



Newcastle Coal

INFRASTRUCTURE GROUP



NCIG IEA 2018 – Response to Auditor Recommendations



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1.0 PURPOSE AND SCOPE

In December 2018 Newcastle Coal Infrastructure Group (NCIG) commissioned an independent environmental audit. This audit is completed to satisfy the requirements of Condition 5.2, Schedule 2 of the Project Approval (MP 06_009):

5.2 The independent environmental audit referred to in condition 5.1c) shall:

(a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General;

(b) include consultation with the relevant agencies;

(c) assess the environmental performance of the project and assess whether it is complying with the requirements in this approval, and any other relevant approvals and relevant EPL/s;

(d) review the adequacy of any approved strategy, plan or program required under the abovementioned approvals; and

(e) recommend measures or actions to improve the environmental performance of the project, and/or any strategy, plan or program required under these approvals.

NCIG engaged *KMH Environmental (pitt&sherry)* to undertake this audit and subsequent report, which has been submitted to the Department of Planning and Environment (DoPE), alongside this report. The findings of the independent environmental audit identified that NCIG maintain a high level of compliance, with the exception of the following: The audit identified one non-compliance against the Project Approval (PA 06_009), and two non-compliances against NCIG's Draft Statement of Commitments (NCIG's Environmental Assessment 2006). No non-compliances were identified against NCIG's Environmental Protection Licence (EPL 12693) and EPBC Particular Manner Decision (EPBC 2006/2987). This report provides a response to any auditor recommendations, including a timeframe for implementation.

The Response to Auditor Recommendations have been developed in general accordance with the Department of Planning and Environment *Independent Audit – Post Approval Requirements (June 2018)*.

2.0 RESPONSE TO AUDITOR RECOMMENDATIONS

Condition	Compliance Status	Audit Recommendation	NCIG Response	Timeframe	
Project Approval (MP 06_009)					
2.42	Unless otherwise agreed by the Director-General, the Proponent shall design, construct, maintain and operate surface water and stormwater management infrastructure on the Site to accommodate a 1 in 100 ARI rainfall event, and shall not permit the discharge of any water from the Site to the Hunter River unless expressly provided under the provision of an Environment Protection Licence.	Non-compliance (low risk level)	It is recommended that NCIG apply for a variation of the EPL to establish a licenced discharge point or alternatively seek a variation to the Approval to permit water discharges from site during rain events that exceed a 1 in 100 ARI event.	<p>NCIG have designed, constructed, maintained and operated surface water and stormwater management infrastructure to accommodate a 1 in 100 ARI rainfall event of 2 hour duration. However, discharge has occurred from the site on occasion, during extreme or prolonged rainfall events that exceed the design volumetric capacity.</p> <p>In regard to this condition, NCIG have had correspondence with the Environmental Protection Authority (EPA) and Department of Planning and Environment (DoPE) since 2015.</p> <p>On 13th May 2015 NCIG contacted the EPA in regard to an overflow event which occurred during an extreme weather event that impacted the Hunter Region. In this letter, NCIG requested the EPA to advise if a modification to EPL 12693 would be considered as the most appropriate means of rectifying the inconsistency between the EPL and this condition of the Project Approval. The EPA's response stated <i>"Condition A3.1 did not appear to have been contravened"</i> (Condition A3.1: <i>The works and activities must be carried out in accordance with the proposal contained in the licence application (Project Approval 06_009)</i>). Additionally, the EPA responded <i>"Condition L1.1 reiterates Section 120 of the Protection of the Environment Operations Act (1997) which prohibits water pollution. Based on the water quality monitoring results provided, there is no evidence that the discharge from NCIG's premises polluted waters. There is no need for a specific licence condition to authorise the discharge of water from the premises where waters are not being polluted."</i></p>	NCIG will seek to obtain clarity from the EPA in regard to this matter and will re-engage DoPE before 30 th June 2019 to address this condition.

				<p>On 10th March 2016, additional monitoring points were added to EPL 12693, requiring NCIG to sample overflow and ambient (background) water quality during overflow events (monitoring points 34 and 35).</p> <p>This above modification to the EPL, and details of the specific actions NCIG has undertaken to satisfy the requirements of Condition 2.42 (Project Approval 06_009) was communicated to DoPE on 26th August 2016, in response to a letter from DoPE regarding the Independent Environmental Audit undertaken in 2015. The DoPE provided acknowledgment of the works that NCIG had completed to date in relation to Condition 2.42.</p> <p>NCIG will seek to obtain clarity from the EPA in regard to this matter and will re-engage DoPE before the 30th June 2019.</p>	
2.50	In the event that stormwater runoff collection cannot meet the water demand of the Site, treated wastewater, if available from the relevant water authority, shall be used preferentially over potable water for the purposes of dust control, unless otherwise agreed by the Director-General.	Compliant	It is recommended that should NCIG determine that the use of the available recycled water is not practical, seek a modification to this Approval Condition to remove the absolute requirement for preferential use of recycled water.	<p>In the past, NCIG have held discussions with Hunter Water Corporation in relation to utilising treated wastewater on site. These discussions have revealed that while treated wastewater is available for utilisation, it could not be supplied in a manner that is in line with the water demand cycle, making it an unviable option.</p> <p>NCIG developed a Water Efficiency Management Plan with Hunter Water in 2018. The Action Plan contained within this management plan includes commitment to investigate the use of alternate process water supplies, including discussion with Hunter Water regarding the compatibility of NCIG's usage profile with Hunter Water's supply capability of recycled water.</p> <p>NCIG will engage with Hunter Water regarding the feasibility of using recycled water over the next 12 months.</p>	NCIG will engage with Hunter Water regarding the feasibility of using treated wastewater over the next 12 months. An update will be provided to DoPE regarding the progress and outcome of this discussion by 31 st March 2020.
Environmental Protection Licence No. 12693					
L3.1	All site preparation, filling/preloading and construction works that may generate an audible noise at any residential receptor shall only be	Compliant	It is recommended that when the current EPL is next reviewed with the EPA, that NCIG seek to	NCIG believe there is merit in retaining the construction related condition in the EPL should construction activities be undertaken in the future.	N/A

	undertaken between 7.00 am and 6.00 pm. This condition does not apply in the event of a direction from police or other emergency authority for safety or emergency reasons.		have the now redundant construction phase conditions removed from the licence.		
L3.2	Notwithstanding any other condition of this licence, piling works shall not be conducted on Sundays or public holidays.	Compliant			
NCIG Draft Statements of Commitment (Environmental Assessment 2006)					
Section 4.4.3	Construction and operational air quality and odour Greenhouse Gas - Mitigation Measures would include: <ul style="list-style-type: none"> regular on-site energy audits to optimise energy efficiency; consideration of energy efficiency in plant and equipment selection/purchase; regular maintenance of plant and equipment to minimise fuel consumption and associated emissions; planting of native vegetation, as part of visual screens in select locations around the site; and installation of solar-powered monitoring equipment and other instrumentation where practicable. 	Non-compliant (administrative non-compliance)	It is recommended that an energy efficiency audit be undertaken, and an energy / greenhouse minimisation plan be developed for the operation.	As outlined in NCIG's Operation Dust and Air Quality Management Plan, NCIG continues to implement further operational improvements to increase the efficiency of the plant. NCIG undertakes annual auditing and reporting of greenhouse gas emissions and submits them to the National Greenhouse and Energy Reporting (NGER) annually. In recent months, NCIG has had preliminary discussions with a consultant to conduct an environmental footprint assessment, including energy efficiency assessment and provide options for improvement. Moving forward, NCIG will undertake an annual internal energy efficiency review and engage an external consultant to undertake an energy efficiency assessment biennially.	NCIG have engaged a consultant to undertake an environmental footprint assessment, including an energy efficiency assessment and provide options for improvement. NCIG will confirm with DoPE before 30 th June 2019 that NCIG have commenced the assessment.
Section 4.13.3	Socio-economics The Project would continue to consult with the local community and would	Non-compliance (low risk level)	It is recommended that NCIG establish a Community Consultative Committee/Group.	NCIG established a Community Reference Group prior to construction of the Terminal. Towards completion of construction, the interest from community members declined. Due to the declining number of members in NCIG's	NCIG's first Community Engagement Meeting will occur

	<p>establish a Community Consultative Committee for the Project as an on-going channel for communication between the local community and NCIG. The CCC would comprise a similar membership to the current SFG and would meet to discuss development progress, to review the general environmental performance of the Project and to discuss any issues raised by the community.</p>			<p>Community Reference Group, NCIG became involved in community consultation via alternate means including Port Waratah Coal Service's Community Consultation Committee in early operational years, and more recently NCIG have participated in Port of Newcastle's Community Liaison Group, of which we are still a member.</p> <p>NCIG is currently in the process of establishing a new Community Engagement Group due to potential for greater community interest in NCIG operations and community engagement activities. Terms of Reference have been finalised and Expressions of Interest advertising commenced in February 2019.</p> <p>The Community Engagement Meetings will be structured around NCIG's internal Terms of Reference.</p>	<p>before 30th June 2019.</p>
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3.0 APPENDIX A - IEA 2018 COMPLIANCE REGISTER

Newcastle Coal Infrastructure Group Coal Export Terminal Independent Environmental Audit 2018 Detailed Findings and Recommendations							
Project Approvals 06_0009/MOD1/MOD2							
Conditions noted with this colouring were amended as per Modification on 27 November 2007							
Conditions noted with this colouring were amended as per Modification on 13 May 2013.							
Project Approval	Sch.	Con.	Requirement	Compliance	Audit Finding	Condition Evidence	
Schedule 2, Administrative Conditions Obligation to Minimise Harm to the Environment							
PA06_0009	1	1	<p>Terms of Approval The Proponent shall carry out the project generally in accordance with the:</p> <p>a) Major Projects Application 06_0009; b) Environmental Assessment: Newcastle Coal Infrastructure Group Coal Export Terminal, prepared by Resource Strategies Pty Ltd and dated July 2006; c) Responses to Submissions, prepared by Newcastle Coal Infrastructure Group and dated December 2006; and d) Plan of subdivision titled Stage 1 Proposed Subdivision of Lot 122 DP 874949, Lot 2 DP 581473, Lot 6 DP 1015754 and Lots 71 and 74 DP 1119950, Stages 2 and 3 Proposed Subdivision of Lot 20 DP 262325 (surveyors reference HW43.01.03.00) prepared by Paul John Stivano and undated; and plan of subdivision titled Plan of Subdivision of Lot 122 DP 874949, Lot 2 DP 581473, Lot 6 DP 1015754 and Lots 71 and 74 DP 1119950 (surveyors reference HW43.01.03.00) prepared by Paul John Stivano and dated 2 November 2007; e) modification application MP 06_0009 MOD 2 and supporting document titled Newcastle Coal Infrastructure Group Coal (NCIG) Export Terminal Rail Flyover Modification Environmental Assessment prepared by NCIG and dated June 2012, as modified by the Response to Submissions document prepared by NCIG and dated 6 December 2012; f) the conditions of this approval.</p>	C	<p>Noted</p> <p>The NCIG Kooragang Island export coal terminal has been constructed generally in accordance with the Major Projects Application 06_0009, 19 April 2006, the Environmental Assessment: Newcastle Coal Infrastructure Group Coal Export Terminal, July 2006 and the Project Approval granted on 13 April 2007.</p> <p>MOD1 (to allow for construction of the grade separation on the realignment of the Kooragang Island Main Line) was submitted and approved on 27 November 2007 for additional parcels of land not previously listed in the schedule of lands in the original Project Approval 06_0009.</p> <p>Stage 1 was constructed and officially opened on 3 May 2010, Stage 2AA construction was completed in September 2012 and Stage F was completed in 2013 providing export capacity for the 66mtpa operations.</p> <p>The Rail Flyover (MOD2) was granted approval on 13 April and construction was completed in June 2015.</p>	<p>Major Projects Application Number 06_0009</p> <p>Plan of subdivision titled Stage 1 Proposed Subdivision of Lot 122 DP 874949, Lot 2 DP 581473, Lot 6 DP 1015754 and Lots 71 and 74 DP 1119950, Stages 2 and 3 Proposed Subdivision of Lot 20 DP 262325, 2 November 2007.</p> <p>Modification Application MP 06_0009 MOD 2, NCIG Export Terminal Rail Flyover Modification Environmental Assessment, 6 December 2012.</p> <p>Consolidated Project Approval 06_0009, May 2013</p> <p>Environmental Assessment: Newcastle Coal Infrastructure Group Coal Export Terminal, Resource Strategies Pty Ltd, July 2006.</p>	There are no recommendations.
PA06_0009	1	2	<p>Terms of Approval In the event of an inconsistency between:</p> <p>a) the conditions of this approval and any document listed from condition 1.1a) to 1.1e) inclusive, the conditions of this approval shall prevail to the extent of the inconsistency; and b) any document listed from condition 1.1a) to 1.1e), the most recent document shall prevail to the extent of the inconsistency.</p>	Noted	<p>During the audit period, there have been no identified inconsistencies between documents and the Conditions of Approval stated in condition 1.1.</p>	<p>Major Projects Application Number 06_0009</p> <p>Plan of subdivision titled Stage 1 Proposed Subdivision of Lot 122 DP 874949, Lot 2 DP 581473, Lot 6 DP 1015754 and Lots 71 and 74 DP 1119950, Stages 2 and 3 Proposed Subdivision of Lot 20 DP 262325, 2 November 2007.</p> <p>Modification Application MP 06_0009 MOD 2, NCIG Export Terminal Rail Flyover Modification Environmental Assessment, 6 December 2012.</p> <p>Consolidated Project Approval 06_0009, May 2013</p> <p>Environmental Assessment: Newcastle Coal Infrastructure Group Coal Export Terminal, Resource Strategies Pty Ltd, July 2006.</p>	There are no recommendations.
PA06_0009	1	3	<p>Terms of Approval The Proponent shall comply with any reasonable requirement(s) of the Director-General arising from the Department's assessment of:</p> <p>a) any reports, plans or correspondence that are submitted in accordance with this approval; and b) the implementation of any actions or measures contained in these reports, plans or correspondence.</p>	C	<p>NCIG has complied with any reasonable requirement(s) of the Director-General in accordance with Condition 1.3. (a) Section 6 of the 2016 and section 7 of the 2017 Annual Reviews contains actions required from the previous audit period.</p>	<p>NSW Department of Planning and Infrastructure letter (dated 9/9/2013) RE: NCIG Coal Export Terminal, Kooragang Island (MP 06_0009) - Condition 1.6 (Limits of Approval).</p> <p>ARTC letter to NCIG (dated 24/12/2009) RE: ARTC Connection Agreement (Outside the Rail Corridor)</p> <p>NCIG letter to NSW Department of Planning and Infrastructure letter (dated 16/08/2013) RE: Condition 1.6 of MP 06_0009.</p>	There are no recommendations.
PA06_0009	1	4	<p>Limits of Approval This approval shall lapse five years after the date on which it is granted, unless the works the subject of this approval are physically and substantially commenced on or before that time.</p>	Not triggered	<p>Project Approval (06_0009) was granted on 13 April 2007 and the Coal Export Terminal (CET) commenced construction February 2008.</p>	<p>Annual Review 2016 and 2017</p>	There are no recommendations.
PA06_0009	1	5	<p>Limits of Approval The project shall be limited to a maximum export capacity of 66 million tonnes of coal per annum.</p>	C	<p>NCIG export capacity for the Stage 2F of the NCIG development did not exceed 66 million tonnes per annum.</p>	<p>AEMR Sustainability Report, belt weighers.</p> <p>Board Report Throughput June 2018 (extract from report).</p>	There are no recommendations.

PA06_0009	1	6	<p>Limits of Approval The Proponent may only proceed to construct the infrastructure marked as High Capacity Optional Inlet Rail Spur and Rail Sidings upon receipt of the Director-General's satisfaction that:</p> <p>a) the Compensatory Habitat and Ecological Monitoring Program required under condition 2.20 is being implemented according to the timeframes required, or to the extent agreed by the Director-General; and</p> <p>b) the Proponent has complied with rail infrastructure design requirements required to in condition 2.39 of this approval.</p>	C	<p>The High Capacity Optional Inlet Rail Spur and Rail Sidings will be constructed. The Compensatory Habitat and Ecological Monitoring Program (CHEMP) is being implemented to the extent agreed by the Director-General, as per letter from DoPI dated 9 September 2013.</p> <p>NCIG has complied with the rail infrastructure design requirements required in condition 2.39, as per letter from ARTC dated 12 August 2013 and letter from PWCS dated 14 August 2013.</p>	<p>ARTC letter to NCIG (dated 24/12/2009) RE: ARTC Connection Agreement (Outside the Rail Corridor)</p> <p>NCIG letter to NSW Department of Planning and Infrastructure letter (dated 16/08/2013) RE: Condition 1.6 of MP 06_0009.</p> <p>Condition 1.6 (Limits of Approval) on 9/09/2013 RE: Compensatory Habitat and Ecological Monitoring Program approved and NCIG may proceed to construct the High Capacity Optional Inlet Rail Spur and Rail Sidings in accordance with the conditions of approval (planning ref: 10/02150-12).</p> <p>Compensatory Habitat Monitoring Program September 2013.</p>	There are no recommendations.
PA06_0009	1	7	<p>Statutory Requirements The Proponent shall ensure that all licences, permits and approvals are obtained and maintained as required throughout the life of the project. No condition of this approval removes the obligation for the Proponent to obtain, renew or comply with such licences, permits or approvals. The Proponent shall ensure that a copy of this approval and all relevant environmental approvals are available on the Site at all times during the project.</p>	C	<p>Environment Protection Licence 12693 was issued by the Department of Environment and Climate Change on 26 October 2007 under the Protection of the Environment Operations Act, 1997.</p> <p>Copies of Project Approval (06_0009) and all relevant environmental approvals will be kept on site by the Environmental Representative - All licences, permits and approvals are being updated as required and maintained as a part of the Stage 1 development stage. These documents have been revised to allow for terminal operations. Compliance with these licences, permits and approvals is ongoing. These documents are available on site and can be accessed publicly at anytime online.</p>	<p>EPL 12693, PA 06_0009 / Mod 1 / Mod 2 Observed on NCIG site.</p>	There are no recommendations.
PA06_0009	1	7(a)	<p>Statutory Requirements Prior to the issue of the Subdivision Certificate, the Proponent shall provide to the relevant certifying authority evidence that all easements and covenants required by this approval have been or will be registered for the subdivision.</p>	C	<p>All easements and covenants required by this approval for the land subdivision have been registered with the NSW Department of Lands on 29 November 2007:</p> <p>a) Stage 1 Subdivision of Lot 122 DP 874949, Lot 2 DP 581473, Lot 6 DP 1015754 and Lots 71 and 74 DP 1119950, b) Stages 2 and 3 Subdivision of Lot 20 DP 262325.</p>	<p>Register of Subdivision, NSW Department of Lands, 29 Nov 2007</p> <p>Plan of subdivision titled Stage 1 Proposed Subdivision of Lot 122 DP 874949, Lot 2 DP 581473, Lot 6 DP 1015754 and Lots 71 and 74 DP 1119950, Stages 2 and 3 Proposed Subdivision of Lot 20 DP 262325, 27 Nov 2007.</p>	There are no recommendations.
PA06_0009	1	8	<p>Statutory Requirements The Proponent shall ensure that all practicable measures shall be taken to prevent and minimise harm to the environment as a result of the construction, operation, and where relevant, decommissioning of the development.</p>	C	<p>NCIG Construction Environmental Management Plan and Operation Environmental Management Plan and Sub-plans have been prepared and approved by DP&I / DP&E, to prevent and minimise harm to the environment in accordance with Condition 1.8.</p> <p>During this audit, the Auditor reviewed the relevant operational environmental management plans. The Auditor's observations confirmed that the approved Plans were being implemented and that a the operation of the Development met the requirement of preventing and minimising harm to the environment.</p>	<p>NCIC IEA 2015</p> <p>Operations Phase Environmental Management Plans</p> <p>Audit inspection and assessment of conformance with documented plans</p>	There are no recommendations.
PA06_0009	1	9	<p>Statutory Requirements The Proponent shall ensure that all plant and equipment installed at the premises or used in conjunction with the project must be:</p> <p>a) Maintained in a proper and efficient condition; and</p> <p>b) Operated in a proper and efficient manner.</p>	C	<p>During the site audit visit in December 2018 all plant and equipment installed and operated at the NCIG Coal Export Terminal was observed as both well maintained and operated in a proper and efficient manner. All environmental control equipment, including for example, water sprays for dust control, were fully operational.</p> <p>A review of the NCIG Maintenance Management System demonstrated that there is an effective preventative plant and equipment maintenance system (Pulse, a computer based system developed and maintained by NCIG) is in operation.</p> <p><i>Detailed maintenance plans and records are maintained in the Pulse system.</i></p>	<p>Site observations.</p> <p>Interview with maintenance personnel.</p> <p>"Pulse" Maintenance Management System and related maintenance schedules and records.</p>	There are no recommendations.
PA06_0009	1	10	<p>Statutory Requirements With the approval of the Director-General, the Proponent may prepare and submit any management plan or monitoring program required by this approval on a progressive basis. Where a management plan and monitoring program is required before carrying out any development or stage of development, the plans/programs may be prepared and submitted in relation to either discrete components of the project or for a specified time period.</p>	Not Triggered	<p>NCIG has completed all development and stages of the development. This condition is not triggered during the audit period as all required management plans had been previously prepared and approved.</p>	<p>2016 Annual review; 2017 Annual Review</p>	There are no recommendations.
PA06_0009	2	1	<p>Specific Environmental Conditions. Air Quality Impacts - Odour The Proponent shall not permit any offensive odour, as defined under section 129 of the Protection of the Environment Operations Act 1997, to be emitted beyond the boundary of the Site.</p>	C	<p>Environment Protection Licence 12693 was issued by the Department of Environment and Climate Change on 26 October 2007 for the NCIG development.</p> <p>During the site visit in December 2018, there were no observations of offensive odour from the site or facility including the plant, equipment and operations.</p> <p>Note that the declined to provide comment (Hunter Office Policy) in relation to this audit and referred the Auditor to the Public Register. NSW EPA POEO Public Register search was completed. No publicly recorded complaints were made during the audit period.</p> <p>No relevant complaints regarding NCIG facility's offensive odour were recorded in the EPL Annual Returns within the audit period.</p>	<p>NCIG internal complaints register 2015-2018</p> <p>NSW EPA Public Register - Complaints</p> <p>Site visit December 2018.</p> <p>EPL Annual Returns 2016, 2017, 2018.</p> <p>Observations during site visit December 2018.</p>	There are no recommendations.

PA06_0009	2	2	<p>Specific Environmental Conditions. Air Quality Impacts - Dust The Proponent shall design, construct, commission, operate and maintain the project in a manner that minimises or prevents the emission of dust from the Site including wind blown and traffic generated dust.</p>	C	<p>NCIG has not undertaken any construction within the audit period, therefore an Construction Environmental Management Plan is not required for this audit period.</p> <p>Operation management measures are detailed in the Operation Dust and Air Quality Management Plan section 4, Document No. HSEC.MP.12.02 which includes management measures in section for dust emissions from NCIG operations.</p> <p>During the site inspection, the Development was fully operational and the Auditor observed coal train arrival and unloading, stacker / reclaimers in operation and ship loading in operation. No visible dust emissions were observed at any of these operations.</p> <p>In addition during the site inspection the Auditor observed:</p> <ul style="list-style-type: none"> - Water sprays at stacker reclaimer and stockpiles; - sweeper truck in operation; - slit rubber dust control curtains and covers for conveyor belt operations; - there were no coal drop heights greater than 4m; and - the meteorological monitoring station was observed and operational. 	<p>Operation Dust and Air Quality Management Plan (2018) Document No. HSEC.MP.12.02</p> <p>Site audit observations</p>	There are no recommendations.
PA06_0009	2	3	<p>Specific Environmental Conditions. Air Quality Impacts - Dust Emissions The Proponent shall take all practicable measures to ensure that all vehicles entering or leaving the Site, carrying a load that may generate dust, are covered at all times, except during loading and unloading. Any such vehicles shall be covered or enclosed in a manner that will prevent emissions of dust from the vehicle at all times, to the extent practicable.</p>	C	<p>The Operation Dust and Air Quality Management Plan details measures as described in condition 2.3 to mitigate dust emissions from vehicles in section 4.4 of the plan.</p> <p>During the site visit there were no dust emissions observed from vehicles operating on the site. All vehicles observed were covered and enclosed in an appropriate manner.</p> <p>All vehicles that have accessed the operational areas of the site area, exit via wheel wash stations - the Auditor observed both heavy and light vehicles using these facilities prior to leaving the site.</p>	<p>Operation Dust and Air Quality Management Plan (ODAQMP) (2018) Document No. HSEC.MP.12.02</p> <p>Site audit observations</p>	There are no recommendations.
PA06_0009	2	4	<p>Specific Environmental Conditions. Air Quality Impacts - Dust Emissions All activities on the Site shall be undertaken with the objective of preventing visible emissions of dust beyond the boundary of the Site. Should such visible dust emissions occur at any time, the Proponent shall identify and implement all practicable dust mitigation measures, including cessation of relevant works, as appropriate.</p>	C	<p>During operational activities NCIG have dust emission response measures including utilising water sprays on stockpiles and stacker reclaimer bucket wheel and water carts (OEMP and OWMP).</p> <p>Dust emissions are pro-actively managed by the Integrated Dust Management System (IDMS) that takes into account:</p> <ul style="list-style-type: none"> - moisture content of coal received and stockpiled; and - existing and forecast meteorological conditions. <p>No dust emissions were observed during the site visit.</p>	<p>Operation Dust and Air Quality Management Plan (ODAQMP) (2018) Document No. HSEC.MP.12.02</p> <p>Site audit observations</p>	There are no recommendations.
PA06_0009	2	5	<p>Specific Environmental Conditions. Air Quality Impacts - Dust Emissions The Proponent shall control dust emissions on all internal roads, trafficable areas and manoeuvring areas to minimise the potential for dust generation by sealing, or otherwise treating surfaces in a manner acceptable to the Director-General.</p>	C	<p>NCIG has controlled dust emissions in accordance with Condition 2.5 during the audit period.</p> <p>Control measures are detailing in the Operational Dust and Air quality Management Plan and include:</p> <ul style="list-style-type: none"> - routine road and coal spillage clean-up; - use of water sprays on stock piles and at coal transfer points; - water carts; - site speed limit (NCIG internal road speed limit of 40km/h); - restricted vehicle access to coal stockpile areas; and - all internal roads are sealed. <p>The implementation of these measures was observed by the Auditor during the Site Inspection.</p>	<p>Operation Dust and Air Quality Management Plan (2018) Document No. HSEC.MP.12.02</p> <p>Site audit observations</p>	There are no recommendations.
PA06_0009	2	6	<p>Specific Environmental Conditions. Air Quality Impacts - Dust Emissions The Proponent shall design, construct, operate and maintain the project in a manner that minimises the potential generation of fugitive dust emissions from plant and equipment, including where relevant and practicable, design of the project to minimise the number of coal transfer points, minimise the drop height from stackers to stockpiles, full or partial enclosure of conveyors, installation of wind shields and belt cleaning systems to conveyors, and installation of dust control equipment to mobile plant.</p>	C	<p>NCIG has designed, construct, operate and maintain the Project in accordance with Condition 2.6 within the audit period.</p> <p>Operation management measures are detailed in the Operation Dust and Air Quality Management Plan section 4, Document No. HSEC.MP.12.02 which includes management measures in section for dust emissions from NCIG operations.</p> <p>The auditor observed:</p> <ul style="list-style-type: none"> -Operating water sprays at stacker reclaimer and stockpiles; - sweeper truck in operation; - slit rubber dust control curtains and covers for conveyor belt operations; - there were no coal drop heights greater than 4m; and - the meteorological monitoring station was observed and operational. 	<p>Operation Dust and Air Quality Management Plan (2018) Document No. HSEC.MP.12.02</p> <p>Site Audit Observations</p>	There are no recommendations.
PA06_0009	2	7	<p>Specific Environmental Conditions. Air Quality Impacts - Dust Emissions As soon as practicable after the placement of fill/ preloading material on the Site, the Proponent shall cover, seal, grass or otherwise treat the Site in a manner acceptable to the Director-General to minimise the potential generation of wind-blown dust from the fill/ preload material. The Proponent shall maintain the cover, seal, grass or other treatment for the duration of relevant Site preparation and preloading activities, and following the addition of further fill/ preload materials that may occur from time to time during that period.</p>	Not triggered	<p>NCIG has completed all development and stages of the development. This condition is not required during the audit period.</p>	<p>IEA 2016</p> <p>Annual Returns 2016-2017</p>	There are no recommendations.
PA06_0009	2	8	<p>Specific Environmental Conditions. Air Quality Impacts - Metrological Monitoring Station The Proponent shall install, operate and maintain a meteorological monitoring station to monitor weather conditions representative of those on the Site, in accordance with:</p> <ol style="list-style-type: none"> a) AM-1 Guide to Siting of Sampling Units (AS 2922-1987). b) AM-2 Guide for Horizontal Measurement of Wind for Air Quality Applications (AS 2923-1987). c) AM-4 On-Site Meteorological Monitoring Program Guidance for Regulatory Modelling Applications. <p>The meteorological monitoring station shall be installed at or near the Site and the Proponent shall use the meteorological monitoring station to undertake the monitoring required under condition 3.1 of this approval. This condition does not preclude the Proponent from reaching agreement with any other relevant party for the installation, operation and maintenance of a shared monitoring station, or shared use of an existing monitoring station representative of the Site, provided the outcomes of this condition are achieved.</p>	C	<p>NCIG has installed a meteorological monitoring station on the Project site on 3 September 2007. This was relocated to an alternate location adjacent the Clearwater Pond in September 2010. NCIG has operated and maintained the meteorological monitoring station in accordance with Condition 2.8 and the Procedures to maintain meteorological equipment measures, Table 2: Procedures to maintain meteorological equipment within the letter (dated 22/04/2016) provided from Jacobs Group (Australia).</p>	<p>Meteorological Monitoring Station equipment specifications: Lufft Mess WSS02-UMB Smart Weather Sensor Manual.</p> <p>Letter from Jacobs Group (Australia) to NCIG (dated 22/04/2016). RE: Upgrade and review of meteorological monitoring station.</p> <p>IA098700 NCIG Met Sensor Procedures SL 2016</p> <p>Site Audit Observations</p>	There are no recommendations.

PA06_0009	2	9	<p>Noise Impacts The Proponent shall minimise noise emissions from plant and equipment operated on the Site in relation to the project according to the principles outlined in the NSW Government's Industrial Noise Policy.</p>	C	<p>NCIG have minimise noise emissions from plant and equipment operated on the Project site in accordance with Condition 2.9 and the Operation Noise Management Plan.</p> <p>The plant and equipment specification and conformance LAeq Sound Power Levels (SWLs) are consistent with the use of best available low noise technology.</p> <p>No noise complaints have been received during the audit period. Routine noise monitoring confirms compliance with this condition.</p> <p>The Auditor observed the noise bunds and barriers installed near the rail loop path to manage noise</p>	<p>Operation Noise Management Plan (ONMP) (2017) Document No. HSEC.MP.12.03.</p> <p>SLR Consulting Biannual Off-Site Noise and On-Site Sound Power Monitoring Reports 2015- June 2018.</p> <p>NCIG Complaints Register</p> <p>NSW EPA Public Register</p> <p>Site Audit Observations</p>	There are no recommendations.
PA06_0009	2	10	<p>Construction Noise All Site preparation, filling/ preloading and construction works that may generate an audible noise at any residential receptor shall only be undertaken between 7:00 am and 6:00 pm. Audible noise is defined as "noise that can be heard at the receiver". This condition does not apply in the event of a direction from police or other relevant authority for safety or emergency reasons.</p> <p>Note: 'safety or emergency reasons' refers to emergency works which may need to be undertaken to avoid loss of life, property loss and/or to prevent environmental harm.</p>	Not triggered	<p>NCIG completed the construction of the Development prior to this Audit Period. This condition was not triggered during the audit period.</p>	<p>IEA 2016.</p> <p>Annual Returns 2016-2017</p>	There are no recommendations.
PA06_0009	2	11	<p>Construction Noise Notwithstanding condition 2.10 of this approval, piling works shall not be conducted on Sundays or public holidays.</p>	Not triggered	<p>NCIG completed the construction of the Development prior to this Audit Period. This condition was not triggered during the audit period.</p>	<p>IEA 2016.</p> <p>Annual Returns 2016-2017</p>	There are no recommendations.
PA06_0009	2	12	<p>Construction Noise The Proponent may seek the Director-General's approval to conduct Site preparation, filling/ preloading and construction works outside the hours specified under condition 2.10 on a case-by-case basis. In seeking the Director-General's approval, the Proponent shall demonstrate a need for activities to be conducted during varied hours and how local acoustic amenity will be protected, as well as details of how the EPA's requirements with respect to the variation of hours have been addressed.</p>	Not triggered	<p>NCIG completed the construction of the Development prior to this Audit Period. This condition was not triggered during the audit period.</p>	<p>IEA 2016.</p> <p>Annual Returns 2016-2017</p>	There are no recommendations.
PA06_0009	2	13	<p>Operation Noise The Proponent shall design, construct, operate and maintain the project to ensure that the noise contributions from the project do not exceed the maximum allowable noise contributions specified in Table 1 below, at those locations and during those periods indicated. The maximum allowable noise contributions apply under: a) meteorological condition of: wind speeds up to 3 ms-1 (measured at 10 metres above ground level); or b) temperature inversion conditions up to 3oC per 100 metres and wind speeds up to 2ms-1 (measured at 10 metres above ground level).</p>	C	<p>NCIG have minimise noise emissions from plant and equipment operated on the Project site in accordance with Condition 2.9 and the Operation Noise Management Plan.</p> <p>The plant and equipment specification and conformance LAeq Sound Power Levels (SWLs) are consistent with the use of best available low noise technology.</p> <p>No noise complaints have been received during the audit period. The Auditor undertook a detailed review of all noise monitoring undertaken during the audit period. The monitoring undertaken confirms compliance with this condition.</p> <p>The Auditor observed the noise bunds and barriers installed near the rail loop path to manage noise emissions.</p>	<p>Operation Noise Management Plan (ONMP) (2017) Document No. HSEC.MP.12.03.</p> <p>SLR Consulting Biannual Off-Site Noise and On-Site Sound Power Monitoring Reports 2015- June 2018.</p> <p>SLR Ref: 610.04515.20700-R29 Version No: v1.0 Q2 2015</p> <p>SLR Ref: 610.04515.20700-R30 Version No: v1.0 Q1 2016</p> <p>SLR Ref: 610.04515.20700-R31 Version No: v1.0 Q2 2016</p> <p>SLR Ref: 610.04515.20700-R32 Version No: v1.0 Q2 2016</p> <p>SLR Ref: 610.04515.20700-R33 Version No: v1.0 Q1 2017</p> <p>SLR Ref: 610.04515.20700-R34 Version No: v1.0 Q2 2017</p> <p>SLR Ref: 610.04515.20700-R35 Version No: v1.0 Q1 2018</p> <p>NCIG Complaints Register</p> <p>NSW EPA Public Register</p> <p>Site Audit Observations</p>	There are no recommendations.
PA06_0009	2	14	<p>Operation of Plant and Equipment For the purpose of assessment of noise contributions specified under condition 2.13 of this consent, noise from the project shall be: a) measured at the most affected point on or within the Site boundary at the most sensitive receiver to determine compliance with LAeq(15 minute) night noise limits. b) measured at one metre from the dwelling façade to determine compliance with LA1(1 minute) noise limits. c) subject to the modification factors provided in Section 4 of the New South Wales Industrial Noise Policy (EPA, 2000), where applicable. Notwithstanding, should direct measurement of noise from the development be impractical, the Proponent may employ an alternative noise assessment method deemed acceptable by the EPA (refer to Section 11 of the New South Wales Industrial Noise Policy (EPA, 2000)). Details of such an alternative noise assessment method accepted by the EPA shall be submitted to the Director-General prior to the implementation of the assessment method.</p>	C	<p>NCIG has measured noise in accordance with Condition 2.14. NCIG has measured noise in accordance with the Construction Noise Management Plan that was approved by the Director-General on 15 June 2007 and the Operation Noise Management Plan (ONMP) (2017) Document No. HSEC.MP.12.03. Monitored in accordance with the EPA Industrial Noise Policy (2000) and reported the Biannual Off-Site Noise and On-Site Sound Power Monitoring Reports by SLR Consulting.</p> <p>a) noise is measured at the most affected point on or within the Site boundary at the most sensitive receiver to determine compliance with LAeq(15 minute) night noise limits. b) noise is measured at one metre from the dwelling façade to determine compliance with LA1(1 minute) noise limits. c) noise monitoring results are subject to the modification factors provided in Section 4 of the New South Wales Industrial Noise Policy (EPA, 2000), where applicable.</p> <p>NCIG has completed all development and stages of the development. Partial of this condition referring to construction noise is not required for the audit period.</p>	<p>Operation Noise Management Plan (ONMP) (2017) Document No. HSEC.MP.12.03.</p> <p>SLR Consulting Biannual Off-Site Noise and On-Site Sound Power Monitoring Reports 2015- June 2018.</p> <p>SLR Ref: 610.04515.20700-R29 Version No: v1.0 Q2 2015</p> <p>SLR Ref: 610.04515.20700-R30 Version No: v1.0 Q1 2016</p> <p>SLR Ref: 610.04515.20700-R31 Version No: v1.0 Q2 2016</p> <p>SLR Ref: 610.04515.20700-R32 Version No: v1.0 Q2 2016</p> <p>SLR Ref: 610.04515.20700-R33 Version No: v1.0 Q1 2017</p> <p>SLR Ref: 610.04515.20700-R34 Version No: v1.0 Q2 2017</p> <p>SLR Ref: 610.04515.20700-R35 Version No: v1.0 Q1 2018</p>	There are no recommendations.

PA06_0009	2	15	Train Noise Performance The Proponent shall take necessary actions to ensure that trains operated on the Site meet the noise performance criteria established under condition 2.13.	C	A letter from the Senior Compliance Officer from DP&E dated 24/09/2016 was sighted during the audit regarding condition 2.15 is adequately addressed. The Department acknowledges that "condition 2.15 of the Approval is adequately addressed" and "NCIG has revised its plans to undertake 6 monthly noise monitoring."	DP&E Email to NCIG (dated 24/09/2016) RE: Compliance Tracking Program - Independent Environmental Audit. "condition 2.15 of the Approval is adequately addressed" and "NCIG has revised its plans to undertake 6 monthly noise monitoring." Operation Noise Management Plan (ONMP) (2017) Document No. HSEC.MP.12.03. SLR Consulting Biannual Off-Site Noise and On-Site Sound Power Monitoring Reports 2015- June 2018.	There are no recommendations.
PA06_0009	2	16	Ecological Impacts Prior to the commencement of construction, including Site preparation and fill/ preloading activities, the Proponent shall employ a qualified ecologist approved by the Director-General to undertake a pre-construction survey of all areas to be affected by construction works for the presence of Litoria aurea. Should members of this species be located within any area to be affected by the project, the Proponent shall notify the Director-General and prepare a management plan for the relocation of Litoria aurea individuals in consultation with the OEH and RLMLC. The management plan shall include, but not be limited to, the identification of potential locations, management procedures and monitoring requirements for the relocation of Litoria aurea individuals prior to the commencement of works.	Not triggered	NCIG completed the construction of the Development prior to this Audit Period. This condition was not triggered during the audit period. Professor David Goldney was approved by the Director-General of the Department of Planning on 2 May 2007 as a qualified ecologist. Professor David Goldney conducted a pre-construction survey for the presence of Litoria aurea in April/May 2007. A member of the species was located on the NCIG and the Director General was notified on the 15 November 2007. A Green and Golden Bell Frog Management Plan (GGBFMP) was consequently prepared by NCIG in consultation with DECC and RLMLC. Comments on the GGBFMP were received from the DECC and RLMLC on 25 September 2007 and 11 October 2007, respectively.	Ecological and Land Management Plan (2018) Document No. HSEC.MP.12.06 subsumes the previous Green and Golden Bell Frog Management Plan for operational purposes. Letter from NSW Department of Planning (Chris Wilson, Executive Director Major Project Assessments) approving Dr Arthur White as a suitably qualified appointment of ecologist for NCIG ref: S06/00617 dated 25.10.2007. NCIG IEA 2015	There are no recommendations.
PA06_0009	2	17	The Proponent shall design and construct relevant rail infrastructure associated with the project to include culverts, underpasses or other similar measures to permit the movement of Litoria aurea and other amphibian species under the rail infrastructure, and shall have consideration of existing and proposed frog habitat areas and movement corridors. The culverts, underpasses or other similar measures shall be installed to include suitable habitat for Litoria aurea, and to provide protection from predators, and shall be designed in consultation with OEH and PWCS.	Not triggered	NCIG completed the construction of the Development prior to this Audit Period. This condition was not triggered during the audit period. NCIG have constructed the relevant rail infrastructure in accordance with Condition 2.17. Rail culverts for Stage 1 were designed and constructed in accordance with guidance provided by Dr Arthur White to provide for the movement of Litoria aurea and other amphibian species under the rail infrastructure. Drainage and culvert design for Stage 2F has been completed with PWCS and OEH agreement.	Biosphere Environmental Consultants Pty Ltd letter (dated 28/02/2014) RE: Culvert designs Rail Loop Area Kooragang Island. Attachment A responds to request from OEH letter (dated 11/11/2013) RE: detailing further information on the NCIG Coal Export Terminal underpasses. Port Waratah Coal Services letter regarding NCIG Rail Flyover Culverts letter dated (13/9/2013). The location and drawings of the Rail Flyover Culverts NCIG provided in the letter sent to PWCS on 23/08/2013 were approved by PWCS. NCIG IEA 2015	There are no recommendations.
PA06_0009	2	18	Ecological Impacts All employees and contractors involved in construction or operation of components of the project in areas known or suspected of providing habitat for Litoria aurea and other amphibian species shall be trained in Site Hygiene management in accordance with Hygiene Protocol for the Control of Disease in Frogs (NPWS, 2001) prior to the commencement of the relevant work.	C	NCIG has completed all development and stages of the development. This condition only applies in accordance to the operation activities of the NCIG site. NCIG is undertaking site hygiene management as part of the training program for employees and contractors in accordance with Condition 2.18, including the importance of not handling Litoria aurea, and calling for Environmental Representative to relocate individuals found.	Ecological and Land Management Plan (2018) Document No. HSEC.MP.12.06 HSEC induction training, including Green and Golden Bell Frog awareness	There are no recommendations.
PA06_0009	2	19	Ecological Impacts The Proponent shall employ a qualified ecologist, approved by the Director-General, for the duration of construction works, including Site preparation and fill/ preloading activities, to advise on the mitigation and management of impacts to listed threatened species that may be affected by the relevant works.	Not triggered	NCIG completed the construction of the Development prior to this Audit Period. This condition was not triggered during the audit period. Professor David Goldney and Dr Arthur White were approved by the Director-General of the Department of Planning on 2 May 2007 and 25 October 2007 respectively as a qualified ecologists to advise NCIG on the mitigation and management of impacts in accordance with Condition 2.19.	Letter from NSW Department of Planning (Chris Wilson, Executive Director Major Project Assessments) approving Dr Arthur White as a suitably qualified appointment of ecologist for NCIG ref: S06/00617 dated 25.10.2007. Annual Review 2016 and 2017 NCIG IEA 2015	There are no recommendations.
PA06_0009	2	19A	Ecological Impacts The Proponent shall minimise clearing of native vegetation, edge effects and fragmentation to the greatest extent practicable and shall maintain retained native vegetation and habitat on Site. In relation to the clearing required for the High Capacity Optional Inlet Rail Spur and Rail Sidings, the amount of clearing to the west of the existing Kooragang Island Main Line shall be limited to a maximum of 2.6 hectares including 1.32 hectares of Coastal Saltmarsh in the NSW North Coast, Sydney Basin and South East Corner Bioregions Endangered Ecological Community, and 0.13 hectares of Freshwater Wetlands on Coastal Floodplains of the NSW North Coast, Sydney Basin and South East Corner Bioregions Endangered Ecological Community.	Not triggered	NCIG has completed all construction and development and stages in the NCIG IEA 2015 period. This condition is not applicable to this audit period.	NCIG IEA 2015	There are no recommendations.

PA06_0009	2	20	<p>Compensatory Habitat and Ecological Monitoring Program</p> <p>The Proponent shall develop and submit for the approval of the Director-General, a Compensatory Habitat and Ecological Monitoring Program to detail how habitat and ecological values lost as a result of the project will be off-set, and how ecological monitoring will be undertaken to inform on-going ecological management. The Program shall be developed in consultation with the OEH, and shall include, but not necessarily be limited to:</p> <p>a) ecological surveys, following detailed design of the project, to identify and quantify the extent and types of habitat that would be lost or degraded as a result of the project;</p> <p>b) provision for establishment of compensatory habitat for each relevant component of the project as follows, unless otherwise agreed by the Director-General:</p> <p>i) for Litoria aurea habitat lost as a result of the project, establishment of 75 hectares of compensatory habitat in a location agreed by the Director-General, in consultation with the OEH. The compensatory habitat shall include viable and sustainable populations of Litoria aurea with a mosaic of wetland, terrestrial and breeding habitat, which includes foraging, sheltering, and wintering habitat attributes and movement corridors, in order to maximise the potential reproductive output of the Litoria aurea population. This amount of compensatory habitat may be reduced if the Proponent can determine, using a scientific methodology agreed to the Department, in consultation with the OEH, that the population of Litoria aurea impacted by the project is less than 37.5 hectares. The reduced amount shall be agreed to by the Department, in consultation with the OEH, by June 2015;</p> <p>ii) for migratory shore bird habitat (including endangered ecological communities) lost as a result of the project, including filling in of parts of Deep Pond and Swan Pond from construction of rail and associated infrastructure, the establishment of 8 hectares of compensatory habitat in a location agreed by the Director-General, in consultation with the OEH. The commencement of compensatory habitat works shall occur within six months of the commencement of construction of the High Capacity Optional Inlet Rail Spur and Rail Sidings, or as otherwise agreed by the Director-General;</p> <p>c) provision for on-going ecological studies and migratory bird monitoring in and around Deep Pond and Swan Pond, to investigate bird behaviour and to inform the design process for components of the project affecting these ponds;</p> <p>d) provision for the funding of works required under this condition, to be managed by a mechanism that provides sound and legally enforceable means of allocating resources for ongoing adaptive management and review of the performance of compensatory habitat works for the life of the project;</p> <p>e) provision for research into Litoria aurea in and around Kooragang Island and the Hunter Estuary, as may be identified by the Proponent in consultation with relevant ecological and research groups;</p> <p>f) provision for ameliorative works on land surrounding the project Site, as may be negotiated by the Proponent with the relevant adjacent land owners, to improve or restore natural hydrology and ecosystems, remove mangrove communities where relevant and restore locally-endemic Endangered Ecological Communities;</p> <p>g) consideration of coordinating compensatory and ameliorative works with similar requirements for other developments, including with respect to the development the subject of development consent DA-134-3-2003-i (dredging and remediation of the South Arm of the Hunter River);</p> <p>h) monitoring requirements for compensatory habitat works and other ecological amelioration proposed under the Program; and</p> <p>i) timing and responsibilities for the implementation of the provisions of the Program. The Proponent shall provide the following commitments in the Program, or as otherwise agreed by the Director-General:</p> <p>i. before 31 December 2014, the Proponent shall have completed the migratory shorebird compensatory habitat works required under condition 2.20b)ii);</p> <p>ii. before 31 December 2016, the Proponent shall have completed the Litoria aurea compensatory habitat works required under condition 2.20b)j). If a viable breeding population of Litoria aurea has not been established as a part of the implemented compensatory habitat works then the Proponent is required to purchase an equivalent area of land that is known to contain the species and manage this land for the enduring conservation of the species in perpetuity. Any land required to be purchased is required to be completed by 31 December 2019.</p>	<p>NCIG documentation "satisfactorily addresses all requirements under Condition 2.20 and therefore the CHEMP is approved for the purposes of this condition". (NSW Department of Planning letter dated 16.11.2010 ref: 10/02150-5 Subject: NCIG Coal Export Terminal, Kooragang Island (Reference:06_0009) Compensatory Habitat and Ecological Monitoring Program (Condition 2.20).</p> <p>NCIG has undertaken operation and activities in accordance to Condition 2.20 and the Compensatory Habitat and Ecological Monitoring Program.</p> <p>NCIG has undertaken ecological surveys (April/May 2007) to identify and quantify the extent and types of habitat that would be lost or degraded as a result of the Project in accordance with Condition 2.20(a).</p> <p>In accordance with Condition 2.20(b)(i) NCIG commenced compensatory habitat works prior to 1 March 2009 in accordance with the extended deadline approved by the Director General. Version 1 of the Compensatory Habitat and Ecological Monitoring Program was developed in consultation with the DECC, and approved by Dept of Planning in November 2010.</p> <p>The Bell Frog Research Area was completed in accordance with this version of the CHEMP in January 2013. An updated version of the CHEMP was developed in consultation with OEH and DoPI in June 2013, including plans for development of 75ha of GGBF habitat and 8ha of Shorebird habitat.</p> <p>The GGBF component of the updated version was approved on 7 August 2013, within previous audit period.</p> <p>DoPI provided in principle support of the Shorebird component, with zoning and in perpetuity protection to be satisfied before full approval.</p> <p>The updated CHEMP provides for ongoing ecological studies and migratory shorebird monitoring in and around Deep and Swan Ponds. The CHEMP has a Consultative Board, with means of allocating resources for ongoing adaptive management and review of performance. GGBF Research is currently being conducted by Newcastle University. As part of the updated CHEMP, a total of 17ha of mangroves were removed from Area E, to satisfy both Shorebird habitat and ameliorative works requirements. Appropriate monitoring will be conducted as a part of compensatory habitat works and ameliorative works. Timing has been included in the CHEMP, which reflects the deadlines outlined in condition 2.20 i, i)-iii). Three breeding events were observed in three consecutive seasons in the NCIG Green and Golden Bell Frog habitat by April 2017.</p> <p>NCIG received a letter from Planning & Environment on 31/7/17 confirming that there is no longer a requirement to purchase an equivalent area of land known to contain GGBF as the compensatory habitat works had been completed for GGBF under condition 2.20 b) i) and condition 2.20 i) iii)</p>	<p>NSW Department of Planning letter dated 16.11.2010 ref: 10/02150-5 Subject: NCIG Coal Export Terminal, Kooragang Island (Reference:06_0009) - Compensatory Habitat and Ecological Monitoring Program (Condition 2.20). Revised CHEMP document No. CHEMP-L (00296800) document addresses all requirements under Condition 2.20.</p> <p>NCIG IEA 2015</p> <p>Compensatory Habitat and Ecological Monitoring Program (2015) Revision CHEMP-R03.</p> <p>a) Section 2 b) Section 2, 5, 6 c) Section 7 d) Section 3 e) Section 4 f) Section 8 g) Section 9 h) Section 5, 7 and 6.6 i) Section 11</p> <p>NSW Department of Planning and the Environment letter received 31 July 2017 ref: MP 06_0009 Subject Newcastle Coal Infrastructure Group Coal Export Terminal (M06_0009) Conservation Bond (Condition 2.20A). Inclusive of Conservation Bond, the department agrees to the reduction in the sum of the Conservation Bond.</p> <p>Transmittal of documents & Equipment NCIG to the Department of planning for Construction and operation of a coal export terminal with capacity of up to 66 million tonnes per annum dated 27/03/2017 and 23.08.2017.</p> <p>NCIG Website</p>	There are no recommendations.
			<p>Compensatory Habitat and Ecological Monitoring Program</p> <p>Financial surety of the requirements specified in condition 2.20 will be provided by the Proponent to the Department in the form of a Conservation Bond. Within 3 months of the date of the approval of modification application MP 06_0009 MOD 2, referred to in condition 1.1e), the Proponent shall determine the sum of the Conservation Bond to the satisfaction of the Director-General, in consultation with OEH, based on the following:</p> <p>a) calculating the full cost of fulfilling its compensatory habitat obligations outlined in condition 2.20, in perpetuity, (including and land acquisition costs). These costs need to consider research, establishment of habitat, ongoing monitoring and management of the habitat.</p> <p>b) employing a suitably qualified quantity surveyor to verify the calculated costs.</p> <p>The Conservation Bond is required to be lodged with the Department by 30 July 2013, or as otherwise agreed by the Director-General, to ensure that the biodiversity offsets outlined in condition 2.20 are implemented in accordance with the performance and timing commitments provided in the Compensatory Habitat and Ecological Monitoring Program. If the offset is completed in accordance with the performance and timing commitments in the Compensatory Habitat and Ecological Monitoring Program to the satisfaction of the Director-General, in consultation with the OEH, the Director-General will release the bond. If the offset is not completed in accordance with the performance and timing commitments in the Compensatory Habitat and Ecological Monitoring Program, the Director-General may, in consultation with OEH, call in all or part of the Conservation Bond, and arrange for the satisfactory completion of the relevant works. The sum of the Conservation Bond may be reduced subject to the successful performance of the compensatory works. The reduction of the Conservation Bond would be at the agreement of the Director-General, in consultation with the OEH. In relation to Litoria aurea, successful performance works include the identification of a viable breeding population.</p>	<p>NCIG documentation "satisfactorily addresses all requirements under Condition 2.20 and therefore the CHEMP is approved for the purposes of this condition". (NSW Department of Planning letter dated 16.11.2010 ref: 10/02150-5 Subject: NCIG Coal Export Terminal, Kooragang Island (Reference:06_0009) Compensatory Habitat and Ecological Monitoring Program (Condition 2.20).</p> <p>DoP wrote to NCIG confirming that it was satisfied with the calculated surety payment in 2010.</p> <p>NCIG received correspondence from the DoPE on 26th July 2013 approving an extension of time for the Conservation Bond to be lodged as outlined in Condition 2.20A, as the Department were in the process of reviewing the Compensatory Habitat and Ecological Monitoring Program (CHEMP).</p> <ul style="list-style-type: none"> On the 10th October 2013, NCIG received correspondence from the DoPE stating that the Director-General is satisfied that the sum of the Conservation Bond, totalling \$10,095,030 addresses the requirement of Condition 2.20A. NCIG provided DoPE with transmittal documents of the lodged Conservation Bond on 16th October 2013. DoPE acknowledged the lodgement of the Conservation Bond on 18th October 2013. NCIG's Letter of Credit facility matured in 2017 and a new facility was established. Therefore, Letter of Credits issued under the old facility had to be cancelled and reissued under the new facility. NCIG lodged the following bonds as acknowledged by DoPE (Jacqui McLeod) in the transmittal receipt dated 27th March 2017: <ul style="list-style-type: none"> o GGBF Habitat Establishment: \$2,538,219.00 o GGBF Land: \$1,052,488.00 o GGBF Habitat Management: \$1,921,480.00 o GGBF Habitat Monitoring: \$32,410.00 o GGBF Habitat Research: \$568,683.00 o Migratory Shorebird Land: \$141,497.00 	<p>NSW Department of Planning letter dated 16.11.2010 ref: 10/02150-5 Subject: NCIG Coal Export Terminal, Kooragang Island (Reference:06_0009) - Compensatory Habitat and Ecological Monitoring Program (Condition 2.20).</p> <p>NCIG IEA 2015</p> <p>Transmittal of documents & Equipment NCIG to the Department of planning for Construction and operation of a coal export terminal with capacity of up to 66 million tonnes per annum dated 27/03/2017 and 23.08.2017.</p> <p>NCIG Transmittal No: 131016-01 to Department of Planning - Ingrid Ilias dated 16/10/2013. RE: Included documents: L80000496, L80000494, L80000495, L80000496, L80000497, L80000498, L80000499, L80000500, L80000501.</p> <p>NCIG letter to Department of Planning- Ingrid Ilias dated 16.10.2013. RE: Newcastle Coal Infrastructure Group - Conservation Bond (MP 06_0009) Condition 2.20A. Including 9 attached original conservation letter of credit.</p> <p>NSW Department of Planning email dated 18.10.2013 RE: Transmittal of Documents: 131016-01 Conservation Bond MP 06_0009 Condition 2.20A - Bank Guarantees. Ingrid Ilias - Environmental Planning Officer Major Project Assessments. Noted original documents had been received and will be stored in the DP&I safe.</p> <p>NSW Department of Planning and Infrastructure letter dated 1.10.2013 RE: Calculation of the Conservation Bond was reviewed by the Department and considers the bond acceptable. The Department agrees to the lodgement of nine separate bank guarantees to make up the amount of the Conservation Bond, as confirmed by NCIG email dated 30.9/2013.</p>	There are no recommendations.

PA06_0009	2	20A		C	<p>o Migratory Shorebird Habitat Establishment: \$3,192,056.00</p> <p>o Migratory Shorebird Monitoring: \$46,848.00</p> <p>o Migratory Shorebird Habitat Management: \$601,349.00</p> <p>• On 12th December 2016 NCIG sought endorsement from the DoPE that a portion of the compensatory habitat works for the GGBF and Shorebird Habitat were completed to the Secretary's satisfaction.</p> <p>• NCIG received correspondence from the DoPE on 22nd June 2017 stating that the Department was satisfied that the requirements of conditions 2.20 (b)(ii) and 2.20(i)(ii) had been met for the GGBF Habitat, and 2.20 (b)(ii), 2.20(f) and 2.20(i)(ii) had been met in relation to the migratory shorebirds. However, they stated that the determination about the adequacy of the offset under Condition 2.20A and a release of part of the Conservation Bond would be subject to consultation with OEH.</p> <p>• NCIG received correspondence from OEH on 6 July 2017 stating that OEH and NPWS supported the reduction in the sum of the Conservation Bond conservation bond (\$10,095,030) to retain the following:</p> <p>o GGBF Habitat Research: \$568,683</p> <p>o GGBF Habitat Management: \$1,921,480</p> <p>o GGBF Habitat Monitoring: \$32,410</p> <p>o Migratory Shorebird Habitat Management: \$601,349</p> <p>o Migratory Shorebird Monitoring: \$46,848</p> <p>• On 31st July 2017, NCIG received correspondence from DoPE confirming that Condition 2.20(i)(iii) had been met. In relation to the Conservation Bond, as supported by the OEH, DoPE also stated a Conservation Bond of \$3,170,770 should be retained for the following amounts:</p> <p>o GGBF Habitat Research: \$568,683</p> <p>o GGBF Habitat Management: \$1,921,480</p> <p>o GGBF Habitat Monitoring: \$32,410</p> <p>o Migratory Shorebird Habitat Management: \$601,349</p> <p>o Migratory Shorebird Monitoring: \$46,848</p> <p>The Department agreed to a reduction in the sum of the Conservation Bond by the following amount:</p> <p>o GGBF Habitat Establishment: \$2,538,219 (works completed)</p> <p>o GGBF Land: \$1,052,488 (Ash Island land secured and viable breeding population established)</p> <p>o Migratory Shorebird Habitat Establishment: \$3,192,056 (works completed)</p> <p>o Migratory Shorebird Land: \$141,497 (Area E land secured and established)</p> <p>• NCIG signed the transmittal document on 23rd August 2017, acknowledging the receipt of the following amounts:</p> <p>o GGBF Habitat Establishment: \$2,538,219.00</p> <p>o GGBF Land: \$1,052,488.00</p> <p>o Migratory Shorebird Land: \$141,497.00</p> <p>o Migratory Shorebird Habitat Establishment: \$3,192,056.00</p> <p>NCIG has undertaken operation and activities in accordance with Condition 2.20, 2.20A and the Compensatory Habitat and Ecological Monitoring Program.</p> <p>Revised CHEMEP document No. CHEMEP-L (00296800) document addresses all requirements under Condition 2.20.</p>	<p>NSW Office of Environment and Heritage - Sharon Molloy letter dated 6.7.2017. RE: Referring to the letter from NCIG dated 22 May 2017 requesting consultation and support from the Office of Environment and Heritage in relation to the successful delivery of the compensatory works for the green and golden bell frog and migratory shorebird. Planning confirmed the works were completed in accordance with Condition 2.20 of Major Project Approval (MP06_0009) for the NCIG Coal Export Terminal. OEH have reviewed the request and conducted an onsite inspection on 23 June 2017 of the compensatory works: GGBF habitat ponds on Ash Island and the restored migratory shorebird habitat at Fishfry Flats. OEH confirm the successful breeding has occurred at the GGBF habitat and suitable migratory shorebird habitat in accordance with the approval. OEH and NPWS support the reduction in the sum of the Conservation Bond to \$ 3,170,770.</p> <p>NSW Department of Planning and the Environment dated 31.7.2017 RE: DP&E confirmed there is no longer a requirement to purchase an equivalent area of land known to contain the GGBF species. Confirming the successful performance of the compensatory works and supporting the reduction of the current \$10,095,030 Conservation Bond by the following amounts:</p> <p>- GGBF Habitat Establishment: \$2,538,219 (works completed)</p> <p>- GGBF Land: \$1,052,488 (Ash Island land secured and viable breeding population established)</p> <p>- Migratory Shorebird Habitat Establishment: \$3,192,056 (works completed)</p> <p>- Migratory Shorebird Land: \$141,497 (Area E land secured and established)</p> <p>As also supported by OEH, a Conservation Bond of \$3,170,770 should be retained for ecological monitoring and ongoing ecological management for the following amounts:</p> <p>- GGBF Habitat Research: \$568,683</p> <p>- GGBF Habitat Management: \$1,921,480</p> <p>- GGBF Habitat Monitoring: \$32,410</p> <p>- Migratory Shorebird Habitat Management: \$601,349</p> <p>- Migratory Shorebird Monitoring: \$46,848</p> <p>NSW Department of Planning and Environment letter dated 22.6.2017. RE: Following the Departments review of the following documents NCIG provided to the DP&E, the Department is satisfied that the requirements of conditions</p> <p>- the Department is satisfied that the requirements of conditions 2.20 (b)(i) and 2.20 (i)(iii) have been met for the Litoria aurea.</p> <p>- the Department is satisfied that the requirements of conditions 2.20 (b)(ii), 2.20(f) and 2.20 (i)(ii) have been met in relation to the migratory shorebirds.</p>	
PA06_0009	2	20B	Compensatory Habitat and Ecological Monitoring Program In the event that the project is modified such that it results in impacts to biodiversity different to those assessed in the document referred to in condition 1.1b), the Proponent is required to submit for the approval of the Director-General, a revised Compensatory Habitat and Ecological Monitoring Program within three months of any approval.	Not triggered	The project has not been modified to date beyond, such that biodiversity impacts result beyond those identified in documents identified in condition 1.1b).	NCIG IEA 2015 Annual Return 2015-2017	There are no recommendations.
PA06_0009	2	21	Traffic and Transport Impacts Prior to the commencement of construction of the project, including fill/preload activities, the Proponent shall develop and submit for the approval of the RMS and Council, construction traffic control measures to be implemented for the project. The construction traffic control measures shall include measures to ensure that project traffic does not adversely affect traffic movements on Cormorant Road during peak traffic times.	Not triggered	NCIG has not conducted any works within the audit period. Therefore the condition is not triggered within the audit period. A Construction Traffic Management Protocol was approved by DP&I on 23 July 2007, the RTA on 12 November 2007 and the Newcastle City Council on 5 July 2007. The Construction Traffic Management Protocol was revised for construction of the Rail Flyover and approved by DP&I on 14 June 2012, RMS on 2 July 2012, and approved by NCC on 5 August 2012. Traffic management has been managed in accordance with the Construction Traffic Management Protocol to minimise project traffic adversely affecting traffic movements on Cormorant Road during peak traffic times. (NCIG IEA 2015)	NCIG IEA 2015 Annual Return 2015-2017	There are no recommendations.
PA06_0009	2	22	Traffic and Transport Impacts The Proponent shall design, install and maintain physical traffic control devices and signs for all prohibited traffic movements referred to in Appendix C of the document referred to under condition 1.1b) of this approval, during construction and operation of the project, as relevant. The Proponent shall submit design details of the traffic control devices and signs to the RMS and Council for approval prior to their installation. Traffic control devices and signs shall be installed prior to the commencement of construction and operation, as relevant, and at the expense of the Proponent.	Not triggered	NCIG has completed all construction and development and stages in the NCIG IEA 2015 period. This condition is not applicable to this audit period. NCIG developed and submitted for the approval of the RTA and Newcastle City Council a Construction Traffic Management Protocol in accordance with Condition 7.3(d) which included design details for physical traffic control devices and signs to be installed and maintained for the Project. The Construction Traffic Management Protocol was approved by the RTA on 12 November 2007 in accordance with Condition 7.3(d). The Construction Traffic Management Protocol was approved by the Newcastle City Council on 5 July 2007. An updated CTMP, including construction of the Rail Flyover was approved by RMS on 2 July 2013, and approved by NCC on 5 August 2013.	NCIG IEA 2015 Annual Return 2015-2017	There are no recommendations.

PA06_0009	2	23	<p>Traffic and Transport Impacts</p> <p>The Proponent shall ensure that all access to the relevant Site areas shall be via the following routes:</p> <p>ii) Temporary haulage road (construction phase only);</p> <p>l) Pacific National access road;</p> <p>iii) Temporary haulage road (construction phase only);</p> <p>iii) Egret Street; and</p> <p>iv) Raven Street, Curlew Street.</p> <p>b) Wharf Area:</p> <p>l) Temporary haulage road (construction phase only); and</p> <p>ii) Wharf access road.</p> <p>c) Rail area:</p> <p>l) Delta access road (construction phase only); and</p> <p>ii) Pacific National access road</p>	C	<p>NCIG has not conducted any construction works within the audit period. This condition was compliant 'complete' for the four (4) access routes specific to the construction phase only and is shown as compliant in the NCIG IEA 2015 report.</p> <p>The remaining access routes and roads utilised in the operational phase within the site have been observed on aerial photographs and during the site visit.</p>	<p>Annual Review 2016 and 2017</p> <p>NCIG IEA 2015</p> <p>Aerial site photographs (Google 2018)</p> <p>Appendix A - Photographs</p>	There are no recommendations.
PA06_0009	2	24	<p>Traffic and Transport Impacts</p> <p>The Proponent shall ensure that traffic control signals and associated civil works are designed and constructed at the intersection of Cormorant Road and the temporary haulage road, west of the existing Blue Circle railway level crossing, in accordance with the RTA's Road Design Guide and the relevant Austroads guidelines, to the satisfaction of the RMS including but not limited to, the following works:</p> <p>a) the traffic control signals shall be designed to restrict all movements at the intersection to through movements only;</p> <p>b) the signals shall be co-ordinated with the adjacent Blue Circle railway level crossing signals; and</p> <p>c) provision shall be made for on-road Nelson Bay Road cyclists at the intersection.</p>	Not triggered	<p>NCIG has not conducted any construction works within the audit period. This condition was compliant 'complete' in the NCIG IEA 2015 report. Therefore the condition is not triggered within the audit period.</p> <p>Activities associated with Project Approval conditions 2.24, 2.25 and 2.26 were implemented and the civil works and construction are complete.</p> <p>These conditions relate to the Temporary Haulage Road to the project site and are no longer applicable as the transport operations for the coal loader occur along the completed permanent road system. (NCIG IEA 2015)</p>	<p>Annual Review 2016 and 2017</p> <p>NCIG IEA 2015</p>	There are no recommendations.
PA06_0009	2	25	<p>Traffic and Transport Impacts</p> <p>The Proponent shall ensure that the traffic control signals outlined in condition 2.24 at the intersection of Cormorant Road and the temporary haul road shall be removed to the satisfaction of the RMS and Council, at completion of the construction phase or after 12 months of operation of the signals. This shall include any rehabilitation work required to Cormorant Road as determined by the RMS and Council.</p>	C	<p>NCIG has not conducted any construction works within the audit period. This condition was compliant 'complete' in the NCIG IEA 2015 report.</p> <p>The Auditor observed the completed rehabilitation works on Cormorant Road.</p> <p>Activities associated with Project Approval conditions 2.24, 2.25 and 2.26 were implemented and the civil works and construction are complete.</p> <p>These conditions relate to the Temporary Haulage Road to the project site and are no longer applicable as the transport operations for the coal loader occur along the completed permanent road system. (NCIG IEA 2015)</p>	<p>Annual Review 2016 and 2017</p> <p>NCIG IEA 2015</p> <p>Site Audit Observation</p>	There are no recommendations.
PA06_0009	2	26	<p>Traffic and Transport Impacts</p> <p>The Proponent shall ensure that the traffic control signals at the intersection of Cormorant Road and the temporary haul road shall not be utilised for traffic movements across Cormorant Road between 6.00 am to 9.00 am and 4.00 pm to 6.00 pm on weekdays.</p>	Not triggered	<p>NCIG activities associated with Project Approval conditions 2.24, 2.25 and 2.26 were implemented and the civil works and construction was complete in the audit period of NCIG IEA 2015. The Auditor observed no construction activities on NCIG Site.</p> <p>These conditions relate to the Temporary Haulage Road to the project site and are no longer applicable as the transport operations for the coal loader occur along the completed permanent road system. (NCIG IEA 2015)</p>	<p>Annual Review 2016 and 2017</p> <p>NCIG IEA 2015</p> <p>Site Audit Observation</p>	There are no recommendations.
PA06_0009	2	27	<p>Traffic and Transport Impacts</p> <p>The Proponent shall ensure that the intersection of Cormorant Road/Tourle Street and the Delta access road to the west of the Site is designed and constructed in accordance with the RTA's Road Design Guide and the relevant Austroads guidelines to the satisfaction of the RMS. The Proponent shall ensure that the intersection include, as a minimum, the following:</p> <p>a) traffic movements shall be physically restricted to left in/left out only;</p> <p>b) the left turn in would require a sealed left turn deceleration lane;</p> <p>c) the left turn out should be constructed at right angles to Cormorant Road as a give way arrangement and sealed for an appropriate length to ensure that materials are not tracked onto Cormorant Road, The Proponent shall ensure that shaker grids are provided on-site at the start of the seal;</p> <p>e) adjustments to the footpath and cycleways shall be undertaken to the satisfaction of the RMS and Council.</p>	Not triggered	<p>NCIG activities associated with Project Approval condition 2.27 were implemented and civil construction was complete in the audit period of NCIG IEA 2015.</p> <p>The Cormorant Road / Tourle Street/ Delta Access Road intersection upgrade was completed by BHP Billiton (BHPB) to facilitate access to the HRRP Landfill Site. As these works had been completed by BHPB, NCIG was not required to complete the design and construction of the requirements of Project Approval 06_0009 condition 2.27. (NCIG IEA 2015).</p> <p>The Auditor inspected the completed works and noted that no recent road construction works were evident.</p>	<p>Annual Review 2016 and 2017</p> <p>NCIG IEA 2015</p> <p>Site Audit Observation</p>	There are no recommendations.
PA06_0009	2	28	<p>Traffic and Transport Impacts</p> <p>The Proponent shall ensure that the intersection of Cormorant Road/Pacific National access shall be designed and constructed in accordance with the RTA's Road Design Guide and the relevant Austroads guidelines, to the satisfaction of the RMS. The Proponent shall ensure that the intersection should include as a minimum:</p> <p>a) traffic movements shall be physically restricted to left in/left out/right in only;</p> <p>b) the existing intersection shall be upgraded to include construction of concrete medians in Cormorant Road;</p> <p>c) this intersection shall be integrated with the wind turbine access to the satisfaction of the RMS and Council.</p>	Not triggered	<p>NCIG activities associated with Project Approval condition 2.28 were implemented and civil construction was complete in the audit period of NCIG IEA 2015.</p> <p>The intersection of Cormorant Road/Pacific National access was designed and constructed in accordance with the RTA Road Design Guide and the Austroads guidelines and approved by the RTA. The revised Construction Traffic Management Protocol, dated 14 June 2012, was submitted to the RMS for approval. RMS noted that additional street lighting and a median strip was required and NCIG completed these works. A letter for Notice of Practical Completion was received from RMS on 5 December 2012, stating that the Cormorant Road access works were considered complete. (NCIG IEA 2015).</p> <p>The Auditor inspected the completed works and noted that no recent road construction works were evident.</p>	<p>Annual Review 2016 and 2017</p> <p>NCIG IEA 2015</p> <p>Site Audit Observation</p>	There are no recommendations.
PA06_0009	2	29	<p>Traffic and Transport Impacts</p> <p>The Proponent shall construct a U-turn facility at the Pacific National access road to the satisfaction of the RMS and Council. The Proponent shall ensure that the U-turn facility:</p> <p>a) is located a minimum distance of 100 metres from Cormorant Road to avoid any potential conflict with traffic at the intersection; and</p> <p>b) is designed to cater for B-double movements.</p>	Not triggered	<p>NCIG activities associated with Project Approval condition 2.29 were implemented and civil construction was complete in the audit period of NCIG IEA 2015.</p> <p>A U-turn facility has been developed at the Pacific National access road 100m from Cormorant Road to the satisfaction of the RTA and Newcastle City Council. (NCIG IEA 2015).</p> <p>The Auditor inspected the completed works and noted that no recent road construction works were evident.</p>	<p>Annual Review 2016 and 2017</p> <p>NCIG IEA 2015</p> <p>Site Audit Observation</p>	There are no recommendations.
PA06_0009	2	30	<p>Traffic and Transport Impacts</p> <p>The Proponent shall ensure that the intersection of Cormorant Road and the Wharf access road to the south of the Site is designed and constructed in accordance with the RTA's Road Design Guide and the relevant Austroads guidelines to the satisfaction of the RMS. The Proponent shall ensure that the intersection includes the following minimum requirements:</p> <p>a) traffic movements shall be physically restricted to left in/left out/right in only;</p> <p>b) the left turn in would require a deceleration lane; and</p> <p>c) the left turn out should be constructed at right angles to Cormorant Road as a give way arrangement.</p>	Not triggered	<p>NCIG activities associated with Project Approval condition 2.30 were implemented and civil construction was complete in the audit period of NCIG IEA 2015.</p> <p>The intersection of Cormorant Road and the Wharf access road to the south of the NCIG site has been designed and constructed in accordance with the RTA Road Design Guide and Austroads guidelines, to the satisfaction of the RTA. (NCIG IEA 2015).</p> <p>The Auditor inspected the completed works and noted that no recent road construction works were evident.</p>	<p>Annual Review 2016 and 2017</p> <p>NCIG IEA 2015</p> <p>Site Audit Observation</p>	There are no recommendations.

PA06_0009	2	31	<p>Traffic and Transport Impacts The Proponent shall ensure that the intersection of Cormorant Road/Egret Street is designed and constructed in accordance with the RTA's Road Design Guide and the relevant Austroads guidelines to the satisfaction of the RMS. The Proponent shall ensure that the intersection includes, as a minimum:</p> <p>a) traffic movements shall be physically restricted to left in/left out and right in only; and b) the existing intersection shall be modified to include the construction of concrete medians in Cormorant Road.</p>	Not Triggered	<p>NCIG activities associated with Project Approval condition 2.31 were implemented and civil construction was complete in the audit period of NCIG IEA 2015.</p> <p>The intersection of Cormorant Road/Egret Street was designed and constructed in accordance with the RTA's Road Design Guide and the relevant Austroads guidelines to the satisfaction of the RTA. (NCIG IEA 2015).</p> <p>The Auditor inspected the completed works and noted that no recent road construction works were evident.</p>	<p>Annual Review 2016 and 2017</p> <p>NCIG IEA 2015</p> <p>Site Audit Observation</p>	There are no recommendations.
PA06_0009	2	32	<p>Traffic and Transport Impacts The Proponent shall ensure that the bridge structure over Cormorant Road is designed and constructed to RMS requirements, including (but not limited to):</p> <p>a) allowance for future road widening/duplication of Cormorant Road; b) a minimum 6.5 metre vertical height clearance be provided from the top of the Cormorant Road pavement to the underside of the bridge structure; c) the bridge structure and its approaches to be designed to minimise impacts on maintenance activities required within the road reserve; and d) any maintenance activities required for the bridge structure shall be carried out from within/on the bridge structure.</p>	C	<p>NCIG activities associated with Project Approval condition 2.32 were implemented and civil construction was complete in the audit period of NCIG IEA 2015.</p> <p>The conveyor bridge structure over Cormorant Road was designed and constructed to RTA requirements, including:</p> <p>a) allowance for future road widening/duplication of Cormorant Road; b) a minimum 6.5 metre vertical height clearance from the top of the Cormorant Road pavement to the underside of the bridge structure; c) designed to minimise impacts on maintenance activities required within the road reserve; and d) provide for any maintenance activities required for the bridge to be carried out from within/on the bridge structure. (NCIG IEA 2015).</p> <p>The Auditor inspected the completed works and noted that no recent road construction works were evident.</p>	<p>Annual Review 2016 and 2017</p> <p>NCIG IEA 2015</p> <p>Site Audit Observation</p>	There are no recommendations.
PA06_0009	2	33	<p>Traffic and Transport Impacts The Proponent shall enter into an agreement with the RTA for the ongoing maintenance and demolition of the bridge structure.</p>	C	<p>NCIG activities associated with Project Approval condition 2.33 were implemented and civil construction was complete in the audit period of NCIG IEA 2015.</p> <p>NCIG entered into an agreement with the RTA in accordance with Condition 2.33. (NCIG IEA 2015).</p>	<p>Annual Review 2016 and 2017</p> <p>NCIG IEA 2015</p>	There are no recommendations.
PA06_0009	2	34	<p>Traffic and Transport Impacts The Proponent shall submit for the approval of the RMS and Council, detailed designs for the road works referred to under condition 2.22 to condition 2.32 inclusive 2.24, prior to the commencement of construction of those works, and prior to the commencement of construction of the relevant components of the project. All road works shall be undertaken and completed to the satisfaction of the RMS and Council.</p>	Not triggered	<p>NCIG activities associated with Project Approval condition 2.34 were implemented and civil construction was complete in the audit period of NCIG IEA 2015.</p> <p>NCIG consulted with the RTA and Newcastle City Council during design phase of the project. NCIG entered into a Works Authorisation Deed with the RTA to ensure that the final design addressed the requirements of the Deed, for each specific change to the state road network. The RTA assessed the designs and issued Notices of Practical Completion for the various works. (NCIG IEA 2015).</p>	<p>Annual Review 2016 and 2017</p> <p>NCIG IEA 2015</p> <p>Site Audit Observation</p>	There are no recommendations.
PA06_0009	2	35	<p>Traffic and Transport Impacts The project shall be designed, constructed, maintained and operated so as not to preclude any future expansion of Cormorant Road to accommodate four lanes of traffic. The Proponent shall consult with the RMS during detailed design of the project to ensure that the requirements of this condition are reflected in the final design of the project. In this regard, the Proponent will be required to enter into a Works Authorisation Deed with the RMS and submit detailed design plans and any additional relevant information, as may be required under the Deed, to the RMS for each specific change to the state road network for the RTA's assessment and approval.</p>	C	<p>NCIG activities associated with Project Approval condition 2.35 were implemented and civil construction was complete in the audit period of NCIG IEA 2015.</p> <p>NCIG consulted with the RTA and Newcastle City Council during design phase of the project. NCIG entered into a Works Authorisation Deed with the RTA to ensure that the final design addressed the requirements of the Deed, for each specific change to the state road network. The RTA assessed the designs and issued Notices of Practical Completion for the various works. (NCIG IEA 2015).</p> <p>Observed well maintained and operated traffic and transport infrastructure and procedures according to condition 2.35 on the NCIG Site December 2018.</p>	<p>Annual Review 2016 and 2017</p> <p>NCIG IEA 2015</p> <p>Observed design onsite</p> <p>Observed no construction activities on NCIG Site.</p>	There are no recommendations.
PA06_0009	2	36	<p>Traffic and Transport Impacts The Proponent shall ensure that any property requirements including acquisition and/or road reserve dedication shall be in accordance with the requirements of the RMS and Council and at the full expense of the Proponent.</p>	Not triggered	<p>NCIG had ensured that any property requirements including acquisition and/or road reserve dedication is in accordance with the requirements of the RMS and Council and at the full expense of the Proponent.</p> <p>There have been no changes in design, acquisition and / or road reserve dedication since during the audit period.</p>	<p>Annual Review 2016 and 2017</p> <p>NCIG IEA 2015</p> <p>NCIG Management Interviews</p>	There are no recommendations.
PA06_0009	2	37	<p>Internal Roads and Parking The Proponent shall design, construct and maintain all internal road works, including the car park, to meet the following requirements:</p> <p>a) compliance with the provisions of relevant Australian Standards, RMS standards and guidelines, and Council codes; b) installation of clear signage to demarcate all vehicle movements within the Site; c) installation and maintenance of any landscaping on the Site so as not to affect driver sight distance for vehicles entering and exiting the Site; and d) clear demarcation of all visitor, disabled, ambulance and service vehicle parking areas.</p>	C	<p>NCIG activities associated with Project Approval condition 2.37 were implemented and civil construction was complete prior to this Audit Period.</p> <p>The Auditor observed the NCIG Car park at the administration offices with clear demarcation of parking areas, signage and landscaping.</p>	<p>Annual Review 2016 and 2017</p> <p>NCIG IEA 2015</p> <p>Site Audit Observation</p>	There are no recommendations.
PA06_0009	2	38	<p>Rail Infrastructure and Management Prior to the commencement of any works associated with the construction of rail infrastructure on land associated with the Kooragang Island Waste Emplacement Facility, the Proponent shall consult with the Regional Land Management Corporation (RLMC) to reach agreement on the detailed design and operational aspects of the rail infrastructure components of the project on land owned by RLMC. Design details shall include all measures outlined in the documents referred to in condition 1.1.</p>	Not triggered	<p>NCIG activities associated with Project Approval condition 2.38 were implemented and civil construction was completed prior to this Audit Period.</p> <p>Newcastle Ports Corporation granted landholder consent to NCIG for Lot 1001 DP 1178025, Lots being 1, 9, 10, and 11 and Part Lot 7 of DP1119752, and Lot 1001 of DP1178025 on behalf of Government Property NSW (GPNSW) on 20 December 2012, for the construction of the Rail Flyover. (NCIG IEA 2015).</p> <p>RMLC confirmed their agreement to the design and operation of the rail infrastructure in a letter dated 20/12/2012. (RMLC is now known as Hunter Development Corporation)</p> <p>No construction has occurred on the NCIG Site within the audit period. This condition is compliant within the audit timeframe.</p>	<p>Letter from Newcastle Port Corporation (dated 20/12/2012) RE: Landholder Consent for GPNSW.</p> <p>Letter from Newcastle Port Corporation (dated 20/12/2012) RE: Landholder Consent for Lot 1001 DP 1178025.</p> <p>Annual Review 2016 and 2017</p> <p>NCIG IEA 2015</p> <p>Site Audit Observation</p>	There are no recommendations.

PA06_0009	2	39	Rail Infrastructure and Management The Proponent shall consult with PWCS and ARTC, and meet the reasonable requirements of ARTC with respect to the design of the project, including those components of the project that may affect the design, connection and operation of existing and proposed ARTC and PWCS rail infrastructure assets.	C	NCIG activities associated with Project Approval condition 2.39 were implemented and civil construction was completed prior to this Audit Period. NCIG consulted in 2007 with the ARTC with respect to components relating to the ARTC existing rail infrastructure assets. ARTC confirmed by letter on 22 May 2007 that the NCIG proposed rail design conformed to ARTC requirements. NCIG signed an ARTC Connection Agreement in 2009. NCIG has constructed the completed rail connections to ARTC's existing rail infrastructure assets in accordance with ARTC's requirements. The rail connections for the Stage 2F and the Rail Flyover have been constructed to the design agreed with ARTC on 12 August 2013 and PWCS who issued a letter stating their satisfaction with the design and construction program on 14 August 2013. (NCIG IEA 2015).	Annual Review 2016 and 2017 NCIG IEA 2015 Observed design and operation onsite Letter from ARTC (dated 12/12/2007) RE: NCIG Rail Design ARTC Connection Agreement, 2009 Letter from ARTC (dated 12/12/2012) RE: Rail Flyover Design Letter from PWCS (dated 14/09/2012) RE: NCIG Rail Flyover Design	There are no recommendations.
PA06_0009	2	40	Rail Infrastructure and Management Utilities, services and other infrastructure potentially affected by construction shall be identified prior to construction to determine requirements for access to, diversion, protection, and/or support. Consultation with the relevant owner and/or provider of services that are likely to be affected by the project shall be undertaken to make suitable arrangements for access to, diversion, protection and/or support of the affected infrastructure as required. The cost of any such arrangements shall be borne by the Proponent, unless otherwise agreed by the utility or service provider.	Not triggered	NCIG activities associated with Project Approval condition 2.40 were implemented and civil construction was complete in the audit period of NCIG IEA 2015. NCIG consulted with service providers to access, divert, protect or support infrastructure that may be affected by the Rail Flyover construction. An Agreement for Connection of Developments, SR00258 for relocation of the 33kV services for the construction of the NCIG Rail Loop, was signed with Ausgrid on 7 November 2013. (NCIG IEA 2015).	Ausgrid Agreement for Connection of Developments March 2006. Amendments included from: CIA 1313 October 2006, CIA 1339 April 2009, CIA 1359A February 2011. Ref: SR00258 Regarding 33kV Relocation for NCIG Rail Loop Wagtail Way Kooragang Island. NCIG IEA 2015	There are no recommendations.
PA06_0009	2	41	Soil and Water Quality Impacts Except as may be expressly provided under the provision of an Environment Protection Licence for the project, the Proponent shall comply with section 120 of the Protection of the Environment Operations Act 1997 which prohibits the pollution of waters.	C	No recorded non-compliances, either in NCIG records or publicly available data from the NSW EPA register website, where found for the Audit Period. Environment Protection Licence 12693 was issued by the Department of Environment and Climate Change on 26 October 2007 for the NCIG development. NCIG Management stated that no water was discharged from the site during the audit period that exceeded the water quality objectives set in the EPL. Management noted that water discharges from the site do occur during periods of prolonged rainfall. A review of monitoring data related to those discharges by the Auditor did not identify any non-compliances.	EPL No.12693 Monthly Monitoring Reports 2015-2018 NCIG internal compliance register 2015-2018. NSW EPA POEO Public Register 2015-2018	There are no recommendations.
PA06_0009	2	42	Soil and Water Quality Impacts Unless otherwise agreed by the Director-General, the Proponent shall design, construct, maintain and operate surface water and stormwater management infrastructure on the Site to accommodate a 1 in 100 ARI rainfall event, and shall not permit the discharge of any water from the Site to the Hunter River unless expressly provided under the provision of an Environment Protection Licence.	NC	NCIG has designed and constructed surface water and stormwater management infrastructure to accommodate a 1 in 100 ARI rainfall event. Water discharges from the NCIG discharge occur on average 1 to 2 times per year. Those waters discharge into the Hunter River during cumulative events of continuous rain of over 110mm. The date(s) of any water discharges from the site during the audit period December 2015- December 2018 are: - 8 January 2016 - 5 April 2017 - 10 - 11 June 2018 - 20-25 June 2018 The EPL does not expressly provide for any licenced discharge point for the discharge of water. This Condition prohibits the discharge of any water, other than that expressly permitted in the EPL. This condition cannot be met, however the Auditor notes that the intent of the POEO Act is being met, in that the discharge of waters from the site has not (based on the results of testing reviewed by the Auditor) resulted in the "Pollution of Waters". NCIG has consulted with DPE and EPA regarding this compliance issue since May 2015, specifically: - Overflow event communicated with EPA – 15/5/15 - EPA response, stating no EPL compliance issues with overflow event – 24/8/15 - EPL varied by EPA to include discharge and ambient water monitoring – 10/3/16 - DoPE letter in response to 2015 IEA asking for an Action Plan on actions taken to achieve compliance with Condition 2.42 – 14/7/16 - Letter to DoPE and Action Plan from NCIG outlining actions to achieve compliance with Condition 2.42 – 26/8/16	Interview with NCIG Environmental Representative Operation Water Management Plan (OWMP) (2018) Document No. HSEC.MP.12.04. EPL 12693 Site Audit Observations	It is recommended that NCIG apply for a variation of the EPL to establish a licenced discharge point or alternatively seek a variation to the Approval to permit water discharges from site during rain events that exceed a 1 in 100 ARI event.
PA06_0009	2	43	Construction Soil and Water Management The Proponent shall take all reasonable measures to prevent soil erosion and the discharge of sediments and pollutants from the Site during construction of the project.	Not Triggered	NCIG activities associated with Project Approval condition 2.43 were implemented and civil construction was completed prior to this Audit Period.	NCIG IEA 2015 Annual Return 2015-2017	There are no recommendations.
PA06_0009	2	44	Construction Soil and Water Management The Proponent shall install stormwater drains, stormwater ponds, settlement ponds and/or storage ponds and other erosion, sediment and pollution controls as may be appropriate to manage stormwater on the Site. The Proponent shall maintain all erosion, sediment and pollution control infrastructure at or above design capacity for the duration of construction of the project and until such time as all ground disturbed by the works has been stabilised and rehabilitated so that it no longer acts as a source of sediment.	C	Erosion and sediment control measures listed in the OWMP were observed to be operating efficiently during the site visit in December 2018, post construction of the NCIG Site. Observations included the containment of material in vehicles, tarp covering fill material onsite, stormwater drains, stormwater ponds, settlement ponds and/or storage ponds.	Operation Water Management Plan (OWMP) (2018) Document No. HSEC.MP.12.04. Site Audit observations December 2018.	There are no recommendations.
PA06_0009	2	45	Construction Soil and Water Management All stockpiled construction materials shall be stabilised and covered where practicable to prevent erosion or dispersal of the materials. The Proponent shall manage any fill/ preload material brought to the Site in manner that prevents erosion and dispersal of those materials.	Not triggered	NCIG activities associated with Project Approval condition 2.45 were implemented and civil construction was completed prior to this Audit Period.	Operation Water Management Plan (OWMP) (2018) Document No. HSEC.MP.12.04. Site Audit observations December 2018.	There are no recommendations.
PA06_0009	2	45A	Construction Soil and Water Management Prior to the commencement of construction of the High Capacity Optional Inlet Rail Spur and Rail Sidings the Proponent shall sample and characterise the quality of the existing groundwater in and around the rail infrastructure corridor to determine groundwater quality trigger values.	Not triggered	NCIG activities associated with Project Approval condition 2.45 were implemented and civil construction was completed prior to this Audit Period.	NCIG IEA 2015 Annual Return 2015-2017	There are no recommendations.

PA06_0009	2	45B	Construction Soil and Water Management Prior to the commencement of construction, the Proponent must develop a long-term groundwater monitoring program in and around the High Capacity Optional Inlet Rail Spur and Rail Sidings to identify changes in groundwater quality from pre-construction groundwater conditions. The groundwater monitoring program will include an action plan should groundwater quality trigger values be exceeded during the course of the monitoring program and the Proponent shall rectify and adverse impact on groundwater that may be detected. Groundwater monitoring must commence at least one month prior to the commencement of construction.	C	The groundwater monitoring program is detailed in section 5 of the Operation Environmental Management Plan . Specifically, groundwater monitoring for the groundwater level and also the following traces of Aluminium, Arsenic, Bromine, Cadmium, Conductivity, Copper, Cyanide, Iron, Manganese, Nickel, pH, Total PAHs, TPH C6-9, TPH C10-14, TPH C15-28, TPH C29-36 and Zinc at the groundwater sampling sites (detailed in appendix G of the OEMP), every 6 months as stated in the OEMP and reported bi-annually in the Monthly Monitoring Data report.	NCIG IEA 2015 Annual Return 2015-2017 Annual Environmental Management Report 2015-2018 Monthly Monitoring Data (January 2016- November 2018) June and December	There are no recommendations.
PA06_0009	2	46	Fill / Preload Material Specifications Materials classified as Virgin Excavated Natural Materials (VENM) or those referred to under condition 2.47, shall be used as fill/ preload material for the project.	Not triggered	NCIG activities associated with Project Approval condition 2.46 were implemented and civil construction was completed prior to this Audit Period. The Annual Environmental Reports 2015-2017 comply with condition 2.46 of the waste material classification as referred to under condition 2.46. NCIG WMP complied with the waste classification for fill / preload material use onsite. Only material classified as VENM has been used as fill/preload material in accordance with Condition 2.46.	Waste Management Plan (WMP) (2018) Document No. HSEC.MP.12.07 Operation Environmental Management Plan (2018) Document No. HSEC.MP.12.01 Annual Environmental Management Reports 2015-2017	There are no recommendations.
PA06_0009	2	47	Fill / Preload Material Specifications Unless otherwise agreed by the Director-General, the Proponent shall only source clean materials for use in fill/ preloading activities from the development the subject of development consent DA-134-3-2003-i (dredging and remediation of the South Arm of the Hunter River). Where the Proponent seeks the agreement of the Director-General to use fill/ preload materials from a different source, the Director-General may require submission of additional information to demonstrate how the impacts from heavy vehicle movements will be adequately and appropriately mitigated and managed.	Not triggered	NCIG activities associated with Project Approval condition 2.47 were implemented and civil construction was completed prior to this Audit Period. NCIG used material only classified as VENM for fill/preload activities on the site. The Annual Environmental Reports from 2015-2017 confirm this.	Waste Management Plan (WMP) (2018) Document No. HSEC.MP.12.07 Operation Environmental Management Plan (2018) Document No. HSEC.MP.12.01 Annual Environmental Management Reports 2015-2017	There are no recommendations.
PA06_0009	2	48	Fill / Preload Material Specifications Unless otherwise agreed by the Director-General, fill/ preload material sourced from the development the subject of development consent DA-134-3-2003-i shall be transported and managed consistently with an approved Dredged Material Transport Strategy under that development consent (condition B2.29).	Not triggered	NCIG activities associated with Project Approval condition 2.48 were implemented and civil construction was completed prior to this Audit Period. NCIG Management reported that no dredged material was used as fill during the construction of the Coal Export Terminal project. NCIG have transported and managed fill/preload material in accordance with the Dredged Material Transport Strategy. The Dredged Material Transport Strategy was developed in consultation with Newcastle City Council and Roads and Traffic Authority (RTA) and approved by the RTA on 23 November 2007 in accordance with B2.29 of development consent (DA-134-3-2003-i).	Annual Environmental Management Reports 2015-2017 NCIG IEA 2015	
PA06_0009	2	49	Operation Soil and Water Management All stormwater and surface water management infrastructure on the Site intended to manage actual or potentially contaminated water shall be lined with a low-permeability material to minimise potential leakage. Collected stormwater shall be reused on Site for beneficial purposes such as the wetting of coal to reduce dust emissions from the Site.	C	NCIG has implemented mitigation measures including the construction of concrete (these were observed by the Auditor during the December 2018 site inspection) to minimise potential leakage from stormwater and surface water management infrastructure intended to manage actual potentially contaminated water in accordance with Condition 2.49.	Operation Water Management Plan (OWMP) (2018) Document No. HSEC.MP.12.04 Operation Environmental Management Plan (2018) Document No. HSEC.MP.12.01 Site Audit Observations	There are no recommendations.
PA06_0009	2	50	Operation Soil and Water Management In the event that stormwater runoff collection cannot meet the water demand of the Site, treated wastewater, if available from the relevant water authority, shall be used preferentially over potable water for the purposes of dust control, unless otherwise agreed by the Director-General.	C	The OWMP 2018 states that Hunter Water Corporation has been consulted regarding supply of treated water for industrial use onsite. As a result of discussions in the past, it was determined that treated wastewater could not be supplied in a manner that was in line with the water demand cycle of the site. However, liaison with Hunter Water Corporation is ongoing in relation to this matter. Discussions were held with the Hunter Water Corporation in relation to utilising treated wastewater as a part of the NCIG operations during the early stages of construction. While wastewater is currently available for utilisation, cost and supply management make it an unviable option. Liaison with Hunter Water Corporation is ongoing in relation to this matter.	Operation Water Management Plan (OWMP) (2018) Document No. HSEC.MP.12.04 Operation Environmental Management Plan (2018) Document No. HSEC.MP.12.01	It is recommended that should NCIG determine that the use of the available recycled water is not practical, seek a modification to this Approval Condition to remove the absolute requirement for preferential use of recycled water.
PA06_0009	2	51	Operation Soil and Water Management All machinery wash down waters and amenities wastewater shall be directed to sewer (subject to Hunter Water Corporation approval), or to an appropriately licensed liquid waste disposal facility.	C	The drainage plan reviewed by the Auditor and observations made during the site inspection indicated that the flow of water from direct machinery wash down waters and amenities wastewater are sent through oily water separator then to sewer. Wash-down water and amenities wastewater are managed in accordance with this condition and Operation Water Management Plan 2018 Section 4.3.8	NCIG Coal Export Terminal Administration Area Drawing Number: HW00-05-M-74503 Operation Water Management Plan (OWMP) (2018) Document No. HSEC.MP.12.04 Site Audit Observations	There are no recommendations.
PA06_0009	2	52	Operation Soil and Water Management The Proponent shall design, install, maintain and operate rainwater tanks for the collection of water for domestic and potable uses on the Site. Collected rainwater shall be used preferentially to external potable water supplies.	C	NCIG has designed and installed rainwater tanks in accordance with Condition 2.52 as observed during December 2018 Site visit.	Observation of the rain water tank (See Appendix A for Photo).	There are no recommendations.
PA06_0009	2	53	Contaminated Land Management The Proponent shall engage an appropriately qualified person to audit construction of the rail infrastructure over land used as part of the KIWEF against the commitments contained in the documents referred to in condition 1.1, including the High Capacity Optional Inlet Rail Spur and Rail Sidings. The auditor shall provide the Director-General and the EPA with quarterly reports on the disturbance and recapping of the waste emplacement area during construction. In the event of any deviation from the commitments made in the abovementioned documents, prior approval should be sought from the EPA, and any deviation from the commitments shall be described in detail and reasons for the change provided and fully justified.	Not triggered	NCIG activities associated with Project Approval condition 2.53 were implemented and civil construction was complete Prior to this Audit Period.	NCIG IEA 2015	There are no recommendations.

PA06_0009	2	54	Contaminated Land Management The Proponent shall ensure that any contaminated materials removed from the Site be directed to a waste management facility lawfully permitted to accept the materials.	C	NCIG contracts Remondis for waste collection and disposing contaminated disposal. Small amounts of contaminated material were removed from the site during operation including small quantities of fuel and oil contaminated soil resulted from a minor vehicle spill clean up. This material was collected by Remondis for disposal at a licenced facility.	NCIG Waste Invoices from waste service provider Remondis from billing period 01.10.2018 to 31.10.2018 NCIG IEA 2015 - Construction phase waste material disposal.	There are no recommendations.																							
PA06_0009	2	55	Contaminated Land Management To avoid any doubt, nothing in this approval relieves the need to comply with the requirements of Environment Protection Licence No. 6437 as it relates to the on-going management of the KIWEF.	Noted	No activities undertaken by NCIG during the Audit Period has required the disturbance of areas covered by EPL 6437. Note that the Licensee for EPL 6457 is the Hunter Development Corporation who responsible for management of the KIWEF.	EPL No. 6437 conditions	There are no recommendations.																							
PA06_0009	2	56	Waste Generation and Management All waste materials removed from the Site shall only be directed to a waste management facility lawfully permitted to accept the materials.	C	All waste material during the audit period was removed and managed in accordance with Condition 2.56 and the Waste Management Plan (2018). NCIG contracted all waste collection and disposal to Remondis. A review of waste docketts and invoices confirmed compliance of the lawful disposal of waste through an EPA approved waste service provider.	NCIG Waste Invoice from waste service provider Remondis from billing period 01.10.2018 to 31.10.2018. Waste Management Plan (2018) Document No. HSEC.MP.12.07	There are no recommendations.																							
PA06_0009	2	57	Waste Generation and Management Except as expressly permitted in an appropriate licence, waste shall not be received at the Site for storage, treatment, processing or reprocessing or disposal.	C	NCIG has not received any waste for storage, treatment, processing or reprocessing or disposal on the site during the audit period. Waste has been managed in accordance with this condition and EPL condition L2.1.	Interview with Management Representative Craig confirmed no waste materials were received, any waste for storage, treatment, processing or reprocessing or disposal on the site during the audit period.	There are no recommendations.																							
PA06_0009	2	58	Visual Amenity Impacts Within six months of the commencement of construction of the project, or as otherwise agreed by the Director-General, the Proponent shall install the bund along the southern side of the stockpile yard (northern side of Cormorant Road) to the satisfaction of the Director-General.	C	NCIG has constructed the earthen bund within six months of commencement of construction in accordance with Condition 2.58. The bund was inspected by the Auditor during December 2018 site visit.	Site audit observations Appendix B (Site photos).	There are no recommendations.																							
PA06_0009	2	59	Visual Amenity Impacts The Proponent shall ensure that all external lighting installed as part of the project is mounted, screened, and directed in such a manner so as not to create a nuisance to surrounding land uses. The lighting shall be the minimum level of illumination necessary, and be in general accordance with AS 4282 – 1997 Control of the Obtrusive Effects of Outdoor Lighting.	C	NCIG has installed external lighting in accordance with Condition 2.59 by a maintenance program. No complaints were received by NCIG in relation to lighting during the Audit Period.	Interview with Management Representative Craig confirmed NCIG had installed external lighting in accordance with Condition 2.59 and AS 4282 – 1997 Control of the Obtrusive Effects of Outdoor Lighting. NCIG Complaints Register	There are no recommendations.																							
PA06_0009	2	60	Visual Amenity Impacts The Proponent shall plant and maintain local native vegetation species along the earthen bund referred to under condition 2.58. Vegetation shall be planted prior to the commencement of operation of the project, and shall aim to screen the project from visual receptors towards the south, to the greatest extent practicable.	C	The Auditor inspected the earthen bund and observed that the Bund had been vegetated in accordance with this Condition.	Site Audit Observations Appendix B (Site photos). Site Audit Observations	There are no recommendations.																							
PA06_0009	2	61	Visual Amenity Impacts Advertising and project identification signs shall not be installed along the Cormorant Road frontage of the Site.	C	NCIG has not installed advertising and Project identification signs along the Cormorant Road frontage of the site in accordance with Condition 2.61 as observed during site visit in December 2018.	Appendix B (Site photos). The Auditor observed no advertising and Project identification signs along the Cormorant Road frontage of the site during site visit December 2018.	There are no recommendations.																							
Schedule 3, Environmental Monitoring and Auditing																														
PA06_0009	3	1	Meteorological Monitoring From the commencement of construction of the project, the Proponent shall continuously monitor, utilising the meteorological monitoring station referred to under condition 2.8 of this approval, each of the parameters listed in Table 2, utilising the sampling method indicated and applying a 15-minute average period to all results, and recording data in units specified in Table 2. Table 2 – Meteorological Monitoring	C	A meteorological monitoring station has been installed at the Project site on 03 September 2007 in accordance with Condition 2.8. A sample of meteorological measurement data was inspected on the NCIG computerised system and confirmed the data collection complied with the requirements of this condition MET station was inspected by Auditor during site visit December 2018 and a sample of raw monitoring data was provided.	NCIG Meteorological monitoring station data sample Start Date 12/1/2018 to End Date 12/9/2018. Site Audit Observations	There are no recommendations.																							
			<table border="1"> <thead> <tr> <th>Parameter</th> <th>Units of Measure</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Temperature at two metres</td> <td>°C</td> <td>AM-4</td> </tr> <tr> <td>Temperature at ten metres</td> <td>°C</td> <td>AM-4</td> </tr> <tr> <td>Wind speed at ten metres</td> <td>ms⁻¹</td> <td>AM-2 and AM-4</td> </tr> <tr> <td>Wind direction at ten metres</td> <td>°</td> <td>AM-2 and AM-4</td> </tr> <tr> <td>Sigma theta at ten metres</td> <td>°</td> <td>AM-2 and AM-4</td> </tr> <tr> <td>Solar radiation</td> <td>Wm⁻²</td> <td>AM-4</td> </tr> </tbody> </table>	Parameter	Units of Measure	Sampling Method	Temperature at two metres	°C	AM-4	Temperature at ten metres	°C	AM-4	Wind speed at ten metres	ms ⁻¹	AM-2 and AM-4	Wind direction at ten metres	°	AM-2 and AM-4	Sigma theta at ten metres	°	AM-2 and AM-4	Solar radiation	Wm ⁻²	AM-4						
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PA06_0009	3	2	<p>Ambient Dust Monitoring</p> <p>Prior to the commencement of operation of the project, the Proponent shall develop and submit for the approval of the Director-General and the EPA an Ambient Dust Monitoring Program, to outline how the ambient dust impacts of the project will be monitored. The Program shall include, but not necessarily be limited to:</p> <p>a) identification of an integrated air quality monitoring network, developed in consultation with the owner/ operator of the existing Kooragang Coal Terminal;</p> <p>b) locations, frequencies and methods for monitoring total suspended particles, ppm and deposited particulate matter;</p> <p>c) provision for the use of at least four hi-volume air samplers (HVAS), four dust depositional gauges and a meteorological station capable of monitoring wind direction and speed in accordance with condition 2.8 and condition 3.1 of this approval;</p> <p>d) investigation of the use of Tapered Element Oscillating Microbalance Samplers (TEOMS) as part of the integrated air quality monitoring network. Should the Proponent consider TEOMS not to be required, the Proponent may seek approval from both the Director-General and the DEC to exclude this requirement. In seeking such an exclusion, the Proponent's reasons for the exclusion shall be provided and be fully justified;</p> <p>e) provided that the use of TEOMS is proven to be justified (as outlined in d) above), the Proponent shall utilise real-time monitoring data to inform environmental management decisions associated with the project;</p> <p>f) a framework for identifying actual and potential dust impacts, and for applying proactive and reactive mitigation and management measures to address those impacts;</p> <p>g) provision for independent review and auditing of the Program; and</p> <p>h) mechanisms for updating the Program as may be required from time to time.</p>	C	<p>The NCIG dust monitoring program is detailed in the Operational Dust Management Plan (2018) This plan includes:</p> <p>a) monitoring and management of air quality at the NCIG site will be undertaken in a coordinated approach with the adjacent coal terminal operated by PWCS.</p> <p>b) Locations, frequencies and methods for monitoring total suspended particles and PM10 (HVAS1 , HVAS2, HVAS-C1, HVAS-K2, HVAS-K3, HVAS-K4) and deposited particulate matter (DG2 to DG6, DDG-K8, DDG-C1, DDG-K1) are identified in Operation Dust Management Plan.</p> <p>c) Monitoring includes six HVAS, eight dust deposition gauges and an on-site meteorological station.</p> <p>d and g) BAMS are used for operations management instead of TEOMS due to vibration issues with the TEOMS. NCIG has discussed the use of BAMS with the DP&E (letter dated 21/12/2011 from Department of Planning.</p> <p>The Ambient Dust Monitoring Program was submitted for approval to the Director General and DECCW prior to commencement of operational activities.</p> <p>The letter from NSW Department of Planning dated 8/03/2011 refers to the consultation with DECCW and the Director-General had decided to defer a decision on whether TEOMS are required to form part of the ambient dust monitoring program until after the first year of air quality data collection has occurred in accordance with the model validation study required under condition 3.3.</p> <p>The letter from NSW Department of Planning letter to NCIG dated 21/12/2011 ref: 10/02150-7. Subject regarding NCIG Coal Export Terminal, Kooragang Island (MP 06_0009) - Air Quality Model Validation Study (Condition 3.3) response to the Air Quality Model Validation and Compliance Assessment Report. The Department reviewed the report in consultation with NSW EPA and concluded the gauges require frequent maintenance, and in relation to the need to use TEOMS as referred to in Condition 3.2, the EPA commenced formal investigations into an environmental monitoring program for the Lower Hunter. For the interim the Department does not require NCIG to install further air quality monitoring equipment.</p>	<p>Operation Dust and Air Quality Management Plan (2018) Document No. HSEC.MP.12.02</p> <p>NSW Department of Planning letter to NCIG dated 8/03/2011 ref: 10/02150-5. Subject regarding NCIG Coal Export Terminal, Kooragang Island (MP 06_0009) - Ambient Dust Monitoring Program (Condition 3).</p> <p>NSW Department of Planning letter to NCIG dated 21/12/2011 ref: 10/02150-7. Subject regarding NCIG Coal Export Terminal, Kooragang Island (MP 06_0009) - Air Quality Model Validation Study (Condition 3.3).</p>	There are no recommendations.
PA06_0009	3	3	<p>Ambient Dust Monitoring</p> <p>Following one full year of data collection in accordance with an approved Ambient Dust Monitoring Program (refer to condition 3.2), the Proponent shall undertake a model validation study to review TSP, PM10 and dust deposition levels to assess compliance with the dust impact predictions made in the documents referred to under condition 1.1 and with applicable ambient air quality goals. The model validation study shall be undertaken in accordance with Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (DEC, 2005), and any specific requirements of the EPA.</p>	C	<p>The data collected by the approved Ambient Dust Monitoring Program was utilised to undertake a model validation study after one full year of operational activity.</p> <p>A model validation study (EN03062 NCIG CET Model Validation Assessment) was completed by SKM dated 17 Oct 2013 in accordance with Project Approval condition 3.3.</p> <p>The assessment was based on a review of monitoring data and stated the CET had not caused any significant change to measured ambient dust concentration levels, and that the approach and model used was appropriate for measuring impacts. (NCIG IEA 2015).</p>	<p>Documents reviewed part of the NCIG IEA 2015 (Compliance complete achieved):</p> <p>NCIG CET Model Validation Assessment N03062, SKM, Aug 2011</p> <p>NCIG CET Model Validation and Compliance Assessment, SKM, 17 Oct 2013 "</p>	There are no recommendations.
PA06_0009	3	4	<p>Ambient Dust Monitoring</p> <p>Within 28 days of conducting the dust validation study referred to under condition 3.3 of this approval, the Proponent shall provide the Director-General and the EPA with a copy of the report. If the dust validation study identifies significant deviance from the predictions made in the documents referred to under condition 1.1 or any exceedance with ambient air quality goals, the Proponent shall detail what additional measures would be implemented to further mitigate dust impacts. The Proponent shall clearly indicate who would implement these measures, when these measures would be implemented, and how the effectiveness of these measures would be assessed and reported to the Director-General.</p>	C	<p>The model validation study was issued to the DP&I on 21 Oct 2013. The "significant deviance" item was not triggered. (NCIG IEA 2015).</p>	<p>Documents reviewed part of the NCIG IEA 2015 (Compliance complete achieved):</p> <p>NCIG CET Model Validation and Compliance Assessment, SKM, 17 Oct 2013.</p>	There are no recommendations
PA06_0009	3	5	<p>Ambient Dust Monitoring</p> <p>The requirements of conditions 3.3 and 3.4 shall be repeated once one year of dust monitoring data is available after the project exceeds an export rate of 33 million tonnes of coal per annum.</p>	C	<p>The model validation study was completed by SKM (dated 17 Oct 2013) for the capacity of 66 Mt/yr. (NCIG IEA 2015).</p>	<p>Documents reviewed part of the NCIG IEA 2015 (Compliance complete achieved):</p> <p>NCIG CET Model Validation and Compliance Assessment, SKM, 17 Oct 2013.</p>	There are no recommendations
PA06_0009	3	6	<p>Noise Auditing</p> <p>Within 90 days of the commencement of operation of the project, or as otherwise agreed by the Director-General, and during a period in which the project is operating under normal operating conditions, the Proponent shall undertake a program to confirm the noise performance of the project. The noise program shall include, but not necessarily be limited to:</p> <p>a) noise monitoring, consistent with the guidelines provided in the New South Wales Industrial Noise Policy (EPA, 2000), to assess compliance with condition 2.13 of this approval.</p> <p>b) methodologies, locations and frequencies for noise monitoring;</p> <p>c) identification of monitoring sites at which pre- and post-project noise levels can be ascertained;</p> <p>d) details of any complaints and enquiries received in relation to noise generated by the project within the first 90 days of operation;</p> <p>e) an assessment of night-time use of audible alarm systems;</p> <p>f) a statement of whether the Site is in compliance with noise limits outlined in condition 2.13; and</p> <p>g) any additional noise mitigation measures and timetables for implementation.</p>	C	<p>The Operational Noise Management Plan was revised in May 2013 to satisfy the requirements of Project Approval Condition 3.6.</p> <p>Noise performance monitoring has been conducted by SLR for the NCIG CET project and reported as each stage became operational. The Noise Audit Reports addressed the requirements of this condition in:</p> <p>a) section 4 – Off-site Attended Noise Monitoring addresses noise monitoring, consistent with the guidelines provided in the NSW Industrial Noise Policy (EPA, 2000), to assess compliance with condition 2.13 of this approval.</p> <p>b) Section 5 - methodologies, locations and frequencies for noise monitoring;</p> <p>c) section 5.1 - identification of monitoring sites at which pre- and post-project noise levels can be ascertained;</p> <p>d) section 6.2 - details of any complaints and enquiries received in relation to noise generated by the project within the first 90 days of operation;</p> <p>e) section 4 and Attachment 1 - an assessment of night-time use of audible alarm systems;</p> <p>f) section 4 - a statement of whether the Site is in compliance with noise limits outlined in condition 2.13; and</p> <p>g) section 4 - any additional noise mitigation measures and timetables for implementation. (NCIG IEA 2015).</p> <p>9) Operational Noise Management Plan (2017) Document No. HSEC.MP.12.03 section 4 - any additional noise mitigation measures and timetables for implementation.</p>	<p>Operational Noise Management Plan (2017) Document No. HSEC.MP.12.03</p> <p>Documents reviewed part of the NCIG IEA 2015 (Compliance achieved):</p> <p>Operational Noise Management Plan, May 2013</p> <p>Noise Audit Report Stage 1 of NCIG construction 2010 (10-4515R8), SLR Nov 2010</p> <p>Noise Audit Report (610-04515-20430 R1), SLR, 29 Oct 2012</p> <p>Letter from DP&I re Noise Audit Report, 21 Nov 2012</p> <p>Offsite Noise and Onsite Sound Power Monitoring Quarter Ending Mar 2013 (610.04515.20700-R18), SLR, Mar 2013.</p>	There are no recommendations

PA06_0009	3	7	<p>Noise Auditing</p> <p>Within 28 days of conducting the noise monitoring referred to under condition 3.6 of this approval, the Proponent shall provide the Director-General and the EPA with a copy of the report. If the noise monitoring report identifies any non-compliance with the noise limits imposed under this approval (refer condition 2.13), the Proponent shall detail what additional measures would be implemented to ensure compliance, clearly indicating who would implement these measures, when these measures would be implemented, and how the effectiveness of these measures would be measured and reported to the Director-General.</p>	C	<p>The requirements of this condition were met prior to this Audit Period.</p> <p>The Noise Monitoring Program report required by Condition 3.7 was prepared and provided to the Director-General and DECCW.</p> <p>The Noise Audit Report 2010 –(10-4515R8) performed for Stage 1 construction in November 2010, concluded that noise emissions were at or below the relevant noise criteria.</p> <p>Offsite Noise and Onsite Sound Power Monitoring Quarter Ending March 2013 (610.04515.20700-R18) demonstrated that offsite and onsite noise met the noise criteria.</p> <p>Noise Audit Report (610-04515-20430 R1) dated 29 October 2012 was submitted to DP&I. A response from DP&I was received on 21 November 2012, commented that while the noise audit results were compliant with the maximum noise contributions for the project, noise receivers in Mayfield and Stockton appeared close to the maximum noise contributions specified. DP&I requested to be notified if noise monitoring towards the construction stage where capacity of 66 Mt is achieved for NCIG identifies likely exceedances of the limits.</p> <p>NCIG IEA 2015 reported that compliance was achieved for this condition during the previous Audit Period.</p>	<p>Documents reviewed part of the NCIG IEA 2015 (Compliance achieved):</p> <p>Noise Audit Report - 10-4515R8, SLR, Nov 2010</p> <p>Noise Audit Report - 610-04515-20430 R1, SLR, 29 Oct 2012</p> <p>Offsite Noise and Onsite Sound Power Monitoring Quarter Ending March 2013, SLR, Mar 2013</p>	There are no recommendations.	
PA06_0009	3	8	<p>Noise Auditing</p> <p>The requirements of conditions 3.6 and 3.7 shall be repeated within 90 days of the commencement of operation of each stage of the project, including the operation of the High Capacity Optional Inlet Rail Spur and Rail Sidings.</p>	C	<p>The requirements of this condition were met prior to this Audit Period.</p> <p>The Noise Monitoring Program was repeated within 90 days of commencement of the Stage 2AA, 2F and Rail Flyover operation.</p> <p>NCIG IEA 2015 reported that compliance was achieved for this condition during the previous Audit Period.</p>	<p>Documents reviewed part of the NCIG IEA 2015 (Compliance achieved):</p> <p>Rail Flyover Modification Noise Audit Report, RFM, Sep 2015</p> <p>Letter to DP&E re Rail Flyover Modification Noise Audit Report, 29 Sep 2015</p>	There are no recommendations.	
Schedule 4, Coordination of Port Works and Coal Export Activities								
PA06_0009	4	1	<p>Coordinated Environmental Monitoring and Management Protocol</p> <p>Prior to the commencement of operation of the project, or within such period as otherwise agreed by the Director-General, the Proponent shall develop, in consultation with owner/ operator of the existing Kooragang Coal Terminal, a Coordinated Environmental Monitoring and Management Protocol to provide a framework for the coordinated and cooperative monitoring and management of environmental impacts from the developments.</p> <p>The Protocol shall include, but not necessarily be limited to:</p> <p>a) procedures for access to, and provision of, monitoring data from each development, particularly in relation to dust and noise emissions;</p> <p>b) the respective remediation and redevelopment works;</p> <p>c) arrangements for coordinated and cooperative monitoring of ambient environmental impacts, including agreements relating to sharing of monitoring networks/ infrastructure, coordinated interpretation of monitoring results and coordination dissemination of monitoring results to relevant parties;</p> <p>d) measures to ensure a coordinated and cooperative approach to the management of common or cumulative environmental impacts from the developments;</p> <p>e) arrangements for communication between the parties, including designated contact persons and contact details;</p> <p>f) notification procedures in the event of an incident at either development that may impact on the other development, or generate a significant common or cumulative impact;</p> <p>g) any agreement for participation in the development of any of the management plans or monitoring programs required under this approval;</p> <p>h) mechanism for review of the Protocol from time to time; and</p> <p>i) such other matters as parties may agree.</p> <p>The Applicant shall provide a copy of the Protocol to the Director-General and the EPA and OEH as soon as practicable after agreement on the terms of the Protocol.</p>	C	<p>The Coordinated Environmental Monitoring and Management Protocol was prepared in consultation with PWCS and in accordance with Condition 4.1.</p> <p>A Coordinated Environmental Monitoring and Management Protocol was developed by NCIG in consultation with PWCS in 2009 and submitted to DP&I and EPA. The Coordinated Environmental Monitoring and Management Protocol (CEMMP), is to link NCIG port works and coal export activities with the surrounding activities of the existing Kooragang Coal Loader operated by Port Waratah Coal Services (PWCS).</p> <p>The CEMMP was reviewed in June 2011 and June 2013 and satisfies the requirements of Project Approval condition 4.1:</p> <p>a) Section 5.3 addresses procedures for access to, and provision of, monitoring data from each development, particularly in relation to dust and noise emissions;</p> <p>b) Section 5.3 addresses respective remediation and / or redevelopment works;</p> <p>c) Section 5.3 addresses arrangements for coordinated and cooperative monitoring of ambient environmental impacts, including agreements relating to sharing of monitoring networks/ infrastructure, coordinated interpretation of monitoring results and coordination dissemination of monitoring results to relevant parties;</p> <p>d) Section 5.6 addresses measures to ensure a coordinated and cooperative approach to the management of common or cumulative environmental impacts from the developments;</p> <p>e) section 5 and 9 Appendix 2 address arrangements for communication between the parties, including designated contact persons and contact details;</p> <p>f) section 5.5 addresses co-ordination meetings and notification procedures in the event of an incident at either development that may impact on the other development, or generate a significant common or cumulative impact;</p> <p>g) section 5.6 addresses any agreement for participation in the development of any of the management plans or monitoring programs required under this approval;</p> <p>h) section 6 addresses mechanism for review of the Protocol from time to time; and</p> <p>i) such other matters as parties may agree.</p> <p>NCIG IEA 2015 reported that compliance was achieved for this condition during the previous Audit</p>	<p>NCIG IEA 2018:</p> <p>Seen the CEMMP on Environmental Representatives computer during site visit December 2018.</p> <p>Documents reviewed part of the NCIG IEA 2015 (Compliance achieved):</p> <p>Coordinated Environmental Monitoring and Management Protocol, PWCS/NCIG Coal Terminals, Jun 2011</p> <p>Coordinated Environmental Monitoring and Management Procedure, Jun 2013</p>	There are no recommendations.	
PA06_0009	4	2	<p>Coordinated Works Program</p> <p>Prior to the commencement of construction of any component of the project, or within such period as otherwise agreed by the Director-General, the Proponent shall develop, in consultation with RMS, a Coordinated Works Program to ensure that the requirements of this approval, and the conditions imposed on the development the subject of development consent DA-134-3-2003-I (dredging and remediation of the South Arm of the Hunter River) are met and coordinated where the relevant works are interrelated. The Program shall specifically focus on requirements for coordination of works in and around the Hunter River foreshore, ecological monitoring and management, and scheduling of dredging and fill/ preloading activities.</p>	C	<p>NCIG has developed a Coordinated Works Program and submitted to NSW Maritime in May 2007 for comment. No comments were received from NSW Maritime. The Coordinated Works Program was finalised in August 2007. The CWP included dredging and remediation of the South Arm of the Hunter River and ceased works in November 2012.</p> <p>A Coordinated Environmental Monitoring and Management Protocol, prepared by PWCS and NCIG for coordination of works in and around the Hunter River foreshore, ecological monitoring and management, and scheduling of dredging and fill/ preloading activities.(NCIG IEA 2015 condition compliance complete achieved prior to 2018 audit period).</p> <p>No construction has occurred during the audit period.</p>	<p>Documents reviewed part of the NCIG IEA 2015 (Compliance achieved):</p> <p>NCIG Coal Export Terminal Coordinated Works Program, Aug 2007</p> <p>Coordinated Environmental Monitoring and Management Procedure NCIG /PWCS June 2013</p>	There are no recommendations.	

PA06_0009	4	3	<p>Coordination of Cumulative Dust Studies</p> <p>The proponent shall participate in any cumulative dust study that may be commissioned by the Department, in consultation with DECC. Any such study shall be focussed on cumulative dust impacts from major port and industrial sources in the Lower Hunter Estuary on potentially affected residential and sensitive receptors, with specific reference to receptors in Fern Bay, Stockton, Mayfield and Carrington. The extent of the Proponent's involvement in such a study shall be agreed with and to the satisfaction of the Director-General, and shall include, but not necessarily be limited to:</p> <p>a) provision of monitoring data associated with the environmental performance of the project;</p> <p>b) provision of management and auditing documentation associated with the project and relevant to the study;</p> <p>c) access to the project and relevant technical and environmental experts associated with the project;</p> <p>d) arrangements for any financial contributions to cover reasonable expenses associated with the study; and</p> <p>e) such other matter as the Proponent and Director-General may agree.</p>	Not Triggered	<p>This condition has been superseded.</p> <p>The Department has not yet commissioned a cumulative dust study.</p> <p>The Newcastle Local Air Quality Monitoring Network (NLAQMN) is a network of three monitoring stations located at Stockton, Carrington and Mayfield that monitors the impacts of industrial activity in and around the Port of Newcastle (and neighbouring NCIG). It began operating in August 2014 and provides continuous local air quality monitoring with public access to real time data. The stations continuously monitor levels of sulfur dioxide, oxides of nitrogen, PM10 and PM2.5</p>	<p>Interview with Environmental Representative Philip Reid - noting a new air quality monitoring network has replaced the requirement of the condition.</p> <p>Office of Environment and Heritage Newcastle Local Air Quality Monitoring Network 2014-2018 Live Map</p>	There are no recommendations
Schedule 5, Compliance Monitoring and Tracking							
PA06_0009	5	1	<p>Compliance Tracking Program</p> <p>The Proponent shall develop and implement a Compliance Tracking Program to track compliance with the requirements of this approval. The Program shall include, but not necessarily limited to:</p> <p>a) provisions for periodic review of the compliance status of the project against the requirements of this approval;</p> <p>b) provisions for periodic reporting of compliance status to the Director-General;</p> <p>c) a program for independent environmental auditing at least annually, or as otherwise agreed by the Director-General, in accordance with ISO 19011:2002 - Guidelines for Quality and/ or Environmental Management Systems Auditing; and</p> <p>d) mechanisms for rectifying any non-compliance identified during environmental auditing or review of compliance.</p>	C	<p>N/This Compliance Tracking Program was implemented in accordance with Condition 5.1.</p> <p>a) DP&E confirmed IEA now undertaken on three yearly basis- letter from DP&E dated 14/07/2016</p> <p>b) Compliance Tracking Program spreadsheets have now been submitted to DP&I and DP&E</p> <p>c) Independent Environmental Audit conducted annually up till 2015, where letter from DP&E confirmed IEA to be conducted three yearly basis</p> <p>d) mechanisms / actions for rectifying non-compliance during environmental auditing for review of compliance are provided in NCIG incident management program and in the review/audit period.</p> <p>NCIG received a letter from the Department of Planning and Environment on 13/08/18 in regards to the 2018 Compliance Tracking Report. The Department requested that future reports contain the following:</p> <p>"- Appendix A, Schedule 2, Condition 1.5 Limits of Approval - please provide the actual quantity of coal (in million tonnes) exported in the reporting period.</p> <p>- Please consider the recently released Compliance Reporting Post Approval Requirements (PAR) document when preparing the future reports."... (As an existing project, NCIG may elect to voluntarily comply with the PAR but must still comply with existing condition).</p> <p>NCIG Management has stated that this request will be met when the next Compliance Tracking Report is prepared.</p>	<p>NCIG Compliance Tracking April 2015, April 2016, April 2017, April 2018.</p> <p>Incident Management Program 2015-2018</p> <p>NSW Department of Planning and Environment letter dated 14/07/2016 regarding NCIG Compliance Tracking Program. Confirmation of independent environmental audit now being undertaken on three yearly basis. Next audit no later than April 2019.</p>	There are no recommendations
PA06_0009	5	2	<p>Compliance Tracking Program</p> <p>The independent environmental audit referred to in condition 5.1c) shall:</p> <p>(a) be conducted by a suitable qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General;</p> <p>(b) include consultation with the relevant agencies;</p> <p>(c) assess the environmental performance of the project and assess whether it is complying with the requirements of this approval, and any other relevant approvals and relevant EPL/s</p> <p>(d) review the adequacy of any approved strategy, plan or program required under the abovementioned approvals; and</p> <p>(e) recommend measures or actions to improve the environmental performance of the project, and/or any strategy, plan or program required under these approvals.</p> <p>Note: This audit team must be led by a suitable qualified auditor, and include experts in biodiversity, air quality, noise, surface water and groundwater management and other fields as specified by the Director-General.</p>	C	<p>NCIG commissioned this Independent Environmental Audit, which was commenced in December 2018. The audit included a lead auditor and a team of experts in the specified fields, approved by the Secretary</p> <p>This condition was added in the Project Approval 06_0009 MOD 2 for the Rail Flyover:</p> <p>(a) The audit team for the Independent Environmental Audits was endorsed by the Secretary:</p> <p>Ken Holmes - Lead Auditor Samantha Bourke - Auditor</p> <p>(b) Consultation with the agencies (DP&E, EPA, NOW, OEH, RMS, WaterNSW, NCC) occurred as required;</p> <p>(c) environmental performance of the project and assessment of compliance with the requirements of the conditions of this Project Approval is presented in section 4 and Attachment A of the IEA 2018;</p> <p>(d) review of the adequacy of the approved plans and programs associated operation noise monitoring, demonstrating that operation noise is appropriately monitored and the impact risk is being adequately and efficiently managed including occasional community noise investigations as triggered;</p> <p>(e) recommendations or actions to improve the environmental performance of the project have been considered and provided in section 4 of this IEA 2018 report where addressed.</p> <p>This current Independent Environmental Audit commenced on 6 December 2018 by the audit team endorsed by DP&E.</p>	<p>Documents reviewed part of the NCIG IEA 2015 (Compliance achieved):</p> <p>Letter from DP&I re Endorsement of Audit Team, 15 Nov 2013 Independent Environmental Audit, Nov 2013</p> <p>Letter from DP&I re Endorsement of Audit Team, Nov 2014 Independent Environmental Audit, Nov 2014</p>	There are no recommendations.
Schedule 6, Community Information, Consultation and Involvement							
PA06_0009	6	1	<p>Community Information, Consultation and Involvement</p> <p>Subject to confidentiality, the Proponent shall make all documents required under this approval available for public inspection on request.</p>	Noted	<p>NCIG will make available all documents required under this approval for public inspection on request (subject to confidentiality).</p>	<p>Documents will be made publicly accessible.</p>	There are no recommendations
PA06_0009	6	2	<p>Complaints and Enquiries Procedure</p> <p>Prior to the commencement of construction of the project, the Proponent shall ensure that the following are available for community complaints and enquiries for the life of the project (including construction and operation):</p> <p>a) a telephone number on which complaints and enquiries about construction and operational activities at the Site may be registered;</p> <p>b) a postal address to which written complaints and enquires may be sent; and</p> <p>c) an email address to which electronic complaints and enquiries may be transmitted.</p> <p>The telephone number, the postal address and the email address shall be displayed on a sign near the entrance to the Site, in a position that is clearly visible to the public, and which clearly indicates the purposes of the sign. This information is also to be provided on the Proponent's website.</p>	C	<p>NCIG has established:</p> <p>a) Complaints telephone number (1800 016 304);</p> <p>b) postal address (PO Box 644 Newcastle 2300) and</p> <p>c) email address (enquiries@ncig.com.au).</p> <p>The required details are displayed on the NCIG website (www.ncig.com.au). NCIG has a sign containing the required contact details at the entrance to the Site (at the Wharf entrance and Administration Building entrance).</p>	<p>Appendix A - Photo of signage with contact details of NCIG clearly visible to the public.</p> <p>NCIG Website</p> <p>NCIG Complaints Register</p>	There are no recommendations

PA06_0009	6	3	<p>Complaints and Enquiries Procedure</p> <p>The Proponent shall record details of all complaints received through the means listed under condition 6.2 of this approval in an up-to-date Complaints Register. The Register shall record, but not necessarily be limited to:</p> <p>a) the date and time, where relevant, of the complaint;</p> <p>b) the means by which the complaint was made (telephone, mail or email);</p> <p>c) any personal details of the complainant that were provided, or if no details were provided, a note to that effect;</p> <p>d) the nature of the complaint;</p> <p>e) record of operational and meteorological condition contributing to the complaint;</p> <p>f) any action(s) taken by the Proponent in relation to the complaint, including any follow-up contact with the complainant; and</p> <p>g) if no action was taken by the Proponent in relation to the complaint, the reason(s) why no action was taken.</p> <p>The Complaints Register shall be made available for inspection by the Director-General upon request.</p>	C	<p>NCIG has recorded all complaints in a Complaints Register in accordance with Condition 6.3.</p> <p>The NCIG compliance tracker and internal complaints register 2015-2018 is updated according to the latest information.</p> <p>Information required for a complaint includes:</p> <p>- Source of contact - number or email, date, time, method of contact, complainant name, address, phone number and documentation.</p> <p>Information on complaint:</p> <p>- Details of complaint / issue, response, follow up actions, outcome and any further action / close out complaint.</p> <p>No NCIG related complaints were received during the audit period.</p>	<p>NCIG internal complaints register 2015-2018</p> <p>NSW EPA Public Register - Complaints</p> <p>Site visit December 2018</p> <p>Site Audit Observations</p> <p>EPL Annual Returns 2016, 2017, 2018</p>	There are no recommendations
PA06_0009	6	4	<p>Complaints and Enquiries Procedure</p> <p>The Proponent shall establish and maintain a new website, or dedicated pages within its existing website for the provision of electronic information associated with the project. The Proponent shall publish and maintain up-to-date information on this website or dedicated pages including, but not necessarily limited to:</p> <p>a) a copy of the documents referred to under condition 1.1 of this approval, and any documentation supporting modifications to this approval that may be granted from time to time;</p> <p>b) a copy of this approval and each relevant environmental approval, licence or permit required and obtained in relation to the project;</p> <p>c) a copy of each strategy, plan and program required under this approval; and</p> <p>d) the outcomes of compliance tracking in accordance with condition 5.1 of this approval.</p>	C	<p>NCIG has established a website (www.ncig.com.au). NCIG has maintained up-to-date information on the website in accordance with Condition 6.4 during the audit period including:</p> <p>a) Environmental Assessments and supporting documentation for modifications referred to under condition 1.1.</p> <p>b) Project Approval, Environment Protection Licence for the project;</p> <p>c) Copies of each strategy, plan and program required under this approval; and</p> <p>d) Compliance Tracking Program in accordance with condition 5.1 of this approval and EPL monitoring results in accordance with the Protection of the Environment Operations Act Amendment 2011.</p>	NCIG website	There are no recommendations
Schedule 7, Environmental Management							
PA06_0009	7	1	<p>Environmental Representative</p> <p>Prior to the commencement of construction of the project, or otherwise agreed by the Director-General, the Proponent shall nominate a suitably qualified and experienced Environmental Representative(s) for the approval of the Director-General. The Proponent shall employ the Environmental Representative(s) on a full-time basis, or as otherwise agreed by the Director-General, during the operation of the project.</p>	C	<p>Mr Nathan Juchau was approved as Environmental Representative for NCIG by the Director-General on 3/10/2007 and was the Environmental Representative during the audit period.</p>	<p>NCIG Management Representative</p> <p>NSW Planning letter dated 3.10.2007 RE: Appointment of Environmental Representative</p>	There are no recommendations
PA06_0009	7	2	<p>Construction Environmental Management Plan</p> <p>Prior to the commencement of construction of the project, the Proponent shall prepare and implement a Construction Environmental Management Plan to outline environmental management practices and procedures to be followed during construction of the project. The Plan shall be prepared in accordance with Guideline for the Preparation of Environmental Management Plans (DIPNR 2004) and shall include, but not necessarily be limited to:</p> <p>a) a description of all activities to be undertaken on the Site during construction including an indication of stages of construction, where relevant;</p> <p>b) statutory and other obligations that the Proponent is required to fulfil during construction including all approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies;</p> <p>c) details of how the environmental performance of the construction works will be monitored, and what actions will be taken to address identified adverse environmental impacts. In particular, the following environmental performance issues shall be addressed in the Plan:</p> <p>i) measures to monitor and manage dust emissions;</p> <p>ii) measures to monitor and minimise soil erosion and the discharge of sediment and other pollutants to lands and/ or waters during construction activities;</p> <p>iii) measures to monitor and control noise emissions during construction works;</p> <p>iv) measures to monitor and manage groundwater impacts, particularly in the vicinity of the High Capacity Optional Inlet Rail Spur and Rail Sidings, and</p> <p>v) measures to monitor and manage potential Aboriginal Heritage impacts.</p> <p>d) a description of the roles and responsibilities for all relevant employees involved in the construction of the project;</p> <p>e) the additional studies listed under condition 7.3 of this approval;</p> <p>f) a traffic control plan to detail the various traffic control measures to be used for construction traffic access connections to the classified road network; and</p> <p>g) complaints handling procedures during construction.</p> <p>The Plan shall be submitted for the approval of the Director-General no later than one month prior to the commencement of any construction works associated with the project, or within such period otherwise agreed by the Director-General. Construction works shall not commence until written approval has been received from the Director-General.</p>	Not triggered	<p>No construction has occurred during the audit period. Therefore this condition was not triggered during this Audit Period.</p> <p>NCIG IEA 2015 confirmed that this Condition was satisfied during the construction phase of the project.</p>	<p>No construction has occurred during the audit period. Therefore this condition does not apply.</p> <p>Compliance against this condition covered in NCIG IEA 2015.</p>	There are no recommendations
PA06_0009	7	3	<p>Construction Environmental Management Plan</p> <p>As part of the Construction Environmental Management Plan for the project required under condition 7.2 of this approval, the Proponent shall prepare and implement the following:</p>	Not triggered	<p>No construction has occurred during the audit period. Therefore this condition was not triggered during this Audit Period.</p> <p>NCIG IEA 2015 confirmed that this Condition was satisfied during the construction phase of the project.</p>	NCIG IEA 2015	There are no recommendations
PA06_0009	7	3(a)	<p>Construction Environmental Management Plan</p> <p>a) where soil testing prior to the commencement of construction identifies the presence of acid sulfate soils, an Acid Sulfate Soil Management Plan prepared in accordance with guidance provided in Acid Sulfate Soil Manual (Acid Sulfate Soil Management Advisory Committee, 1998);</p>	C	<p>No construction has occurred during the audit period. Therefore this condition was not triggered during this Audit Period.</p> <p>NCIG IEA 2015 confirmed that this Condition was satisfied during the construction phase of the project.</p> <p>The Acid Sulfate Soil Management Plan was developed as part of the Construction Environmental Management Plan (Condition 7.2). The Acid Sulfate Soil Management Plan for the Stage 2AA development phase was prepared and submitted on 26 August 2010. Approval by the Director-General was received on 21 September 2010. The Acid Sulfate Soil Management Plan for the Stage 2F development phase was prepared and submitted on 28 March 2012. Approval by the Director-General was received on 14 June 2012. Approval by the Director-General was received on 28 June 2013.</p>	NCIG IEA 2015	There are no recommendations

PA06_0009	7	3(b)	<p>Construction Environmental Management Plan b) a Construction Surface Water Management Plan to detail how surface water and stormwater will be managed on the Site during construction. The Plan shall include use of appropriately-sized stormwater controls, in accordance with Managing Urban Stormwater: Soils and Construction (Landcom, 2004). The Plan shall include specific measures to avoid sediment-laden stormwater from entering Deep and Swan Ponds, wetland areas or the Hunter River, and a monitoring program for stormwater leaving the Site;</p>	Not triggered	<p>No construction has occurred during the audit period. Therefore this condition was not triggered during this Audit Period.</p> <p>NCIG IEA 2015 confirmed that this Condition was satisfied during the construction phase of the project.</p> <p>The Construction Surface Water Management Plan was developed as part of the Construction Environmental Management Plan (Condition 7.2). The Construction Surface Water Management Plan for the Stage 2AA development phase was prepared and submitted on 26 August 2010. Approval by the Director-General was received on 21 September 2010. The Construction Surface Water Management Plan for the Stage 2F development phase was prepared and submitted on 28 March 2012. Approval by the Director-General was received on 14 June 2012. Approval by the Director-General was received on 28 June 2013.</p>	NCIG IEA 2015.	There are no recommendations
PA06_0009	7	3(c)	<p>Construction Environmental Management Plan c) a Construction Noise Management Plan to detail how construction noise and vibration impacts would be minimised and managed, including, but not necessarily limited to: i) details of construction activities and a schedule for construction works; ii) identification of construction activities that have the potential to generate noise and/or vibration impacts on surrounding land uses, particularly residential areas; iii) a detailed description of what actions and measures would be implemented to ensure that these works would comply with the relevant noise and vibration criteria/ guidelines; iv) procedures for notifying residents of construction activities that are likely to effect their noise and vibration amenity, as well as procedures for dealing with and responding to noise complaints; and v) a description of how the effectiveness of these actions and measures would be monitored during the proposed works, clearly indicating how often this monitoring would be conducted, how the results of this monitoring would be recorded; and, if any non-compliance is detected.</p>	Not triggered	<p>No construction has occurred during the audit period. Therefore this condition was not triggered during this Audit Period.</p> <p>NCIG IEA 2015 confirmed that this Condition was satisfied during the construction phase of the project.</p> <p>The Construction Noise Management Plan was developed as part of the Construction Environmental Management Plan (Condition 7.2). The Construction Noise Management Plan for the Stage 2AA development phase was prepared and submitted on 26 August 2010. Approval by the Director-General was received on 21 September 2010. The Construction Noise Management Plan for the Stage 2F development phase was prepared and submitted on 28 March 2012. Approval by the Director-General was received on 14 June 2012. Approval by the Director-General was received on 28 June 2013.</p>	NCIG IEA 2015.	There are no recommendations
PA06_0009	7	3(d)	<p>Construction Environmental Management Plan d) a Construction Traffic Management Protocol to detail how heavy vehicle movements associated with the project will be managed during construction, including Site preparation and fill/ preloading activities. The Protocol shall specifically address the movement of oversize loads to and from the Site, the management of construction traffic, restrictions to the hours of heavy vehicle movements to avoid road use conflicts, and the transport of construction waste materials. In addition to approval from the Director-General, the Construction Traffic Management Protocol shall be submitted for the approval of the RTA and Council.</p>	Not triggered	<p>No construction has occurred during the audit period. Therefore this condition was not triggered during this Audit Period.</p> <p>NCIG IEA 2015 confirmed that this Condition was satisfied during the construction phase of the project.</p> <p>The Construction Traffic Management Protocol was developed as part of the Construction Environmental Management Plan (Condition 7.2). The Construction Traffic Management Protocol for the Stage 2AA development phase was prepared and submitted on 26 August 2010. Approval by the Director-General was received on 21 September 2010. The Construction Traffic Management Protocol for the Stage 2F development phase was prepared and submitted on 28 March 2012. Approval by the Director-General was received on 14 June 2012. Approval by the Director-General was received on 28 June 2013.</p>	NCIG IEA 2015.	There are no recommendations
PA06_0009	7	3(e)	<p>Construction Environmental Management Plan e) a Construction Aboriginal Heritage Management Plan to detail how construction impacts on Aboriginal heritage will be minimised and managed. The plan shall be developed in consultation with the local Aboriginal Community, and include, but not necessarily be limited to: i) a commitment to provide opportunities for representatives of the local Aboriginal community to monitor any initial ground disturbance activities associated with previously undisturbed environments within the project area; ii) procedures for dealing with previously unidentified Aboriginal objects (excluding human remains) including cessation of works in the vicinity, assessment of the significance of the item(s) and determination of appropriate mitigation measures including when works can re-commence by a suitably qualified archaeologist in consultation with the Department, OEH and the local Aboriginal community, and registering of the new site in the OEH's Aboriginal Heritage Information Management System (AHIMS) register; iii) procedures for dealing with human remains, including cessation of works in the vicinity and notification of the Department, NSW Police, OEH and local Aboriginal community and not recommencing any works in the area unless authorised by the OEH and/or the NSW Police; and iv) heritage training and induction processes for construction personnel (including procedures for keeping records of inductions) and obligations under the conditions of this approval including site identification, protection and conservation of Aboriginal cultural heritage;</p>	Not triggered	<p>No construction has occurred during the audit period. Therefore this condition was not triggered during this Audit Period.</p> <p>NCIG IEA 2015 confirmed that this Condition was satisfied during the construction phase of the project.</p> <p>The Construction Aboriginal Heritage Management Plan was developed as part of the Construction Environmental Management Plan for Stage 2F construction, including construction of the Rail Flyover. Approval by the Director-General was received on 28 June 2013.</p>	NCIG IEA 2015.	There are no recommendations
PA06_0009	7	4	<p>Construction Environmental Management Plan In the event that construction of the project is staged or phased up to the maximum capacity specified under condition 1.5, the requirements of conditions 7.2 and 7.3 shall be repeated prior to the commencement of construction.</p>	Not triggered	<p>No construction has occurred during the audit period. Therefore this condition was not triggered during this Audit Period.</p> <p>NCIG IEA 2015 confirmed that this Condition was satisfied during the construction phase of the project.</p> <p>The development of new Construction Environmental Management Plans was completed for each new stage of construction, including the Rail Flyover.</p>	NCIG IEA 2015.	There are no recommendations

PA06_0009	7	5	<p>Operation Environmental Management Plan</p> <p>Prior to the commencement of operation of the project, the Proponent shall prepare and submit for the approval of the Director-General an Operation Environmental Management Plan (OEMP) to detail an environmental management framework, practices and procedures to be followed during the operation of the project. The Plan shall be consistent with the Department's Guideline for the Preparation of Environmental Management Plans (DIPNR 2004), and shall include, but not necessarily be limited to:</p> <p>a) a description of all activities to be undertaken on the Site during operation including an indication of stages of operation, where relevant;</p> <p>b) statutory and other obligations that the Proponent is required to fulfil during operation including all approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies;</p> <p>c) details of how the environmental performance of the operations will be monitored, and what actions will be taken to address identified adverse environmental impacts. In particular, the following environmental performance issues shall be addressed in the Plan:</p> <p>i) measures to monitor and manage dust emissions;</p> <p>ii) measures to monitor and minimise soil erosion and the discharge of sediment and other pollutants to lands and/ or waters during operation;</p> <p>iii) measures to monitor and control noise emissions during operation;</p> <p>iv) measures to monitor and manage retained onsite native vegetation and habitat.</p> <p>d) a description of the roles and responsibilities for all relevant employees involved in the operation of the project;</p> <p>e) the additional studies listed under condition 7.6 of this approval; and</p> <p>f) complaints handling procedures during operation.</p> <p>The Operation Environmental Management Plan shall be made available for inspection by the public upon request following its approval by the Director-General.</p>	C	<p>The Operational Environmental Management Plan was submitted for approval to the Director General and DECCW prior to commencement of operational activities it has since been updated to the latest 2018 version.</p> <p>The Operation Environmental Management Plan (2018) Document No. HSEC.MP.12.01 (reviewed August 2018) meets the requirements of this condition, specifically:</p> <p>A) Section 4 details a description of activities to be undertaken during operation;</p> <p>B) Section 3.1 details statutory and other obligations that the Proponent is required to fulfil during operation including all approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies</p> <p>C) Section 3.1 details of how the environmental performance of the operations will be monitored, and what actions will be taken to address identified adverse environmental impacts. In particular, the following environmental performance issues shall be addressed in the Plan:</p> <p>I) Section 5 discusses measures to monitor and manage dust emissions;</p> <p>ii) The OEMP Sub Plan OWMP section 4.2 details measures to monitor and minimise soil erosion and the discharge of sediment and other pollutants to lands and/ or waters during operation;</p> <p>iii) the OEMP Sub Plan ONMP section 4.1 details measures to monitor and control noise emissions during operation;</p> <p>iv) the OEMP Sub Plan Ecological and Land Management Plan section 4.1 measures to monitor and manage retained onsite native vegetation and habitat.</p> <p>D) Section 2 of the OEMP provides a description of the roles and responsibilities for all relevant employees involved in the operation of the project;</p> <p>E) Table 3 of the OEMP details the Sub Plans such as ONMP section 3.2.1, ODAQMP and OWMP the additional studies listed under condition 7.6 of this approval; and</p> <p>F) Section 5.7 of the OEMP complaints handling procedures during operation.</p>	<p>Operation Environmental Management Plan (2018) Document No. HSEC.MP.12.01</p> <p>Operation Dust and Air Quality Management Plan (2018)</p> <p>Operation Noise Management Plan (2017)</p> <p>Ecological and Land Management Plan (2018)</p> <p>Operation Water Management Plan (2018)</p> <p>Department of Planning letter to NCIG dated 30/07/2010 ref: 10/02150-2 Regarding Operational Environmental Management Plan & Sub Plans (Condition 7.5 & 7.6). Satisfies conditions 7.5 and 7.6</p>	There are no recommendations
PA06_0009	7	6	<p>Operation Environmental Management Plan</p> <p>As part of the Operation Environmental Management Plan for the project required under condition 7.5 of this approval, the Proponent shall prepare and implement the following:</p>	C	<p>The Operational Environmental Management Plan prepared and was implemented prior to commencement of operational activities.</p>	<p>Operation Environmental Management Plan (2018) Document No. HSEC.MP.12.01</p> <p>Site Audit Observations</p> <p>NCIG IEA 2015</p>	There are no recommendations
PA06_0009	7	6(a)	<p>Operation Environmental Management Plan</p> <p>a) a Dust Management Plan to outline measures to minimise and manage any impacts from the operation of the project on local air quality. The Plan shall include, but not necessarily be limited to:</p> <p>i) identification of all major sources of dust emissions that may occur as result of the operation of the project;</p> <p>ii) description of the procedures to manage the dust emissions from the sources identified;</p> <p>iii) identification of the locations where monitoring of dust emissions is to be undertaken;</p> <p>iv) procedures for monitoring dust emissions from the project, in accordance with the requirements of this approval and the Environment Protection Licence for the project;</p> <p>v) protocols for regular maintenance of plant and equipment, to minimise the potential for fugitive dust emissions; and</p> <p>vi) description of procedures to be undertaken if any non-compliance is detected.</p>	C	<p>The Operation Dust Management Plan was prepared and submitted to the Director-General DP&I and DECCW for approval in March 2010. The Operation Dust Management Plan was revised and resubmitted to DP&I on 1 May 2013. Since then the document has been reviewed and the latest document revision is Operation Dust and Air Quality Management Plan (ODAQMP) (2018) Documents No. HSEC.MP.12.02:</p> <p>I) section 3.5 and Table 3 identify the major sources of dust emissions that may occur as result of the operation of the project;</p> <p>ii) section 4.1 describes Managing Potential Air Quality and Dust Controls from the sources identified;</p> <p>iii) section 4 describes the locations where monitoring of dust emissions is to be undertaken;</p> <p>iv) section 4 describes procedures for monitoring dust emissions from the project, in accordance with the requirements of this approval and the Environment Protection Licence for the project;</p> <p>v) section 5.3 describes protocols for regular maintenance of plant and equipment, to minimise the potential for fugitive dust emissions; and</p> <p>vi) section 5.6 and 5.7 describe procedures to be undertaken if any non-compliance is detected.</p>	<p>Operation Dust and Air Quality Management Plan (ODAQMP) (2018) Documents No. HSEC.MP.12.02</p> <p>Department of Planning letter to NCIG dated 30/07/2010 ref: 10/02150-2 Regarding Operational Environmental Management Plan & Sub Plans (Condition 7.5 & 7.6). Satisfies conditions 7.5 and 7.6</p>	There are no recommendations
PA06_0009	7	6(b)	<p>Operation Environmental Management Plan</p> <p>b) a Noise Management Plan to outline monitoring, management procedures and measures to minimise total operational noise emissions from the project. The Plan shall also include, but not necessarily be limited to:</p> <p>i) identification of all relevant receivers and the applicable criteria at those receivers commensurate with the noise limits specified under this approval;</p> <p>ii) identification of activities that will be carried out in relation to the project and the associated noise sources;</p> <p>iii) assessment of project noise impacts at the relevant receivers against the noise limits specified under this approval;</p> <p>iv) details of all management methods and procedures that will be implemented to control individual and overall noise emissions from the Site during the project;</p> <p>v) details regarding the procurement process to guarantee that equipment levels meet the noise levels as provided in the documents listed in condition 1.1;</p> <p>vi) development of reactive and pro-active strategies for dealing promptly with any noise complaints;</p> <p>vii) noise monitoring and reporting procedures; and</p> <p>viii) regular internal audits of compliance of all plant and equipment with acceptable design noise.</p>	C	<p>The Operations Noise Management Plan was submitted to the Director-General and DECCW for approval on 12 March 2010. The Operations Noise Management Plan was revised and submitted to DP&I on 1 May 2013. The latest revision is Operation Noise Management Plan (ONMP) (2018) Document No. HSEC.MP.12.03:</p> <p>I) Section 3.2 identifies relevant receivers and the applicable criteria at those receivers commensurate with the noise limits specified under this approval;</p> <p>ii) section 3.2.1 and table 3 identifies activities that will be carried out in relation to the project and the associated noise sources;</p> <p>iii) section 3.2.2 outlines assessment of project noise impacts at the relevant receivers against the noise limits specified under this approval;</p> <p>iv) section 4.1 details management methods and procedures that will be implemented to control individual and overall noise emissions from the Site during the project;</p> <p>v) section 4.2 Table 6 details regarding the procurement process to guarantee that equipment levels meet the noise levels as provided in the documents listed in condition 1.1;</p> <p>vi) section 5.5 and 5.6 identifies strategies for dealing promptly with any noise complaints;</p> <p>vii) section 5.1 outlines noise monitoring and Section 5.7 describes reporting procedures; and</p> <p>viii) section 5.2 and 5.3 outline regular internal audits of compliance of all plant and equipment with acceptable design noise.</p>	<p>Operation Noise Management Plan (ONMP) (2018) Document No. HSEC.MP.12.03</p> <p>Department of Planning letter to NCIG dated 30/07/2010 ref: 10/02150-2 Regarding Operational Environmental Management Plan & Sub Plans (Condition 7.5 & 7.6). Satisfies conditions 7.5 and 7.6</p>	There are no recommendations

PA06_0009	7	6(c)	<p>Operation Environmental Management Plan c) a Water Management Plan to outline the water management system for the Site. The Plan shall include, but not necessarily be limited to: i) predicted Site water balance including the water supply system; ii) details regarding water management structures such as settling ponds, water tanks and the water management system for dredge sea water; iii) locations and design specifications for all water diversions from undisturbed runoff areas including channel design and stabilisation, sediment retention storages and other structures; iv) details on the internal drainage system including bunding, drainage channels, dewatering sumps and any pipelines; v) procedures for the management of groundwater encountered on Site and any temporary dewatering facilities; and vi) procedures to be implemented to minimise potential surface water impacts.</p>	C	<p>The Operation Water Management Plan was submitted to the Director-General and DECCW for approval on 12 March 2010 in accordance with Condition 7.6(c). The Operation Water Management Plan was reviewed and revised in May 2013 and submitted to DP&I. The latest revision is Operation Water Management Plan (OWMP) (2018) Document No. HSEC.MP.12.04:</p> <p>i) section 3.4 presents predicted Site water balance including the water supply system developed for the site for operational capacity of 66Mtpa (reference Operation Water Management Plan section 3.4). A review of the site water balance was undertaken by Aurecon Hatch in July 2014. AK Environmental Pty Ltd conducted a review of predicted water balance data against observed data in June 2015;</p> <p>ii) section 4.1.2 outlines water management structures for the site such as settling ponds, water tanks and the water management system and outlines the water management infrastructure for the site. Reclamation of sediments is not undertaken during the operational phase and therefore management of dredged sea water is not required;</p> <p>iii) section 4.1.2, Figure 5 of the Operation Water Management Plan details the drainage plan including layout and surface water monitoring features. Design parameters for the construction of these features are outlined in section 4.1.3;</p> <p>iv) Figure 5 of the Operation Water Management Plan details drainage layout and surface water monitoring features. Design parameters for construction of these features was outlined in section 4.1 for the internal drainage system including bunding, drainage channels, dewatering sumps and any pipelines;</p> <p>v) section 4.1.3 provides procedures for the management of groundwater encountered on site and any temporary dewatering facilities. Groundwater dewatering is not required as part of the operational phase.; and</p> <p>vi) section 4.2.2 provides a risk review of potential impacts to surface water. Controls to mitigate these risks are presented in Table 1 of the Operation Water Management Plan. Erosion and sediment controls are presented in section 4.2 of the Operation Water Management Plan and amenities water management is presented in section 4.1.</p>	<p>Operation Water Management Plan (ONMP) (2018) Document No. HSEC.MP.12.04 Department of Planning letter to NCIG dated 30/07/2010 ref: 10/02150-2 Regarding Operational Environmental Management Plan & Sub Plans (Condition 7.5 & 7.6). Satisfies conditions 7.5 and 7.6</p>	There are no recommendations
PA06_0009	7	6(d)	<p>Operation Environmental Management Plan d) a Spontaneous Combustion Management Protocol to outline measures to minimise and manage the spontaneous combustion of the coal stockpiles. The Plan shall include, but not necessarily be limited to: i) coal stockpile management measures; ii) monitoring of potential causes of spontaneous combustion events; and iii) corrective action in the event of spontaneous combustion.</p>	C	<p>The Operation Spontaneous Combustion Management Plan (OSCM) was prepared by NCIG to complete the requirements of the Operation spontaneous Combustion Management Protocol. The OSCMP was prepared by NCIG and submitted to the Director-General and DECCW for approval on 12 March 2010. The Operation Spontaneous Combustion Management Plan (OSCM) was revised and submitted to DP&I in June 2013.</p> <p>During this audit period the OSCMP has been revised and updated to version Operation Spontaneous Combustion Management Plan (2017) Document No. HSEC.MP.12.05: (i) section 3.2.2 Coal Handling and Stockpile Operations Coal Accumulation; (ii) section 5.1 Stockpile Monitoring; and (iii) section 4.1 Spontaneous Combustion Preventative Measures, section 4.2 Spontaneous Combustion Remedial Actions, and section 5.4 Corrective Action).</p>	<p>Operation Spontaneous Combustion Management Plan (2017) Document No. HSEC.MP.12.05</p>	There are no recommendations
PA06_0009	7	7	<p>Operation Environmental Management Plan The Operation Environmental Management Plan required under conditions 7.5 and 7.6 shall periodically reviewed and maintained, to reflect any phasing of implementation of the project, and any operational changes that may be made from time to time.</p>	C	<p>The Operation Environmental Management Plan and associated Sub Plans are scheduled to be reviewed periodically in accordance with Condition 7.7, in accordance with conditions 7.5 and 7.6. The OEMP and Sub Plans front page has the date of the next document review and maintenance. NCIG has updated documents according to the condition for this audit period.</p>	<p>Operation Environmental Management Plan (2018) Document No. HSEC.MP.12.01</p>	There are no recommendations
Schedule 8, Environmental Reporting							
PA06_0009	8	1	<p>Incident Reporting The Proponent shall notify the Director-General of any incident with actual or potential significant off-Site impacts on people or the biophysical environment as soon as practicable after the occurrence of the incident. The Proponent shall provide written details of the incident to the Director-General within seven days of the date on which the incident occurred.</p>	C	<p>The Spill and Pollution Incident Response Management Plan (SOIRMP) (2017) Document No. HSEC.MP.13.04 and associated incident register (reviewed by the Auditor during site visit December 2018) was prepared by NCIG as a management measure to track incidents from the issue or complaint to the close out stage which includes the notification of the incident to the Director General that has actual or significant off-Site impacts on people or the biophysical environment. The SOIRMP details the notification requirement in Section 13.</p> <p>The relevant condition in the EPL is a Trigger Action Response Plan - if there is an initial exceedance in the first sample, then a follow up sample must be taken to confirm or reject the initial result. In this instance, there was an initial exceedance for Nickel at MP 37. The EPA was notified of this exceedance in accordance with the EPL conditions. The Department was not informed as this record did not constitute an actual or potential significant off-site impact on people or the biophysical environment.</p>	<p>Spill and Pollution Incident Response Management Plan (2017) Document No. HSEC.MP.13.04</p>	There are no recommendations
PA06_0009	8	2	<p>Incident Reporting The Proponent shall maintain a register of accidents, incidents and potential incidents with actual or potential significant off-Site impacts on people or the biophysical environment. The register shall be made available for inspection at any time by the independent qualified person or team conducting the Environmental Audit and/or the Director-General.</p>	C	<p>The Spill and Pollution Incident Response Management Plan (SOIRMP) (2017) Document No. HSEC.MP.13.04 and associated incident register (reviewed by the Auditor during site visit December 2018) was prepared by NCIG as a management measure to track incidents from the issue or complaint to the close out stage which includes the notification of the incident to the Director General that has actual or significant off-Site impacts on people or the biophysical environment. The SOIRMP details the actions in the presence of an incident in Section 14 Actions During and After Incident.</p> <p>The Operation Environmental Management Plan (2018) Document No. HSEC.MP.12.01 relate to the actions prior to post incident sections 2.2.2 details the position description of the HSEC Manager to ensure adequate levels of environmental training for all levels of personnel, section 2.2.2 HSEC Department to implement controls outlined including provision of environmental training. Section 5.7.1 to 5.9.1 refer to NCIG complaint register protocol, procedure and requirements as per condition 8.2.</p>	<p>Spill and Pollution Incident Response Management Plan (2017) Document No. HSEC.MP.13.04 Operation Environmental Management Plan (2018) Document No. HSEC.MP.12.01</p>	There are no recommendations

PA06_0009	8	3	Incident Reporting The Proponent shall meet the requirements of the Director-General to address the cause or impact of any incident, as it relates to this approval, reported in accordance with condition 8.1 of this consent, within such period as the Director-General may agree.	Not Triggered	No reportable incidents occurred during the Audit Period.	Spill and Pollution Incident Response Management Plan (2017) Document No. HSEC.MP.13.04 Operation Environmental Management Plan (2018) Document No. HSEC.MP.12.01 Incident Register NSW EPA Public Register	There are no recommendations
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Newcastle Coal Infrastructure Group Coal Export Terminal															
Independent Environmental Audit 2018															
Detailed Findings and Recommendations															
Environment Protection Licence No 12693															
Clause	Condition Details	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation									
Administrative Conditions															
What the licence authorises and regulates															
A1.1	What the licence authorises and regulates	<p>This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation.</p> <p>Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.</p> <table border="1"> <thead> <tr> <th>Scheduled Activities</th> <th>Scale</th> </tr> </thead> <tbody> <tr> <td>Coal Works</td> <td>>5,000,000 T handled</td> </tr> <tr> <td>Shipping in Bulk</td> <td>>500,000 T loaded and unloaded</td> </tr> </tbody> </table>	Scheduled Activities	Scale	Coal Works	>5,000,000 T handled	Shipping in Bulk	>500,000 T loaded and unloaded	Noted	A production summary is provided in the Annual reviews. The AEMR 2016 report detailed the NCIG operations provided 66 million tonnes of capacity and loaded 50.1 million tonnes of coal.	2016 and 2017 Annual Review Import and export data	There are no recommendations.			
Scheduled Activities	Scale														
Coal Works	>5,000,000 T handled														
Shipping in Bulk	>500,000 T loaded and unloaded														
A2.1	Premises or plant to which this licence applies	The licence applies to the following premises - as outlined in Table A2.1 Newcastle Coal Infrastructure Group Cormorant Road Kooragang NSW 2304 and PREMISES MARKED AND SHOWN AS "DENOTES DRYLAND" AND "DENOTES WETLAND" BOUNDED BY "DENOTES BOUNDARY OF N.C.I.G. MANAGEMENT AND CONTROL" ON THE PLAN TITLED "PLAN FOR EPA SUBMISSION, NCIG COAL LOADING FACILITY, KOORAGANG ISLAND", PREPARED BY MONTEATH & POWYS PTY LTD, SHEET 1/2, DATED 08/12/2015, REV.3 ("THE PREMISES plan") (EPA REF. DOC 15/524237). THE PREMISES ALSO INCLUDES THE SHIP LOADER MARKED AND SHOWN AS "DENOTES MOBILE SHIP LOADERS" ON THE PREMISES PLAN, WHICH ARE MOBILE PLANT THAT WORK ALONG THE KOORAGANG 8, 9 AND 10 BERTHS.	C	The Newcastle Coal Infrastructure Group Coal Export Terminal is developed and operated within the boundaries defined in the Environment Assessments for Stage 1, Stage 2AA, Stage 2F and the rail flyover.	PA06_0009	There are no recommendations.									
A3.1	Information supplied to the EPA	<p>Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence. In this condition the reference to "the licence application" includes a reference to:</p> <p>a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and</p> <p>b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.</p>	Noted	<p>The licence application was sighted by the Auditor and works and activities are generally carried out in accordance with the proposal contained in the licence application. All activities during the site inspection related to the mining and processing of coal.</p> <p>A production summary is provided in the Annual reviews. A summary of the data shows that none of the activities have exceeded the annual scale as stipulated in this condition.</p>	EPL Application pitt&sherry IEA 2018 EPL 12693 2016 and 2017 Annual Review	There are no recommendations.									
P1.1	Discharges to Air and Water and Applications to Land.	<p>Location of monitoring/discharge points and areas.</p> <p>The following points referred to in the table below are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point.</p> <table border="1"> <thead> <tr> <th colspan="3">Air</th> </tr> <tr> <th>EPA ID No.</th> <th>Type of</th> <th>Location Description</th> </tr> </thead> <tbody> <tr> <td>19</td> <td>Meteorological Monitoring</td> <td>Meteorological Monitoring station located on the premises, marked and shown as "EPA Monitoring Point 19 (Meteorological Station)" on the Monitoring Points Plan.</td> </tr> </tbody> </table>	Air			EPA ID No.	Type of	Location Description	19	Meteorological Monitoring	Meteorological Monitoring station located on the premises, marked and shown as "EPA Monitoring Point 19 (Meteorological Station)" on the Monitoring Points Plan.	C	<p>Meteorological Monitoring was continuously undertaken at point 19. The Auditor reviewed a sample of meteorological monitoring raw data from monitoring site 19 dated from 12/1/2018 to 12/9/2018.</p> <p>The meteorological station has been continuously monitoring environmental conditions and the performance has been recorded in the Annual Environmental Monitoring Reports 2015-2017, provided on the NCIG website.</p>	EPL Application NCIG website EPL 12693 Operation Dust and Air Quality Management Plan (ODAMP) (2018) Documents No. HSEC.MP.12.02 Observed Meteorological Monitoring Station photo of the MET station is provided in Appendix B - Photos of this report. Meteorological Monitoring Station monitoring site 19 raw data sample dated from 12/1/2018 to 12/9/2018. AEMR 2015 - AEMR 2017 section 4 - environmental management performance.	There are no recommendations.
Air															
EPA ID No.	Type of	Location Description													
19	Meteorological Monitoring	Meteorological Monitoring station located on the premises, marked and shown as "EPA Monitoring Point 19 (Meteorological Station)" on the Monitoring Points Plan.													
P1.2	Discharges to Air and Water and Applications to Land.	The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids of liquids to the utilisation area.	Noted	The licence application was sighted and activities are generally carried out in accordance with the proposal contained in the licence application for the purposes of the monitoring and/or the setting of limits for any application of solids of liquids to the utilisation area.	EPL Application EPL 12693 Site Audit Observations	There are no recommendations.									

<p>P 1.3</p>	<p>Discharges to Air and Water and Applications to Land.</p>	<p>The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.</p> <table border="1" data-bbox="519 199 1113 1480"> <thead> <tr> <th colspan="3">Water and land</th> </tr> <tr> <th>EPA Identification No.</th> <th>Type of Monitoring</th> <th>Location Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Groundwater quality monitoring</td> <td>Groundwater monitoring well, located to the northeast of the Rail Dump Station, marked and shown as "EPA Monitoring Point 1 (GW1)" on the Monitoring Points Plan.</td> </tr> <tr> <td>20</td> <td>Groundwater quality monitoring</td> <td>Groundwater Monitoring well, located to the east of the rail loop adjacent to Pacific National haul road, marked and shown as "EPA Monitoring Point 20 (K9/3N)" on the Monitoring Points Plan.</td> </tr> <tr> <td>21</td> <td>Groundwater quality monitoring</td> <td>Groundwater Monitoring well, located to the south of the rail loop adjacent to Pacific National haul road, marked and shown as "EPA Monitoring Point 21 (K9/3S)" on the Monitoring Points Plan.</td> </tr> <tr> <td>22</td> <td>Groundwater quality monitoring</td> <td>Groundwater Monitoring well, located to the south of the rail loop between Cormorant Road and the South Arm of the Hunter River, marked and shown as "EPA Monitoring Point 22 (K11/1)" on the Monitoring Points Plan.</td> </tr> <tr> <td>23</td> <td>Groundwater quality monitoring</td> <td>Groundwater monitoring well, located to the south of the rail loop between Cormorant Road and the South Arm of the Hunter River, marked and shown as "EPA Monitoring Point 23 (K11/1S)" on the Monitoring Points Plan.</td> </tr> <tr> <td>24</td> <td>Groundwater quality monitoring</td> <td>Groundwater monitoring well, located down gradient of southern boundary of the premises (on the southern side of Cormorant Road, and east of Point 23), marked and shown as "EPA Monitoring Point 24 (K11/3E)" on the Monitoring Points Plan.</td> </tr> <tr> <td>25</td> <td>Groundwater quality monitoring</td> <td>Groundwater monitoring well, located down gradient of southern boundary of the premises (on the southern side of Cormorant Road, and east of Point 23), marked and shown as "EPA Monitoring Point 25 (K11/3W)" on the Monitoring Points Plan.</td> </tr> <tr> <td>26</td> <td>Groundwater quality monitoring</td> <td>Groundwater monitoring well, located down gradient of the southern boundary of the premises (on the northern side of Cormorant Road, and west of Point 23), marked and shown as "EPA Monitoring Point 26 (K11/2W)" on the Monitoring Points Plan.</td> </tr> <tr> <td></td> <td></td> <td>Groundwater monitoring well, located down gradient of southern</td> </tr> </tbody> </table>	Water and land			EPA Identification No.	Type of Monitoring	Location Description	1	Groundwater quality monitoring	Groundwater monitoring well, located to the northeast of the Rail Dump Station, marked and shown as "EPA Monitoring Point 1 (GW1)" on the Monitoring Points Plan.	20	Groundwater quality monitoring	Groundwater Monitoring well, located to the east of the rail loop adjacent to Pacific National haul road, marked and shown as "EPA Monitoring Point 20 (K9/3N)" on the Monitoring Points Plan.	21	Groundwater quality monitoring	Groundwater Monitoring well, located to the south of the rail loop adjacent to Pacific National haul road, marked and shown as "EPA Monitoring Point 21 (K9/3S)" on the Monitoring Points Plan.	22	Groundwater quality monitoring	Groundwater Monitoring well, located to the south of the rail loop between Cormorant Road and the South Arm of the Hunter River, marked and shown as "EPA Monitoring Point 22 (K11/1)" on the Monitoring Points Plan.	23	Groundwater quality monitoring	Groundwater monitoring well, located to the south of the rail loop between Cormorant Road and the South Arm of the Hunter River, marked and shown as "EPA Monitoring Point 23 (K11/1S)" on the Monitoring Points Plan.	24	Groundwater quality monitoring	Groundwater monitoring well, located down gradient of southern boundary of the premises (on the southern side of Cormorant Road, and east of Point 23), marked and shown as "EPA Monitoring Point 24 (K11/3E)" on the Monitoring Points Plan.	25	Groundwater quality monitoring	Groundwater monitoring well, located down gradient of southern boundary of the premises (on the southern side of Cormorant Road, and east of Point 23), marked and shown as "EPA Monitoring Point 25 (K11/3W)" on the Monitoring Points Plan.	26	Groundwater quality monitoring	Groundwater monitoring well, located down gradient of the southern boundary of the premises (on the northern side of Cormorant Road, and west of Point 23), marked and shown as "EPA Monitoring Point 26 (K11/2W)" on the Monitoring Points Plan.			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30	Groundwater quality monitoring	Groundwater monitoring well, located up gradient of northern boundary of the premises (east of Point 1), marked and shown as "EPA Monitoring Point 30 (K9/2W)" on the Monitoring Points Plan.
31	Groundwater quality monitoring	Groundwater monitoring well, located up gradient of northern boundary of the premises (east of Point 1), marked and shown as "EPA Monitoring Point 31 (K9/2E)" on the Monitoring Points Plan.
32	Groundwater quality monitoring	Groundwater monitoring well, located east of the rail loop, marked and shown as "EPA Monitoring Point 32 (K10/4W)" on the Monitoring Points Plan.
33	Groundwater quality monitoring	Groundwater monitoring well, located east of the rail loop, marked and shown as "EPA Monitoring Point 33 (DM10)" on the Monitoring Points Plan.
34	Discharge quality monitoring	Discharge from stormwater settling pond to stormwater drain, marked and shown as "Discharge Water Sampling Point" on the Monitoring Points Plan.
35	Ambient water monitoring	South Arm of Hunter River upstream of the Kooragang No. 10 Berth, marked and shown as "Background (Water Discharge) Sampling Point" on the Monitoring Points Plan.
36	Groundwater quality monitoring	Groundwater monitoring well, beneath the rail flyover west of Deep Pond, marked and shown as "Point 36 (BH20S) on the Plan of Water Monitoring Locations.
37	Groundwater quality monitoring	Groundwater monitoring well, beneath the rail flyover west of Deep Pond, marked and shown as "Point 37 (BH20D) on the Plan of Water Monitoring Locations.
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L 1.1	Pollution of waters	Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.	C	<p>Management reported that no water discharges from the site during the Audit Period has resulted in the "Pollution of Waters". It is noted that stormwater discharges occur from the site on average once or twice a year as a result of extended rain periods.</p> <p>A review of water quality monitoring and testing records for the Audit Period confirmed that all EPL requirements relating to water discharges have been met.</p> <p>No water pollution related incidents have been recorded by NCIG for the Audit Period and no instances of water pollution from the site are recorded in the EPA's Public Register.</p>	<p>EPL 12693</p> <p>NSW EPA Public Register</p> <p>NCIG Incident Register</p> <p>Annual Return</p>	There are no recommendations.											
L 2.1	Waste	The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by the licence.	C	No waste generated outside the premises were received at the NCIG premises during the compliance period.	<p>EPL 12693</p> <p>NSW EPA incident register</p> <p>AEMR 2015-2017</p>	There are no recommendations.											
L 2.2	Waste	This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if those activities require an environmental protection licence.	Not triggered	N/A	N/A	There are no recommendations.											
L 3.1	Noise Limits	All site preparation, filling/preloading and construction works that may generate an audible noise at any residential receptor shall only be undertaken between 7.00 am and 6.00 pm. This condition does not apply in the event of a direction from police or other emergency authority for safety or emergency reasons.	Not triggered	No construction activities performed during the compliance period.	AEMR 2015-2017	It is recommended that when the current EPL is next reviewed with the EPA, that NCIG seek to have the now redundant construction phase conditions removed from the licence.											
L 3.2	Noise Limits	Notwithstanding any other condition of this licence, piling works shall not be conducted on Sundays or public holidays.	Not triggered	No construction activities performed during this Audit Period. No piling works were carried out on the premises during the period.	AEMR 2015-2017	It is recommended that when the current EPL is next reviewed with the EPA, that NCIG seek to have the now redundant construction phase conditions removed from the licence.											
L 3.3	Noise Limits	<p>The licensee shall design, construct, operate and maintain the premises to ensure that the noise contributions from the premises do not exceed the maximum allowable noise contributions specified in the Table below, at those locations and during those periods indicated. The maximum allowable noise contributions apply under:</p> <p>a) wind speeds up to 3m/s (measured at 10 metres above ground level), or</p> <p>b) temperature inversion conditions up to 3°C per 100 metres and wind speeds up to 2m/s (measured at 10 metres above ground level).</p> <p>NOTE: For the purposes of the Table - 'Night' is defined as being 10:00pm to 7:00am Monday to Saturday and 10:00pm-7:00am on Sundays and Public Holidays.</p> <p>For the purpose of assessment of noise contributions specified in this licence, noise from the project shall be:</p> <p>a) measured at the most affected point on or within the site boundary at the most sensitive locations to determine compliance with Lea(15 minute) noise limits.</p> <p>b) measured at one metre from the dwelling façade to determine compliance with LA1(1minute) noise limits.</p> <p>c) subject to the modification factors provided in Section 4 of the New South Wales Industrial Noise Policy (EPA 2000) where applicable.</p> <p>Notwithstanding, should direct measurement of noise from the development be impractical, the licensee may employ an alternative noise assessment method deemed acceptable by the EPA (refer to Section 11 of the New South Wales Industrial Noise Policy (EPA 2000). Details of such an alternative noise assessment method must be accepted by the EPA prior to the implementation of the assessment method.</p>		Sound power monitoring conducted throughout the period (SLR Consulting) demonstrated that NCIG did not exceed the maximum allowable noise contributions during the compliance period.	<p>Operation Noise Management Plan (ONMP) (2017) Document No. HSEC.MP.12.03.</p> <p>SLR Consulting Biannual Off-Site Noise and On-Site Sound Power Monitoring Reports 2015- June 2018.</p> <p>SLR Ref: 610.04515.20700-R29 Version No: v1.0 Q2 2015</p> <p>SLR Ref: 610.04515.20700-R30 Version No: v1.0 Q1 2016</p> <p>SLR Ref: 610.04515.20700-R31 Version No: v1.0 Q2 2016</p> <p>SLR Ref: 610.04515.20700-R32 Version No: v1.0 Q2 2016</p> <p>SLR Ref: 610.04515.20700-R33 Version No: v1.0 Q1 2017</p> <p>SLR Ref: 610.04515.20700-R34 Version No: v1.0 Q2 2017</p> <p>SLR Ref: 610.04515.20700-R35 Version No: v1.0 Q1 2018</p>	There are no recommendations.											

		The assessment method				
		Location	Day, Evening, Night at all times			
			Lea _(15 min)	Lea _(night)		
		Fern Bay West (1 Fullerton Street/Stockton Centre)	41	37	c	
		Fern Bay East (21 Braid Road/Fern Bay Primary School)	39	36		
		Stockton West (284 Fullerton Street/Corner of Penbroke Street and Fullerton Street)	41	37		
		Stockton East (40 Eames Avenue/10 Pitt Street/Stockton Primary School)	38	35		
		Mayfield West (47 Stevenson Avenue/4 Groongal Street/Mayfield West Primary School)	45	40		
		Mayfield (68 Bull Street/45 Simpson Crescent/1 Arthur Street/52 Arthur Street/21 Crebert Street/Hunter Christian School/Mayfield East Primary School)	44	39		
		Carrington (Corner of Hargrave street and Young Street)	36	33		
L 4	Potentially offensive odour	Note: Section 129 of the Protection of the Environment Operations Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.	Noted	N/A	N/A	
L 4.1	Potentially offensive odour	No condition of this licence identifies a potentially offensive odour for the purposes of section 129 of the Protection of the Environment Operations Act 1997.	Noted	N/A	N/A	
4	Operating Conditions		Noted	N/A	N/A	
O1.1	Activities must be carried out in a competent manner	Licensed activities must be carried out in a competent manner. This includes: a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.	c	The licensed activities were deemed to be carried out in a competent manner during the period. For further information refer to Project Approval Condition: Schedule 2 Condition 56.	Refer to Project Approval: Schedule 2 Condition 56.	There are no recommendations.
O 2.1	Maintenance of plant and equipment	All plant and equipment installed at the premises or used in connection with the licensed activity: a) must be maintained in a proper and efficient condition; and b) must be operated in a proper and efficient manner.	c	All plant and equipment at NCIG has been maintained in a proper and efficient condition and is operated in a proper and efficient manner. For further information refer to Project Approval Condition: Schedule 1 Condition 9.	Refer to Project Approval: Schedule 1 Condition 9.	There are no recommendations.

O3.1	Operating Conditions, Dust	The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.	C	This is covered in section 4 of the AQMP. Specifically, odour and fume is covered in section 4.5, and dust is covered in section 4.1. The system involves proactive dust management such as predictive meteorological forecasting and reactive approaches such as real time response triggers. To minimise surface disturbance and emissions into the air NCIG is completing their operations progressively and completing progressive rehabilitation activities including temporary cover crops to stabilise rehabilitation areas. No visible off-site air pollution was observed during the site investigation. For further details refer to Project Approval: Schedule 2 Condition 1 to Condition 8.	Refer to Project Approval: Schedule 2 Condition 1 to Condition 8.	There are no recommendations.
O3.2	Operating Conditions, Dust	All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.	C	All operations and activities at the NCIG site are carried out in a manner that minimises the emission of dust from the premises Correspondence between EPA and NCIG occurred between 02/02/17-06/11/17 regarding elevated PM10 levels recorded in Stockton on 18/01/17. The EPA has since included a new operating condition (O3.4) that aims to formalise the Dust Management System already in place at NCIG. For further details refer to Project Approval: Schedule 2 Condition 1 to Condition 8.	AQMP Site inspection Correspondence between EPA and NCIG occurred between 02/02/17-06/11/17 regarding elevated PM10 levels recorded in Stockton on 18/01/17. The EPA has since included a new operating condition (O3.4) that aims to formalise the Dust Management System already in place at NCIG.	There are no recommendations.
O3.3	Operating Conditions, Dust	Trucks entering and leaving the premises that are carrying loads of dust generating materials must have their loads covered at all times, except during loading and unloading.	C	This is covered in section 4 of the AQMP and includes measures such as: - Use of water carts as necessary and practicable on all trafficked areas to minimise excessive visible dust. - Enforcement of speed limits - Fitting, inspection and maintenance of dust suppression systems to stationary plant - Partial enclosure of raw coal transfer and rejects conveyors where possible No visible off-site air pollution was observed during the site investigation. Trucks entering and leaving the premises that are carrying loads of dust generating material are covered in accordance with the NCIG Materials Transport Procedure.	AQMP Site inspection	There are no recommendations.
O3.4	Operating Conditions, Dust	The licensee must operate, on an as needs basis, sprays to prevent and minimise the generation and emission of dust from coal, stored in the coal stockyard, from the premises. The operation of the sprays must give consideration to the following matters. (a) The types of coal received and handled at the premises and the respective potential to generate dust. (b) Forecast meteorological conditions. (c) Current weather conditions from a real-time meteorological station located at the premises. (d) Ambient air quality from a real-time monitoring network located at the premises.	C	NCIG operates on an as needs basis, using sprays to minimise dust emissions of coal on the premises. The sprays operate in accordance with Condition O3.4. For further details refer to Project Approval: Schedule 2 Condition 1 to Condition 8.	AQMP Site inspection	There are no recommendations.
O4.1	Operating Conditions, Emergency response	The licensee must maintain, and implement as necessary, a current emergency response plan for the premises. The licensee must keep the emergency response plan on the premises at all times. The emergency response plan must document systems and procedures to deal with all types of incidents (e.g. spills, explosions or fire) that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment. If a current emergency response plan does not exist at the date on which this condition is attached to the licence, the licensee must develop an emergency response plan within three months of that date.	C	This is covered in section 4 of the OEMP. NCIG have an internal Emergency Management Procedure to manage incidents onsite. NCIG has a current Emergency Response Procedure. The procedure is kept on the premises at all times. The procedure deals with all types of incidents including spills and explosions, which may cause harm to the environment.	OEMP NCIG Emergency Management Procedure (HSEC.PRO.14.01)	There are no recommendations.
O5	Operating Conditions, Processes and management					
O5.1	Operating Conditions, Processes and management	All above ground tanks containing material that is likely to cause environmental harm must be banded or have an alternative spill containments system in place	C	All chemicals, fuels and explosives stored at the NCIG site are within banded areas that comply with the specifications of the relevant Australian Standard (AS 1940).	Audit Site inspection	There are no recommendations.
O5.2	Operating Conditions, Processes and management	Bunds must: a) have walls and floors constructed of impervious material; b) be of sufficient capacity to contain 110% of the volume of the tank (or 110% volume of the largest tank where a group of tanks are installed); c) have floors graded to a collection sump; and d) not have a drain valve incorporated in the bund structure, or be constructed and operated in a manner that achieves the same environmental outcome.	C	All chemicals, fuels and explosives stored at the NCIG site are within banded areas that comply with the specifications of the relevant Australian Standard (AS1940). This includes bunds constructed of impervious material such as concrete or steel and have 110% capacity of the storage tank volume. Floors flow to an enclosed collection sump.	Spill and Pollution Incident Response Management Plan Site inspection	There are no recommendations.
O6.1	Operating Conditions, Waste Management	The licensee must ensure that any liquid and/or non liquid waste generated and/or stored at the premises is assessed and classified in accordance with the EPA's Waste Classification Guidelines as in force from time to time.	C	Observed waste generated at the premises is classified with the EPA's Waste Classification Guidelines. A review of waste records confirmed that wastes generated during the Audit Period were assessed and disposed of appropriately.	Site inspection /photo Waste Invoice	There are no recommendations.
O6.2	Operating Conditions, Waste Management	The licensee must ensure that waste identified for recycling is stored separately from other waste.	C	The Auditor observed waste identified for recycling is stored separately from other waste. At the time of the audit, all waste storage areas were clearly signposted and maintained in a clean and tidy manner.	Site inspection Waste Disposla Records	There are no recommendations.

O7	Operating Conditions, Other operating conditions	The licensee must ensure that activities are conducted in an environmentally satisfactory manner. So as to minimise and prevent the pollution of air and water the licensee must: a) Ensure that vehicles or containers prior to leaving the premises are clean and sealed in a manner that will not cause materials or waste used in conducting the activities at the premises to be tracked, thrown from, blown, fall, or cast from any vehicle or container onto a public road. b) The licensee must have in place and implement procedures to ensure that vehicles and containers exiting the premises are in a condition to ensure that materials are not tracked, thrown, blown, fall or cast into a public road.	C	a) The site operations were observed during site visit and the vehicles and containers leaving the premises were clean and sealed. b) Staff and contractors are inducted prior to entering the site regarding operating vehicles onsite. The management of this condition is addressed in section 3.3 of the Operation Water Management Plan and section 4.4 of the Operation Dust and Air Quality Management Plan. For further details refer to Project Approval: Schedule 2 Condition 3.	Site inspection Water Management Plan Operation Dust and Air Quality Management Plan	There are no recommendations.																																																						
5	Operating Conditions, Monitoring and Recording Conditions																																																											
M1.1	Monitoring records	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.	Noted	N/A	N/A	There are no recommendations.																																																						
M1.2	Monitoring records	All records required to be kept by this licence must be: a) in a legible form, or in a form that can readily be reduced to a legible form; b) kept for at least 4 years after the monitoring or event to which they relate took place; and c) produced in a legible form to any authorised officer of the EPA who asks to see them.	C	The Auditor's review of monitoring records confirmed that all monitoring and records required by this licence is kept in a legible form, is kept for at least 4 years and can be produced in a legible form to an authorised EPA Officer if requested.	Monthly monitoring is available on the NCIG publicly accessible website and onsite.	There are no recommendations.																																																						
M1.3	Monitoring records	The following records must be kept in respect of any samples required to be collected for the purposes of this licence: a) the date(s) on which the sample was taken; b) the time(s) at which the sample was collected; c) the point at which the sample was taken; and d) the name of the person who collected the sample.	C	The Auditor observed all monitoring records which included the date on which samples were taken, the time at which samples were taken, the point at which samples were taken and the name of the person who collected them.	Monthly monitoring NCIG publicly accessible website. SLR noise monitoring reports	There are no recommendations.																																																						
M2	Requirement to monitor concentration of pollutants discharged																																																											
M2.1	Requirement to monitor concentration of pollutants discharged	For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:	C	The Auditor's review of monitoring records found that all monitoring points are monitored for their relevant pollutant concentrations according to the relevant sampling method. The sampling method, units of measure and sampling frequency is undertaken in accordance with M2.2.	N/A	There are no recommendations.																																																						
M2.2	Requirement to monitor concentration of pollutants discharged	<table border="1"> <thead> <tr> <th colspan="3">Water and/ or Land Monitoring Requirements</th> </tr> <tr> <th colspan="3">Point 1,38,39</th> </tr> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>As described</td> <td>µg/l</td> <td>Every 6 months</td> </tr> <tr> <th colspan="3">Points 20 to 23,36,37,40,41</th> </tr> <tr> <th>Pollutant</th> <th>Unit of measure</th> <th>Frequency</th> </tr> <tr> <td>As described</td> <td>µg/l</td> <td>Every 6 months</td> </tr> <tr> <th colspan="3">Points 24 to 33</th> </tr> <tr> <th>Pollutant</th> <th>Unit of measure</th> <th>Frequency</th> </tr> <tr> <td>As described</td> <td>µg/l</td> <td>Special Frequency 1</td> </tr> <tr> <th colspan="3">Point 34</th> </tr> <tr> <th>Pollutant</th> <th>Unit of measure</th> <th>Frequency</th> </tr> <tr> <td>As described</td> <td>mg/L</td> <td>Monthly during discharge</td> </tr> <tr> <th colspan="3">Point 35</th> </tr> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>Frequency</th> </tr> <tr> <td>As described</td> <td>mg/L</td> <td>Special Frequency 2</td> </tr> <tr> <td colspan="3">Note: For the purposes of the table(s) above Special Frequency 1 means the collection of samples on a six-monthly basis if trigger conditions specified in condition E1.1 are exceeded.</td> </tr> <tr> <td colspan="3">Note For the purpose of the table(s) above Special Frequency 2 means that collection of samples on an outgoing/ebb tide when monitoring is required at Point 34.</td> </tr> </tbody> </table>	Water and/ or Land Monitoring Requirements			Point 1,38,39			Pollutant	Units of measure	Frequency	As described	µg/l	Every 6 months	Points 20 to 23,36,37,40,41			Pollutant	Unit of measure	Frequency	As described	µg/l	Every 6 months	Points 24 to 33			Pollutant	Unit of measure	Frequency	As described	µg/l	Special Frequency 1	Point 34			Pollutant	Unit of measure	Frequency	As described	mg/L	Monthly during discharge	Point 35			Pollutant	Units of measure	Frequency	As described	mg/L	Special Frequency 2	Note: For the purposes of the table(s) above Special Frequency 1 means the collection of samples on a six-monthly basis if trigger conditions specified in condition E1.1 are exceeded.			Note For the purpose of the table(s) above Special Frequency 2 means that collection of samples on an outgoing/ebb tide when monitoring is required at Point 34.			C	The Auditor's review of monitoring records found that all monitoring points are sampled and tested according to the relevant sampling method. The sampling method, units of measure and sampling frequency is undertaken in accordance with M2.2. and the Operation Dust and Air Quality Management Plan. The Newcastle Local Air Quality Monitoring Network has been in operation since November 2014. This network is funded through local industry and operated by the Office of Environment and Heritage. A review of the most recent published Newcastle LAQMN Report and the Lower Hunter Particle Characterisation Study is provided summarised in the Operation Dust and Air Quality Management Plan and the full report is available from the Newcastle Air Quality Monitoring Network.	Monthly monitoring reports on NCIG publicly accessible website. AEMR 2016-2017 Operation Dust and Air Quality Management Plan. Newcastle Air Quality Monitoring Network	There are no recommendations.
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M3	Testing Methods - concentration limits																																																											

M3.1	Testing Methods - concentration limits	Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.	C	Monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area has been conducted in accordance with the Approved Methods Publication. This includes standards AS 29224, AS/NZS 35802, AS 29224, and DEC Approved Methods as listed in section 1 of the Operation Water Management Plan.	Monitoring report prepared by RCA Laboratories regarding surface water and groundwater monitoring results 2018- NATA Accredited Laboratory Operation Water Management Plan	There are no recommendations.																								
M4	Weather monitoring																													
M4.1	Weather monitoring	The licensee must measure and electronically log the meteorological parameters and sampling methods listed below and applying a 15-minute average period to all results, record data in units specified below. <table border="1" data-bbox="519 415 1121 758"> <thead> <tr> <th>Parameter</th> <th>Units of Measure</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Siting of Monitoring Station</td> <td>Not applicable</td> <td>AS2922-1987</td> </tr> <tr> <td>Temperature (2m)</td> <td>°C</td> <td>AM-4</td> </tr> <tr> <td>Temperature (10m)</td> <td>°C</td> <td>AM-4</td> </tr> <tr> <td>Wind speed (10m)</td> <td>m/s</td> <td>AM-2 and AM-4</td> </tr> <tr> <td>Wind direction (10m)</td> <td>o</td> <td>AM-2 and AM-4</td> </tr> <tr> <td>Sigma Theta (10m)</td> <td>o</td> <td>AM-2 and AM-4</td> </tr> <tr> <td>Solar radiation</td> <td>Wm-2</td> <td>AM-4</td> </tr> </tbody> </table>	Parameter	Units of Measure	Sampling Method	Siting of Monitoring Station	Not applicable	AS2922-1987	Temperature (2m)	°C	AM-4	Temperature (10m)	°C	AM-4	Wind speed (10m)	m/s	AM-2 and AM-4	Wind direction (10m)	o	AM-2 and AM-4	Sigma Theta (10m)	o	AM-2 and AM-4	Solar radiation	Wm-2	AM-4	C	Meteorological parameters are measured and recorded electronically at NCIG using the SCADA/CITECT network in accordance with Condition M4.1 observed at site visit. The meteorological station specifications and raw data extract were checked and confirmed.	WSS02-UMB Smart Weather Sensor Manual Site Audit Inspection.	There are no recommendations.
Parameter	Units of Measure	Sampling Method																												
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M5	Recording pollution complaints			N/A	N/A																									
M5.1	Recording pollution complaints	The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.	C	The Auditor reviewed the NCIG Complaints Register including all enquiries and complaints are recorded covering the Audit Period. No complaints reported and recorded were NCIG related.	NCIG Complaints Register	There are no recommendations.																								
M5.2	Recording pollution complaints	The record must include details of the following: a) the date and time of the complaint; b) the method by which the complaint was made; c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; d) the nature of the complaint; e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and f) if no action was taken by the licensee, the reasons why no action was taken.	C	The Auditor reviewed the NCIG Complaints Register including all enquiries and complaints recorded. The compliant details recorded meet all of the requirements of this Condition. No complaints were reported and recorded for this Audit Period.	NCIG Complaints Register	There are no recommendations.																								
M5.3	Recording pollution complaints	The record of a complaint must be kept for at least 4 years after the complaint was made.	C	Observed NCIG Complaints Register including all enquiries and complaints recorded according to condition M5.2. No complaints reported and recorded within the audit period were NCIG related. Records 4 years prior to the site audit were sighted by the Auditor.	NCIG Complaints Register	There are no recommendations.																								
M5.4	Recording pollution complaints	The record must be produced to any authorised officer of the EPA who asks to see them.	C	Compliance register records were easily accessed and are available to Authorities if requested.	NCIG Complaints Register	There are no recommendations.																								
M6	Telephone complaints line			N/A	N/A																									
M6.1	Telephone complaints line	The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.	C	NCIG operates a 24 hour enquiries line. Enquiries line phone number is accessible from the website and/or from the front signage to NCIG observed.	NCIG website	There are no recommendations.																								
M6.2	Telephone complaints line	The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.	C	NCIG operates a 24 hour enquiries line. Enquiries line phone number is accessible from the website and/or from the front signage to NCIG observed.	NCIG website	There are no recommendations.																								
M6.3	Telephone complaints line	The preceding two conditions do not apply until 21 days after: the date of the issue of this licence.	Noted																											
M6.4	Telephone complaints line	The licensee must nominate to the EPA a single telephone number for the EPA contacting the licensee to provide immediate assistance or response during emergencies or any other incidents at the premises. The telephone number must be current at all times. The nomination must be provided to the EPA's Director - Hunter at PO Box 488G, Newcastle NSW 2300. Note: This condition does not apply until two (2) weeks after the date of issue of the Notice adding the condition to the licence.	C	NCIG has nominated and provided contact details for the Manager HSEC, Environmental Advisor and the NCIG Process Leader. The NSW EPA have all the contacts required for this condition.	NCIG has a contact profile on the NSW EPA website login portal. (Viewed Screenshot of contact details provided to NSW EPA)	There are no recommendations.																								
6	Reporting Conditions																													
R1	Annual Return Documents																													

R1.1	Reporting Conditions, Annual return documents	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: 1. a Statement of Compliance; 2. a Monitoring and Complaints Summary; 3. a Statement of Compliance - Licence Conditions; 4. a Statement of Compliance - Load Based Fee; 5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan 6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; 7. a Statement of Compliance - Environmental Management Systems and Practices; and At the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.	C	NCIG have completed and supplied an Annual Review on the approved form to the EPA each year. Note: The 2018 Annual Review was not available at the time of the audit.	2016 and 2017 Annual Reviews	There are no recommendations.
R 1.2	Reporting Conditions, Annual return documents	An Annual Return must be prepared in respect of each reporting period, except as provided below.	Noted	Annual Reviews have been filed with NSW EPA. Auditors have reviewed the Annual Reviews for years 2016, 2017. The 2018 Annual Review was not available at the time of the audit. The reporting is undertaken using the standard EPA form and contains all the required sections.	2016 and 2017 Annual Reviews NSW EPA Public Register	There are no recommendations.
R 1.3	Reporting Conditions, Annual return documents	Where this licence is transferred from the licensee to a new licensee: a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.	Not Triggered	Annual Reviews have been filed with NSW EPA. Auditors have reviewed the Annual Reviews for years 2016, 2017. The 2018 Annual Review was not available at the time of the audit. No such licence transfer from the licensee to a new licence occurred during the audit period.	2016 and 2017 Annual Reviews NSW EPA Public Register	There are no recommendations.
R 1.4	Reporting Conditions, Annual return documents	Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on: a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.	Noted			
R 1.5	Reporting Conditions, Annual return documents	The Annual Return for the reporting period must be supplied to the EPA via eConnect EPA or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').	C	Submission date of the Annual Reviews as per the EPA website receipt date confirms compliance to this requirement. All reports during the audit period have been submitted in the second half of May, within 60 days of the end of each reporting period.	Management assertion NSW EPA Public Register	There are no recommendations.
R 1.6	Reporting Conditions, Annual return documents	The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.	C	Submission date of the Annual Reviews as per the EPA website receipt date confirms compliance to this requirement. All reports during the audit period have been submitted in the second half of May, within 60 days of the end of each reporting period and 2009 - 2017 AEMR documents are uploaded onto the NCIG website.	2016 and 2017 Annual Review NSW EPA online records for EPL 12693	There are no recommendations.
R1.7	Reporting Conditions, Annual return documents	Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by: a) the licence holder; or b) by a person approved in writing by the EPA to sign on behalf of the licence holder. Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period. Note: An application to transfer a licence must be made in the approved form for this purpose.	C	Within the Annual Reviews a verified Statement of Compliance has been signed by the NCIG Secretary and a Board member who are authorised to make this statement on Behalf of NCIG.	2016 and 2017 Annual Review NSW EPA Public Register	There are no recommendations.
R2	Reporting Conditions, notification of environmental harm					
R2.1	Reporting Conditions, notification of environmental harm	Notifications must be made by telephoning the Environment Line service on 131 555.	Not Triggered	The Spill and Pollution Incident Response Management Plan section 13 As the following agencies and government bodies are to be notified in the event of a notifiable pollution incident: EPA (Environment Line) – 131 555 No reportable incidents were identified for the Audit Period.	PRIMP - NSW EPA Contact Environmental Line	There are no recommendations.
R 2.2	Reporting Conditions, notification of environmental harm	The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred. Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.	C	The OEMP provides the following summary of incident reporting: NCIG will notify the Secretary of the DP&E, the EPA and any other relevant agencies immediately after NCIG becomes aware of the incident. <i>The Director-General will be notified of any incident with actual or potential significant off-site impacts on people or the biophysical environment as soon as practicable after the occurrence of the incident. The Director-General will be provided with written details of the incident within seven days of the date on which the incident occurred.</i> Additionally most management plans state that either the protocol for managing and reporting incidents will be followed or specifies that relevant agencies and government bodies will be notified of the incident and that a report will be provided within 7 days. No environmental harm notifications were made during the compliance period.	Operations Environmental Management Plan Spill and Pollution Incident Response Management Plan Management Plans	There are no recommendations.

R3	Reporting Conditions, written report					
R3.1	Reporting Conditions, written report	Where an authorised officer of the EPA suspects on reasonable grounds that: a) where this licence applies to premises, an event has occurred at the premises; or b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.	Not Triggered	This condition was not triggered during the audit reporting period.	NCIG Website monitoring reports. NCIG letter to NSW EPA correspondence (dated 31 July 2017). Regarding dust management system at Newcastle Coal Infrastructure Group, Air Quality at Stockton 2017.	There are no recommendations.
R 3.2	Reporting Conditions, written report	The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.	Not Triggered	This condition was not triggered during the audit reporting period.	2016 and 2017 Annual Review	There are no recommendations.
R3.3	Reporting Conditions, written report	The request may require a report which includes any or all of the following information: a. the cause, time and duration of the event; b. the type, volume and concentration of every pollutant discharged as a result of the event; c. the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; d. the name, address and business hours telephone number of every other person (of whom the licensee is aware who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort); e. action taken by the licensee in relation to the event, including any follow-up contact with any complainants; f. details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and g. any other relevant matters.	Not Triggered	This condition was not triggered during the audit reporting period. NCIG has provided correspondence to NSW EPA letter (letter received 2/02/2017) regarding exceeded PM10 levels at Stockton. However, NSW EPA considers the exposed stockpiles around the Port of Newcastle to be a potential source. The NCIG correspondence letter to NSW EPA (dated 15/02/2017) was viewed during the audit and included all the requirements of this condition.	NCIG Website monitoring reports. NCIG letter to NSW EPA correspondence (dated 31 July 2017). Regarding dust management system at Newcastle Coal Infrastructure Group, Air Quality at Stockton 2017.	There are no recommendations.
R3.4	Reporting Conditions, written report	The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.	Noted	This condition was not triggered during the audit reporting period.	NCIG Website monitoring reports. NCIG letter to NSW EPA correspondence (dated 31 July 2017). Regarding dust management system at Newcastle Coal Infrastructure Group, Air Quality at Stockton 2017.	There are no recommendations.
7	General conditions					
G1.1	General conditions	A copy of this licence must be kept at the premises to which the licence applies	C	A copy of this licence was be kept at the premises to which the licence applies during the audit compliance period both onsite and online.	EPL 12693 NSW EPA POEO Website NCIG Website	There are no recommendations.
G1.2	General conditions	The licence must be produced to any authorised officer of the EPA who asks to see it.	C	A copy of this licence was be kept at the premises to which the licence applies during the audit compliance period both onsite and accessible to the public online.	EPL 12693 NSW EPA POEO Website NCIG Website	There are no recommendations.
G1.3	General conditions	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	C	A copy of this licence was be kept at the premises to which the licence applies during the audit compliance period both onsite and accessible to the public online..	EPL 12693 NSW EPA POEO Website NCIG Website	There are no recommendations.
G2	Other general conditions					

G2.1	General conditions, Completed Programs	<table border="1"> <thead> <tr> <th>Program</th> <th>Description</th> <th>Completed Date</th> </tr> </thead> <tbody> <tr> <td>Groundwater Monitoring Program</td> <td>Develop groundwater monitoring program to detect any mobilisation of contaminants around K26/32 on Kooragang Island. Early detection of contaminant mobilisation beyond premises boundary.</td> <td>03-June-2010</td> </tr> <tr> <td>Review Existing Groundwater Quality</td> <td>Review existing groundwater quality to determine baseline on which future groundwater monitoring results will be compared to detect mobilisation of groundwater contaminants. Early detection of groundwater contaminant mobilisation.</td> <td>30-August-2010</td> </tr> <tr> <td>Kooragang Island - Rail Loop Groundwater Monitorin</td> <td>Develop a Groundwater Contingency Plan that identified trigger values and associated actions to occur should values be exceeded during regular monitoring program. Prevent groundwater contamination movement offsite and entering the Hunter River.</td> <td>11-March-2011</td> </tr> <tr> <td>Wagon Monitoring and Reporting Environmental Improvement Program</td> <td>Implement a program of monitoring and reporting on the condition of loaded wagons received at the premises. All trains entering the dump-station will be assessed against criteria relating to likelihood that coal may have been split within the rail corridor during the train's most recent journey.</td> <td>01-September-2016</td> </tr> <tr> <td>Train Condition Exception Reporting</td> <td>The visual assessment of wagons to identify those that are consistently loaded in a manner that clearly is likely to contribute to spillage of coal in the rail corridor.</td> <td>30-November-2017</td> </tr> </tbody> </table>	Program	Description	Completed Date	Groundwater Monitoring Program	Develop groundwater monitoring program to detect any mobilisation of contaminants around K26/32 on Kooragang Island. Early detection of contaminant mobilisation beyond premises boundary.	03-June-2010	Review Existing Groundwater Quality	Review existing groundwater quality to determine baseline on which future groundwater monitoring results will be compared to detect mobilisation of groundwater contaminants. Early detection of groundwater contaminant mobilisation.	30-August-2010	Kooragang Island - Rail Loop Groundwater Monitorin	Develop a Groundwater Contingency Plan that identified trigger values and associated actions to occur should values be exceeded during regular monitoring program. Prevent groundwater contamination movement offsite and entering the Hunter River.	11-March-2011	Wagon Monitoring and Reporting Environmental Improvement Program	Implement a program of monitoring and reporting on the condition of loaded wagons received at the premises. All trains entering the dump-station will be assessed against criteria relating to likelihood that coal may have been split within the rail corridor during the train's most recent journey.	01-September-2016	Train Condition Exception Reporting	The visual assessment of wagons to identify those that are consistently loaded in a manner that clearly is likely to contribute to spillage of coal in the rail corridor.	30-November-2017	Noted	NCIG no longer conducts Train Condition Exception Reporting as the Condition ceased to have effect on 30 November 2017.	EPL 12693 NSW EPA Train Condition Checking: Email correspondence NCIG and NSW EPA provided Wagon Cleanliness report (dated 28/9/2016). NCIG Website	There are no recommendations.
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E1	Special conditons, Groundwater monitoring - Triggers for Further Investigation																							
	Special conditons, Groundwater monitoring - Triggers for Further Investigation	<p>The following Trigger and Contingency Response Program must be taken by the licensee, if groundwater monitoring required under the licence for Points 20, 21, 22, 23, 36, 37, 40 or 41 reveals concentrations whereby either of the following two Trigger Conditions are met.</p> <p>Trigger Condition 1 - Where monitoring of the parameters required under the licence for Points 20, 21, 22, 23, 36, 37, 40 or 41 demonstrates a sudden increase in concentration compared to historical data, or sudden decrease in for pH is observed. A sudden increase or decrease is defined as a value that is greater than the mean plus twice the standard deviation for the historical data.</p> <p>Trigger Condition 2 - Where the trend analysis of the concentration of the parameters required under the licence for Points 20, 21, 22, 23, 36, 37, 40 or 41 against time shows an increasing concentration over the most recent four monitoring events. Trend analysis tools such as Mann-Kendall may be adopted.</p> <p>Contingency Response Program</p> <p>Step 1: In the event of either of the above two Trigger Conditions being met, the licensee must notify the EPA in writing within two (2) working days of initial results becoming available to the licensee. The notification must included details of the Point(s) and the concentration recorded.</p> <p>Step 2: In the event of Step 1, the licensee must resample the Point(s) at which the Trigger Condition was met to confirm the elevated level.</p> <p>Step 3: The licensee must notify the EPA in writing within two (2) working days of the results collected in Step 2 becoming available to the licensee. The notification must included details of the Point(s) and concentration recorded. The EPA must be notified regardless of whether the results are elevated or not.</p> <p>Step 4: If the results collected in Step 2 confirms the elevated levels, the licensee must commence six monthly groundwater monitoring at Points 24 to 33 inclusive for the parameters as detailed in licence condition M2.2.</p> <p>Step 5: A suitably qualified and experienced person must undertake an assessment of the cause of the elevated concentration(s) identified in Steps 1 and 2, as well as trends in the groundwater contaminant concentrations. The analysis must consider data collected at Point 1, and any other relevant groundwater data, both historical and current. A report detailing the assessment and its findings must be prepared. The assessment report must include details of and justification for the assessment identified</p>		<p>An exceedance was found onsite from NCIG Groundwater monitoring point 37 during initial sampling and reporting result, however the re-sampling of the water for Nickel levels was below the Trigger Condition 1 level. NCIG provided the laboratory results to NSW EPA to support this.</p> <p>A phone call and follow up email notification of exceedances regarding Condition E1 (GW Monitoring, Trigger for Further Investigation) from NCIG to NSW EPA (dated 23 January 2018). The email letter stated "As discussed earlier over the phone, yesterday we received groundwater analysis results from the first round of sampling since groundwater conditions were amended to our EPL (12693) in August 2017. Some preliminary analysis has been conducted of the results, and we have identified a result which exceeds Trigger 1 of Condition E1 in the licence:</p> <p>Trigger Condition 1 – Where monitoring of the parameters required under the licence for Points 20, 21, 22, 23, 36, 37, 40 or 41 demonstrates a sudden increase in concentration compared to historical data, or sudden decrease in for pH is observed. A sudden increase or decrease is defined as a value that is greater than the mean plus twice the standard deviation for the historical data.</p> <p>The result is specifically regarding Nickel at Monitoring Point 37 (BH20D), where the result of sampling taken in December 2017 is 0.013 mg/L, compared to a historical average of 0.0048 mg/L and a standard deviation of 0.00192. The historical average and standard deviation draws upon data taken between January 2014 and July 2015.</p> <p>We are having this data analysis confirmed with the assistance of Environ consulting, but are preparing to have this re-sampled by Thursday. It is likely we will have an updated result approximately 2 weeks after this date.</p> <p>For clarification, this result has initiated Steps 1 and 2 of the Contingency Response Program of Condition E1. We will be in contact once more after having the data analysis confirmed by Environ, then again after the re-sample result becomes available." - Environmental Advisor Philip Reid.</p> <p>A follow up email was sent from NCIG to NSW EPA on 2/3/2018.</p>	<p>Email notification of exceedances regarding Condition E1 (GW Monitoring, Trigger for Further Investigation) from NCIG to NSW EPA (dated 23 January 2018).</p> <p>Email follow up of reported exceedance regarding condition 1 from NCIG to NSW EPA (dated 2/3/2018).</p>	There are no recommendations.																		

E1.1		<p>prepared. The assessment report must provide advice on, and justification for, the trend identified and any actions to be taken by the licensee in response to the elevated concentration.</p> <p>The assessment and report must be completed within eight (8) months of the results collected in Step 2 becoming available to the licensee; and, submitted to the EPA.</p> <p>Step 6: If the assessment undertaken in Step 5 identifies an increasing or upward trend in contaminant levels, the licensee must undertake an assessment and prepare a report on the risks posed by the migration of the contaminated groundwater on the Hunter River. The risk assessment report must include groundwater fate; transport modelling; and include justification for the conclusions reached as to whether the risk identified is acceptable or unacceptable and what actions are to be taken by the licensee.</p> <p>Where the above risk assessment is required, the risk assessment and report must be completed within two (2) months of the submission of the report required under Step 5.</p> <p>Step 7: If the risk identified in Step 6 is deemed 'unacceptable', the licensee must undertake a Remedial Options Study to identify and report on remediation options to be implemented to remediate the identified groundwater risk.</p> <p>The Remedial Options Study must be undertaken by a suitably qualified and experienced person. The Remedial Options Study must identify and provide justification for the remedial actions to be undertaken; criteria to validate/monitor the effectiveness of the remedial works; and, timeframes for the implementation of the proposed remedial works.</p> <p>Where the above Remedial Options Study is required, the licensee must provide a report detailing the Remedial Options Study to the EPA within two (2) months of the submission of the report required under Step 6.</p> <p>Note: The above notifications and reports must be provided to the EPA's Director - Hunter at PO Box 488G, Newcastle NSW 2300, or emailed to hunter.region@epa.nsw.gov.au.</p>	C	<p>"Just following up regarding previous correspondence regarding Condition E1 (EPL12693) and re-sampling of Groundwater Monitoring Point 37. My apologies that we have not reported sooner – we received initial results from the re-sampling on 20/2, but due to complications with analysis the Limit of Reporting (LoR) for Nickel was raised, which was in fact higher than the Trigger Condition 1 (the historical mean + twice the standard deviation). The Nickel result for this sample was below the LoR. For this reason, the sample required an ultratrace analysis to reduce the LoR below the trigger level, which is currently 0.0086 mg/L.</p> <p>We have now received the result for the ultratrace analysis and the result is 0.0073 mg/L, i.e. below the Trigger Condition 1 level. See attached laboratory report. Based on the this analysis, the process has now concluded at Step 3 of Special Condition E1.1 and there is no need for further action. Please let me know if you have any further questions about the above."</p> <p>In the last two six monthly groundwater monitoring results (December 2017 and June 2018) the Trigger Conditions were exceeded. In December 2017 Nickel from Point 37 exceeded Triggered Condition 1 and in June 2018 EC from Point 20 exceeded Triggered Condition 2, and PAH at Point 40 exceeded Trigger Condition 1.</p> <p>The Contingency Response Program was followed. The EPA were notified within two working days of the result becoming available and each location was resampled. The results of the resample did not confirm the elevated results and the process concluded at Step 3.</p>		
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Newcastle Coal Infrastructure Group Coal Export Terminal Independent Environmental Audit 2018 Detailed Findings and Recommendations Approval Decisions (EPBC 2006/2987) and clarification letter						
EPBC	Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
1. Schedule 2, Administrative Conditions Manner in which the proposed action is to be taken						
2006/2987	C01 pg 1	Green and Golden Bell Frog Green and Golden Bell Frogs found on the project site during construction or operation will be removed from the direct disturbance area and placed in adjacent similar habitat within the Kooragang Nature Reserve, and in accordance with the NPWS Hygiene Protocol for the Control of Disease in Frogs 2001.	C	NCIG management reported that any Green and Golden Bell Frogs found during operations are relocated. All staff and subcontractors are provided with training (during site inductions) regarding the reporting and management of frog finds. Section 4 and attachment 1 of the NCIG Ecological and Land Management Plan details the frog management procedures.	Ecological and Land Management Plan, (Document No. HSEC.MP.12.06): - Attachment 1: Hygiene Protocol. - Section 4.1.2.2. Inspection and Disinfection of Mobile Plant. - Section 4.1.3 Pre-clearance surveys (Vegetation Clearance Protocol) - Section 4.1.4 Green and Golden Bell Frog Relocation Procedures and section 4.1.4.2 Relocation Procedure outside Pre-Clearance Surveys. - Section 4.1.4.3 Procedures for handling sick or dead Green and Golden Bell Frogs.	There are no recommendations
2006/2987	C02 pg 1	The following management measures, as a minimum, will be undertaken to minimise the further spread of amphibian chytrid fungus: a) The training of all project personnel in site hygiene management in accordance with the NPWS Hygiene Protocol for the Control of Disease in Frogs 2001. b) Procedures will be implemented to inspect mobile plant entering the proposal site during construction activities to ensure the plant is free of soil and/r organic matter and to disinfect tyres and wheels of vehicles entering the proposal site that have been exposed to mud.	C	NCIG staff and subcontractors are trained in site hygiene management relating to Green and Golden Bell Frogs. The Green and Golden Bell Frogs induction training PowerPoint is provided to all staff and subcontractors to be informed to minimise the spread of amphibian chytrid fungus, site hygiene management and procedures implemented to inspect mobile plant to ensure the plant is free of organic matter. During the site, no other vehicles were observed, however, the site was clean, organised and had no evidence of mud tracked from mobile plant.	Green and Golden Bell Frogs Environmental Awareness Induction Training PowerPoint Ecological and Land Management Plan, (Document No. HSEC.MP.12.06): - Attachment 1: Hygiene Protocol. - Section 4 - Section 4.1.2.2. Inspection and Disinfection of Mobile Plant. Site Audit Observations	There are no recommendations
2006/2987	C03 pg 1	Rail culverts, to act as frog underpasses, will be designed and constructed along the proposed rail loop and as described in the referral and on Drawing 3, NCIG Coal Export Terminal (NCIG 2006) attached to the referral.	C	In accordance with Condition 2.17, Schedule 2 of PA 06_0009 NCIG has designed and constructed relevant rail infrastructure associated with the Project to include culverts, underpasses or other similar measures to permit the movement of Litoria aurea and other amphibian species under the NCIG rail infrastructure. The culverts and underpasses were installed to include suitable habitat for the Green and Golden Bell Frogs and to provide protection from predators in accordance with guidance provided by Dr Arthur White. Measures are listed in section 5 of the Compensatory Habitat Ecological Monitoring Program (CHEMP) Site drainage structures were observed by the Auditor during the site inspection.	Annual Report 2016-2017 Ecological and Land Management Plan, section 4 and 5 (Document No. HSEC.MP.12.06) Compensatory Habitat and Ecological Monitoring Program Quarterly Reports Section 7 – Reporting and Review, May, July, December 2015, April, July, December (combined quarter 3 and quarter 4) 2016 and June 2017. Site Audit Observations	There are no recommendations
2006/2987	C04 pg1	The following measures will be undertaken to establish habitat for the Green and Golden Bell Frogs at the frog underpasses: a) Planting of vegetation preferred by the frog species, including Cumbungi (Typha sp), spike rushes (Eleocharis spp) or sedges (Schoenoplectus spp). b) Placing piles of rocks at either end of the frog underpasses. c) Establishment of pond areas at either end of the frog underpasses.	C	During the site inspection, the Auditor observed the wetland vegetation, including the use of native vegetation, occurring at either end of rail culverts as habitat for the Green and Golden Bell Frog. Rocks have been placed at these locations for the same purpose. Depressions- shaping of aquatic and terrestrial habitat have been included in the same locations for frog habitat. The measures have been implemented in accordance with the Ecological and Land Management Plan, section 4.	Ecological and Land Management Plan, section 4 and 5 (Document No. HSEC.MP.12.06) Compensatory Habitat and Ecological Monitoring Program Quarterly Reports Section 7 – Reporting and Review, May, July, December 2015, April, July, December (combined quarter 3 and quarter 4) 2016 and June 2017 Site Audit Observations	There are no recommendations
2006/2987	C05 pg 1	Project personnel will be prohibited from entering Green and Golden Bell Frog habitat area located outside defined construction areas.	Not triggered	Construction was completed during the previous audit period. Operations started June 2010 and construction was complete June 2015.	N/A	N/A
2006/2987	C06 pg 2	Annual monitoring during the breeding season of Green and Golden Bell Frogs will be undertaken on the Coal Export Terminal site until 2020. Thereafter, monitoring will be undertaken on a three yearly basis until 2030. If monitoring indicated declining populations attributable to the development, measures will be implemented, in consultation with the Department, to reverse any decline. Such measures may include control of Gambusia populations, further creation or enhancement of frog habitat and dispersal pathways, and establishment of new populations.	C	Green and Golden Bell Frog monitoring in the Kooragang Island area was completed during the Audit Period in conjunction with PWCS and HDC. The University of Newcastle completed Green and Golden Bell Frog monitoring at the compensatory habitat and former NCIG trial ponds in October 2016, February 2017 and March 2017. The Ecological and Land Management Plan subsumes the previous Green and Golden Bell Frog Management Plan (GGBFMP) for operational purposes.	Ecological and Land Management Plan, section 4 and 5 (Document No. HSEC.MP.12.06) Compensatory Habitat and Ecological Monitoring Program Quarterly Reports Section 7 – Reporting and Review, May, July, December 2015, April, July, December (combined quarter 3 and quarter 4) 2016 and June 2017. Research Program on the Green and Golden Bell Frog (Litoria aurea) on Kooragang Island Draft Annual Report (2017-2018) dated August 2018.	There are no recommendations
2006/2987	C07 pg 2	Shorebirds Screens, comprising timber paling fences or similar structures, will be placed at intervals along the rail infrastructure to minimise lighting impacts on shorebird habitat along the southern shores of Deep Pond from trains and ground-level rail corridor lighting.	C	During the site inspection the Auditor observed that screens have been erected along the rail infrastructure to minimise lighting impacts from passing trains on shorebirds using Deep Pond.	Site Audit Observations	There are no recommendations

2006/2987	C08 pg 2	Annual monitoring of the Australian Bittern and shorebird populations utilising Deep Pond will be undertaken during summer (e.g. peak waterbird usage period) until 2020. Thereafter, monitoring will be undertaken on a three yearly basis until 2030.	c	Monthly waterbird and shorebird monitoring of Deep Pond was conducted, including during this Audit Period. The results are provided in the Compensatory Habitat and Ecological Monitoring Program Quarterly Reports and the results summarised in the Annual Reports 2015, 2016 and 2016-2017.	Annual Return 2015, 2016 and 2016-2017. Compensatory Habitat and Ecological Monitoring Program Quarterly Reports Section 7 – Reporting and Review, May, July, December 2015, April, July, December (combined quarter 3 and quarter 4) 2016 and June 2017.	There are no recommendations
2006/2987	C09 pg 2	Monitoring results will be provided on an annual basis to the Department up to 2020 (by 31 March of each year). A summary and analysis of the results will also be provided each three years (by 31 March) addressing any changes in the utilisation patterns of listed migratory shorebirds at Deep Pond since the monitoring commenced. Measures will be implemented to enhance existing habitat, or provide additional habitat, in the event monitoring indicates a decline in listed shorebird usage attributable to construction and operation of the rail loop. Design and construction of any new habitat, or habitat enhancement measures, will be undertaken in consultation with a shorebird specialist.	c	Monitoring results were provided to the Department of Environment prior to 31 March for the 2015, 2016 and 2017 period. (Emails from NCIG to the Department on 30/03/2016, 19/03/2018 RE: EPBC 2006/2987 Shorebird Reporting including attachment to the analysis of the survey information undertaken by the Hunter Bird Observers Club). The Hunter Bird Observers Club prepared a Avifauna Data Summary for 2015, 2016 and 2017 for Deep Pond facilitated by the Newcastle Coal Infrastructure Group (NCIG). The reports were prepared and finalised on the 15/03/2016 for 2015, 07/03/2017 for 2016 and 12/03/2018 for 2017.	Bird Data 2015 Deep Pond Avifauna Data Summary 2015 (HBOC) Bird Data 2016 Deep Pond Avifauna Data Summary 2016 (HBOC) Deep Pond Avifauna Data Summary 2017 (HBOC) NCIG Deep Pond North Bird Data 2017 NCIG Deep Pond South Bird Data 2017 Email from NCIG to the Department of Environment (dated 19/03/2018) RE: EPBC 2006/2987 Shorebird Reporting Compensatory Habitat and Ecological Monitoring Program Quarterly Reports Section 7 – Reporting and Review, May, July, December 2015, April, July, December (combined quarter 3 and quarter 4) 2016 and June 2017.	There are no recommendations
2006/2987	C010 pg 2	The Department will be notified a minimum of 24 months prior to construction of the northern rail spur, if it proceeds. An assessment of potential impacts on listed shorebird habitat in Deep Pond will be provided at that time, together with a description of any design or other mitigation measures required to avoid significant impacts on listed birds. Such measures may include enhancement of existing habitat and creation of new habitat alongside the northern rail spur embankment. Design and construction of any new habitat, or habitat enhancement measures, will be undertaken in consultation with a shorebird specialist.	c	This condition was satisfied prior to construction of the Rail Flyover. Communication with the Department of Environment indicated that no regulatory action would be taken by commencing construction of the Rail Flyover earlier than 24 months after notification to the Department. As stated, compliance with this condition was resolved prior to construction of the Rail Flyover. Development works for enhancement of existing and creation new shorebird compensatory habitat was completed in November 2016 and evidence is provided in the Annual Report 2017. This included: - Removal of 17 hectares of mangroves using a power tool (hand removal) and plant/ machinery methods. - Installation of a hydrological control device (Smart Gate) at Fish Fry Creek culvert. - Installation of two Mangrove Propagule Exclusion Devices (MPEDs) in Fish Fry Creek. - Installation of bird diverters using a bucket truck at the Ausgrid power lines. - Installation of bird diverters using a helicopter at the Transgrid power lines. - Other minor infrastructure works such as rock protection along Fish Fry Creek, security gates and fences and access tracks. Further improvements to the habitat within the reporting period included fixing of minor mechanical and electrical defects on the Smart Gate at Fish Fry Creek, followed by modification of the programming logic for gate operation as recommended by University of NSW Water Research Laboratory.	Letter from Department of Sustainability, Environment, Water, Population and Communities (SEWPaC) (dated 15/08/2013) RE: Northern Rail Spur - particular manner 10 EPBC 2006/2987. NCIG AEMR 2017 Compensatory Habitat and Ecological Monitoring Program Quarterly Report, July 2015 Compensatory Habitat and Ecological Monitoring Program Quarterly Report, December 2015	There are no recommendations
2006/2987	C011 pg2	Hunter Estuary Ramsar Wetlands A site water management plan, including a surface water monitoring program, will be developed in accordance with the measures outlined in the Site Water Management Plan (SWMP) (Construction and Operations) provided in Section 5 of the Draft Statement of Commitments, Environmental Assessment (Newcastle Coal Infrastructure Group, July 2006) and Sections 8 & 9 of the Land Contamination and Groundwater Assessment, Newcastle Coal Infrastructure Group Coal Export Terminal, Kooragang Island, Appendix D (RCA Australia, June 2006).	c	The provisions of the Site Water Management Plan, section 4, and monitoring program in section 5 have been incorporated into the NCIG Operation Water Management Plan (version HSEC.MP.12.04).	Operation Water Management Plan Document No. HSEC.MP.12.04	There are no recommendations

Newcastle Coal Infrastructure Group Coal Export Terminal Independent Environmental Audit 2018 Detailed Findings and Recommendations Project Approvals 06_0009						
SoC	EA Reference	Requirement	Compliance	Audit Finding	Condition Evidence	Recommendation
		Summary of the Operational Environmental Mitigation Measures and Compliance Obligations from the Draft SoC				
Land Resources	Section 4.1.3	<p>Soil and Erosion Potential</p> <p>Erosion and sediment control measures for the Project would be developed and documented in an Erosion and Sediment Control Plan (ESCP). The ESCP would be a component of the SWMP (Section 4.6). The measures presented in the ESCP would aim to control soil erosion and sediment generation proximal to the source and thereby minimise the potential for Project activities to adversely affect downstream water quality.</p> <p>The ESCP would be prepared in general accordance with the manual Managing Urban Stormwater: Soils and Construction – Volume 1 (Landcom, 2004). The design capacity of erosion and sediment control structures would be determined in consultation with relevant authorities based on catchment area, soil types, design life and associated environmental risk.</p> <p>The ESCP would be revised as required in consultation with relevant authorities.</p> <p>Monitoring Erosion and sediment control structures would be inspected monthly and following significant rainfall events (i.e. greater than 20 mm in 24 hours). The structures would be assessed for structural stability and effectiveness in controlling erosion and sediment migration. Appropriate remedial works would be implemented as required.</p> <p>Acid Sulphate Soils</p> <p>A Soil and Excavation Management Plan (SEMP) would be developed for the Project and would describe the management procedures for acid sulphate soils should they occur on the site. Measures such as lime dosing of soils would be undertaken if necessary.</p>	C	<p>Soil and Erosion Potential</p> <p>Soil and Erosion is covered in the Operation Water Management Plan section 4.2. The 2016 Annual Review and meets the requirements of this SoC.</p> <p>The plan was developed to meet the Principles of the Managing Urban Stormwater: Soils and Construction 2004 (Volume 1: Blue Book, Landcom) .</p> <p>Acid Sulphate Soils</p> <p>Acid Sulfate Soils management are covered in the Operation Water Management Plan in section 3.6.1.</p>	<p>Modification Application MP 06_0009 MOD 2, NCIG Export Terminal Rail Flyover Modification Environmental Assessment, 6 December 2012;</p> <p>Consolidated Project Approval 06_009, May 2013</p> <p>Environmental Assessment: Newcastle Coal Infrastructure Group Coal Export Terminal, Resource Strategies Pty Ltd, July 2006;</p> <p>Operation Water Management Plan</p> <p>Site Audit Observations</p>	There are no recommendations
Construction and operational noise and construction vibration	Section 4.3.3	<p>Project Noise Mitigation Measures</p> <p>The noise mitigation and management measures included in the predictive modelling and which would be adopted for the Project, include:</p> <ul style="list-style-type: none"> Fixed plant and mobile equipment would be commissioned and maintained to remain below specified maximum operating LAeq sound power levels detailed in Appendix A (of the EA). An earth bund approximately 1,500 m in length would be constructed on the northern side of Cormorant Road. The bund would be located east of the Pacific National access road between the coal storage area and Cormorant Road. The bund would essentially be an extension of, and of a similar height to, the existing southern embankment of the KIWEF. <p>A purpose-built acoustic barrier (will be constructed of) approximately 600 m in length, 5 m above rail level and with an offset distance no greater than 3m from the outer rail. The implementation of the acoustic barrier would be dependant on the actual progressive development of the Project capacity (i.e. the acoustic barrier need only be installed as the capacity of the Project approaches 66 Mtpa, in order to facilitate compliance with the relevant Project noise criteria).</p>	C	<p>Noise management is covered in section 4, monitoring is covered in section 5.1 and figure 2 of the NMP, and contingency measures are covered in section 5.5. The NMP states that NCIG undertakes attended noise monitoring in the surrounding community. The frequency of monitoring is six monthly monitoring will be conducted at up to seven locations. Noise monitoring will be conducted in accordance with Australian standard AS 1055-1997 Description and Measurement of Environmental Noise (Standards Association of Australia (SAA) 1997) and the INP (EPA 2000).</p> <p>The 2016 Annual Review, 2017 Annual Review and a sample of Monthly Environmental Monitoring Reports were reviewed which showed that noise management controls are effective.</p> <p>The Earthen Bund on the Northern side of Cormorant Road was observed by the Auditor.</p>	<p>NMP</p> <p>2016 and 2017 Annual Review</p> <p>Management assertion</p> <p>Site Audit Observations</p>	There are no recommendations
Construction and operational air quality and odour	Section 4.4.3	<p>The specific air quality control measures that are proposed for the Project are listed below:</p> <ul style="list-style-type: none"> moisture levels of the coal stockpiles would be monitored and maintained to minimise dust emissions; a dust extraction system would be provided at the train unloading stations, with the hopper designed for dust containment; coal transfer conveyors would be covered or enclosed on three sides, except for yard and wharf conveyors; conveyors over roads would be fully enclosed; conveyor transfer points would be fully enclosed; buffer bins would be fully enclosed; and water sprays would be used on stockpiles and immediately after conveyor transfer points. <p>The water sprays on the coal stockpiles would include rain gun type sprays mounted on the berms approximately 60 m apart on each side of the coal stockpiles. The system would be controlled by software integrated with the on-site meteorological station. The moisture status of coal stockpiles and relevant meteorological conditions would be monitored and dust suppression sprays on the coal stockpiles would be automatically activated to minimise dust emissions as required.</p> <p>An AQMP would be prepared for the construction and operation the Project. The AQMP would describe the following elements:</p> <ul style="list-style-type: none"> air quality monitoring to be undertaken for the Project; Project mitigation measures with respect to air quality; a protocol for the ongoing management of air quality; procedures to be followed in the event of an exceedance of criteria should they occur; and complaint response protocols. <p>Notwithstanding the predicted compliance with applicable air quality criteria, the AQMP would detail specific actions for responding to exceedances of criteria and complaints should they occur. The results of the air quality monitoring would be used to optimise air quality controls, validate the air quality modelling predictions and would be reported to relevant authorities via the AEMR.</p>	C	<p>Operation management measures are detailed in the Operation Dust and Air Quality Management Plan section 4, Document No. HSEC.MP.12.02 which includes management measures in section for dust emissions from NCIG operations.</p> <p>During the site inspection, the Development was fully operational and the Auditor observed coal train arrival and unloading, stacker / reclaimers in operation and ship loading in operation. No visible dust emissions were observed at any of these operations.</p> <p>For further details please refer to Project Approval Conditions 2.1 to 2.8</p>	<p>Operation Dust and Air Quality Management Plan (2018); Document No. HSEC.MP.12.02</p> <p>Site audit observations</p>	There are no recommendations
		<p>A network of up to six dust depositional gauges would be installed for the Project prior to the commencement of construction. These gauges would be installed on Kooragang Island and in surrounding residential areas (such as Mayfield, Fern Bay and Stockton). The dust deposition gauges would be analysed for ash content and insoluble solids in accordance with AS 3580.10.1-1991 Methods for Sampling and Analysis of Ambient Air – Determination of Particulates – Deposited Matter – Gravimetric Method.</p> <p>A HVAS would be installed at Stockton to facilitate monitoring of PM10 concentrations. The HVAS would monitor PM10 over a six day continuous cycle in accordance with the Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales (EPA, 2001).</p>	C	<p>Operation management measures are detailed in the Operation Dust and Air Quality Management Plan section 4, Document No. HSEC.MP.12.02 which includes management measures in section for dust emissions from NCIG operations.</p> <p>During the site inspection, the Development was fully operational and the Auditor observed coal train arrival and unloading, stacker / reclaimers in operation and ship loading in operation. No visible dust emissions were observed at any of these operations.</p> <p>For further details please refer to Project Approval Conditions 2.1 to 2.8</p>	<p>Operation Dust and Air Quality Management Plan (2018); Document No. HSEC.MP.12.02</p> <p>Site audit observations</p>	There are no recommendations

		<p>Greenhouse Gas - Mitigation Measures would include:</p> <ul style="list-style-type: none"> regular on-site energy audits to optimise energy efficiency; consideration of energy efficiency in plant and equipment selection/purchase; regular maintenance of plant and equipment to minimise fuel consumption and associated emissions; planting of native vegetation, as part of visual screens in select locations around the site; and installation of solar-powered monitoring equipment and other instrumentation where practicable. 	NC	The Operation Environmental Management Plan details the reporting requirements for Greenhouse gas emissions in section 5.9.5. Greenhouse gas emission reporting is prepared and submitted annually to National Greenhouse and Energy Reporting (NGER). NCIG has not conducted regular energy audits. NCIG however have had preliminary discussions with consultants to conduct an energy audit in April 2019.	REFERENCE PLAN CONTAINING GREENHOUSE REDUCTION STRATEGIES Operation Environmental Management Plan	It is recommended that an energy efficiency audit be undertaken and an energy / greenhouse minimisation plan be developed for the operation.
		<p>Odour</p> <p>A Spontaneous Combustion Management Plan would be developed for the Project and would include the following:</p> <ul style="list-style-type: none"> coal stockpile management measures; monitoring of potential causes of spontaneous combustion events; and corrective action in the event of spontaneous combustion. 	C	A spontaneous Combustion Management Plan has been prepared by NCIG which includes coal stockpile management measures in table 1 of section 3.3, monitoring of potential causes of spontaneous combustion events in section 5.1 and corrective action in the event of spontaneous combustion in section 4.2.	Operation Spontaneous Combustion Management Plan	There are no recommendations
Visual Character	Section 4.5.3	<p>Visual Character Section 4.5.3</p> <p>Measures that would be employed to mitigate visual impacts include:</p> <ul style="list-style-type: none"> the design of infrastructure and landscaping to meet the requirements of the Newcastle DCP; establishment of visual screening; and management of night lighting. 	C	NCIG has installed external lighting in accordance with Condition 2.59 by a maintenance program.	Interview with Management Representative confirmed NCIG had installed external lighting in accordance with Condition 2.59 and AS 4282 – 1997 Control of the Obtrusive Effects of Outdoor Lighting.	There are no recommendations
Surface Water	Section 4.6.3	<p>Water Management - Operation</p> <p>A network of stormwater drains and stormwater settlement ponds, primary and secondary settling ponds and a site water pond would be used to manage runoff on and around the site.. All site water management structures would be lined with low permeability materials (e.g. compacted clay or geo-membrane) to minimise the potential for leakage.</p> <p>Stormwater runoff from areas external to the Project site would be directed around the Project infrastructure areas by table drains and culverts to the existing stormwater drainage system on Kooragang Island Stormwater runoff collected on the Project infrastructure areas would be diverted through sediment control structures and/or to stormwater settlement ponds. Lined sumps would be installed where necessary at the end of the open drains to act as pollutant traps. The coal storage area would be sloped with dedicated drains located along the pads and berms. A sub-grade drainage system would be incorporated into the coal stockpile pads to capture water infiltrating through the coal stockpiles. The sub-grade drainage system would comprise a series of underground drains, pits and transfer pumps for controlling drainage from the coal storage area. The primary and secondary settling ponds and site water pond would be constructed to the north of the coal storage area. The settling ponds would capture sediments not trapped in the concrete sumps in open drains. Water in the site water pond would be pumped to a raw water tank with a capacity of up to 4 ML. The raw water tank would store water for re-use on-site for purposes such as dust suppression, fire protection, plant washdown and landscape management.</p> <p>A 500 kL potable water tank would be installed adjacent the raw water tank for potable water supply purposes (e.g. amenities and ship potable water supply). A 2 ML fire services tank would also be installed for emergency fire fighting situations. Stormwater runoff from the rail infrastructure area would be diverted via table drains along the rail infrastructure corridor to localised sediment control structures/settlement ponds. Once runoff has passed through these structures it would report to the existing drainage system across the KIWEF.</p> <p>Sediment control structures/settlement ponds would also be installed at the administration and workshop area and the wharf facilities and ship loaders. Water collected in these ponds would be transferred via pump and pipeline to the primary and secondary settling ponds (Figure 2-7). Consistent with the design goal of no discharge to the Hunter River during operations, the stormwater settlement ponds, primary and secondary settling ponds and the site water pond would be designed and constructed with sufficient capacity to contain a 1 in 100 year ARI rainfall event. All Project water management structures would be operated in accordance with the requirements of the Project EPL.</p>	C	The NCIG site has been designed and constructed to meet these general requirements.	Operation Water Management Plan (OWMP) (2018) Document No. HSEC.MP.12.04 Site Audit Observations	There are no recommendations
		<p>A Site Water Management Plan (SWMP) would be developed for the Project construction and operations in consultation with relevant authorities. The SWMP would describe the Project water management system, including:</p> <ul style="list-style-type: none"> updates of the predicted site water balance including details of the Project water supply system (Section 2.8.2); details of all water management structures including settling ponds and water tanks; locations and design specifications for all water diversions from undisturbed runoff areas including channel design and stabilisation, sediment retention storages and other structures; details of internal drainage of water from construction/development runoff or operational areas, including bunding, drainage channels, dewatering sumps and pump and pipelines; and procedures that would be implemented to ameliorate potential surface water impacts. <p>Details of the surface water monitoring programme would be included in the SWMP and would include:</p> <ul style="list-style-type: none"> monthly sampling at a network of surface water quality monitoring sites; monitoring of water quality in the raw water tank on a continuous basis; analysis of surface water samples for a range of parameters including, but not necessarily limited to pH, electrical conductivity (EC), total dissolved solids (TDS) and total suspended solids (TSS); data review procedures for analysing surface water quality results; and investigation triggers and contingencies for managing potential adverse impacts of the Project on surface water quality. 	C	The Operation Water Management Plan was submitted to the Director-General and DECCW for approval on 12 March 2010 in accordance with Condition 7.6(c). The Operation Water management Plan was reviewed and revised in May 2013 and submitted to DP&I. The latest revision is Operation Water Management Plan (OWMP) (2018) Document No. HSEC.MP.12.04.	Operation Water Management Plan (OWMP) (2018) Document No. HSEC.MP.12.04 Site Audit Observations	There are no recommendations
		<p>Erosion and sediment control measures would be designed in accordance with the above water management principles and would involve the preparation and implementation of an Erosion and Sediment Control Plan (ESCP).</p>	C	Operational Water Management Plan the requirements of this SoC. For further details refer to Project Approval Section 7 Condition 6c.	Operation Water Management Plan (OWMP) (2018) Document No. HSEC.MP.12.04 Site Audit Observations	There are no recommendations
Land Contamination and Groundwater	Section 4.7.2	<p>Land Contamination and Groundwater</p> <p>Section 4.7.2 of the EA Specifies the land contamination and groundwater management obligations related to the construction phase of the project.</p>	Not Triggered	No construction was undertaken during this Audit Period.		There are no recommendations

Flora	Section 4.8.3	<p>Flora and Fauna Management Plan- The FFMP would be prepared prior to Project construction and would include management measures to be undertaken during construction and operation, including a Vegetation Clearance Protocol (VCP), weed control and landscape plantings. The main components to be included in the FFMP with regards to flora are described below.</p> <p>A Weed Management Programme would be implemented to limit the spread and colonisation of weeds in the Project site during construction and operations. Landscape (amenity) plantings would be established on available areas of land between the coal storage area and Cormorant Road. These landscape plantings would comprise locally indigenous species in order to provide some potential habitat for local fauna.</p> <p>The potential for a change in the frequency of fires due to the Project would be reduced through the use of water sprays and prudent stockpile management.</p> <p>The Project would include several measures to minimise disturbance to the marine environment in the south arm of the Hunter River including the water management strategies described in Section 2 of the Project EA. The primary design goal of the Project water management system is that of no discharge to the Hunter River during operation of the Project.</p>	C	<p>Weed management is detailed in section 4.6, landscape amenity management is detailed in section 4.7 of the Ecological and Land Management Plan.</p> <p>Fire protection is detailed in the Operations Spontaneous Combustion Management Plan and Emergency Management Procedure.</p> <p>Measures to minimise disturbance to the marine environment are mentioned in the OWMP .</p>	<p>Ecological and Land Management Plan (2018) Document No. HSEC.MP.12.06</p> <p>Annual Report 2016-2017</p> <p>Compensatory Habitat and Ecological Monitoring Program Quarterly Reports Section 7 – Reporting and Review, May, July, December 2015, April, July, December (combined quarter 3 and quarter 4) 2016 and June 2017.</p>	There are no recommendations
Fauna	Section 4.9.3	<p>The FFMP would be prepared prior to Project construction and would include management measures to be undertaken during construction and operation, including:</p> <ul style="list-style-type: none"> - a VCP, Threatened Species Management Protocol (TSMP); - landscape plantings; - pest management measures; - on-site amphibian chytrid fungus management measures; and - rail culvert modification and fauna monitoring programmes. 	C	<p>Vegetation clearance protocol has been prepared by NCIG and detailed in the Threatened Species Management Protocol (TSMP) in section 3.</p> <p>Landscape plantings are detailed in section 3.1.2, pest management is detailed in section 4.5, onsite amphibian chytrid fungus management measures are detailed in section 4.1.2 of the Ecological and Land Management Plan.</p> <p>Rail culvert modification is detailed in section 5.5.1 of the Compensatory Habitat and Ecological Monitoring Program.</p> <p>NCIG has constructed the relevant rail infrastructure in accordance with Condition 2.17. Rail culverts for Stage 1 were designed and constructed in accordance with guidance provided by Dr Arthur White to provide for the movement of Litoria aurea and other amphibian species under the rail infrastructure. Drainage and culvert design for Stage 2F has been completed with PWCS and OEH agreement.</p>	<p>Ecological and Land Management Plan (2018) Document No. HSEC.MP.12.06</p> <p>Site Audit Observations</p> <p>Biosphere Environmental Consultants Pty Ltd letter (dated 28/02/2014) RE: Culvert designs Rail Loop Area Kooragang Island. Attachment A responds to request from OEH letter (dated 11/11/2013) RE: detailing further information on the NCIG Coal Export Terminal underpasses.</p>	There are no recommendations
Aboriginal and Non-Aboriginal Heritage	Section 4.10.3	<p>Notwithstanding the fact that no Aboriginal sites have been identified within the Project site, as a precaution, the Worimi LALC has requested a site monitor be present to facilitate the identification and salvage of any buried artefacts in the unlikely event that any are uncovered during excavation.</p> <p>No known non-Aboriginal heritage items of significance have been identified within the Project site. The non-Aboriginal heritage sites that are registered in the vicinity of the Project would not be impacted by the development</p>	Not Triggered	<p>No indigenous sites have been identified at this site. No known non-Aboriginal heritage items of significance have been identified within the Project site</p>	<p>Management Interviews</p> <p>NCIG IEA 2015</p>	There are no recommendations
Road Transport	Section 4.11.3	<p>To facilitate the safe use of the Project access points the following road upgrades/traffic management measures would be implemented:</p> <ul style="list-style-type: none"> • Improvements to the existing Delta access road intersection north of the Tourle Street bridge – including advance warning signage and a realignment of the existing footpath/cycleway. • Right turn prohibition onto Cormorant Road from the Pacific National access road and Delta access road. • New intersection to the wharf facilities area – installation of a central carriageway median island to prevent right turns and suitable lengths of deceleration and acceleration lanes. • New turning loop on the Pacific National access road (to facilitate U-turns). • Prohibition of right turn movements at the Cormorant Road/Egret Street intersection – installation of a central carriageway median island to prevent right turns. • Temporary traffic lights would be installed on Cormorant Road to manage construction traffic crossing directly across the road (haulage of fill and machine parts) at off-peak times. <p>For the progressive expansion from 33 Mtpa to 66 Mtpa, a construction traffic management plan (CTMP) would be prepared in consultation with the RTA and NCC.</p>	C	<p>Road and access upgrades related to the construction and operation of the facility have been completed in consultation with Council and RMS.</p> <p>NCIG developed and submitted for the approval of the RTA and Newcastle City Council a Construction Traffic Management Protocol in accordance with Condition 7.3(d) which included design details for physical traffic control devices and signs to be installed and maintained for the Project. The Construction Traffic Management Protocol was approved by the RTA on 12 November 2007 in accordance with Condition 7.3(d). The Construction Traffic Management Protocol was approved by the Newcastle City Council on 5 July 2007. An updated CTMP, including construction of the Rail Flyover was approved by RMS on 2 July 2013, and approved by NCC on 5 August 2013.</p> <p>The Construction Traffic Management Protocol was revised for construction of the Rail Flyover and approved by DP&I on 14 June 2012, RMS on 2 July 2012, and approved by NCC on 5 August 2012.</p>	<p>NCIG IEA 2015</p> <p>Annual Return 2015-2017</p> <p>Site Audit Observations</p>	There are no recommendations
Socio-economics	Section 4.13.3	<p>The Project would continue to consult with the local community and would establish a Community Consultative Committee for the Project as an on-going channel for communication between the local community and NCIG. The CCC would comprise a similar membership to the current SFG and would meet to discuss development progress, to review the general environmental performance of the Project and to discuss any issues raised by the community.</p>	NC	<p>There is currently no Community Consultative Committee (CCC) in place.</p> <p>NCIG management stated that it is their intention to establish a CCC in the first quarter of 2019.</p>	<p>Audit Interviews</p>	It is recommended that NCIG establish a Community Consultative Committee / Group.
Hazard and Risk	Section 4.14.2	<p>A number of hazard preventative and mitigative measures would be described in management plans for the Project, including the following:</p> <ul style="list-style-type: none"> • Emergency Response Plan (ERP); • Construction Environmental Management Plan (CEMP); • Spontaneous Combustion Management Plan (SCMP); • Site Water Management Plan (SWMP); • Contractor Management Plan; and • Traffic management plans. <p>In addition, the following hazard treatment measures would be adopted for the Project:</p> <ul style="list-style-type: none"> • Maintenance – Ongoing and timely maintenance of all mobile and fixed plant and equipment in accordance with the manufacturer’s recommended maintenance schedule, and consistent with the maintenance schemes required by relevant standards. Only vehicles permitted to carry dangerous goods would be used for the transport of potentially hazardous materials. • Staff Training – Operators and drivers would be trained and (where appropriate) licensed for their job descriptions. Only those personnel licensed to undertake skilled and potentially hazardous work would be permitted to do so. • Engineering Structures – Civil engineering structures would be constructed in accordance with applicable codes, guidelines and Australian Standards. • Contractor Management – All contractors employed by NCIG would be required to operate in accordance with the relevant Australian Standards, NSW Legislation and NCIG’s Contractor Management Plan. • Storage Facilities – Storage and usage procedures for potentially hazardous materials (i.e. fuels and lubricants) would be developed in accordance with Australian Standards and relevant legislation. 	C	<p>All plans required for by this SoC have been developed and approved.</p> <p>All additional requirements have been met, for example the maintenance management system was demonstrated to the Auditor, training packages were sighted by the Auditor and storage facilities for hazardous materials were inspected by the Auditor and deemed to meet the requirements of AS1940.</p>	<p>Emergency Response Management Procedure</p> <p>Construction Environmental Management Plan (CEMP) CEMP-R04-D</p> <p>Operation Spontaneous Combustion Management Plan HSEC.MP.12.05</p> <p>Site Water Management Plan (SWMP) SWMP-R02-B.DOC</p> <p>Contractor Management and Permit to Work Procedure HSEC.PRO.11.01</p> <p>Construction Traffic Management Protocol CTMP-R03-B</p>	There are no recommendations

Compensatory Measures	SoC	<p>KIWRP Kooragang Wetland Rehabilitation Project (KWRP) Environmental Management Plan - A financial contribution will be made to KWRP towards updating its Environmental Management Plan to incorporate the details of the proposed habitat creation initiatives outlined below, where relevant to lands managed by the KWRP. This will include a consultation programme and input from relevant independent experts.</p>	C	<p>Kooragang Wetland Rehabilitation Project Donation 0013 Kooragang Wetland Rehab Project Processed as Donation 0015 paid 26/05/2011.</p> <p>A donation contribution from NCIG was made to Kooragang Wetland Rehabilitation Project for Environment & Sustainability in March 2011. The objectives and implemented actions from the initiative are detailed in the paper presented at the 2017 Coastal Conference on the 8-10 November 2017.</p>	<p>Kooragang Wetland Rehabilitation Project Donation 0013 Kooragang Wetland Rehab Project Processed as Donation 0015 paid 26/05/2011.</p> <p>Kooragang Wetlands: Retrospective of an Integrated Ecological Restoration Project in the Hunter River Estuary, P Svoboda (Hunter Local Land Services, Paterson) - Paper presented at the Coastal Conference (dated 8-10/09/2017).</p>	There are no recommendations
Compensatory Measures	SoC	<p>Habitat Creation A financial contribution will be made towards current or future projects which involve habitat creation for the Green and Golden Bell Frog on Regional Land Management Corporation (RLMC) owned lands within the KWRP or alternate suitable lands in the Kooragang Nature Reserve.</p> <p>Habitat creation will be located on the perimeter of existing habitat areas to provide suitable habitat into which the existing Green and Golden Bell Frog population can expand. This habitat creation will also create an opportunity to research the performance of alternative types of habitat enhancement.</p> <p>Habitat creation initiatives for the Green and Golden Bell Frog will include construction of two habitat ponds of similar scale and detail to existing ponds where the Green and Golden Bell Frogs have been recorded on the Kooragang Island Waste Emplacement Facility (KIWEF) site (i.e. Pond C – Section 4.9). This is consistent with the recovery strategies (i.e. habitat rehabilitation/restoration and/or regeneration and monitoring) identified by the Department of Environment and Conservation (DEC) to help recover the Green and Golden Bell Frog (DEC, 2005d).</p> <p>Mangroves in the Hunter Estuary have been expanding at the expense of the Coastal Saltmarsh Endangered Ecological Community (EEC) and, in some areas (e.g. Ash Island), mangroves have been removed to enhance habitat for Coastal Saltmarsh EEC and shorebirds. A financial contribution will be made to an organisation such as the KWRP for the removal of up to 6 ha of mangroves from coastal saltmarsh habitat. A financial contribution will also be made towards the construction of a flow control structure to minimise the potential for mangrove propagules to enter areas reserved for saltmarsh. Alternatively, these initiatives may also be applied to lands within the Kooragang Nature Reserve. These works are expected to enhance habitat for waders as well as provide habitat for the Coastal Saltmarsh EEC.</p> <p>In addition, habitat in the form of shallow areas for foraging shorebirds will be created during the construction of the northern rail spur embankment, if required to be installed when the Project is fully developed to 66 Mtpa, by modifying the design of the embankment batter slopes to have a gentle toe gradient (i.e. in the submerged zone of the batter slope). This will result in the creation of shallow areas suitable for shorebirds in Deep Pond. The specifications of this initiative will be detailed in the Flora and Fauna Management Plan (FFMP).</p>	C	<p>A donation from NCIG has been made to the University of Newcastle NCIG Research Grant for Green and Golden Bell Frog Population viability in compensatory habitat November 2018.</p> <p>A donation from NCIG has been made to Kooragang Wetland Project for Environment & Sustainability in March 2011.</p> <p>NCIG has created habitat initiatives for the Green and Golden Bell Frog which includes two habitat ponds to existing ponds where Green and Golden Bell Frogs have been recorded on pond C and is consistent with recovery strategies identified by the DEC to help recover the GGBF.</p> <p>Monitoring and characterisation of the Green and Golden Bell Frog population on Kooragang Island, in and surrounding the industrial part of the island has been completed for the seventh year by University of Newcastle. This work is being co-funded by NCIG, PWCS and HDC. Monitoring continued throughout the summer season and the annual report was finalised in September 2017, including population estimates for the island. The monitoring result report is detailed in appendix 6 of the AEMR 2017.</p> <p>Mangroves have been removed from the Fish Fry pond and other surrounding areas as detailed in section 5 and mangrove propagules control structures and Design and commissioning of the Smart Gate and Mangrove Propagule Exclusion Device (MPED) continued throughout the period. The preferred supplier (AWMA) was chosen and discussions continue to refine the design in consultation with Dr Will Glamore. have been implemented as detailed in the Compensatory Habitat and Ecological Monitoring Program Quarterly report 6 July 2016. A financial contribution has been made from NCIG to Conservation Volunteers annually from 2011 to present date.</p> <p>Habitat has been created for foraging shorebirds as detailed in section 4.4 and figure 5 of the Ecological and Land Management Plan. Monitoring report has been prepared on behalf of NCIG and shorebird habitat creation is detailed in section 4 of the Compensatory Habitat and Ecological Monitoring Program – Quarterly Report (Quarter 1, 2017)</p>	<p>Monthly pro rata invoice NCIG Research Grant: Bell Frog Population viability in compensatory habitat Nov 2018 (Example)</p> <p>Kooragang Wetland Rehabilitation Project Donation 0013 Kooragang Wetland Rehab Project Processed as Donation 0015 paid 26/05/2011.</p> <p>Appendix 6 of AEMR 2017</p> <p>Conservation Volunteers Australia Financial Contribution Invoice number Donation 0025 in 2011 to Invoice CSP0222 in March 2017.</p> <p>Ecological and Land Management Plan</p> <p>Compensatory Habitat and Ecological Monitoring Program – Quarterly Report (Quarter 1, 2017)</p>	There are no recommendations
Ecological Initiatives, Contribution to research	SoC	<p>Contribution to Research A financial contribution would be given to the University of Newcastle, or other appropriate recognised research body, to fund research into the Green and Golden Bell Frog. The focus of research will be to expand existing knowledge of factors affecting the species which may be used to actively improve the strength of the population of Green and Golden Bell Frogs on Kooragang Island.</p>	C	<p>A donation from NCIG has been made to the University of Newcastle NCIG Research Grant for Green and Golden Bell Frog Population viability in compensatory habitat November 2018.</p>	<p>Monthly pro rata invoice NCIG Research Grant: Bell Frog Population viability in compensatory habitat Nov 2018 (Example)</p>	There are no recommendations
Ecological Initiatives, Contribution to Hunter Wetlands Centre	SoC	<p>Contribution to Hunter Wetlands Centre A financial contribution will be given to the Hunter Wetlands Centre towards an annual exhibition regarding the Green and Golden Bell Frog and migratory shorebirds. The exhibition will include an update on the progress and the effectiveness of the habitat enhancement initiatives conducted as part of the compensatory measures of the Project. This will also provide an opportunity for a representative undertaking the university-based research described above to explain the progress/findings of the research to the interested public.</p>	C	<p>A financial contribution from NCIG was provided to the Hunter Wetlands Centre Australia on 20/12/2012.</p> <p>Hunter Wetlands Centre - The Importance of Frogs Free Talk - Save Our Species 8 October 2018. Chad Beranek, a PHD candidate, wildlife ecologist & research assistant from Newcastle University was a guest speaker detailing the perfect habitat for the Green and Golden Bell Frog threatened species to ensure its survival. As well as why is frog conservation so important. Visitors were able to view the Frogs including the Green and Golden Bell Frogs on display at Hunter Wetlands Centre in October 2018.</p>	<p>NCIG bank transfer to Hunter Wetlands Centre Australia on 20.12.2012. invoice number 00007228</p> <p>Hunter Wetlands Centre- The Importance of Frogs Free Talk - Save Our Species 8 October 2018</p>	There are no recommendations
Environmental Representative	SoC	<p>Environmental Representative Newcastle Coal Infrastructure Group (NCIG) will employ a suitably qualified and experienced Environmental Manager to oversee the environmental performance of the Project and compliance with statutory and other obligations including the conditions of approvals and licences.</p>	C	<p>The current NCIG Environmental Representative is Philip Reid.</p>	<p>NCIG Management Representative</p>	There are no recommendations
Construction Environmental Management Plan (CEMP)	SoC	<p>Construction Environmental Management Plan (CEMP) NCIG will prepare and implement a CEMP to detail an environmental management framework, practices and procedures to be followed during construction of the Project. The CEMP will identify all statutory and other obligations that NCIG is required to fulfil including approvals, licences and consultation requirements. The CEMP will include the detailed management plans and monitoring programmes described below.</p>	Not Triggered	<p>No construction has occurred during the audit period. Therefore this condition was not triggered during this Audit Period.</p> <p>NCIG IEA 2015 confirmed that this Condition was satisfied during the construction phase of the project.</p>	<p>No construction has occurred during the audit period. Therefore this condition does not apply.</p> <p>Compliance against this condition covered in NCIG IEA 2015.</p>	There are no recommendations

	SoC	<p>Soil and Excavation Management Plan (SEMP) A SEMP will be developed for the Project detailing methods for the management of contaminated soils and water. The SEMP will be prepared prior to the development of the Project and will incorporate the outcomes of a detailed geotechnical and geochemical investigation undertaken as part of the detailed design of the Project. A description of the detailed design of these controls will be included in the SEMP.</p> <p>The SEMP will describe the measures to control contaminated soils and dust generation/volatilisation potential. These measures will include:</p> <ul style="list-style-type: none"> • using water sprays to control dust; • minimising the surface area disturbed by excavation at any one time; • confining vehicle movements to designated access routes; • limiting the speed of vehicles on unpaved roads; and • immediate encapsulation of materials considered unsuitable for use as construction fill. <p>The SEMP will detail the management procedures for acid sulphate soils should they occur on the site. The SEMP will provide measures for the control of acid sulphate soils such as lime dosing if necessary.</p> <p>The SEMP will also describe procedures for the management of Aboriginal cultural heritage during construction. These procedures will incorporate the following elements:</p> <ul style="list-style-type: none"> • During induction training, NCIG personnel will be advised of their responsibility to advise management if they uncover any item that could be of Aboriginal heritage significance. • Project excavation works that are expected to extend into the natural ground surface (i.e. below known fill material) will be monitored by an Aboriginal heritage representative to identify any archaeological material if it is present in the excavated material. • If potential archaeological material is identified, based on the significance of the items (as determined by a consulting archaeologist), salvage of a selection of any artefacts may be undertaken in consultation with the DEC. • If any archaeological material is salvaged on-site, it will be either stored in a keeping place on-site or provided to the Aboriginal community for safekeeping or educational display. • At the cessation of the Project, if any salvaged Aboriginal objects are stored on-site their management will be determined in consultation with the Aboriginal community and the DEC. 	Not Triggered	<p>No construction has occurred during the audit period. Therefore this condition was not triggered during this Audit Period.</p> <p>NCIG IEA 2015 confirmed that this Condition was satisfied during the construction phase of the project.</p>	<p>No construction has occurred during the audit period. Therefore this condition does not apply.</p> <p>Compliance against this condition covered in NCIG IEA 2015.</p>	There are no recommendations
Site Water Management Plan (SWMP) (Construction)	SoC	<p>A SWMP will be developed for the construction phase of the Project in consultation with relevant authorities. The construction SWMP will describe the Project water management system, including:</p> <ul style="list-style-type: none"> • details of all water management structures including the water management system for dredge sea water; • locations and design specifications for all water diversions from undisturbed runoff areas including channel design and stabilisation, sediment retention storages and other structures; • details of internal drainage of water from construction/development runoff areas including bunding, drainage channels, dewatering sumps and pump and pipelines; • procedures for the management of groundwater during excavations and temporary dewatering activities on site; and • procedures that will be implemented to ameliorate potential surface water and groundwater impacts. <p>The SWMP will be reviewed and revised as required in consultation with relevant authorities and will be periodically updated during the period of construction, where necessary.</p> <p>Erosion and sediment control strategies for the Project will be developed and documented in an Erosion and Sediment Control Plan (ESCP) and will be a component of the SWMP. The ESCP will be prepared in a progressive manner prior to the development of each Project component involving land disturbance.</p> <p>The measures presented in the ESCP will aim to control soil erosion and sediment generation proximal to the source and thereby minimise the potential for Project activities to adversely affect downstream water quality. The ESCP will be prepared in general accordance with the manual Managing Urban Stormwater: Soils and Construction – Volume 1 (Landcom, 2004). The design capacity of erosion and sediment control structures will be determined in consultation with relevant authorities based on catchment area, soil types, design life and associated environmental risk.</p> <p>A Surface Water and Groundwater Monitoring Programme (SWGMP) will be developed for the Project as part of the water management system and will be detailed in the SWMP. The monitoring programme will include:</p> <ul style="list-style-type: none"> • monthly sampling at a network of surface water and groundwater quality monitoring sites; • analysis of groundwater samples for a range of parameters including, but not necessarily limited to groundwater level, pH, electrical conductivity (EC), total dissolved solids (TDS), Total suspended solids (TSS), sulphate, Total polycyclic aromatic hydrocarbons (PAH) and a suite of metals; • analysis of surface water samples for a range of parameters including, but not necessarily limited to pH, EC, TDS and TSS. • data review procedures for analysing surface water and groundwater quality results; and 	Not Triggered	<p>No construction has occurred during the audit period. Therefore this condition was not triggered during this Audit Period.</p> <p>NCIG IEA 2015 confirmed that this Condition was satisfied during the construction phase of the project.</p>	<p>No construction has occurred during the audit period. Therefore this condition does not apply.</p> <p>Compliance against this condition covered in NCIG IEA 2015.</p>	There are no recommendations
Noise Monitoring Programme (NMP) (Construction)	SoC	<p>Noise Monitoring Programme A NMP will be developed for the Project. The NMP will describe the following elements:</p> <ul style="list-style-type: none"> • noise monitoring to be undertaken for the Project (i.e. monitoring locations, frequencies, parameters and specifications); • Project noise mitigation measures; • a protocol for the ongoing management of noise; • procedures to be followed in the event of an exceedance of criteria; and • complaint response protocols. <p>The NMP will detail specific actions for responding to exceedances of criteria and complaints if they occur. The results of noise monitoring will be used to optimise noise controls, validate the noise modelling predictions and will be reported to relevant authorities via the Annual Environmental Management Report (AEMR).</p> <p>The Project noise monitoring will comprise quarterly attended and unattended monitoring. Quarterly monitoring will be conducted at up to six locations in the vicinity of the Project. Noise monitoring will be conducted in accordance with AS 1055-1997 Acoustics – Description and Measurement of Environmental Noise and the Industrial Noise Policy (INP).</p>	Not Triggered	<p>No construction has occurred during the audit period. Therefore this condition was not triggered during this Audit Period.</p> <p>NCIG IEA 2015 confirmed that this Condition was satisfied during the construction phase of the project.</p>	<p>No construction has occurred during the audit period. Therefore this condition does not apply.</p> <p>Compliance against this condition covered in NCIG IEA 2015.</p>	There are no recommendations
Construction Vibration Monitoring	SoC	<p>Monitoring of construction vibration will be undertaken at adjacent industrial receivers within 180 m of piling activities to assess compliance with relevant criteria. Vibrational peak particle velocity (mm/s) will be measured in accordance with relevant standards.</p>	Not Triggered	<p>No construction has occurred during the audit period. Therefore this condition was not triggered during this Audit Period.</p> <p>NCIG IEA 2015 confirmed that this Condition was satisfied during the construction phase of the project.</p>	<p>No construction has occurred during the audit period. Therefore this condition does not apply.</p> <p>Compliance against this condition covered in NCIG IEA 2015.</p>	There are no recommendations

Air Quality Monitoring Programme (AQMP)	SoC	<p>An AQMP will be prepared for the Project. The AQMP will describe the following elements:</p> <ul style="list-style-type: none"> • air quality monitoring to be undertaken for the Project; • Project mitigation measures with respect to air quality; • a protocol for the ongoing management of air quality during construction; • procedures to be followed in the event of an exceedance of criteria; and • complaint response protocols. <p>Notwithstanding the predicted compliance with applicable air quality criteria, the AQMP will detail specific actions for responding to exceedances of criteria and complaints should they occur. The results of air quality monitoring will be used to optimise air quality controls and will be reported to relevant authorities via the AEMR. A network of up to six dust depositional gauges will be installed for the Project. These gauges will be installed on Kooragang Island and in surrounding residential areas (such as Mayfield, Fern Bay and Stockton).</p> <p>The dust deposition gauges will be analysed for ash content and insoluble solids in accordance with AS/NZS 3580.10.1-2003 Methods for Sampling and Analysis of Ambient Air – Determination of Particulate Matter – Deposited Matter – Gravimetric Method.</p> <p>A high volume sampler will be installed at Stockton to facilitate monitoring of the concentration of particulate matter less than 10 microns in size (PM10). The high volume sampler will monitor PM10 over a six day continuous cycle in accordance with the Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales (EPA, 2001).</p>	Not Triggered	<p>No construction has occurred during the audit period. Therefore this condition was not triggered during this Audit Period.</p> <p>NCIG IEA 2015 confirmed that this Condition was satisfied during the construction phase of the project.</p>	<p>No construction has occurred during the audit period. Therefore this condition does not apply.</p> <p>Compliance against this condition covered in NCIG IEA 2015.</p>	There are no recommendations
Traffic Management Plans (Construction)	Construction Environmental Management Plan (CEMP)	<p>Traffic management plans will be completed to address any roadworks on public roads (e.g. improvements to the Delta access road and Cormorant Road intersection) in consultation with the Newcastle City Council (NCC) and the Roads and Traffic Authority (RTA) and in accordance with the RTA Traffic Control at Worksites Manual (RTA, 2003b). Traffic management plans will also be developed to address the construction of the conveyors over Cormorant Road and the haulage of fill across Cormorant Road and Pacific National access road/Delta access road in consultation with NCC and RTA.</p> <p>A component of the traffic management plans will be identification of relevant aspects of the local road environment including:</p> <ul style="list-style-type: none"> • an inventory of road widths, road condition, traffic management and parking controls present; • a description of the nature and extent of any existing on-street parking; • existing public transport and pedestrian infrastructure and any requirements for any additional infrastructure of this nature; • consideration of the requirements of NCC with respect to sight distances, parking, suitable splays and driveway widths at intersections and gates; and • provision of suitable internal roads on-site. <p>For the progressive expansion from 33 million tonnes per annum (Mtpa) to 66 Mtpa, a Construction Traffic Management Plan (CTMP) will be prepared in consultation with the RTA and NCC. A CTMP should review the outcomes of the Road Transport Assessment (Appendix C); compare predicted versus actual road usage levels; consider the road network configuration existing at that time; and, if necessary, make recommendations for further traffic controls in consultation with the RTA and NCC.</p>	Not Triggered	<p>No construction has occurred during the audit period. Therefore this condition was not triggered during this Audit Period.</p> <p>NCIG IEA 2015 confirmed that this Condition was satisfied during the construction phase of the project.</p>	<p>No construction has occurred during the audit period. Therefore this condition does not apply.</p> <p>Compliance against this condition covered in NCIG IEA 2015.</p>	There are no recommendations
Flora and Fauna Management Plan (Construction)	Construction Environmental Management Plan (CEMP)	<p>A FFMP will be prepared prior to Project construction and will include management measures to be undertaken during construction and operation, including a Vegetation Clearance Protocol (VCP) and Threatened Species Management Protocol (TSMP). In addition, the FFMP will describe landscape plantings, pest management measures, weed management measures, on-site amphibian chytrid fungus management measures, rail culvert modification and fauna monitoring programmes. Further details regarding the FFMP are provided below.</p>	Not Triggered	<p>No construction has occurred during the audit period. Therefore this condition was not triggered during this Audit Period.</p> <p>NCIG IEA 2015 confirmed that this Condition was satisfied during the construction phase of the project.</p>	<p>No construction has occurred during the audit period. Therefore this condition does not apply.</p> <p>Compliance against this condition covered in NCIG IEA 2015.</p>	There are no recommendations
Vegetation Clearance Protocol (Construction)		<p>The FFMP will include a VCP to minimise the potential impacts of vegetation clearance on fauna. During construction, vegetation immediately adjoining the Project disturbance areas (including the Freshwater Wetlands on Coastal Floodplains EEC and the Coastal Saltmarsh EEC) will be delineated and clearly marked to minimise the potential for accidental damage during construction. The VCP will also include a pre-clearance survey, identification of fauna management strategies and specific procedures for vegetation clearance.</p>	Not Triggered	<p>No construction has occurred during the audit period. Therefore this condition was not triggered during this Audit Period.</p> <p>NCIG IEA 2015 confirmed that this Condition was satisfied during the construction phase of the project.</p>	<p>No construction has occurred during the audit period. Therefore this condition does not apply.</p> <p>Compliance against this condition covered in NCIG IEA 2015.</p>	There are no recommendations
Threatened Species Management Protocol (Construction)	SoC	<p>A TSMP will be developed as a component of the FFMP to facilitate the implementation of threatened species management strategies to minimise potential impacts on threatened fauna species.</p> <p>Green and Golden Bell Frogs found in the Project site during construction or operation will be removed from the direct disturbance area and placed in adjacent suitable habitat in accordance with the Hygiene Protocol for the Control of Disease in Frogs (NPWS, 2001) which recommends best-practice procedures for handling frogs and suggests strategies for minimising the potential of spreading amphibian chytrid fungus.</p> <p>Habitat in the form of shallow areas for foraging shorebirds would be created during the construction of the northern rail spur embankment (if required to be built) by modifying the design of the embankment batter slopes to have a gentle toe gradient (i.e. in the submerged zone of the batter slope). This would result in the creation of shallow areas suitable for shorebirds in Deep Pond. The specifications of this initiative would be detailed in the FFMP.</p> <p>Monitoring of the Green and Golden Bell Frog, Australasian Bittern and shorebirds will be undertaken in the area surrounding the Project annually for the duration of the Project. The objective of monitoring will be to collect up-to-date information on the use of the Project site and surrounds by fauna. Monitoring data for the Green and Golden Bell Frog will be provided to university institutions undertaking relevant research on the Green and Golden Bell Frog.</p>	Not Triggered	<p>No construction has occurred during the audit period. Therefore this condition was not triggered during this Audit Period.</p> <p>NCIG IEA 2015 confirmed that this Condition was satisfied during the construction phase of the project.</p>	<p>No construction has occurred during the audit period. Therefore this condition does not apply.</p> <p>Compliance against this condition covered in NCIG IEA 2015.</p>	There are no recommendations
Operation Environmental Management Plan (OEMP)	SoC	<p>Operation Environmental Management Plan (OEMP)</p> <p>NCIG will prepare and implement an OEMP to detail an environmental management framework, practices and procedures to be followed during operation of the Project. The OEMP will identify all statutory and other obligations NCIG is required to fulfil including approvals, licences and consultation requirements. The OEMP will include the detailed management plans described below.</p>	C	<p>The Operational Environmental Management Plan was submitted for approval to the Director General and DECCW prior to commencement of operational activities it has since been updated to the latest 2018 version.</p> <p>The Operation Environmental Management Plan (2018) Document No. HSEC.MP.12.01 (reviewed August 2018) meets the requirements of this condition.</p>	<p>Operation Environmental Management Plan (2018) Document No. HSEC.MP.12.01</p>	There are no recommendations

Site Water Management Plan (Operation)	Soc	<p>A SWMP will be developed for the operational phase of the Project in consultation with relevant authorities. The operational SWMP will describe the Project water management system, including:</p> <ul style="list-style-type: none"> updates of the predicted site water balance including details of the Project water supply system (Section 2.8.2); details of all water management structures including settling ponds and water tanks; locations and design specifications for all water diversions from undisturbed runoff areas including channel design and stabilisation, sediment retention storages and other structures; details of internal drainage of water from construction/development runoff or operational areas, including bunding, drainage channels, dewatering sumps and pump and pipelines; and procedures that will be implemented to ameliorate potential surface water impacts. <p>A SWGMP will be developed for the Project as part of the water management system and will be detailed in the SWMP and will include:</p> <ul style="list-style-type: none"> monthly sampling at a network of surface water and groundwater quality monitoring sites; analysis of groundwater samples for a range of parameters including, but not necessarily limited to groundwater level, pH, EC, TDS, TSS, sulphate, Total PAH and a suite of metals; analysis of surface water samples for a range of parameters including, but not necessarily limited to pH, EC, TDS and TSS; data review procedures for analysing surface water and groundwater quality results; and investigation triggers and contingencies for managing potential adverse impacts of the Project on surface water and groundwater quality. <p>The SWMP will be reviewed and revised as required in consultation with relevant authorities and will be periodically updated over the life of the Project.</p>	C	<p>The Operation Water Management Plan was submitted to the Director-General and DECCW for approval on 12 March 2010 in accordance with Condition 7.6(c). The Operation Water Management Plan was reviewed and revised in May 2013 and submitted to DP&I. The latest revision is Operation Water Management Plan (OWMP) (2018) Document No. HSEC.MP.12.04:</p> <p>Refer to Project Approval Section 7 Clause 6c for further compliance details.</p>	<p>Operation Water Management Plan (ONMP) (2018) Document No. HSEC.MP.12.03</p> <p>Department of Planning letter to NCIG dated 30/07/2010 ref: 10/02150-2 Regarding Operational Environmental Management Plan & Sub Plans (Condition 7.5 & 7.6). Satisfies conditions 7.5 and 7.6</p>	There are no recommendations
Noise Monitoring Programme (Operation)	Soc	<p>A NMP will be developed for the Project operations. The NMP will describe the following elements:</p> <ul style="list-style-type: none"> noise monitoring to be undertaken for the Project (i.e. monitoring locations, frequencies, parameters and specifications); Project noise mitigation measures; a protocol for the ongoing management of noise; procedures to be followed in the event of an exceedance of criteria; and complaint response protocols. <p>The NMP will detail specific actions for responding to exceedances of criteria and complaints. The results of noise monitoring will be used to optimise noise controls, validate the noise modelling predictions and will be reported to relevant authorities via the AEMR.</p> <p>The Project noise monitoring will comprise quarterly attended and unattended monitoring. Quarterly monitoring will be conducted at up to six locations in the vicinity of the Project. Noise monitoring will be conducted in accordance with AS 1055-1997 Acoustics – Description and Measurement of Environmental Noise and the INP.</p>	C	<p>The Operations Noise Management Plan was submitted to the Director-General and DECCW for approval on 12 March 2010. The Operations Noise Management Plan was revised and submitted to DP&I on 1 May 2013. The latest revision is Operation Noise Management Plan (ONMP) (2018) Document No. HSEC.MP.12.03.</p> <p>Refer to Project Approval Section 7 Clause 6b for further compliance details.</p>	<p>Operation Noise Management Plan (ONMP) (2018) Document No. HSEC.MP.12.03</p> <p>Department of Planning letter to NCIG dated 30/07/2010 ref: 10/02150-2 Regarding Operational Environmental Management Plan & Sub Plans (Condition 7.5 & 7.6). Satisfies conditions 7.5 and 7.6</p>	There are no recommendations
Air Quality Monitoring Programme (Operation)	Soc	<p>An AQMP will be prepared for the Project operations. The AQMP will describe the following elements:</p> <ul style="list-style-type: none"> air quality monitoring to be undertaken for the Project; Project mitigation measures with respect to air quality; a protocol for the ongoing management of air quality during operations; procedures to be followed in the event of an exceedance of criteria; and complaint response protocols. <p>The AQMP will detail specific actions for responding to exceedances of criteria and complaints. The results of air quality monitoring will be used to optimise air quality controls, validate the air quality modelling predictions and will be reported to relevant authorities via the AEMR.</p> <p>Dust deposition and PM10 monitoring will be undertaken for the Project operations. It is anticipated that the monitoring sites established for the construction AQMP will continue to be utilised during Project operations.</p>	C	<p>The Operation Dust Management Plan was prepared and submitted to the Director-General DP&I and DECCW for approval in March 2010. The Operation Dust Management Plan was revised and resubmitted to DP&I on 1 May 2013. Since then the document has been reviewed and the latest document revision is Operation Dust and Air Quality Management Plan (ODAQMP) (2018) Documents No. HSEC.MP.12.02.</p> <p>Refer to Project Approval Section 7 Clause 6a for further compliance details.</p>	<p>Operation Dust and Air Quality Management Plan (ODAQMP) (2018) Documents No. HSEC.MP.12.02</p> <p>Department of Planning letter to NCIG dated 30/07/2010 ref: 10/02150-2 Regarding Operational Environmental Management Plan & Sub Plans (Condition 7.5 & 7.6). Satisfies conditions 7.5 and 7.6</p>	There are no recommendations
Landscape Management Plan	Soc	<p>A Landscape Management Plan will be developed for the Project to fulfil the requirements of the Newcastle Development Control Plan (DCP). Administration and workshop areas will be appropriately landscaped with selective tree planting, formal gardens and grassed areas in keeping with the “shop front” location on Egret Street.</p>	C	<p>The existing environment is described in section 3.1 of the Ecological and Land Management Plan and references the Newcastle DCP plan and the statement of conditions requirements have been met on the completion of the construction. Section 4.7 of the ELMP details general landscape and vegetation management activities. These activities are on a set schedule and irrigation has been installed in locations around the site where plant health is critical. However, during the audit period a specific Landscape Management Plan was not provided.</p>	<p>Ecological and Land Management Plan</p>	There are no recommendations
Spontaneous Combustion Management Plan	Soc	<p>A Spontaneous Combustion Management Plan will be developed for the Project and will include the following:</p> <ul style="list-style-type: none"> coal stockpile management measures; monitoring of potential causes of spontaneous combustion events; and corrective action in the event of spontaneous combustion. 	C	<p>The Operation Spontaneous Combustion Management Plan (OSCM) was prepared by NCIG to complete the requirements of the Operation spontaneous Combustion Management Protocol. The OSCMP was prepared by NCIG and submitted to the Director-General and DECCW for approval on 12 March 2010. The Operation Spontaneous Combustion Management Plan (OSCM) was revised and submitted to DP&I in June 2013.</p>	<p>Operation Spontaneous Combustion Management Plan (2017) Document No. HSEC.MP.12.05</p>	There are no recommendations
Waste Management Plan (WMP)	Soc	<p>In accordance with the requirements of the Newcastle DCP (Section 3.3.4), a WMP will be prepared for the Project. The WMP will include measures to avoid and minimise the generation of wastes and promote waste re-use and recycling, including:</p> <ul style="list-style-type: none"> waste avoidance – practices will be developed that reduce the amount of waste on-site, via selective purchasing procedures by store personnel and the use of bulk purchasing, where practicable; material reuse – reuse of recyclable or reusable materials where practicable; and recycling – materials such as metals, oil, timber, plastics, glass and paper will be recycled where practicable. <p>Waste hydrocarbons will be collected and stored in a 12,000 litre (L) waste oil tank, before being removed by licensed waste transporters on a periodic basis. The workshop and truck washdown areas will have purpose built oil/water separator systems installed which will be inspected and maintained on a regular basis.</p>	C	<p>NCIG activities associated with Project Approval condition 2.46 were implemented and civil construction was completed prior to this Audit Period.</p> <p>The Waste Management Plan was prepared by NCIG. Waste management measures are detailed in section 4 of the waste management plan and waste hydrocarbons detailed in 3.6.3 of the WMP.</p> <p>The Annual Environmental Management Reports 2015-2017 comply with condition 2.46, 2.46 and the this statement of commitment.</p>	<p>Waste Management Plan (WMP) (2018) Document No. HSEC.MP.12.07</p>	There are no recommendations
Emergency Response Plan (ERP)	Soc	<p>An ERP will be prepared for the Project and will include:</p> <ul style="list-style-type: none"> emergency objectives and procedures; site emergency response structure; roles and responsibilities, including dedicated emergency personnel appointed by NCIG; and protocols for incident reporting. 	C	<p>NCIG has a current Emergency Management Procedure (EMP). The procedure is kept on the premises at all times. The procedure deals with all types of incidents including spills and explosions, which may cause harm to the environment. Appendix 1 details Emergency Response Guides where emergency objectives and procedures, site emergency response structure, roles and responsibilities detailed in appendix 2, including dedicated emergency personnel appointed by NCIG and protocols for incident reporting have been detailed in appendix 5 of this EMP.</p> <p>Emergency response organisation structure is detailed in appendix 5 of the emergency roles for each position description within NCIG.</p>	<p>Emergency Management Procedure HSEC.PRO.14.01</p>	There are no recommendations

Flora and Fauna Management Plan	Soc	A FFMP will also be prepared for Project operations. The construction FFMP will be reviewed and relevant components will be retained for the operation FFMP. This will include annual fauna monitoring (as previously described for the construction FFMP) and relevant TSMP components.	C	Flora and Fauna management is covered under the Ecological and Land Management Plan.	Ecological and Land Management Plan (2018) Document No. HSEC.MP.12.06	There are no recommendations																											
Environmental Reporting	Soc	NCIG will prepare an AEMR that reviews the performance of the Project against the construction and operation management plans, provides an overview of environmental management actions and summarises monitoring results over the 12-month reporting period. The AEMR will be distributed to relevant government agencies and stakeholders, and copies provided to other interested parties if requested.	C	Annual AMERs have been prepared and published.	AMER 2015, 2016 and 2017.	There are no recommendations																											
Site Exit Strategy	Soc	NCIG will develop a site exit strategy prior to decommissioning and closure of the Project. The site exit strategy will be developed in consultation with the relevant government authorities and other stakeholders. The site exit strategy will include consideration of: <ul style="list-style-type: none"> • consideration of the post closure retention of rail and wharf infrastructure to promote future development of the port and industry area on Kooragang Island; and • consideration of the amelioration of potential adverse socio-economic effects due to the reduction in employment at Project closure. 	Not Triggered			There are no recommendations																											
Environmental Monitoring Programme	Soc	An environmental monitoring programme will be developed for the Project. Table SOC-1 provides an overview of the programme and Figure SOC-1 shows the proposed location of each monitoring site. Monitoring results as well as monitoring site locations, parameters and frequencies will be reviewed through the AEMR, in consultation with relevant authorities. <p style="text-align: center;">Table SOC-1 Overview of the Proposed Environmental Monitoring Programme</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Monitoring Focus</th> <th style="text-align: center;">Section</th> <th style="text-align: center;">Proposed Monitoring Sites</th> </tr> </thead> <tbody> <tr> <td>Erosion and Sediment Control</td> <td style="text-align: center;">4.1.3</td> <td>Sediment control structures.</td> </tr> <tr> <td>Meteorology <ul style="list-style-type: none"> • Temperature. • Relative humidity. • Net solar radiation. • Rainfall. • Wind speed and direction. • Sigma theta (rate of change of wind direction). </td> <td style="text-align: center;">4.2.2</td> <td>Project automated meteorological station.</td> </tr> <tr> <td>Noise <ul style="list-style-type: none"> • Attended and unattended noise monitoring. </td> <td style="text-align: center;">4.3.3</td> <td>N1, N3, N5, N9, N13 and N14.</td> </tr> <tr> <td>Construction Vibration <ul style="list-style-type: none"> • Ground vibration. </td> <td style="text-align: center;">4.3.3</td> <td>Adjacent industrial receivers within 180 m of piling activities.</td> </tr> <tr> <td>Air Quality <ul style="list-style-type: none"> • Dust deposition. • High volume sampling (PM₁₀). </td> <td style="text-align: center;">4.4.3</td> <td>DG1 to DG6. HV1.</td> </tr> <tr> <td>Surface Water Quality <ul style="list-style-type: none"> • pH, EC, TDS and TSS. </td> <td style="text-align: center;">4.6.3</td> <td>Surface water quality sites.¹ Raw water tank.</td> </tr> <tr> <td>Groundwater <ul style="list-style-type: none"> • Groundwater level, pH, EC, TDS, TSS, Total PAH and a suite of metals. </td> <td style="text-align: center;">4.7.2</td> <td>Groundwater monitoring piezometer network. GW1 to GW4</td> </tr> <tr> <td>Fauna Monitoring <ul style="list-style-type: none"> • Green and Golden Bell Frog, Australasian Bittern and shorebirds. <small>¹ To be located at site water management structures.</small> </td> <td style="text-align: center;">4.9.3</td> <td>Potential habitat areas surrounding the Project.</td> </tr> </tbody> </table>	Monitoring Focus	Section	Proposed Monitoring Sites	Erosion and Sediment Control	4.1.3	Sediment control structures.	Meteorology <ul style="list-style-type: none"> • Temperature. • Relative humidity. • Net solar radiation. • Rainfall. • Wind speed and direction. • Sigma theta (rate of change of wind direction). 	4.2.2	Project automated meteorological station.	Noise <ul style="list-style-type: none"> • Attended and unattended noise monitoring. 	4.3.3	N1, N3, N5, N9, N13 and N14.	Construction Vibration <ul style="list-style-type: none"> • Ground vibration. 	4.3.3	Adjacent industrial receivers within 180 m of piling activities.	Air Quality <ul style="list-style-type: none"> • Dust deposition. • High volume sampling (PM₁₀). 	4.4.3	DG1 to DG6. HV1.	Surface Water Quality <ul style="list-style-type: none"> • pH, EC, TDS and TSS. 	4.6.3	Surface water quality sites. ¹ Raw water tank.	Groundwater <ul style="list-style-type: none"> • Groundwater level, pH, EC, TDS, TSS, Total PAH and a suite of metals. 	4.7.2	Groundwater monitoring piezometer network. GW1 to GW4	Fauna Monitoring <ul style="list-style-type: none"> • Green and Golden Bell Frog, Australasian Bittern and shorebirds. <small>¹ To be located at site water management structures.</small>	4.9.3	Potential habitat areas surrounding the Project.	C	A compliant environmental monitoring program has been documented and implemented.	AMER 2015, 2016 and 2017.	There are no recommendations
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