



NEW HOPE
GROUP

Appendix L Proponent Commitments





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PROPONENT COMMITMENTS

*New Acland Coal Mine
Stage 3 Project*

JANUARY 2014



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1. Proponent Commitments

The following sections represent the commitments made by New Acland Coal Pty Ltd (NAC) for the revised Project. Revised Project commitments are also presented in the Environmental Management Plan (EM Plan) located in **Appendix J.19**.

The revised Project commitments have been derived from the various chapters of the EIS.

1.1. Land Resources

Action/item	Mitigation Measures and Commitments	EIS Section
Stock Routes	<ul style="list-style-type: none"> NAC will consult with the Department of Environment and Heritage Protection (DEHP) in relation to the realignment of the Jondaryan-Muldu Road and will ensure continuity and operability of the stock route. 	4.4.2 Stock Routes
Road Openings and Closures	<ul style="list-style-type: none"> NAC will liaise with the DEHP and other relevant government agencies to gain all relevant approvals in relation to the opening and closing of roads (including roads which are stock routes) and in land dealings relating to changes in land tenure. 	4.2.3 Planning Provisions
Fire Breaks and Maintenance Programs	<ul style="list-style-type: none"> NAC will liaise with landowners and local authorities with respect to fire breaks and on-going maintenance programs. 	4.2.3 Planning Provisions
Off Site Water Discharges	<ul style="list-style-type: none"> An assessment of the likelihood of offsite water discharges during the revised Project's operation is provided in Chapter 5. The findings of this assessment demonstrate that the risk of discharge from the revised Project is low. NAC will continue to evaluate and manage this risk over the life of the revised Project. 	4.4.6 Soil Conservation Plans
Land Management and Monitoring Programs	<ul style="list-style-type: none"> NAC will expand its current monitoring programs and grazing trials to incorporate the applicable rehabilitation success criteria to guide its rehabilitation management and to collect the necessary data to demonstrate: <ul style="list-style-type: none"> the geotechnical stability of the constructed landform; the successful establishment of a suitable vegetative cover to support the final land use and minimise the potential for erosion; and the productivity of the vegetative cover for grazing (beef production). 	4.5.4 Post-Mine Land Use Suitability
Land forms and Rehabilitation	<ul style="list-style-type: none"> NAC will demonstrate in a scientifically rigorous manner the success of the revised Project's rehabilitation to allow future surrender of the associated mining leases. NAC will consult with government and community on a regular basis over the life of the revised Project to report on the progress of rehabilitation and other matters. 	4.5.4 Post-Mine Land Use Suitability

Action/item	Mitigation Measures and Commitments	EIS Section
	<ul style="list-style-type: none"> • NAC is committed to maximising the revised Project's rehabilitation success to ensure the Acland Pastoral Company (APC) can function as a competitive agribusiness. NAC will also continue to draw on the APC's expertise to assist and enhance rehabilitation management. • NAC will use experience gained at the Mine and other mines in Queensland to meet its stable landform objective. Stable landforms will be established following mining, using soils capable of supporting vegetation communities adapted to the local environment. The stability of the post-mine landform will be achieved by applying sound rehabilitation practices. The disturbed land will be rehabilitated to a condition that is self-sustaining or to a condition where the maintenance requirements are consistent with the post-mining land use. • NAC will use the existing grazing trial: <ul style="list-style-type: none"> ○ to assess the success of the current rehabilitated area in relation to the performance of cattle growth (beef production); ○ to evaluate current rehabilitation practices from a final land use perspective; and ○ as required, to develop new rehabilitation strategies to improve rehabilitation and long term grazing performance. • Longer term, the APC will also use this information to develop appropriate land management plans for NAC's former mined land within both the current Mine and the revised Project site. 	
Contaminated Sites	<ul style="list-style-type: none"> • NAC will undertake further management of these contaminated sites as the revised Project progresses. 	4.6 Site Contamination
Mineral Waste	<ul style="list-style-type: none"> • NAC will evaluate the acid generation potential appropriately regularly during mining operations to assess its acid generating capacity. • The following measures will be implemented to manage mine waste. Low capacity PAF (PAF-LC) and PAF mine waste: <ul style="list-style-type: none"> ○ progressively backfilled into pit voids and placed below the pre-mining groundwater level; and ○ co-mingled with non-acid forming (NAF) materials in out of pit dumps during construction. 	4.7.5. Mine Waste Management

Action/item	Mitigation Measures and Commitments	EIS Section
Offset Strategy	<ul style="list-style-type: none"> NAC will establish a suitable legal mechanism connected to the underlying land title to protect the <i>Dichanthium sericeum</i> based grassland offset in perpetuity. This legal agreement will also include a long term management plan for preservation of the <i>Dichanthium sericeum</i> based grassland offset. 	4.8.3. Rehabilitation Strategy
Fossils	<ul style="list-style-type: none"> NAC will take all reasonable and practical measures to identify and prevent impacts to significant fossil specimens during the construction and operational phase of the revised Project. In the event of a significant fossil find, NAC will liaise with the Queensland Museum about strategies to protect the find. 	4.8.10 Fossils
Environmental Management Plans relevant to Land Resources	<ul style="list-style-type: none"> NAC will implement the: <ul style="list-style-type: none"> ITSF Management Plan (Appendix J.1). Final Land Use and Management Plan (Appendix J.2). Topsoil Management Plan (Appendix J.3). Conservation Zone Management Plan (Appendix J.6). Threatened Species Translocation Plan (Appendix J.7). Bluegrass Offset Management Plan (Appendix J.8). Pest and Weed Management Plan (Appendix J.9). 	4.12. Summary of Mitigations Measures and Commitments

1.2. Surface Water Resources

Action/item	Mitigation Measures and Commitments	EIS Section
Prevent or minimise adverse water quality impacts during construction	<p>Current good practice erosion and sediment control measures will be provided as outlined in the Institution of Engineers publication <i>IECA Best Practice Erosion and Sediment Control Guidelines</i> (2008) to comply with the EPP (Water). These measures include:</p> <ul style="list-style-type: none"> construction work in creeks will be undertaken in dry weather and conditions of minimal or no flow; weather conditions will be monitored so that work in creek crossings and erosion prone areas will not take place if rain and/or extreme weather (e.g. storms) are forecast; sedimentation fences and bunds will be used to contain fill or excavated material during construction; fill and excavated material will be stockpiled away from gully heads, active creek banks, bank erosion or other unstable areas; 	5.14.2 Mitigation Measures

Action/item	Mitigation Measures and Commitments	EIS Section
	<ul style="list-style-type: none"> local runoff from disturbed areas will be routed clear of disturbed areas; assessment of the integrity and effectiveness of erosion control measures will be undertaken at regular periods and following significant rainfall events; and if required the erection of temporary waterway barriers during construction will include the provision to transfer flows from upstream of the works to the downstream channel without passing through the disturbed construction site. 	
Protect surface water quality and the downstream receiving environment during operation.	<ul style="list-style-type: none"> An operational separation distance of approximately 150 m will be maintained from the edge of the mining pits to Lagoon Creek, which will include a 50 m conservation buffer where no mining activities will be undertaken. 	5.7.1 Potential Impacts on Water Quality and Geomorphology
	<ul style="list-style-type: none"> Sediment dams, environmental dams, pit water storage and other water management structures (e.g. bunds and drains) will be used appropriately by the revised Project as per the Water Resource Management Plan (WRMP). 	5.13 Site Water Management
	<ul style="list-style-type: none"> The revised Project's water management will be based on the separation and management of clean and dirty water catchments. 	
	<ul style="list-style-type: none"> Water capture within the revised Project's clean areas will be diverted around operational areas and where practical, allowed to discharge off site as part of normal overland flow. 	
	<ul style="list-style-type: none"> Water from disturbed areas within the revised Project site will be diverted to sediment dams for treatment and possible reuse as a supplementary supply for the revised Project's water requirement. 	
	<ul style="list-style-type: none"> Progressive rehabilitation will be undertaken as the revised Project's operational areas become available to reduce the amount of disturbed areas. 	
	<ul style="list-style-type: none"> The current conservation zone, 50 m either side of Lagoon Creek, from the Mine will be extended into the revised Project site to promote the re-establishment of the riparian zone. No mining activities will occur within the proposed conservation zone. Surface runoff from the revised Project's potentially contaminated areas, such as infrastructure areas, will receive additional levels of treatment (e.g. oil-water separators and bunding). Water captured by these devices will be preferentially reused on site, while captured oil will be collected for recycling by a licensed contractor. 	5.14.2 Mitigation Measures

Action/item	Mitigation Measures and Commitments	EIS Section
	<ul style="list-style-type: none"> <li data-bbox="472 264 1161 398">• Fuel, dangerous goods and hazardous chemicals will be managed as outlined by current standards, guidelines and in compliance with statutory requirements. <li data-bbox="472 421 1161 521">• Refuelling locations and handling of fuels will be undertaken away from all waterways including creeks and drainage paths <li data-bbox="472 544 1161 745">• NAC's existing SOP for spills and emergency response procedures will be expanded to incorporate the revised Project. Spill recovery and containment equipment will be available when working adjacent to sensitive drainage paths and within other areas, such as workshops. <li data-bbox="472 768 1161 958">• NAC will continue to commit to investigating all legitimate surface water complaints, and if a genuine problem is identified, conduct immediate remediation measures and establish standard operating procedures to minimise the possibility of a reoccurrence of the original issue. <li data-bbox="472 981 1161 2018">• NAC's current water quality monitoring program will be expanded to incorporate the operational and decommissioning phases of the revised Project. The program is designed to ensure the WRMP is effective, to demonstrate compliance with the Mine's strict discharge limits, and to ensure the downstream water quality (physico-chemical parameters, at a minimum) is not being adversely impacted. In general, the monitoring program will include the following actions. <ul style="list-style-type: none"> <li data-bbox="568 1283 1161 1507">○ Water quality will be measured upstream and downstream of the revised Project site. Basic water quality indicators (i.e. Salinity, pH, DO, EC, temperature) will continue to be monitored on a monthly basis, or when water is present, and heavy metals, nutrients, anions and cations monitored twice annually. <li data-bbox="568 1529 1161 1776">○ During any release event, the receiving water will be monitored upstream (50 m to 100 m upstream of the release point) and downstream (200 m downstream of the release point) locations. Water quality variables will include basic water quality indicators, suspended solids, heavy metals, nutrients, anions and cations. <li data-bbox="568 1798 1161 1910">○ Progressive rehabilitation of areas impacted by operational activities will be undertaken as soon as practical in order to reduce the amount of exposed soil. <li data-bbox="568 1933 1161 2018">○ Fuel, dangerous goods, hazardous chemicals and work shop wastes will be managed to ensure compliance with current industry 	

Action/item	Mitigation Measures and Commitments	EIS Section
	standards and guidelines for safety and environmental protection. These management actions will focus on handling, storage, spill containment, emergency response, establishment of 'standard operating procedures' for key operational aspects, and development of a responsibility matrix for operational and reporting matters.	

1.3. Groundwater Resources

Action/item	Mitigation Measures and Commitments	EIS Section
Groundwater Monitoring Program	<p>The groundwater monitoring program for the revised Project combines the current monitoring program for the existing Mine with an extended network of monitoring bores enclosing the revised Project site. Data collected from the groundwater monitoring program will:</p> <ul style="list-style-type: none"> • be operated in accordance with the revised Project's approved Environmental Authority (EA), including adoption of suitable guideline criteria and temporal investigation; • be used in the continued development and refinement of groundwater impact assessment criteria and investigation triggers; • enable verification and refinement (where necessary) of the groundwater modelling predictions presented in this EIS; and • be collated into a database that will be made available to the administering authority on request. <p>The groundwater monitoring network will:</p> <ul style="list-style-type: none"> • be installed and maintained by a person possessing appropriate qualifications and experience in the fields of hydrogeology and groundwater monitoring program design to be able to competently make recommendations about these matters; • be constructed in accordance with methods prescribed in the "Minimum Construction Requirements for Water Bores in Australia" (National Uniform Drillers Licensing Committee, 2012) by an appropriately qualified driller; and • include a sufficient number of 'bores of compliance' that are located at an appropriate distance from potential sources of impact from mining activities and provide the following: <ul style="list-style-type: none"> ○ representative groundwater samples from the uppermost aquifer; ○ background water quality in hydraulically up-gradient or background bore(s) that have not 	6.4.1 Groundwater Monitoring Program

Action/item	Mitigation Measures and Commitments	EIS Section
	<p>been affected by any mining activities conducted by NAC; and</p> <ul style="list-style-type: none"> ○ the quality of groundwater down gradient of potential sources of contamination. 	
Landholder Bores	<ul style="list-style-type: none"> • Groundwater monitoring will be undertaken by appropriately qualified personnel. Groundwater level measurements, sample collection, storage and transportation will be undertaken in accordance with procedures conforming to the current industry standard: AS/NZS 5667.1, .11 1998. 	6.4.2 Landholder Bores
Groundwater Impact Prediction, Validation and Review	<ul style="list-style-type: none"> • During the life of the revised Project, data collected through the groundwater monitoring program, will be used to update and refine the revised Project's groundwater model and it's predictions to reflect the actual activities undertaken on site (e.g. mine development and sump locations). 	6.4.3 Groundwater Impact Prediction, Validation and Review
Mitigation Measures for affected Groundwater Users	<ul style="list-style-type: none"> • NAC will undertake a program of works to characterise and assess predicted impacts on individual groundwater users within the predicted drawdown area. The work program will have the primary outcome of determining the most appropriate means of 'Make Good' for individual users should groundwater monitoring validate model predictions of groundwater effects on those users. Results of this characterisation work will also feed into the first revision of the groundwater model where possible. • If required in these circumstances, NAC will provide an alternative water supply arrangement to affected third parties. Due to the progressive nature of drawdown within aquifers, the provision of alternative supplies may be staged. Options for possible alternative supplies include: <ul style="list-style-type: none"> ○ the deepening and / or refurbishment of existing bores; ○ the installation of new pumps capable of extracting groundwater from greater depths within existing bores; ○ the installation of a new bores at other locations on the affected landholder's property; and 	6.4.4 Mitigation Measures for affected Groundwater Users

Action/item	Mitigation Measures and Commitments	EIS Section
	<ul style="list-style-type: none"> ○ the installation of a new high yielding 'community bore' and subsequent pipeline to multiple affected landholders. • NAC will ensure its groundwater monitoring regime is adequate to identify possible effects to neighbouring groundwater users from the revised Project's operations (i.e., in relation to drawdown levels and water quality). NAC will review its groundwater monitoring regime on a regular basis in line with the progression of mining over the life of the revised Project. The revised Project's groundwater monitoring regime will be periodically updated in NAC's current Environmental Monitoring Plan, which forms a supporting document to the NAC Plan of Operations. • NAC will investigate all groundwater complaints related to the revised Project both during the operational phase and following mine closure. NAC will ensure all legitimate groundwater complaints are addressed in an expedient manner. • NAC has developed a Groundwater Monitoring and Impact Management Plan (GMIMP) to formalise the management of the revised Project's potential impacts on the surrounding groundwater environment. The GMIMP will be regularly reviewed over the life of the revised Project, and as required, will be updated based on monitoring results, new outputs from revisions to the groundwater modelling and any other applicable groundwater management matters that relate to operation of the revised Project. 	<p>6.4.4 Mitigation Measures for affected Groundwater Users</p> <p>Appendix J.5. Groundwater Monitoring and Impact Management Plan</p>
Groundwater management	<ul style="list-style-type: none"> • NAC will discuss and agree with the administering authority, the need for on-going groundwater management, including monitoring during the decommissioning phase of the revised Project. 	6.5 Conclusions

1.4. Terrestrial Ecology

Action/item	Mitigation Measures and Commitments	EIS Section
Removal of riparian vegetation at waterway crossings.	<ul style="list-style-type: none"> Minimise areas of vegetation to be cleared by selecting crossing locations which require minimal clearing of established vegetation. Implementing the management measures described in the FLURP and the Conservation Zone Management Plan. Monitor riparian vegetation on banks to review and refine riparian management and rehabilitation strategies. 	7.7 Mitigation Measures
Earthworks and construction within the channel and banks for watercourse crossing	<ul style="list-style-type: none"> Minimise width of the rail and road crossing and locate workspace areas away from creek banks, so as to reduce the disturbance to riparian vegetation, bank and channel affected by construction. Restrict construction within and around the creek channel to the dry periods and rehabilitate areas of disturbed channel bed and banks. Design and construct temporary barriers in waterways to minimise disturbance to environmental flows. Monitor the effectiveness of waterway crossing rehabilitation. 	7.9 Summary of Mitigation Measures and Commitments
Follow up reptile surveys	<ul style="list-style-type: none"> Surveys of habitat suitable for small mammals, Brigalow reptiles, bats and birds will be conducted in October and November 2013. 	7.4.2 Methodology
Rail loop and spur	<ul style="list-style-type: none"> The location of the rail loop and spur will avoid areas of brigalow and poplar box woodland in the south-western corner of the mining lease. 	7.6.1 Clearing of vegetation
Lagoon Creek vegetation and habitat retention	<ul style="list-style-type: none"> Vegetation and habitat will be retained along the length of Lagoon Creek. Fauna movement will be able to continue unaffected by the revised Project. Areas of regional ecosystems and threatened ecological communities will be retained along Lagoon Cree, between the Willaroo and Manning Vale East pits. 	7.9 Summary of Mitigation Measures and Commitments
Biodiversity Offsets	<ul style="list-style-type: none"> The Biodiversity Offset Strategy will be implemented, to secure offsets for Brigalow and Bluegrass Dominant Grassland TECs, <i>Bothriochloa biloba</i>, <i>Digitaria porrecta</i>, <i>Homopholis belsonii</i> and poplar box woodland, mountain coolabah forest and gum-topped box woodland. 	7.7.1 Biodiversity Offset Strategy (BOS)
Bluegrass offset management	<ul style="list-style-type: none"> The Bluegrass Offset Management Plan will be implemented to manage the areas of bluegrass offset to be established on land owned by NAC 	7.2.2 Management Plans

Action/item	Mitigation Measures and Commitments	EIS Section
Lagoon Creek management	<ul style="list-style-type: none"> The Conservation Zone Management Plan will be implemented to manage the Lagoon Creek riparian zone, to rehabilitate vegetation and habitat along the length of Lagoon Creek. 	
Threatened species translocation	<ul style="list-style-type: none"> The Threatened Species Translocation Management Plan will be implemented to relocate threatened species affected by the revised Project. The Plan describes the sites where the species will be relocated to, how the translocation will be completed and monitoring of the implementation of the Plan. 	
Vegetation clearance	<ul style="list-style-type: none"> The Construction Phase Management Plan will be implemented to avoid impacts to areas of vegetation and habitat that are to be retained within the revised Project site. Vegetation that falls outside the revised Project disturbance footprint will not be cleared or impacted. 	
Pest and weed management	<ul style="list-style-type: none"> The Pest and Weed Management Plan and the Pest and Domestic Animal Management Plan will be implemented to oversee the management of weeds and pest animals at the revised Project site. 	

1.5. Aquatic Ecology

Action/item	Mitigation Measures and Commitments	EIS Section
Removal of terrestrial vegetation for development of resource areas and infrastructure including roads and rail spur	<ul style="list-style-type: none"> Flood levees to be constructed adjacent to the Manning Vale and Willeroo resource areas resource operations. Flood levees will be an average of 100m from the top of the banks area and designed to control flood water for up to a Probable Maximum Flood (PMF) event. Reinforce flood levee sections that may be prone to erosion during flood events. Riparian buffer zones maintained to a minimum of 50 m on either side of Lagoon Creek Preparing and implementing an Erosion and Sediment Management Plan including installing and maintaining sediment control devices to be installed around exposed areas and earthworks adjacent to aquatic habitats and watercourses. Implementing the management measures described in the Final Land Use and Rehabilitation Plan (FLURP). 	8.6.1. Management of Cleared Vegetation Zones

Action/item	Mitigation Measures and Commitments	EIS Section
Water management and infrastructure	<ul style="list-style-type: none"> Controlled discharges are to be regulated within the integrated water management system in accordance with the WRMP and approved water quality targets. 	8.6.2. Water Management and Infrastructure
	<ul style="list-style-type: none"> Design and construction of all water management structures using practical hydraulic parameters based on an appropriate risk based rainfall event, catchment size, slopes, discharge design and soil types. 	
	<ul style="list-style-type: none"> The maximum reduction of total catchment area is 5%. And will have a negligible effect on flows in Lagoon Creek based upon the results of the surface water modelling and accordingly, aquatic values would not be affected by decreased flows. 	
	<ul style="list-style-type: none"> Application of the Water Management strategy and regulatory requirements will avoid disruption to the seasonal patterns of the flow regime. The potential increased magnitude of flow events and extended tail of flow events is not considered to represent a significant disruption to aquatic values in Lagoon Creek. 	
Removal of riparian vegetation at waterway crossings.	<ul style="list-style-type: none"> Minimise areas of vegetation to be cleared by selecting crossing locations which require minimal clearing of established vegetation. Implementing the management measures described in the FLURP and the Conservation Zone Management Plan. Monitor riparian vegetation on banks to review and refine riparian management and rehabilitation strategies. 	8.6.3. Construction of Waterway Crossings
Earthworks and construction within the channel and banks for watercourse crossing	<ul style="list-style-type: none"> Minimise width of the rail and road crossing and locate workspace areas away from creek banks, so as to reduce the disturbance to riparian vegetation, bank and channel affected by construction. Restrict construction within and around the creek channel to the dry periods and rehabilitate areas of disturbed channel bed and banks. Design and construct temporary barriers in waterways to minimise disturbance to environmental flows. Monitor the effectiveness of waterway crossing rehabilitation. 	8.6.3. Construction of Waterway Crossings
Movement and operation of vehicles and machinery.	<ul style="list-style-type: none"> Implement the Pest and Weed Management Plan. The plan will include required vehicle wash-down, monitoring of pests and weeds, and application of appropriate control measures and is presented in Appendix J.9. 	8.6.4. Movement and Operation of Vehicles and Machinery

Action/item	Mitigation Measures and Commitments	EIS Section
Movement and operation of vehicles and machinery.	<ul style="list-style-type: none"> Procedures should be applied to minimise the risk of accidental release or spillage. Do not conduct refuelling operations within the waterway crossing. Ensure spill kits are available for all refuelling operations. 	8.6.4. Movement and Operation of Vehicles and Machinery
Decommissioning and rehabilitation	<ul style="list-style-type: none"> The stability of the dams will be enhanced by buttressing with inert rock material (where appropriate) to create safe final slopes that are resistant to erosion and which may then be rehabilitated in accordance with the post-mine land use. Implement the management measures outlined in the FLURP. 	8.6.5. Decommissioning

1.6. Air Quality

Action/item	Mitigation Measures and Commitments	EIS Section
Material extraction and handling	<p>Loading/dumping overburden</p> <ul style="list-style-type: none"> The drop height of material from excavators will be minimised when loading trucks. Modification of operations will occur during adverse weather conditions (e.g. dust storms, gale force winds and storm conditions). Water carts will be employed to keep mine roads and work areas in a moist condition. Dozer operations on overburden dumps will be modified or suspended if dust generation is excessive. 	9.5.1 Minimising Dust Emissions
Drilling and Blasting	<ul style="list-style-type: none"> Dust curtains will be installed on drill rigs (i.e. under the drill deck with fabric filters to collect dust). Water injector will be used on drill rigs to minimise dust emission. Local residents (neighbours) will be advised of blasting events (date and time). Blasting operations will be modified during adverse weather conditions (e.g. dust storms, gale force winds and storm conditions). Blasts will occur during daytime hours only and not on weekends or public holidays. Gravel/basalt stemming will be used in blast holes. 	
Haul roads	<ul style="list-style-type: none"> Water carts will maintain moisture conditions on haul roads. Road grading and maintenance will be undertaken on a regular basis. Key actions include: <ul style="list-style-type: none"> Application of coarse rejects on haul roads to 	

Action/item	Mitigation Measures and Commitments	EIS Section
	<p>reduce dust generation.</p> <ul style="list-style-type: none"> - Grading procedures to achieve constant spread of fines and coarser material. • Speed on haul roads will be limited to 60km/h (20 km/h on selected corners). • Where feasible, the volumes of trays on haul trucks will be maximised to increase carrying capacity and to reduce vehicle kilometres travelled on haul roads. • Visual monitoring of haul roads and major work areas will be undertaken to identify noticeable dust generation for corrective actioning. • Certain site roads will be sealed (near administration area – site access and employee car park). • Efficient watering will be conducted during peak periods of activity and within areas of concentrated activity. • Well defined and planned haul routes and internal roads will be developed to maximise efficiency of travel. • Obsolete mine roads will be rehabilitated. • The private haulage route from the Materials Handling Facility (MHF) to Train Loading Facility (TLF) will be a sealed road. 	
Exposed areas	<ul style="list-style-type: none"> • The pre-strip areas will be planned to minimise the time of exposure following clearing in advance of mine development. • Exposed areas/active areas will be watered if dust generation is observed. • Where possible, topsoil will be stripped when its moisture content is elevated but not sodden. • A vegetative cover will be established as soon as feasible on areas prepared for rehabilitation. • Progressive rehabilitation will be conducted behind the active pit areas to minimise exposed areas. • Unauthorised clearing of non-mine areas will be prevented using a 'permit to disturb' system. 	
ROM Pad	<ul style="list-style-type: none"> • Water will be applied on a regular basis by a water cart on trafficked areas within the ROM Pad's operational area. • Visual monitoring of ROM coal stockpiles will be undertaken to identify noticeable dust generation for corrective action. • Water will be applied on the ROM coal stockpiles if significant dust levels are being generated. 	

Action/item	Mitigation Measures and Commitments	EIS Section
Coal Handling Preparation Plant (CHPP) and ROM Bin	<p>ROM Bin</p> <ul style="list-style-type: none"> • Automatic water sprays will be installed at the ROM hopper bin to produce a fine mist to suppress dust generated when sensors are triggered. <p>Surge Bin</p> <ul style="list-style-type: none"> • Dust curtains will be installed. • Water sprays will be used. <p>Crushing</p> <ul style="list-style-type: none"> • Wet crushing will be employed. • This activity will be fully enclosed. <p>Conveyors</p> <ul style="list-style-type: none"> • Water sprays will be used on transfer points. 	
MHF	<ul style="list-style-type: none"> • An automatic sprinkler system will be employed to moisten product coal stockpiles. • Water sprays will operate at transfer points on conveyors. • Coal spills will be removed regularly to minimise the potential for dust generation. • A vacuum sweeper will operate on roads near the MHF. • The washed coal will normally retain a moisture level of approximately 10%. 	
CHPP, MHF, TLF	<ul style="list-style-type: none"> • No coal will be stored in open/exposed stockpiles. • An enclosed overhead bin will deliver the coal to each rail wagon as part of the train loadout system. • Coal will be loaded by side tipper into a hopper as part of the train loadout system. • Veneering and profiling of the loaded coal will be conducted to minimise dust emissions during transport. 	
Blast fume management	<p>Key fume management actions include:</p> <ul style="list-style-type: none"> • Review weather forecast • Establish 300 m machine and 500 m personnel exclusion zones • Establish Fume Management Zone based on expected meteorological conditions • Notify neighbours on blast contact list of time and date of blast, and whether their residence is in the fume management zone • Set up portable weather station to monitor field meteorological conditions • Blast when meteorological conditions favourable • Capture, record and review relevant blast data 	9.5.2 Fume Management

Action/item	Mitigation Measures and Commitments	EIS Section
Dust Forecasting System	<ul style="list-style-type: none"> • Implements a dust forecasting system to predict potential dust risk from the revised Project using dispersion modelling tools for up to two days in advance • Dust forecasts will be updated on a daily basis, generating a daily automated email of forecast meteorological conditions and dust risk 	9.5.3 Dust Forecasting System
Air Quality Monitoring	<p>The rationale for each component of the air quality monitoring program is:</p> <ul style="list-style-type: none"> • Real time monitoring for PM10 concentrations • Real time monitoring for Total Suspended Particulates (TSP) concentrations • Quarterly monitoring of PM10 concentrations • Monthly dust deposition monitoring • Meteorological monitoring 	9.5.4 Air quality monitoring
Adaptive Air Quality Management	<p>Suspension or modification of operations in response to the following triggers:</p> <ul style="list-style-type: none"> • potential dust risk predictions from the dust forecasting system • warning or exceedance alarms from the real time air quality monitoring system • observation(s) of significant dust generation during visual monitoring 	9.5.5 Adaptive Air Quality Management
Local Stakeholder Engagement	<p>The potential for dust nuisance from the revised Project can be further reduced through:</p> <ul style="list-style-type: none"> • Effective communications with local stakeholders • All concerns about dust will be investigated promptly and appropriate action taken to reduce legitimate dust nuisance • A register of dust concerns will be maintained for periodic review by the regulatory authority 	9.5.6 Local Stakeholder Engagement
Acquisition/relocation/ treatment strategy	<ul style="list-style-type: none"> • Acquire/relocation sensitive receptors if air quality impacts cannot be adequately managed by dust minimisation and adaptive air quality management • Physically treat sensitive receptor's residences if air quality impacts cannot be adequately managed by dust mitigation and adaptive air quality management (e.g. air conditioning) 	9.5.7 Acquisition/relocation/ treatment strategy

1.7. Greenhouse Gas and Climate Change

Economic risk	Mitigation strategy	EIS Section
Greenhouse Gas Reduction	<ul style="list-style-type: none"> • Mine planning to reduce haulage distances • Improving efficiency of payload management (e.g. run-of-mine coal haulage) • Consider fuel efficiency of mining equipment and haul trucks during procurement • Maintaining mining equipment and haul trucks in good working order so fuel efficiency of equipment is maximised • Modifying operational procedures to improve the fuel use of selected machines (for example, minimising unnecessary idling of mobile equipment); • Implementing an operator education program to promote more fuel efficient operation of machines • Using power factor correction equipment at the CHPP to improve electricity consumption efficiency • Using LED lighting for general access and safety lighting, e.g. around personnel access walkways and doors and conveyor walkways can result in a reduction of electricity consumption • Report annual greenhouse gas emissions under NGERS • Identify, evaluate and publicly report cost effective energy savings opportunities under the EEO Act. • Investigate opportunities to offset greenhouse gas emissions through carbon trading scheme under the <i>Clean Energy Act 2011</i> 	10.5. Mitigation Measures
Climate Change	<ul style="list-style-type: none"> • Recycled water will be supplied from Toowoomba's Wetalla Wastewater Reclamation Facility (WWRF) to provide a consistent and reliable source of water to the Project • Ongoing monitoring of rehabilitation areas and implement control measures, if required, to achieve rehabilitation success criteria • Responsive water management system to deal with severe storm events • Progressive rehabilitation will be undertaken as soon as practical to minimise risk of erosion from exposed areas 	10.6.2 Change Climate Risk Assessment

1.8. Noise and Vibration

Action/item	Mitigation Measures and Commitments	EIS Section
Reduce the revised Project's potential noise impact.	<ul style="list-style-type: none"> NAC will establish a real-time noise monitoring network, which will be used in conjunction with a weather forecasting system and an adaptive management process, to proactively relocate, reduce or stop noisier mining operations. 	11.8 Mitigation Measures for Mining Operations
	<ul style="list-style-type: none"> NAC has developed a Noise and Vibration Management Plan (NVMP) for the revised Project. The NVMP will be administered as an accompanying document to the revised Project's Plan of Operations. A copy of the NVMP is provided in Appendix J.11. 	
	<ul style="list-style-type: none"> Based on ambient conditions (climate and the current mine plan) and feedback from the real-time noise monitoring (warning and alarm protocols), NAC may be required to limit or stop mining operations in the Manning Vale East pit during the night time period. This requirement is based on the noise assessment work completed for the revised Project's EIS. 	
	<ul style="list-style-type: none"> NAC will ensure noisier mining equipment, including excavators, track dozers, loaders and rear dump trucks, is fully attenuated. This requirement is based on the noise assessment work completed for the revised Project's EIS. 	
	<ul style="list-style-type: none"> NAC will implement its Noise and Vibration Management Plan as presented in Appendix J.11 to minimise the risk of noise complaints from nearby sensitive receptors to the revised Project. All complaints received in relation to the revised Project's operation will be managed as outlined in NAC's Local Stakeholder Engagement Plan as presented in Appendix J.18. NAC's approach to complaints management is based on the key principles of timeliness, sensitivity, fairness and impartiality, and confidentiality. NAC is committed to open communication with its local stakeholders and active complaint resolution when issues or concerns are raised about its mining operations. 	
	<ul style="list-style-type: none"> Where possible, NAC will schedule noisier operations in-pit at night or during daylight hours only. For example, dumping of overburden and dozer activity on overburden dumps at or above ground surface may be restricted during night periods (10pm to 7am). 	
	<ul style="list-style-type: none"> If no suitable or acceptable noise amelioration solutions are available for a particular noise issue, NAC will negotiate in good faith with all affected property owners for property purchase or by agreement implement some other form of amicable arrangement (e.g. acoustic treatment of the dwelling, relocation or replacement of the dwelling at another 	

Action/item	Mitigation Measures and Commitments	EIS Section
	<p>suitable location, relocation of the landowner to another living arrangement for the period of the issue or any other suitable innovative solution). NAC would be responsible for all reasonable costs associated with any agreed solution to a noise issue. In the event agreement cannot be reached, NAC will enter into mediation with the affected party and employ the services of a third party to facilitate this process.</p> <ul style="list-style-type: none"> • NAC will ensure proper maintenance and operational procedures will be undertaken to minimise noise emissions from equipment, including proper servicing and maintenance of exhaust systems on mine equipment. • Where practicable, NAC using the mine planning process will utilise topsoil and other dumps as noise barriers between active mine operations and nearby noise receptor locations. • NAC will continue to utilise broad band alarms instead of reverse beepers on all mobile equipment. • NAC will continue to limit the speed of heavy vehicle traffic on haul roads. • NAC will continue its current proactive monthly noise monitoring program and will expand its coverage around the revised Project site. • NAC will continue its proactive assessment of possible noise attenuation options for both mobile or stationery noise emitting equipment. Noise emissions with tonal, impulsive and/or intermittent characteristics will be targeted for noise attenuation. 	
Management of airblast overpressure and vibration	<ul style="list-style-type: none"> • Field data will be used to best determine blast conditions and the type of stemming required for the area. • In the event of a blast issue, the maximum instantaneous charge of subsequent blasts will be reduced using delays, reduction of hole diameter, etc. (i.e. until the blast issue is resolved). • In the event of a blast issue, the burden and spacing of subsequent blasts will be changed by altering the drilling pattern and/or delay layout, or altering the hole inclination (i.e. until the blast issue is resolved).; • The stemming depth and type will be adequate for each blast event. • Blast events will only be conducted during favourable weather conditions. • The monitoring of blasts will continue at the nearest 	

Action/item	Mitigation Measures and Commitments	EIS Section
	<p>sensitive receivers based on the interpretation of pre-blast weather data.</p> <ul style="list-style-type: none"> The practice of advising near neighbours will continue in advance of each blast. All new near neighbours surrounding the Project area will be proactively invited to join the blast notification contact list. A qualified professional with suitable experience will be responsible for the Project's blast management. All blast complaints will be investigated in a timely manner to determine the extent of the issue. Where appropriate, blast monitoring will be conducted at the affected residence, and as required, blast mitigation solutions will be investigated and implemented by agreement. 	

1.9. Cultural Heritage

Action/item	Mitigation Measures and Commitments	EIS Section
Aboriginal cultural heritage	<ul style="list-style-type: none"> NAC and the Western Wakka Wakka People will continue to progressively implement the requirements of the Co-operation Agreement and CHMP to ensure the proper management and the protection of Aboriginal cultural heritage within the Study area. All future clearance/collection activities on MLA 50232 will be dealt with under the ACH Act. All personnel and contractors (construction and subsequent workings) will undergo a cultural heritage awareness program. 	12.3.3 Mitigation Measures
Acland No.2 Colliery	<p>As a Queensland Heritage listed site, the significance of the former Acland No.2 Colliery requires that the following general commitments are undertaken.</p> <ul style="list-style-type: none"> The historical mine site, including all built, moveable and landscape features will be maintained and conserved within their original setting, particularly where possible elements of moderate and high rankings of significance. Significant elements should be maintained. Intrusive elements should be removed. Development on or immediately adjoining the site will be avoided or if necessary only undertaken with full consideration of the cultural heritage significance of the site. The scale, form and setting of the place should be respected and any proposed management or use 	12.2.9 Mitigation Measures Appendix J.12 Acland Colliery Conservation Management Plan

Action/item	Mitigation Measures and Commitments	EIS Section
	<p>options should be sympathetic to its historic use.</p> <p>A total of twenty-one management commitments have been included in the Acland Colliery Conservation Management Plan (ACCMP) to ensure the former Acland No.2 Colliery receives a high standard of management and is protected for future generations. NAC has developed the ACCMP and is provided in Appendix J.12.</p>	
Acland	<ul style="list-style-type: none"> NAC has developed an Acland Management Strategy for each of the property types and structures in Acland currently owned by the New Hope Group (NHG). This is provided in Chapter 3, Section 3.12. 	12.2.9 Mitigation Measures

1.10. Traffic and Infrastructure

Action/item	Mitigation Measures and Commitments	EIS Section
Traffic movements during peak construction (2016) phase	<ul style="list-style-type: none"> Working hour arrangements will be modified and haulage tasks avoided during peak traffic periods and school drop-off and pick-up times. Established truck routes and arterial roads will be used for the haulage of construction materials and spoil in order to minimise truck traffic on local roads. Construction works will be staged to minimise traffic congestion effects. Traffic conditions during the construction period will be monitored in order to identify and address any negative impacts. The local community will be adequately notified about proposed changes to local traffic conditions due to construction activities, including the provision of advanced notice, clear signage of changed traffic conditions and as required, traffic control personnel. Prior to the commencement of any roadwork, bus operators and the local community will be notified about potential delays or disruptions to school bus services and other travel arrangements. Traffic control measures designed for the safe movement of vehicles, pedestrians and cyclists accessing the residential properties in the vicinity of the revised Project site will be provided. Adequate on-site parking will be provided to accommodate for employee vehicles. 	<ul style="list-style-type: none"> 13.13.1 Peak construction phase mitigation measures

Action/item	Mitigation Measures and Commitments	EIS Section
	<ul style="list-style-type: none"> • At least one lane will be open for traffic at any time near the construction activities to ensure traffic flow. • NAC will ensure adequate consultation is undertaken with the appropriate regulatory authorities. • Access to Acland will be maintained via Oakey-Cooyar Road • NAC will ensure discussions are undertaken with the relevant road and rail authorities to ensure an appropriate mitigation measures are implemented based on the proposed design considerations outlined within the ALCAM Report. 	
Traffic movements throughout operation (2017) phase	<ul style="list-style-type: none"> • Working hour arrangements will be modified and haulage tasks avoided during peak traffic periods and school drop-off and pick-up times. • Established haul routes and arterial roads will be used for coal transportation to minimise traffic on local roads. • Traffic conditions during the operational phase will be monitored in order to identify and address any negative impacts. • Local communities will be adequately notified about proposed changes to local traffic conditions during the operational phase, including the provision of advanced notice, clear signage of changed traffic conditions, and as required, traffic control personnel. • Traffic control measures designed for the safe movement of vehicles, pedestrians and cyclists accessing the revised Project site will be provided. • Adequate on-site parking will be provided to accommodate employee vehicles. • Access to Acland will be maintained at all times via Oakey-Cooyar Road. • NAC will ensure discussions are undertaken with the relevant road and rail authorities to ensure an appropriate mitigation measures are implemented based on the proposed design considerations outlined within the ALCAM Report • Adequate consultation is undertaken with the appropriate regulatory authorities to ensure the intersection requirements for the key intersections are operating safely during the operation phase. 	13.13.2 Operational phase mitigation measures

1.11. Waste Management

Action/item	Mitigation Measures and Commitments	EIS Section
Construction Waste Minimisation	<ul style="list-style-type: none"> Assessment of construction methods and possible waste generation areas will be undertaken in line with the waste management hierarchy to identify the most appropriate measures to manage all wastes. 	14.5.2. Construction Wastes
Update of the Waste Management Plan (WMP)	<p>The WMP will be periodically updated to incorporate aspects of the revised Project and involved the following process:</p> <ul style="list-style-type: none"> Identification and minimisation of waste streams; Improve where possible on the waste disposal and management techniques currently adopted; All waste generated on-site during the construction and operational phases will be disposed of in accordance with the updated WMP; Contracts with construction companies will be negotiated to place responsibility on all contractors to adopt best practice waste minimisation procedures; Waste monitoring and auditing will be undertaken; and training will be provided to personnel and contractors in relation to waste management requirements and practices. 	14.4.1. Waste Management Plan Appendix J.13 Waste Management Plan
Decommissioning Waste Minimisation	<ul style="list-style-type: none"> An assessment of waste will be undertaken in line with the waste management hierarchy to identify the most appropriate measures to manage the remaining waste. 	14.5.4. Decommissioning Wastes

1.12. Visual Amenity

Action/item	Mitigation Measures and Commitments	EIS Section
Retention of Existing Vegetation	<p>Retention of existing roadside and fence line vegetation at the following locations:</p> <ul style="list-style-type: none"> • Oakey-Cooyar Road (along the western side of the road); • Jondaryan-Muldu Road (along the eastern side of the road); • Acland-Silverleigh Road (along the northern and southern sides of the road; and • Within and surrounding Acland. 	15.5 Mitigation Measures
Completion of Tree Screening Activities	<p>Tree-screening activities will occur:</p> <ul style="list-style-type: none"> • along the western side of Oakey-Cooyar Road to minimise expansive views of the revised Project site to the east; • along the western side of the re-aligned section of Jondaryan-Muldu Road to limit views of mining vehicle traffic; • along both the eastern and western sides of Jondaryan-Muldu Road south-west of the revised Project site to limit views of the rail spur and mining vehicle traffic; and • on the eastern and western edges of Acland. <p>Consultation with individual landholders impacted by the revised Project to identify other areas of tree-screening activities surrounding the revised Project site.</p>	
Night lighting	<ul style="list-style-type: none"> • Lighting on the revised Project site will be oriented inwards and screened from the outside where possible. • Consultation with Oakey Airbase and Training Centre will continue as part of the implementation and operation of the Aviation Hazard Management Plan. 	
Rehabilitation of the revised Project site	<ul style="list-style-type: none"> • Rehabilitation will be carried out progressively. The provision of vegetation to the excavated sites, including the out-of-pit spoil dumps, backfilled areas and depressed land forms, will ensure that the site is returned, as much as possible, to its predominately rural outlook. 	
Establishment of Visual Buffers	<ul style="list-style-type: none"> • The establishment of elevated bunds between the revised Project site and the sensitive receptors may be implemented to reduce the overall visibility of the revised Project. Mitigation strategies that were implemented for the Mine could be incorporated along Oakey-Cooyar Road and the re-aligned section of Jondaryan-Muldu Road. 	

Action/item	Mitigation Measures and Commitments	EIS Section
	<ul style="list-style-type: none"> Elevated bunds should only be implemented in areas where limited views are currently provided or where mining activities are located very near to roadsides and could present as a distraction to vehicle occupants. 	
Further identification of impacts	<ul style="list-style-type: none"> Residences will be consulted with in order to determine if future perceived impacts require mitigation; and if so, discuss what form of mitigation is acceptable. For example, a tree screen at the back of a house to completely screen the views of the mine expansion areas is an option. 	

1.13. Social Impact

Action/item	Mitigation Measures and Commitments	EIS Section
Community development	<ul style="list-style-type: none"> Continued operation of the Community Investment Fund and Community Sponsorship and Donation Program. 	16.4. Consultation
	<ul style="list-style-type: none"> Maintain a community grievance mechanism to allow landholders and other stakeholders to lodge issues, concerns, questions or suggestions and have them responded to in a timely manner. 	
	<ul style="list-style-type: none"> Engage with local schools to provide specific curriculum assistance through specialist visits. 	
Change of land use from agriculture to mining.	<ul style="list-style-type: none"> APC will continue to undertake grazing and agricultural activities in the Social Impact Assessment (SIA) study area and provide training and employment opportunities for local people. 	16.16.1. Property and Land Use
	<ul style="list-style-type: none"> Continued progressive rehabilitation of mined land – returned to grazing potential 	
Changes to Acland.	<ul style="list-style-type: none"> Retain and maintain the Tom Doherty Park, War Memorial and the Acland No 2 Colliery 	16.16.1. Property and Land Use
Impact on amenity	<ul style="list-style-type: none"> Move the Jondaryan Rail Loadout Facility (JRLF) onto the revised Project site. 	16.16.1. Property and Land Use
	<ul style="list-style-type: none"> Continue dust suppression measures, such as veneering and implement the use of enclosed hoppers for loading. 	
	<ul style="list-style-type: none"> Implement environmental management measures as identified in Appendix J.19. 	
	<ul style="list-style-type: none"> NAC will continue its on-going community consultation to provide updated information and respond to issues and concerns. 	
	<ul style="list-style-type: none"> The current and future activities of APC will 	

Action/item	Mitigation Measures and Commitments	EIS Section
	<p>promote the continued agricultural use of land surrounding the revised Project site.</p> <ul style="list-style-type: none"> Continue the CRG as a communication channel to identify concerns and disseminate information 	
Increase in SIA study area and Toowoomba Regional Council (TRC) area population.	<ul style="list-style-type: none"> Where practical and possible, NAC will continue its employment of local people. Where practical and possible, NAC will source employment from unskilled labour to help meet labour demand. 	16.16.2. Population and demography
Demand for worker housing, potentially impacting on availability of local rental and purchase properties.	<ul style="list-style-type: none"> NAC will liaise with local accommodation providers so that demand for short term accommodation can be met locally where possible. Where practical and possible, adopt a target of 70 % local employment to reduce demand for housing in the SIA study area. 	16.16.3. Housing and Accommodation
Increased opportunities for local short term accommodation establishments.	<ul style="list-style-type: none"> NAC will liaise with local accommodation providers so that demand for short term accommodation can be met locally where possible. 	16.16.3. Housing and Accommodation
Creation of direct and indirect employment opportunities.	<ul style="list-style-type: none"> Where practical, NAC will recruit local community members (i.e. based on skills and job specific recruitment requirements at the time of employment). Where practical and if necessary, NAC will train previously unskilled local labour to meet recruitment requirements. Continuation of existing partnerships with educational institutions, training groups and government agencies (such as Oakey State High School, University of South Queensland and Downs Group Training) Continued implementation of structured training programs such as apprenticeships and traineeships, and opportunities for vacation employment and graduate employment through NAC Continued appointment of a dedicated Community Liaison Officer, to provide information around employment opportunities to local communities. Job advertisements placed online and in physical locations to allow local access 	16.16.4. Employment and training

Action/item	Mitigation Measures and Commitments	EIS Section
Creation of employment opportunities for vulnerable groups	<ul style="list-style-type: none"> Maintain relationships with government agencies, training groups and community groups to assess the opportunity to provide employment for long-term unemployed people or people with a disability, and assessing skills gaps and training required. 	16.16.4. Employment and training
	<ul style="list-style-type: none"> Implement a targeted advertising campaign to attract a diverse workforce, including circulation of employment opportunities to local community groups and development of specific ads targeting females and Indigenous workers, dedicating 10% of NAC's recruitment budget to targeting advertising, distributing employment advertisements to community groups and the Oakey Reconciliation Council. 	
	<ul style="list-style-type: none"> Maintain preference clauses for employment of local Indigenous peoples in line with the Cultural Heritage Management Plan and Cooperation Agreement 	
	<ul style="list-style-type: none"> Adopt flexible and fair work arrangements such as flexible shift times, working from home arrangements and school hour shifts which are designed to assist employees with maintaining work/life balance and help disadvantaged groups transition to the workforce. 	
	<ul style="list-style-type: none"> Continued adoption of equal employment opportunities for recruitment and continue to support a diverse workforce that includes vulnerable population groups including people from culturally and linguistically diverse backgrounds, Indigenous peoples, women, school leavers, the unemployed and underemployed. 	
	<ul style="list-style-type: none"> Continue to build partnership with the Oakey Reconciliation Council to encourage Indigenous peoples to apply for employment opportunities. 	
Education and training.	<ul style="list-style-type: none"> NAC will continue to liaise with Oakey State High School and other local education providers to identify training opportunities. 	16.16.4. Employment and training
	<ul style="list-style-type: none"> Wherever possible, NAC will continue to provide training and apprenticeships in various skill areas, including agriculture. 	
	<ul style="list-style-type: none"> Continued practice of up-skilling and training staff to progress to new positions and training to Black Coal industry standards. 	
	<ul style="list-style-type: none"> Continued implementation of Management and Leadership Development Training. 	
	<ul style="list-style-type: none"> Continued access to Employee Educational 	

Action/item	Mitigation Measures and Commitments	EIS Section
	<p>Assistance Program to encourage staff to continue their education or undertake further training and qualifications.</p> <ul style="list-style-type: none"> Continued relationship with Downs Group Training to facilitate structure training programs. 	
Procurement opportunities for local businesses.	<ul style="list-style-type: none"> NAC will continue its preferential use of local businesses and suppliers (i.e. based on an assumption of competitive pricing). Where appropriate, NAC will advertise tender requirements locally and participate in information sessions regarding local procurement requirements. NAC will liaise with local accommodation providers so that demand for short term accommodation can be met locally where possible. NAC will adopt and promote the Queensland Resources and Energy Sector Code of Practice for Local Content. NAC will establish a register for local contractors to register interest in the revised Project. NAC will develop and publicise a forward procurement plan. NAC will hold local briefings for businesses explaining what opportunities are available for local contractors and the anticipated timelines. NAC will provide or facilitate the provision of pre-tender training and information to ensure interested parties are tender ready. NAC will hold bi-annual procurement information sessions will be held with potential contractors and subcontractors to explain NAC requirements and expectations. NAC will encourage suppliers to collaborate with other suppliers (alliances / partnerships) which will enable tendering for larger contracts and/or unbundle supply packages to allow suppliers to tender in part. NAC invite pre-qualified suppliers to tender in addition to advertising tender opportunities via public avenues. NAC will identify capability development programs and promoting these to potential suppliers through supplier guides or as feedback for suppliers that were unsuccessful in prequalification or tendering. Advise capability development program providers of capabilities required by the company and 	16.16.5. Economy, Local Business and Industry

Action/item	Mitigation Measures and Commitments	EIS Section
	<p>existing capability gaps in the region.</p> <ul style="list-style-type: none"> Present at the Toowoomba Regional Council 2014 Energy Summit to inform local business of NAC content requires and provide information to allow businesses to ready themselves for tender opportunities. NAC to sponsor a local workshop to educate businesses on preparing for tenders and becoming 'tender ready'. Develop and distribute fact sheet on tender requirements. Consult with the Oakey Reconciliation Council to identify Indigenous business opportunities. Develop and distribute fact sheet on procurement requirements and processes to New Hope Community Information Centre at Oakey, Oakey Reconciliation Council and Traditional Owner representatives. 	
Declining local employment opportunities in agriculture.	<ul style="list-style-type: none"> Where possible, NAC will continue to provide employment and training opportunities through APC. 	16.16.5. Economy, Local Business and Industry
Limited access to social services in smaller towns.	<ul style="list-style-type: none"> Where practical, NAC will continue to support local businesses and services to strengthen the local economic base. 	16.16.11. Revised Project workforce
Impacts on health and emergency services.	<ul style="list-style-type: none"> NAC will liaise with state and regional health departments to provide information about the revised Project and the potential for associated service provision requirements. NAC will continue to undertake appropriate site induction and health / safety training of consultants, contractors and employees to help minimise the number of health and safety related incidents. NAC will continue to provide on-site first aid and fire fighting services. NAC has prepared an Emergency Management Plan for the revised Project (Appendix J.15), which will include consultation with local emergency service centres, including fire, ambulance and police stations and the Jondaryan Rural Fire Brigade. NAC will continue to liaise directly and through the CRG with Oakey Hospital and other local health services. 	16.16.6. Social Infrastructure

Action/item	Mitigation Measures and Commitments	EIS Section
Increased demand for education services	<ul style="list-style-type: none"> NAC will continue to liaise directly with Oakey State High School and other local schools through the Community Reference Group and other mechanisms. 	16.18. Summary of Mitigation Measures
	<ul style="list-style-type: none"> Partnerships and relationships with local educational institutions such as Oakey State High School, University of Queensland and University of Southern Queensland to understand concerns and opportunities. 	
Decreased connectivity on and around the Project site due to increased vehicle movement.	<ul style="list-style-type: none"> Access to individual properties surrounding the revised Project site will be maintained using the existing peripheral road network. 	16.16.7. Access and connectivity
	<ul style="list-style-type: none"> NAC will develop and implement a communication program to inform local residents and road users of planned changes to traffic and access conditions undertaken as a result of the revised Project. 	
	<ul style="list-style-type: none"> NAC will employ appropriate road safety signage and minimise delays to travel during the revised Project related construction and transport activities. 	
	<ul style="list-style-type: none"> Develop a Traffic Management Plan for the revised Project in consultation with relevant state and local government departments. 	
Increased traffic congestion and travelling times for local people.	<ul style="list-style-type: none"> NAC will undertake maintenance and upgrade activities on road surfaces that are significantly affected by the revised Project related traffic in a timely manner. This will be done in consultation and agreement with the TRC. 	16.18. Summary of Mitigation Measures
Improved amenity at site of JRLF.	<ul style="list-style-type: none"> Decommissioning of the JRLF. 	16.16.8. Amenity
	<ul style="list-style-type: none"> Removal of buildings, coal stockpile and concrete floors at JRLF. 	
	<ul style="list-style-type: none"> Use of the JRLF site for grazing and agriculture following decommissioning of the JRLF. 	
Dust, noise and visual impacts from mining operations.	<ul style="list-style-type: none"> NAC will continue to implement the environmental impact control strategies and measures described in Appendix J.19. 	16.16.8. Amenity
	<ul style="list-style-type: none"> Use of enclosed hoppers, veneering and dust suppression measures at the rail loading facility. 	
	<ul style="list-style-type: none"> NAC will implement visual screening measures, such as tree planting, along roads and neighbouring properties. 	

Action/item	Mitigation Measures and Commitments	EIS Section
Improvements in the health and wellbeing of vulnerable groups if they are able to access employment or other opportunities that improve their financial wellbeing.	<ul style="list-style-type: none"> Where practical and possible, implement 70% local workforce target to maximise local employment opportunities. 	16.16.9. Community Health and Safety
	<ul style="list-style-type: none"> Continue to build a diverse workforce by ensuring that it is non-discriminatory and equal employment opportunity provider and continue training and apprenticeship programs wherever possible. 	
Safety concerns related to increases in heavy vehicles in towns and local roads.	<ul style="list-style-type: none"> Develop a Traffic Management Plan for the revised Project in consultation with relevant state and local government departments. 	16.16.9. Community Health and Safety
	<ul style="list-style-type: none"> Communication (i.e. signage, advertisements in local papers, consultation materials) about changes to local access, road hazards and expected traffic volumes during construction. 	
	<ul style="list-style-type: none"> Develop a fatigue and road safety strategy for the workforce. 	
Concerns of impacts associated with mining activities.	<ul style="list-style-type: none"> NAC will use enclosed hoppers and other dust mitigation measures to reduce dust impacts associated with the coal stockpile. 	16.16.9. Community Health and Safety
	<ul style="list-style-type: none"> NAC will implement the environmental impact control strategies and measures described in Appendix J.19. 	
Reduced rural and agricultural amenity.	<ul style="list-style-type: none"> NAC will continue its on-going community consultation to provide updated information and respond to issues and concerns. 	16.16.8. Amenity
	<ul style="list-style-type: none"> The current and future activities of APC will promote the continued agricultural use of land surrounding the revised Project site. 	
Reduced ability to live in accordance with environmental and social values.	<ul style="list-style-type: none"> NAC will implement the environmental impact control strategies and measures described in Appendix J.19. 	16.16.10. Community values
	<ul style="list-style-type: none"> Continued operation of the New Acland Community Reference Group to understand community concerns and disseminate project information. 	
	<ul style="list-style-type: none"> Continued commitment to provide the staffed New Hope Community Information Centre at Oakey 	
	<ul style="list-style-type: none"> Continued land and stakeholder engagement and implementation of the Local Stakeholder Management Plan. 	
	<ul style="list-style-type: none"> continued communications through the project phone line and email address and implementation of a complaints management process. 	

Action/item	Mitigation Measures and Commitments	EIS Section
	<ul style="list-style-type: none"> participation in the Oakey Community Care Group, Toowoomba Surat Basin Enterprise, Oakey Chamber of Commerce and other local groups. Continue to liaise with local Traditional Owners as outlined in the Cultural Heritage Management Plan and Cooperation Agreements and continue to build relationship with Oakey Reconciliation Council. 	
Preservation of sites of historical or social significance.	<ul style="list-style-type: none"> NAC will maintain the sites through general ground keeping and maintenance. 	16.16.10. Community values
Safety risks associated with travelling to site.	<ul style="list-style-type: none"> NAC will continue to communicate the company's corporate policies. NAC will continue to manage health and safety issues, such as fatigue, in an effort to reduce the potential for accidents on and off the revised Project site. 	16.16.11. Revised Project workforce
Worker health and safety	<ul style="list-style-type: none"> medical facilities and services and emergency services will be provided on-site at the Mine in line with the requirements of the Health (Drugs and Poisons) Regulations 1996. Continue to manage communicable diseases and viruses through vaccination programs and education. Undertake appropriate site induction and health/safety training of consultants, contractors and employees to minimise the number of health and safety related incidents on-site. Implement Emergency Management Plan to incorporate the revised Project. Maintain an effective and well-communicated Safety and Health Management System (SHMS) to limit the number of mining-related emergencies. The SHMS will include relevant health aspects, such as fatigue management. Maintain current Employee Assistance Programme (EAP) to assist employees in dealing with personal issues and minimise impact on family assistance services locally. Maintain Fitness for Duty (FFD) Policy to avoid onsite accidents and emergencies. 	

1.14. Economics

Action/item	Mitigation Measures and Commitments	EIS Section
Reduction in agricultural output from impacted land	<ul style="list-style-type: none"> Household impacts from a reduction in agricultural output have been mitigated to some extent through compensation for landowners. Rehabilitation should ensure that land is returned to beneficial post mine use as possible. 	17.4.2 Mitigating economic risks
Lower than expected benefits for the regional study area	<ul style="list-style-type: none"> Employ strategies outlined in Section 17.4.1 to increase local participation. Locally sources labour and materials should only be pursued where the net benefit of the project is not undermined. 	17.4.1 Maximising economic benefits in the study area
Displacement of employment following construction and commissioning phase	<ul style="list-style-type: none"> Maximise the transfer of appropriately skilled and experienced staff within the NHG where possible Undertake a skills and education audit with employees to determine existing levels of transferrable skills, and opportunities for further training in the skills development program; Identify local skills shortages through consultation with state and local government, industry, economic development boards and local training providers. 	17.4.2 Mitigating economic risks
Employment is transferred from other industries or businesses leading to reduced business viability and increasing labour costs	<p>Mitigating inflationary pressures are out of the scope of control for the proponent, however where possible local development should be supported through:</p> <ul style="list-style-type: none"> Training for currently unemployed workers to encourage generated employment Advertising employment opportunities with welfare agencies in the Project study area 	17.4.2 Mitigating economic risks
Significant migration to the local area causing upward pressure on property values	<ul style="list-style-type: none"> Source employment locally where appropriate to limit migration and pressure on property values Conduct surveys to ascertain the number of workers likely to relocate for the revised Project and whether construction of temporary or permanent accommodation may be required 	17.4.2 Mitigating economic risks
Impact on future development in the region	<ul style="list-style-type: none"> The revised Project is not expected to negatively impact on future development in the region except where significant competition for labour and materials exists. Should supply constraints exist, this impact can be mitigated through sourcing labour and materials outside of the region. This approach should only be pursued where necessary, since the objective of sourcing labour and materials locally is to maximise economic benefits for the region. Positive impacts include potential new business investment from supporting industries and industries benefitting from increased consumption expenditure such as retail trade. This benefit can 	17.4.2 Mitigating economic risks

Action/item	Mitigation Measures and Commitments	EIS Section
	be enhanced through employing the strategies outlined in Section 17.1.4 , where this does not cause excessive pressure on availability of labour and materials.	

1.15. Health Safety and Risk

Action/item	Mitigation Measures and Commitments	EIS Section
Dangerous goods and hazardous substances	<ul style="list-style-type: none"> Material Safety Data Sheet (MSDS) information will be obtained and communicated to all site personnel involved in the storage, handling, use and disposal of dangerous and hazardous substances and materials. 	18.3. Dangerous Goods and Hazardous Substances
Pests	<ul style="list-style-type: none"> Appropriate waste management strategies will limit any pest impacts. A Pest and Weed Management Plan are currently in place for the Mine and have been updated for the revised Project. The Pest and Weed Management Plan for the revised Project site is provided in Appendix J.9. This plan will be implemented during construction, operation and decommissioning phases of the revised Project. 	18.7.2. Mitigation Measures
Water resources	<ul style="list-style-type: none"> Mine water discharges to waterways will be restricted to emergency discharges during extreme rainfall/flood conditions, thus discharges (if required) would be significantly diluted with flood waters. All sewage will be treated on-site at the Sewage Treatment Plant (STP) and treated effluent drains to an on-site sediment dam. No sewage effluent will be discharged to waterways. The WRMP for the revised Project is provided in Appendix J.4. 	18.7.2. Mitigation Measures
Driver fatigue	<ul style="list-style-type: none"> NAC will ensure that appropriate discussions are undertaken with the relevant road and rail authorities to ensure an appropriate mitigation measures are implemented based on the proposed design considerations outlined within the ALCAM Report, which is presented in Appendix G.8.4. NAC implement a driver fatigue policy on-site, and this is communicated to all site personnel during the routine site induction. NAC's Fitness for Work – Fatigue Management is provided in Appendix A.4. 	18.7.2. Mitigation Measures

Action/item	Mitigation Measures and Commitments	EIS Section
Emergency response	<ul style="list-style-type: none"> An Emergency Management Plan is currently implemented at the Mine and has been updated for the revised Project. The Emergency Management Plan for the revised Project is located in Appendix J.15. 	<p>18.8. Emergency Response</p> <p>18.9. Emergency Management Plan</p>
Potential impacts on operations of the Oakey Airbase and the Army Aviation Training Centre	<ul style="list-style-type: none"> To address the Department of Defence concerns an Aviation Hazard Management Plan has been developed in consultation with the Department of Defence and is located in Appendix J.17. 	18.10. Aviation Hazard Management Plan

1.16. Community Consultation

Action/item	Mitigation Measures and Commitments	EIS Section
Stakeholder Engagement Plan	<ul style="list-style-type: none"> NAC will continue to provide proactive stakeholder engagement activities about the revised Project, in accordance with the Stakeholder Engagement Plan, which is provided in Appendix K.1. 	<p>19.4. Consultation approach</p> <p>Appendix K.1 Stakeholder Engagement Plan</p>
Local Stakeholder Management Plan	<ul style="list-style-type: none"> NAC will continue to ensure its neighbours are properly consulted in relation to revised Project, through the implementation of the Local Stakeholder Management Plan which is provided in Appendix J.18. 	Appendix J.18 Local Stakeholder Management Plan
Sponsorship and donation	<ul style="list-style-type: none"> NHG will continue to contribute sponsorships and donations to support schools, sporting groups and not-for-profit organisations in the local region. 	19.5.14. NAC Community Program