project (see Condition 49C for management plan requirements);</p> <p>b) provide the strategic framework for environmental management of the Project;</p> <p>c) identify the statutory licences, permits and approval/consents that apply to the Project;</p> <p>d) include a copy of all relevant management plans and monitoring programs under this Project;</p> <p>e) consolidate all relevant management and mitigation measures for the Initial Operations that will continue to be implemented the Project site together with those outlined in Appendix C of this consent;</p> <p>f) outline all environmental management practices and procedures that will followed during the operation of the Project, including those that will continue to be implemented by the Proponent in respect of the Initial Operations (see Condition 7);</p> <p>g) include a description of all activities to be carried on the site during the operation of the Project;</p> <p>h) detail how the environmental performance of the operation of the Project will be monitored, and what actions will be taken to address identified adverse environmental impacts, including (but not limited to):</p> <ul style="list-style-type: none"> · Air Quality (see Conditions 21 to 27C); · Noise and Vibration (see Conditions 30 to 33A); · Transport (see Conditions 34 to 36); · Soil and Water (see Conditions 37 to 44); · Visual (see Conditions 45 and 46); 	<p>Antony Taylor:</p> <p><i>"This has not been triggered for the boiler, however one should be done the flares."</i></p>		<p>Non-compliant</p> <p>The Operational Environmental Management Plan was not prepared prior to operation of the flares.</p> <p>Recommendation: Prepare and implement an Operational Environmental Management Plan for the flares.</p>

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
	<ul style="list-style-type: none"> · Waste (see Conditions 47 and 48); · Site Security (see Condition 48A); and · Aviation Safety (see Condition 48B). i) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the Project; j) describe the procedures that will be implemented to: <ul style="list-style-type: none"> · keep the local community and relevant agencies informed about the operation and environmental performance of the Project, , including information on and notification during flare activation and operation; · receive, handle, respond to, and record complaints; · resolve any disputes that may arise during the course of the Project; · respond to any non-compliance; and · respond to emergencies; and k) include: <ul style="list-style-type: none"> · copies of any strategies, plans and programs approved under the conditions of this approval; and · a clear plan depicting all the monitoring required to be carried out under the conditions of this approval. 			
Management plan				
49C	<p>The Proponent shall ensure that Management Plans required under this approval are prepared in accordance with any relevant guidelines, and include:</p> <ul style="list-style-type: none"> a) detailed baseline data; b) a description of: <ul style="list-style-type: none"> · the relevant statutory requirements (including any relevant approval, licence or lease conditions); · any relevant limits or performance measures/criteria; and · the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the Project or any management measures; c) a description of the measures that will be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria; d) a program to monitor and report on the: <ul style="list-style-type: none"> · impacts and environmental performance of the Project; and · effectiveness of any management measures (see (c) above); e) a contingency plan to manage any unpredicted impacts and their consequences; f) a program to investigate and implement ways to improve the environmental performance of the Project over time; g) a protocol for managing and reporting any: <ul style="list-style-type: none"> · incidents; 	<p>Antony Taylor: “This was a new condition. As we have not been required to resubmit operation plans since the condition has been in the Development Consent, the new format requirements have not been implemented”</p>		<p>Non-compliant The Operational Environmental Management Plan was not prepared prior to operation of the flares.</p> <p>Recommendation: Prepare and implement an Operational Environmental Management Plan for the flares.</p>

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
	<ul style="list-style-type: none"> · complaints (including a complaints register); · non-compliances with statutory requirements; and · exceedance/s of the impact assessment criteria and/or performance criteria; and h) a protocol for periodic review of the plan. Notes: <ul style="list-style-type: none"> · This condition only applies to management plans that are submitted from 30 November 2014 onwards. · The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans. 			
Revision of Strategies, Plans and Programs				
49D	Within 3 months of the submission of an: <ol style="list-style-type: none"> a) Annual Environmental Management Report under Condition 50; b) Incident Report under Conditions 51A to 51B; c) any modifications to this approval, the Proponent shall review, and if necessary revise all post approval documents required under this approval to the satisfaction of the Secretary.	Antony Taylor: <i>"We submit AEMRs annually but there has been no requirement to review post approval documents. The only thing that would be relevant is the flares."</i>	Viewed letter from Stewart McLachlan from DoPE to Antony Taylor dated 20 January 2017 regarding the 2015/16 Annual Environmental Management Report (AEMR) which states <i>"The Department has reviewed the AEMR and considers it to be generally in accordance with the Approval."</i>	Compliant The requirements of this condition are being met.
	Note: This is to ensure the post approval documents are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the Project.	<i>"The only MOD received since 2014 was administrative in nature and was to match weekly production with annual production of the Ammonia Plant."</i>		

Table 20 – Environmental Reporting

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
Environmental Reporting				
Environmental Reporting				
50	<p>The Proponent shall submit an Annual Report to the Secretary and other relevant agencies. This report must:</p> <p>(a) identify the standards and performance measures for the Project;</p> <p>(b) describe the works carried out in the past 12 months and the works to be carried out in the next 12 months;</p> <p>(c) include a summary of the complaints received in the past year, and provide comparison with previous years;</p> <p>(d) report results of all monitoring required by this approval and an EPL for the Project;</p> <p>(e) provide analysis of monitoring results in the context of relevant criteria and limits, previous monitoring results and the predictions made in the EA; EA (MOD1) and EA (MOD2)</p> <p>(f) identify any trends in monitoring results over the life of the Project; and</p> <p>(g) report on compliance with the project approval, summarise non-compliances in the previous 12 months and report on actions taken to rectify non-compliances.</p>		<p>Viewed letter from Stewart McLachlan from DoPE to Antony Taylor from Orica dated 20 January 2017 regarding the 2015/16 Annual Environmental Management Report (AEMR) which states <i>"The Department has reviewed the AEMR and considers it to be generally in accordance with the Approval."</i></p> <p><i>Viewed "Annual Environmental Management Report 2016 section 3" which identifies the standards and performance measures for the Project.</i></p> <p><i>Viewed "Annual Environmental Management Report 2016 section 4" which outlines the project status (past and future).</i></p> <p><i>Viewed "Annual Environmental Management Report 2016 section 5" which provides a summary of complaints and compares against previous years. The "Annual Environmental Management Report" includes findings from years previous dating back to 2012 to compare results over the life of the Project.</i></p> <p><i>Viewed "Annual Environmental Management Report 2016 section 5" which shows analysis of air quality and noise monitoring results in the context of the EPL Limits (air) and EA (noise).</i></p> <p><i>Viewed "Annual Environmental Management Report 2016 section 8" which provides a summary of project approval compliance</i></p>	<p>Compliant</p> <p>The Annual Report is being prepared in accordance with the requirements of this condition and submitted as required.</p>
Incident				

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
51	The Proponent shall notify the Secretary and any other relevant agencies of any incident or potential incident with actual or potential significant off-site impacts on people or the biophysical environment associated with the facility immediately after the Proponent becomes aware of the incident	Antony Taylor: <i>"There have been no incidents impacting off-site people or the biophysical environment since the last audit."</i>		Compliant The requirements of this condition are being met.
51B	Within 7 days of the date of the incident, the Proponent shall provide the Secretary and any relevant agencies with a detailed report on the incident.			
Flare Activation Reporting				
	The Proponent shall provide a report to the Secretary that summarises all ammonia flare activations. The report must be provided on a three-monthly basis for the first 12 months of flare operation, commencing three months following the date of commissioning of the first flare. Following the first 12 months, the Proponent must provide the report annually to the Secretary by 31 March each year. The ammonia flare activation summary report must include, but is not limited to, the following: a) the date and time the ammonia flare activation occurred b) the duration of the ammonia flare activation c) the estimated quantity of ammonia directed to the flare during the flare activation period d) details of operational parameters that affected destruction efficiency during the flare activation; and e) actions identified to prevent further flare activations	Antony Taylor: <i>"Flare activation reports have been submitted according to the timeline in this condition."</i>	Viewed email from Sheree Woodroffe from Orica to Deana Burn from DoPE dated 4 July 2016 which summarises the flare activations for the quarter.	Compliant The requirements of this condition are being met.

Table 21 – Auditing

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
Auditing				
Independent Environmental Audit				
52	<p>Within 2 years of the commencement of Phase 1 of the Project, and every 3 years thereafter, or at such intervals as the Secretary may agree, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project and within 1 month of each audit submit a report to the Secretary. This audit must:</p> <p>(a) be conducted by a suitably qualified, experienced, and independent team of experts whose appointment has been endorsed by the Secretary;</p> <p>(b) assess the environmental performance of the project and, and its effects on the surrounding environment;</p> <p>(c) assess whether the Project is complying with the relevant standards, performance measures, and statutory requirements;</p> <p>(d) review the adequacy of any strategy/plan/program required under this approval; and, if necessary</p> <p>(e) recommend measures or actions to improve the environmental performance of the project, and/or any strategy/plan/program required under this approval.</p>		<p>Viewed letter from Pamela Morales from DoPE to Antony Taylor from Orica dated 15 June 2017 which states "<i>Having reviewed details, qualifications and experience of Mr. Panic, Mr. Cookings and Mr. Doyle, approval is granted.</i>"</p>	<p>Compliant This audit report provides the evidence required for compliance with this condition.</p>
	<p><i>Note: This audit team must include experts in the field of noise and air quality</i></p>			

Table 22 – Access to Information

Condition	Requirement	Interviews and Inspections	Documentation Viewed	Compliance Status
Access to Information				
Access to Information				
53	<p>The Proponent shall, unless otherwise agreed to in writing by the Secretary:</p> <p>(a) make the following information publicly available on its website:</p> <ul style="list-style-type: none"> · the EA, EA (MOD 1) and EA (MOD 2) and EA (MOD3); · current statutory approvals for the Project; · all approved post approval documents; · a summary of the monitoring results of the Project, which have been reported in accordance with the conditions of this approval; · copies of any annual reviews (over the last 5 years); · any independent environmental audit, and the Proponent’s response to the recommendations in any audit; and · any other matter required by the Secretary; and <p>(b) keep this information up-to-date.</p>	<p>Antony Taylor:</p> <p><i>“Many of the documents captured under this condition contain sensitive information and so have not been uploaded to the Project website”</i></p>	<p>Viewed company website which makes publicly available the following documentation:</p> <ul style="list-style-type: none"> - general license requirements - annual <i>Community SHEC Reports</i> - environmental monitoring data - chemicals stored onsite - <i>Environmental Management Plan</i> <p>The following documents are not found on the website:</p> <ul style="list-style-type: none"> - post approval documents - independent environmental audit and responses to recommendations 	<p>Administrative non-compliance Not all documents required by the condition are displayed on the website.</p> <p>Recommendation: Orica has indicated that some documentation that could be required to be made public under this condition is sensitive. Orica should seek clarification from the Secretary with respect to the minimum post-approval documents that should be displayed on the website.</p>