



Adani Mining Pty Ltd

NORTH GALILEE BASIN RAIL PROJECT

Additional information to the Environmental Impact Statement

Final Commitment Register

July 2014

Commitments

The table below provides a summary of commitments identified in the North Galilee Basin Rail Project (NGBR Project) Environmental Impact Statement (EIS) and Additional information to the Environmental Impact Statement (AEIS). Commitments have been listed generally in order of appearance of the respective chapters as presented in the EIS. Commitments that are applicable to multiple EIS chapters have only been listed once (and/or chapter topics are considered together), with duplication of commitments removed. For a comprehensive summary of commitments as well as mitigation and management measures, refer to NGBR Project AEIS Volume 2 Appendix H Revised environmental management plan framework.

	Commitment	Cross-reference
1	Project description	
1.1	A decommissioning and rehabilitation management plan will be developed for areas temporarily disturbed during construction. Rehabilitation success criteria will be established in accordance with the Department of Environment and Heritage Protection Guideline 'Rehabilitation requirements for mining resource activities' – or other relevant guidelines at the time of rehabilitation.	AEIS Volume 2 Appendix B Revised project description
1.2	Further decommissioning activities will occur at the end of the 90 year life of the NGBR Project. Appropriate rehabilitation strategies will be planned and refined throughout the life of the NGBR Project, and in accordance with any legislated requirements closer to the time of intended end-of-life decommissioning.	
1.3	Water intended for potable use will be treated to an acceptable level as per the Australian Drinking Water Guidelines.	
2	Land use and tenure	
2.1	Stock route agreements will be developed, in consultation with key stakeholders, which specify the final treatment for each stock route, designs of the stock route crossings (including drainage, ramps and stockyards) and ongoing maintenance arrangements.	EIS Volume 1 Chapter 3 Section 3.4.4
2.2	Where closure of stock routes is required, Adani will conduct discussions with the Department of Natural Resources and Mines (DNRM), Isaac Regional Council, Whitsunday Regional Council and landholders regarding re-alignment.	

	Commitment	Cross-reference
2.3	Discussions with the relevant telecommunications, water and gas infrastructure owners and service providers will be undertaken during detailed design to establish the most effective protection, relocation or modification for each service crossing	
2.4	Ongoing consultation will be undertaken with the relevant electricity infrastructure owners regarding potential disruptions to their infrastructure, including appropriate and acceptable protection measures	
2.5	Infrastructure agreements will be developed with all relevant infrastructure owners prior to construction commencing	
2.6	Consultation with the Department of Energy and Water Supply (DEWS) and DNRM (Water) will be undertaken to confirm the mitigation requirements relating to development and location of the final rail corridor within the Suttur River dam site (RA8). Should the NGBR Project need to be relocated at some time in the future as a result of construction of the RA8 Dam, Adani will contribute to the full cost of relocation.	EIS Volume 1 Chapter 3 Section 3.4.5
2.7	Adani will comply with requirements outlined in the <i>Mineral Resources Act 1989</i> regarding construction on a granted mining tenure.	EIS Volume 1 Chapter 3 Section 3.4.2
3	Topography, geology, soils and land contamination	
3.1	A soil survey will be undertaken prior to construction commencing to verify soil types and develop a Soils Management Plan and an Erosion and Sediment Control Plan (ESCP).	EIS Volume 1 Chapter 5 Section 5.4.1
3.2	<p>A Soils Management Plan will be developed for problematic soils identified during the detailed soil survey and include the following:</p> <ul style="list-style-type: none"> – Identification of cracking clays with potential trafficability hindrances – Identification of unstable soils that would require additional provisions in the ESCP – Identification of saline soils, which will typically be unsuitable for use in rehabilitation – Identification of acidic or sodic soils that may require amelioration and management prior to rehabilitation. <p>The Soils Management Plan will also include measures for managing problematic soils identified during the soil survey.</p>	

	Commitment	Cross-reference
3.3	An acid sulfate soils (ASS) investigation will be undertaken for areas of PASS between chainages 3.4 km and 9.9 km for areas < 20 mAHD in accordance the State Planning Policy and the latest version of the Queensland ASS Technical Manual Soil Management Guideline.	
3.4	<p>An ASS Management Plan will be prepared and specifically tailored to the construction activities based on the results of the ASS investigation in accordance the State Planning Policy and the latest version of the Queensland ASS Technical Manual Soil Management Guideline. That is, for any activities below 5 meters AHD that will:</p> <ul style="list-style-type: none"> – Disturb >100m³ (bulked volume) of ASS material – Place hard fill material of >500 m³, with an average thickness > 0.5 m³ and/or – Disturb existing groundwater or surface water regimes. 	
3.5	<p>The ASS Management Plan will developed in accordance with the State Planning Policy and the latest version of the Queensland ASS Technical Manual Soil Management Guideline. Applicable management techniques may include:</p> <ul style="list-style-type: none"> – Chemical neutralisation (use of pure fine agricultural lime, Aglime) through mechanical mixing by plough or excavator, to provide adequate homogeneity of the sediment-lime mix – The less preferred, higher risk method of anoxic storage or placement below the water table and beneath clean non-ASS fill – Disposal of neutralised material upon acceptance of relevant permits. 	
3.6	A detailed geotechnical investigation will be undertaken and will determine the risk of heaves and mud waves, and where applicable, management measures will be included in an ASS Management Plan.	
3.7	Additional investigations on all land within the final rail corridor will be undertaken in order to assess the potential contamination status and develop appropriate procedures to manage identified potential or actual contamination. Additional assessments will include a site inspection by a 'suitably qualified person' as a minimum. Where required, a Sampling and Analysis Plan will be developed and tailored to each property / potentially contaminated area.	
3.8	For the properties containing Strategic Cropping Land (SCL) that did not progress past the preliminary	

	Commitment	Cross-reference
	History of Cropping (HOC) assessment, applications will be submitted to DNRM if required in accordance with the relevant legislation.	
4	Nature conservation, Matters of National Environmental Significance & Offsets	
4.1	Baseline field surveys of identified “hotspots” within, and near, construction areas will be undertaken prior to commencement of construction.	EIS Volume 1 Chapter 6 Section 6.4.3
4.2	<p>A comprehensive survey of the ecological values of the final rail corridor will be undertaken to:</p> <ul style="list-style-type: none"> – Confirm state significant biodiversity values under the relevant offset policies – Confirm the extent of matters of national environmental significance, including threatened ecological communities and potential habitat for species listed under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> – Determine the presence of individuals, populations/colonies and/or important habitat areas for threatened species not detected during field surveys for the EIS, via targeted additional field studies where considered likely to occur. – Confirm the extent and condition of regional biodiversity corridors within the final rail corridor – Confirm the extent of watercourse vegetation – Complete biocondition assessment of confirmed state significant biodiversity values or matters of national environmental significance – Determine likely extent of potential groundwater dependent ecosystems. 	EIS Volume 1 Chapter 7 Section 7.4 AEIS Volume 2 Appendix E Revised offsets
4.3	The findings of the comprehensive survey of ecological values will be provided to the Department of Environment and Heritage Protection and the Commonwealth Department of the Environment.	
4.4	The comprehensive survey of ecological values will inform the development of the environmental management plan, Species Management Plans, the final offset package, Fauna Crossing Strategy, subsequent vegetation clearing applications and any associated property maps of assessable vegetation.	
4.5	A Construction Flora and Fauna Management Plan will be developed prior to construction commencing and incorporating the results of baseline field surveys. This plan will include development of Species	

	Commitment	Cross-reference
	Management Plans for identified threatened species, and will be implemented during construction to manage and mitigate the potential adverse impacts on flora and fauna.	
4.6	<p>A Fauna Crossing Strategy will be developed in consultation with, and for the approval of, the Department of Environment and Heritage Protection to mitigate potential impacts on fauna communities utilising habitat traversed by the NGBR Project. The Fauna Crossing Strategy will include fauna-friendly design principles for the design of culverts, bridges and other watercourse structures, particularly in important habitat areas of mapped remnant vegetation and habitat potentially suitable for threatened species. The Fauna Crossing Strategy will set design criteria for fauna-friendly features, including:</p> <ul style="list-style-type: none"> – Culverts with ledges that facilitate fauna movement – Using grids that allow natural lighting – Protecting and enhancing entries and exits – Standard, four strand barbed wire fencing, with a plain top wire in sensitive areas. 	
4.7	Weed mapping will be undertaken prior to commencement of construction. Mapping will cover the final rail corridor and ancillary infrastructure areas but will be particularly focused at high risk locations.	
4.8	A Construction Weed and Pest Management Plan will be developed prior to construction commencing. The Weed and Pest Management Plan will align with the priorities of Isaac Regional Council and Whitsunday Regional Council with regards to weed and pest species, and Adani's responsibilities under the <i>Plant Protection Act 1989</i> , the <i>Chemical Usage (Agricultural and Veterinary) Control Act 1988</i> and the <i>Agricultural Chemicals Distribution Controls Act 1966</i> . The plan will include measures for monitoring, management and where necessary, eradication of weeds, disposal of green waste and vehicle/plant weed wash down procedures.	
4.9	A Mosquito Management Plan will be developed as part of the Construction Weed and Pest Management Plan for the construction phase of the NGBR Project.	
4.10	An Operation Weed and Pest Management Plan will be developed to manage pest and weed species during operation. The Weed and Pest Management Plan will align with the priorities of Isaac Regional Council and Whitsunday Regional Council with regards to weed and pest species, and Adani's responsibilities under the <i>Plant Protection Act 1989</i> , the <i>Chemical Usage (Agricultural and Veterinary) Control Act 1988</i> and the	

	Commitment	Cross-reference
	<i>Agricultural Chemicals Distribution Controls Act 1966.</i>	
4.11	Prior to construction commencing, consultation with the Department of National Parks, Recreation, Sport and Racing will be undertaken to obtain historical data on previously conducted turtle nesting surveys in the region.	
4.12	Pre-clearance surveys will be undertaken in areas identified as potential habitat for threatened species, prior to commencement of clearing. During pre-clearance surveys, habitat features that may be used by fauna for nesting or shelter will be marked (e.g. hollow-bearing trees, log piles) and thoroughly checked by a fauna spotter-catcher prior to vegetation clearing commencing.	
4.13	<p>A monitoring program will be developed and implemented to assess the success of the pre-construction and construction mitigation and management measures for flora and fauna. The monitoring program will include:</p> <ul style="list-style-type: none"> – Monitoring of habitat features (i.e. hollows, logs) that have been relocated into adjacent habitat or artificial habitat (i.e. nest boxes, artificial water sources) that have been installed into adjacent habitat to compensate loss of habitat – Monitoring of fauna-friendly design features incorporated into culverts, bridges and other watercourse structures – Monitoring of rehabilitated areas to assess success against rehabilitation criteria using the BioCondition assessment methodology. 	
4.14	The Rail Bushfire Management Plan developed for the Carmichael Coal Mine and Rail project (refer to Carmichael Coal Mine and Rail SEIS, Volume 4, Appendix S2) will be extended for use with the North Galilee Basin Rail Project. This plan has been developed to address rail-specific fire risks and to protect the rail corridor, rail operations and the corridor’s neighbours against bushfire.	EIS Volume 1 Chapter 7 Section 7.4.4
4.15	Offsetting will be undertaken to address any residual loss of TEC area where adjustments to footprints are not possible.	
4.16	As a precaution, appropriate monitoring, avoidance, mitigation and management measures for species that ‘may occur’ will be incorporated into Species Management Plans. Should further surveys provide no evidence to indicate the presence of these species, these measures will be removed from the Species	

	Commitment	Cross-reference
	Management Plans.	
4.17	A Water Quality Management Plan will be established to monitor changes in the water quality of the Caley Valley Wetland and other major watercourses.	
4.18	A property map of assessable vegetation will be prepared and certified by the Department of Natural Resources and Mines, to confirm potential impact areas, where required.	EIS Volume 1 Chapter 6 Section 6.4.3
4.19	Biocondition assessment of potential impact areas and potential offset sites will be undertaken to determine their ecological equivalence.	EIS Volume 1 Chapter 7 Section 7.4 AEIS Volume 2 Appendix E Revised offsets
5	Chapter 9 Water resources	
5.1	A Water Quality Management Plan will be developed and implemented prior to construction commencing.	EIS Volume 1 Chapter 9 Section 9.4.3
5.2	Further investigations for the detailed design of watercourse structures will be undertaken and include detailed identification and consideration of all afflux affected property and assets. This will determine afflux levels and appropriate drainage structure dimension requirements.	
5.3	Additional hydrology and hydraulic modelling will be undertaken during detailed design to refine bridge design, culvert design and afflux values, and ensure the minimisation of hydraulic impacts.	
5.4	At quarry locations, further investigation into potential groundwater impacts will be undertaken to better characterise the groundwater conditions and impacts at these locations.	
6	Air quality	
6.1	A Dust Management Plan will be developed and implemented for the construction phase of the NGBR Project.	EIS Volume 1 Chapter 10 Section 10.4.3
6.2	A Coal Dust Management Plan will be implemented to address the operation of all trains and maintenance activities.	
6.3	Adani will consult with the Department of Environment and Heritage Protection and the Department of Transport and Main Roads during preparation of the Dust Management Plan and Coal Dust Management Plan.	

	Commitment	Cross-reference
6.4	All complaints relating to air quality (including dust emissions) will be recorded and managed in accordance with the complaints management procedure. Corrective action will be undertaken in accordance with the environmental management plan if the complaint is validated.	
6.5	Potential impacts to occupants of construction camps will be fully mitigated to avoid any potential health risks.	
7	Greenhouse gas	
7.1	An energy efficiency review will be undertaken at the commencement of operations and every five years following, to identify initiatives and technology that may be integrated into the NGBR Project.	EIS Volume 1 Chapter 11 Section 11.4.1
8	Noise and vibration	
8.1	Operational noise monitoring will be undertaken to validate noise predictions. Where operational noise monitoring identifies noise impact occurring at a sensitive receptor, additional mitigation measure will be employed.	EIS Volume 1 Chapter 12 Section 12.4.3
8.2	Sensitive receptors included in the environmental management plan will be updated during detailed design to ensure that receptors applicable to the rail alignment are appropriately identified and managed.	
8.3	Adani will consult with the Department of Environment and Heritage Protection during the planning stage of operational noise monitoring regarding applied noise standards.	
8.4	Respond to complaints relating to construction in accordance with complaints management procedures. Corrective action will be undertaken in accordance with the environmental management plan if the complaint is validated.	
8.5	Undertake operational noise monitoring to validate model predictions and employ additional mitigation such as screening, barriers, bunds or building works as necessary.	
8.6	Potential impacts to occupants of construction camps will be fully mitigated to avoid any potential health risks.	

	Commitment	Cross-reference
9	Waste	
9.1	<p>A waste management strategy has been developed for the NGBR Project. It will continue to be developed and refined during the detailed design and will include:</p> <ul style="list-style-type: none"> – The development of a procurement plan – Formalisation of a waste management standard – Development of site based management plans for wastewater discharge – Waste auditing and monitoring. 	EIS Volume 1 Chapter 13 Section 13.6
10	Transport	
10.1	A construction Traffic Management Plan (TMP) will be developed and implemented prior to construction commencing on site. Development of the TMP will include consultation with Department of Transport and Main Roads (DTMR), Whitsunday Regional Council, Isaac Regional Council and the Queensland Police Service.	EIS Volume 1 Chapter 14 Section 14.6
10.2	The TMP will include measures to manage driver fatigue in accordance with DTMR strategies and any obligations under the <i>Heavy Vehicle National Law Act 2012</i> .	
10.3	A Road Use Management Plan (RUMP) will be developed in conjunction with relevant infrastructure owners and in consultation with Queensland Police Service, where relevant.	
10.4	A Road Impact Assessment (RIA) will be prepared prior to construction commencing for all key roads and approaches to key intersections in the study area. The RIA will identify locations on the road network where a detailed pavement impact assessment (PIA) is required. A PIA will be prepared and submitted to DTMR/Council prior to construction commencing. The PIA will assess the impact of construction traffic on the life of the affected road pavements and recommend remedial measures. The extent of the remedial measures and compensation will be determined through an infrastructure agreement process, involving Adani, DTMR and local councils.	
10.5	Prior to commencement of construction, further investigation and consultation will be undertaken with affected infrastructure owners and associated regulatory agencies regarding final crossing treatment	

	Commitment	Cross-reference
	arrangements, impact management practices to be employed and the development and execution of Infrastructure Agreement with respective parties.	
10.6	Infrastructure agreements will be developed with all relevant infrastructure owners prior to construction commencing.	
11	Cultural heritage	
11.1	A Cultural Heritage Management Plan (CHMP) will be developed in accordance with the <i>Aboriginal Cultural Heritage Act 2003</i> and the Department of Aboriginal and Torres Strait Islander and Multicultural Affairs (DATSIMA) guidelines.	EIS Volume 1 Chapter 15 Section 15.5
11.2	Ongoing consultation will be conducted with Native Title and Traditional Owner stakeholders including development of Indigenous Land Use Agreements.	
11.3	Comprehensive cultural heritage surveys will be undertaken in accordance with Adani's duty of care under the <i>Aboriginal Cultural Heritage Act 2003</i> and the <i>Queensland Cultural Heritage Act 1992</i> .	
11.4	A Non-indigenous CHMP will be developed as part of the Construction EMP (separate to Indigenous CHMP's that are developed with each of the affected Indigenous traditional owner groups) to manage compliance with the <i>Queensland Cultural Heritage Act 1992</i> .	EIS Volume 1 Chapter 15 Section 15.4.1
12	Social and economic impacts	
12.1	Adani will monitor and review impacts and management strategies on an annual basis during the construction phase and the first two years of operation. Subsequent impacts and the respective management strategies will be reviewed annually and reported through Adani's annual reporting process.	EIS Volume 1 Chapter 16 Section 16.6
12.2	Adani will extend its existing community development plan to the NGBR Project.	
12.3	Adani will include community investment into its overall business and planning process, for integrating and delivering effective business outcomes and will seek to do this in a transparent and genuine manner.	
12.4	Adani will develop a Local Content Strategy in accordance with Queensland Resource Council's Queensland	EIS Volume 1 Chapter 16

	Commitment	Cross-reference	
	Resources and Energy Sector Code of Practice for Local Content 2013 and associated implementation guidelines. In developing the Local Content Strategy, Adani will work with the Whitsunday Regional Council, Isaac Regional Council, the economic development groups in the region and local businesses in conjunction with the Queensland Government and the Industry Capability Network.	Section 16.6.1	
12.5	Preference for workforce sourcing will be given in the hierarchy of local, regional, state and national recruitment for direct, as well as contractor employment opportunities.		
12.6	Adani will continue to engage with the Jangga, Birriah and Juru Peoples through the CHMP and native title processes and will continue to work with traditional owners to further develop and agree upon Indigenous business and employment opportunities.		
12.7	A non-indigenous CHMP will be developed as a part of the Construction Environmental Management Plan.		
12.8	Adani has commenced engagement with DATSIMA to develop an appropriate Indigenous Participation Plan.		
12.9	Adani commits to the development, training and employment of apprentices/trainees on the NGBR Project, where appropriate. Adani will support skills and up-skilling development of its workforce and is strongly encouraging its contractors to actively support apprentice/trainee development, training and employment through the placement of appropriate number of apprentices and trainees on the work site, subject to associated regulatory and associated restrictions.		
12.10	Adani will engage with regional training providers to offer appropriate training and apprenticeship programs.		
12.11	For sustainability of the region's community and economy Adani will also explore supporting skills development in other industrial sectors relevant to the regional study area		
12.12	Adani will develop a Workforce Management Plan for the NGBR Project in consultation with the Department of Education, Training and Employment. The plan will be applicable to Adani, as well as the contractors engaged for the NGBR Project.		EIS Volume 1 Chapter 16 Section 16.6.2
12.13	The Workforce Management Plan will incorporate a Code of Conduct, developed in consultation with the Queensland Police Service.		

	Commitment	Cross-reference
12.14	<p>Adani will consult with landholders about the location and design for stock and vehicle/equipment crossings of the final rail corridor and ancillary infrastructure (both temporary and permanent) based on minimising impacts on access to bisected properties whilst taking into account engineering design constraints. The outcomes may include:</p> <ul style="list-style-type: none"> – Holding yards established at either side of stock crossings as necessary – Private tracks joined to local roads or grade separated where possible to preserve their utility – Surface drainage patterns preserved (where possible) with the design of culverts and cut/fill areas. 	EIS Volume 1 Chapter 16 Section 16.6.3
12.15	Adani commits to monitoring regional housing conditions through consultations with key housing stakeholders in Bowen and implement an approach to accommodation management that is transparent and flexible to changing housing conditions.	EIS Volume 1 Chapter 16 Section 16.6.4
12.16	Adani commits to developing a workforce integration and cohesion program.	EIS Volume 1 Chapter 16 Section 16.6.5
12.17	Adani commits to engaging with regional health providers and emergency service providers, including Queensland Fire and Emergency Services and Queensland Police Service, for input into the Emergency Management Plan	
12.18	A stakeholder engagement plan for the NGBR Project will be developed within Adani’s overall stakeholder engagement strategy	EIS Volume 1 Chapter 16 Section 16.6.7
13	Climate and natural hazards & Hazard, risk, health and safety	
13.1	A Risk Management Plan will developed and implemented for the NGBR Project and include preventative and responsive mitigation measures to reduce the overall risk of potential hazards identified as high risk.	EIS Volume 1 Chapter 17 Section 17.5 EIS Volume 1 Chapter 18 Section 18.7
13.2	An Emergency Management Plan will be developed, including specific emergency response plans for potential hazards and risk identified through the Risk Management Plan. Adani commits to engage with emergency service providers, including Queensland Fire and Emergency Services and Queensland Police	EIS Volume 1 Chapter 18 Section 18.5.1

	Commitment	Cross-reference
	Service, for input into the Emergency Management Plan.	
13.3	Adani will develop and implement a Rail Health and Safety Management System (RHSMS), including a Safety Management Plan, for the mitigation of risk so far as reasonably practicable. The RHSMS will provide a systematic way to identify hazards and control risks while maintaining assurance that the risk controls are effective, to provide a safe and healthy work environment to its employees, contractors and visitors.	
13.4	Rail safety accreditation will be obtained and maintained. Tracks, wagons and locomotives will be routinely inspected and maintained.	
13.5	Proper signalling systems will be installed and will be routinely inspected and maintained.	
13.6	The Project will install either passive or active controls at level crossings. Grade separators will be constructed at identified crossings as required by DTMR.	
13.7	The Project will provide radio communications systems, transponders/GPS, rail track signalling systems and in-vehicle communication as per Australian Standards.	
13.8	Provision of adequate and safe access for fire fighting/other emergency vehicles and safe evacuation. Adani will work closely with QPS, DCS and other emergency service providers with regards to services and emergency responses.	
13.9	As part of the spill response plan, spillages will be prevented from entering drains or water courses and absorbent material will be placed on spillages which will be collected for disposal and any contaminated soil removed for treatment and disposal. A licenced contractor will be used for removal and disposal of spilled waste oil and clean-up material.	
13.10	The Rail Bushfire Management Plan developed for the Carmichael Coal Mine and Rail project (refer to Carmichael Coal Mine and Rail SEIS, Volume 4, Appendix S2) will be extended for use with the North Galilee Basin Rail Project. This plan has been developed to address rail-specific fire risks and to protect the rail corridor, rail operations and the corridor's neighbours against bushfire.	

	Commitment	Cross-reference
14	Consultation	
14.1	Adani will undertake consultation with affected landholders regarding property impacts, valuation and compensation arrangements, including consideration of ongoing flood modelling and property-scale mapping.	AEIS Volume 2 Appendix I Revised consultation
14.2	Adani will continue to consult with affected resource tenement holders and the Department of Natural Resources and Mines in regard to how and when consent is required (if any) to be obtained for access to, and/or for other activities on, affected resource tenements during detailed design, construction and/or operations.	