

13.0 Statement of Commitments

The following table details the proposed management and mitigation measures that QR National commits to for the TSF Project.

Table 60: Statement of Commitments

	Table 66. Glater Ferri of Corribinities in		
Item	Commitment		
Plans,	Plans, Documentation And Approvals		
Pl	Construction and operation of the TSF will be undertaken in accordance with the submitted plans and the description of the proposed development provided in this Environmental Assessment.		
P2	All licences, permits and approvals required by law to construct and operate the TSF will be obtained and maintained as required.		
P3	Operation of the TSF will be undertaken in accordance with the Environmental Management Plan (EMP). The EMP will address all measures to be implemented to minimise and manage potential environmental impacts during the operation of the TSF. The EMP will include the following plans: a) Conservation Management Plan; b) Waste Management Plan; c) Traffic Management Plan; d) Stormwater Management Plan;		
	e) Erosion and Sediment Control Plan; f) Flood Emergency Management Plan; g) Water Quality Management Plan; h) Acid Sulphate Soil Management Plan; and i) Aboriginal Cultural Heritage Management Plan.		
Const	truction		
C1	Construction of the TSF will be undertaken in accordance with the Construction Environmental Management Plan (CEMP). The CEMP will outline the environmental mitigation measures to be implemented during the construction phase and will document mechanism for demonstrating compliance with the relevant approvals. The CEMP will include the plans that address the following: a) construction traffic management; b) construction noise and vibration management; c) water quality and soil management; d) groundwater management; e) flora, fauna and weed management; f) non-indigenous and indigenous heritage management; g) aboriginal heritage management; h) community liaison; i) hazards and risk management; j) spoil management; k) waste management; and l) air quality management.		
C2	Construction activities associated with the TSF will be undertaken during the following hours: a) Monday to Friday (inclusive) – 7:00am to 6:00pm b) Saturday – 8:00am to 1:00pm c) Sundays and public holidays – No works to be undertaken at any time		
C3	Where construction works are required to be undertaken outside of the standard construction		
L			



	•
ltem	Commitment
	hours, the following measures will be implemented:
	a) works will be kept to a minimum;
	b) where feasible noise generating works would be scheduled to be completed outside of the 10:00pm to 7:00am night time period; and
	c) the works will be undertaken in accordance with the Environment Protection Licence for the TSF Project.
Ecolo	gy
E1	During construction and operation of the TSF, the Conservation Management Plan will be followed. The Conservation Management Plan will include:
	a) strategies to avoid or minimise impacts to flora and fauna;
	b) procedures to monitor and control weeds (with special methods for eradicating alligator weed);
	c) measures to prevent erosion and sediment control procedures, which will also be incorporated into the Erosion and Sediment Control Plan;
	d) monitoring of frog ponds;
	e) strategies to minimise the impact of the access route through Proposed Offset Area 2; and
	f) contingency procedures or corrective actions to be followed should monitoring indicate that the identified objectives and outcomes are not being achieved.
E2	Ecological surveys will be undertaken prior to clearing or filling of the wetland to minimise impacts on threatened and endangered species and ensure that direct impacts to flora and fauna are avoided.
E3	The management of the Southern Offset Area will include:
	a) the establishment and fencing of the conservation area;
	b) entering into an appropriate arrangement for the security of the offset area such as a Voluntary Conservation Agreement;
	c) management of habitat for existing terestial and acquautic, flora and fauna species; and
	d) an annual monitoring program for the first five years.
E4	The management of the Northern Offset Area will include:
	a) improving the condition of the Swamp Oak Forest and the Coastal Floodplain Sedgelands;
	b) entering into an appropriate arrangement for the security of the offset area such as a Voluntary Conservation Agreement; and
	c) construction of the access route through the Northern Offset Area in a manner that minimises the impact on threatened and endangered species.
Traffic	, Access and Car Parking
Tl	A Construction Traffic Management Plan will be prepared and implemented, which will outline:
	a) the safe access routes to and from site;
	b) vehicle parking areas during construction;
	c) appropriate signage requirements;
	d) construction activities that will result in the disruption of traffic and the arrangements for traffic management; and
	e) methods to minimise impacts associated with construction activities.
T2	A new T-intersection will be constructed on the Tarro Interchange with a sheltered right turn lane that will be able to accommodate the site access road.
T3	An access road connecting the Tarro Interchange with the TSF will be constructed.
T4	Road construction and associated drainage works will comply with relevant Newcastle City Council and Roads & Maritime Services standards.
T5	Dedicated onsite parking will be provided adjacent to the offices and amenities and on
10	pedicaled offshe paining will be provided adjacent to the offices and afficilities and off



ltem	Commitment
	hardstand areas adjacent to main work areas. The facility car park will have 38 parking spaces including two disabled spaces.
Floodin	ng
F1	A Flood Emergency Management Plan will be prepared which provides mitigation and management measures to be implemented in the event of a flood on site.
F2	The TSF will be constructed using flood compatible material and site power facilities will be place above the 1% AEP flood levels.
Stormw	vater Management
S1	A Stormwater Management Plan will be prepared and implemented and will address the following matters:
	 a) the current site hydrology, water quality and changes to these as a result of the development;
	b) the formation of a network of catch drains (cess drains) which will drain the TSF site; and
	 c) appropriate erosion and sediment controls to be implemented at discharge locations and spillways to prevent the discharge of sedimentation.
S2	Areas of high sediment, oil & grease and nutrient loads will be separated from the stormwater system (e.g. wash bays, provisioning sheds, servicing sheds). These areas will be treated separately and discharged to trade waste or for re-use in wash down.
S3	Gross Pollutant Traps (GPTs) will be utilised to provide primary screening of stormwater. A secondary system of GPTs will be located at the outlet of each Water Quality Control Pond as a final barrier to remove suspended solids, remaining floating debris and hydrocarbons.
S4	Access roads will be constructed with road side swales to provide treatment through flow attenuation and sedimentation of suspended sediments.
Effluen	t Disposal
Effluent ED1	t Disposal A wastewater system for effluent disposal will be established.
ED1	A wastewater system for effluent disposal will be established.
ED1 ED2	A wastewater system for effluent disposal will be established. A recycle system for wash down water will be established.
ED1 ED2	A wastewater system for effluent disposal will be established. A recycle system for wash down water will be established. An irrigation area with the following site improvements will be established: a) removal of the concrete hardstand and footings in the central portion of the site, or
ED1 ED2	A wastewater system for effluent disposal will be established. A recycle system for wash down water will be established. An irrigation area with the following site improvements will be established: a) removal of the concrete hardstand and footings in the central portion of the site, or placement of 0.5m of suitable clay loam fill material over concrete; b) addition of lime to acidic soils to maintain plant growth; c) addition of gypsum to improve the soil structure and reduce dispersion/erosion;
ED1 ED2	A wastewater system for effluent disposal will be established. A recycle system for wash down water will be established. An irrigation area with the following site improvements will be established: a) removal of the concrete hardstand and footings in the central portion of the site, or placement of 0.5m of suitable clay loam fill material over concrete; b) addition of lime to acidic soils to maintain plant growth;
ED1 ED2	A wastewater system for effluent disposal will be established. A recycle system for wash down water will be established. An irrigation area with the following site improvements will be established: a) removal of the concrete hardstand and footings in the central portion of the site, or placement of 0.5m of suitable clay loam fill material over concrete; b) addition of lime to acidic soils to maintain plant growth; c) addition of gypsum to improve the soil structure and reduce dispersion/erosion; d) earthworks to recontour and fill drainage channels and redirect surface water flow around the
ED1 ED2	A wastewater system for effluent disposal will be established. A recycle system for wash down water will be established. An irrigation area with the following site improvements will be established: a) removal of the concrete hardstand and footings in the central portion of the site, or placement of 0.5m of suitable clay loam fill material over concrete; b) addition of lime to acidic soils to maintain plant growth; c) addition of gypsum to improve the soil structure and reduce dispersion/erosion; d) earthworks to recontour and fill drainage channels and redirect surface water flow around the proposed irrigation area (meeting buffer distance requirements); e) where required, placement of suitable fill or earthworks to raise site levels to at least 1m above the permanent groundwater table and/or at least 0.6m between the highest seasonal
ED1 ED2	A wastewater system for effluent disposal will be established. A recycle system for wash down water will be established. An irrigation area with the following site improvements will be established: a) removal of the concrete hardstand and footings in the central portion of the site, or placement of 0.5m of suitable clay loam fill material over concrete; b) addition of lime to acidic soils to maintain plant growth; c) addition of gypsum to improve the soil structure and reduce dispersion/erosion; d) earthworks to recontour and fill drainage channels and redirect surface water flow around the proposed irrigation area (meeting buffer distance requirements); e) where required, placement of suitable fill or earthworks to raise site levels to at least 1m above the permanent groundwater table and/or at least 0.6m between the highest seasonal water table level and the base of the irrigation areas (whichever is the greater); f) importation and placement of a suitable clay loam fill to form the surface of the irrigation
ED1 ED2	A wastewater system for effluent disposal will be established. A recycle system for wash down water will be established. An irrigation area with the following site improvements will be established: a) removal of the concrete hardstand and footings in the central portion of the site, or placement of 0.5m of suitable clay loam fill material over concrete; b) addition of lime to acidic soils to maintain plant growth; c) addition of gypsum to improve the soil structure and reduce dispersion/erosion; d) earthworks to recontour and fill drainage channels and redirect surface water flow around the proposed irrigation area (meeting buffer distance requirements); e) where required, placement of suitable fill or earthworks to raise site levels to at least 1m above the permanent groundwater table and/or at least 0.6m between the highest seasonal water table level and the base of the irrigation areas (whichever is the greater); f) importation and placement of a suitable clay loam fill to form the surface of the irrigation area to improve soil properties and minimise the potential for the groundwater pollution; and g) installation of catch drains/bunds upslope and downslope of the irrigation area to prevent
ED1 ED2 ED3	A wastewater system for effluent disposal will be established. A recycle system for wash down water will be established. An irrigation area with the following site improvements will be established: a) removal of the concrete hardstand and footings in the central portion of the site, or placement of 0.5m of suitable clay loam fill material over concrete; b) addition of lime to acidic soils to maintain plant growth; c) addition of gypsum to improve the soil structure and reduce dispersion/erosion; d) earthworks to recontour and fill drainage channels and redirect surface water flow around the proposed irrigation area (meeting buffer distance requirements); e) where required, placement of suitable fill or earthworks to raise site levels to at least 1m above the permanent groundwater table and/or at least 0.6m between the highest seasonal water table level and the base of the irrigation areas (whichever is the greater); f) importation and placement of a suitable clay loam fill to form the surface of the irrigation area to improve soil properties and minimise the potential for the groundwater pollution; and g) installation of catch drains/bunds upslope and downslope of the irrigation area to prevent rainfall run-on and runoff.
ED1 ED2 ED3 ED4 ED5	A wastewater system for effluent disposal will be established. A recycle system for wash down water will be established. An irrigation area with the following site improvements will be established: a) removal of the concrete hardstand and footings in the central portion of the site, or placement of 0.5m of suitable clay loam fill material over concrete; b) addition of lime to acidic soils to maintain plant growth; c) addition of gypsum to improve the soil structure and reduce dispersion/erosion; d) earthworks to recontour and fill drainage channels and redirect surface water flow around the proposed irrigation area (meeting buffer distance requirements); e) where required, placement of suitable fill or earthworks to raise site levels to at least 1m above the permanent groundwater table and/or at least 0.6m between the highest seasonal water table level and the base of the irrigation areas (whichever is the greater); f) importation and placement of a suitable clay loam fill to form the surface of the irrigation area to improve soil properties and minimise the potential for the groundwater pollution; and g) installation of catch drains/bunds upslope and downslope of the irrigation area to prevent rainfall run-on and runoff. Dewatering licences will be obtained in respect of the sewer installations where required.
ED1 ED2 ED3 ED4 ED5	A wastewater system for effluent disposal will be established. A recycle system for wash down water will be established. An irrigation area with the following site improvements will be established: a) removal of the concrete hardstand and footings in the central portion of the site, or placement of 0.5m of suitable clay loam fill material over concrete; b) addition of lime to acidic soils to maintain plant growth; c) addition of gypsum to improve the soil structure and reduce dispersion/erosion; d) earthworks to recontour and fill drainage channels and redirect surface water flow around the proposed irrigation area (meeting buffer distance requirements); e) where required, placement of suitable fill or earthworks to raise site levels to at least 1m above the permanent groundwater table and/or at least 0.6m between the highest seasonal water table level and the base of the irrigation areas (whichever is the greater); f) importation and placement of a suitable clay loam fill to form the surface of the irrigation area to improve soil properties and minimise the potential for the groundwater pollution; and g) installation of catch drains/bunds upslope and downslope of the irrigation area to prevent rainfall run-on and runoff. Dewatering licences will be obtained in respect of the sewer installations where required. Rainwater tanks will be installed to top up the recycled water system.



Hono	Community and
Item	Commitment
	former refuelling areas;
	b) the potential source of the hydrocarbon contamination across the site;
	c) the elevated TRH (C10-C36) concentration in groundwater in Bore 108, MW01, MW03 and MW09;
	d) the fill materials to determine its leachability and suitability to remain on site;
	e) the coal reject and fines to be disturbed during construction to assess the extent of potential contaminants (i.e. asbestos, etc.) and the potential management options for the re-use of these coal reject and fines materials on-site; and
	f) the western portion of Lot 113, DP 755232 (i.e. west of Chichester pipeline), which has not currently been investigated due to modification of the site boundary after completion of field work.
CT2	The sampling and analysis of contaminated land will be undertaken at a density which is commensurate with the NSW EPA Sampling Guidelines.
CT3	Appropriate management action will be taken, including a Remedial Action Plan if required, to:
	a) remediate hydrocarbon contamination present in fill material;
	b) remove by localised excavation those hydrocarbon impacted soil associated with former fuel tank (Pit 128) and the former refuelling area (Bore 102 and Pit 128); and
	c) remove and validate fibro fragments containing asbestos in the former control cabin and former baling shed or establish on-site management of asbestos impacted materials.
Surfac	e and Groundwater Management
SG1	Surface water and groundwater monitoring will be undertaken prior to the commencement of construction to:
	a) establish existing water quality baselines;
	b) identify sources of potential impact from construction operations; and
	c) determine the potential for off-site migration of contaminants through water sources.
SG2	Surface water and groundwater monitoring will be regularly undertaken during the ongoing operation of the TSF to:
	a) identify any change in water quality; and
	b) determine the appropriate treatment strategies to be implemented to maintain or improve water quality.
SG3	A Water Quality Management Plan will be prepared and implemented and will identify a range of preventative, treatment and contingency measures for the TSF project.
Acid s	ulphate soils
A1	An Acid Sulphate Soil Management Plan will be prepared and implemented which includes methods and procedures for:
	a) minimising the disturbance of potential acid sulphate soils through appropriate dewatering and excavation procedures;
	b) monitoring of soils, water and leachate throughout construction to identify acid sulphates;
	c) the storage, treatment and disposal of excavated soils, water and leachate containing acid sulphate;
	d) managing acid sulphate produced from excavated soil and dewatering, in accordance with the NSW Acid Sulphate Soil Management Advisory Committee Guidelines; and
	e) remedial action or mitigation action to be implemented as a contingency if the acceptance criteria has not been achieved.
Geote	chnical
G1	Deep soil mixing will be utilised for ground improvement. Piling will be used to support building footings.
L	



ltem	Commitment
G2	The ground improvement method will be monitored by geotechnical instrumentation to measure and verify performance.
Aborig	inal Archaeology
AA1	An Aboriginal Heritage Management Plan will be prepared and implemented prior to the commencement of any works that may impact on Aboriginal heritage.
AA2	All staff, contractors and others involved in construction and maintenance related activities will be made aware of the statutory provisions protecting Aboriginal objects and Aboriginal places of significance. A cultural awareness program will be included as part of the site induction program and developed in consultation with the registered Aboriginal stakeholders.
AA3	The involvement of the registered Aboriginal stakeholders in the ongoing management of the Aboriginal cultural materials within the project study will be promoted and included in the Environmental Management Plan and the Aboriginal Heritage Management Plan.
AA4	If the identified Potential Cultural Deposit will be impacted upon by the proposed works an archaeological subsurface investigation and salvage will be undertaken in accordance with the Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW.
AA5	If the potential subsurface component of site 'HS1' will be impacted on, an archaeological subsurface investigation and salvage will be undertaken in accordance with the Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW.
Europe	ean heritage
EH1	A Construction Non-Indigenous Cultural Heritage Management Plan will be prepared and implemented, which will set out the mitigation and management strategies to be implemented to minimise potential impacts to European heritage items.
EH2	Serviceable bricks from the Control Box will be salvaged and appropriately reused in a symbolic linkage of the past and proposed uses of the place.
EH3	A plaque providing details of the site's heritage will to be located on the site.
EH4	An Excavation Director, with appropriate experience will be appointed prior to any excavation within the vicinity of the junction of the Minmi to Hexham Railway and the Great Northern Railway.
EH5	The Excavation Director will advise on archaeological matters associated with the excavation, and will ensure compliance with procedures to be adopted in the event of unexpected finds and measures for protecting heritage items that are to be conserved.
EH6	All archaeological deposits, features and relics that are exposed during the works associated with the proposed TSF will be recorded in accordance with Heritage Branch guidelines.
Noise	and Vibration
N1	A Construction Noise Management Plan (CNMP) will be prepared and implemented prior to commencement of construction works at the site. The CNMP will include the following: a) construction noise goals; b) specific practical, feasible and reasonable measures for controlling noise, noise and
	vibration monitoring programs and reporting procedures; and c) mechanisms to provide ongoing community liaison.
N2	Equipment will be kept well maintained to prevent unnecessary noise and vibration.
N3	When noisy operations associated with construction activities must be carried out:
	a) Australian Standard 2436-1981 'Guide to noise control on construction, maintenance and demolition sites' will be followed when relevant;
	b) where reasonable and feasible, noisy equipment will be sited behind structures that act as barriers or at the greatest distance from the noise-sensitive areas; and
	c) a responsible person will maintain liaison between the neighbouring community and the contractor.



Item	Commitment
	ality and Greenhouse Gas
AQ1	Activities carried out on site will be undertaken in a manner that will ensure that all equipment used, and all facilities erected, are designed and operated to control the emission of smoke, dust, fumes and other pollutants into the atmosphere.
AQ2	Measures to minimise the impact of dust generated in association with the proposed development will be implemented including: a) watering of roads and sealing of roads if required; b) stabilisation of disturbed areas as soon as possible; c) wind breaks composed of earth banks and other screens to protect areas by reducing capacity of the wind to raise dust; d) trucks entering and leaving the site will be well maintained in accordance with the manufacturer's specification to comply with all relevant regulations; e) fines may be imposed on vehicles which do not comply with smoke emission standards; f) truck movement will be controlled on site and restricted to designated roadways; g) truck wheel washes or other dust removal procedures (including covering of loads) will be installed to minimise transport of dust offsite if necessary;
	 h) during construction if there are periods of high winds, stockpiles and exposed areas will be covered, or watered, or revegetated; i) procedures to control dust and other emissions from construction operations and on-site equipment will be implemented; ii) stockpiles and handling groups will be projected in a condition which minimises windblown.
	 stockpiles and handling areas will be maintained in a condition which minimises windblown or traffic generated dust; construction equipment and transport vehicles will be properly maintained to ensure exhaust emissions comply with relevant regulatory requirements, and to minimise emissions;
	cleared vegetation, demolition, materials and other combustible waste material will not be burnt on site; m) silt will be removed from behind filter fences and other erosion control structures on a regular basis to prevent it becoming a source of durit.
	basis, to prevent it becoming a source of dust; n) non-essential idling of locomotives will be minimised, and locomotives with excessive smoke will be expeditiously repaired; and
	o) low sulphur diesel fuel will be used where available.
Social	and Economic
SE1	The following information will be available for community enquiries and complaints prior to and during the construction and operation of the TSF: a) a contact number on which complaints and enquiries about construction and operational activities may be registered;
	b) a postal address to which written complaints and enquiries may be sent; and
	c) an email address to which electronic complaints and enquiries may be sent.
SE2	A Near Neighbour Consultation Strategy will be implemented for ongoing proactive engagement and communication with surrounding and adjoining residents. This strategy will include:
	 a) policies which aim to increase project knowledge and develop community-staff relations; and b) processes to inform neighbours about access arrangements to the development site and abandos to properly access that may affect them.
SE3	changes to property access that may affect them. Employment of local and regional workers will be promoted to retain and develop the local skills-base. Local businesses will be utilised where possible for resources and materials for construction and operations.
SE4	Appropriate security protocols will be established to ensure unauthorised persons do not access the TSF site.



Commitment
Open and direct communications will be maintained with Australian Rail Track Corporation and the Hunter Valley Coal Chain Coordinator, to ensure that potential benefits of the project are maximised and negative impacts minimised.
Management
A Construction Waste Management Plan will be prepared prior to the commencement of construction on the site. The Construction Waste Management Plan will address the following: a) appropriate waste identification, handling, storage and disposal in accordance with the Department of Environment Climate Change and Water Guidelines; and
b) procedures for how the different waste streams will be stored, collected and disposed of by licensed waste contractors.
An Operational Waste Management Plan will be prepared to address the ongoing handling, storage and disposal of waste. The Operational Waste Management Plan will provide:
a) identification of the types of waste likely to be generated during construction;
b) appropriate storage of waste on site;
c) measures to minimise the amount of waste produced;
d) measures to increase the potential for waste to be re-used and recycled;
e) appropriate methods to assess if waste can be re-used, recycled or disposed to landfill; andf) maintaining records of waste re-use, recycling and/or disposal.
Licensed waste contractors will be made responsible for collection and appropriate disposal of waste.
Following construction, landscaping treatment will be undertaken within the developed area of the site. Appropriate locations for landscaping treatment will be determined based on environmental, operational and safety considerations.
Buildings will be constructed of low reflective materials and colours will be of earth tones.
lous Material
Any hazardous materials will be stored and disposed of in accordance with WorkCover Authority requirements.
The amount of diesel fuel to be stored at the TSF exceeds the NSW WorkCover 100kL threshold for C1 combustible goods. As such notification of Dangerous Goods on Premises will be lodged with WorkCover NSW prior to construction being initiated.
g Codes Australia
The proposed development will comply with either the 'deemed to satisfy' provisions of the Building Code of Australia, or alternatively provide a performance-based solution prepared by a suitably qualified person.



14.0 Conclusion

This EA has been prepared in accordance with Part 3A of the EP&A Act. In particular, it addresses each of the issues raised in the DGRs of March 2010 and the Adequacy Review by the DP&I in July 2012.

The proposed QR National's TSF will result in the relocation of infrastructure, fuelling and other provisioning and inspection activities currently located in and around the Port of Newcastle, thereby reducing congestion and disruption associated with these activities.

The proposed TSF is supported by the HVCCC, whose objectives are to plan and coordinate the HVCC to maximise the volume of coal transported through the coal chain to market. QR National's TSF has been identified as a critical element of the coal chain's solution to inefficiency caused by coal terminal congestion, to which the Hunter Valley rail haulage operators' current train fuelling, provisioning and maintenance practices contribute significantly.

The proposed TSF will consolidate QR National's current maintenance and refuelling activity onto one low impact site at Hexham. The TSF will provide an efficient and cost effective method of supporting QR National operations in the HVCC by providing a facility to satisfy daily train operating / maintenance requirements.

The site is strategically located relative to the Port of Newcastle, major road connections, Newcastle Airport and existing industry to the north west and south east of the site. The site has excellent access to workforces, being centrally located to Newcastle, Maitland and Port Stephens. The site is isolated from any significant residential area. The site is also located close to its primary customer base, being mining companies operating in the Hunter Valley. These attributes make the site ideal for the proposed development.

This EA has identified and addressed the key environmental issues relevant to the proposed development. It has been established that the site is appropriate for the on-going operation of the TSF. A range of management measures have been committed to ensuring that no significant adverse impacts will result from the construction and operation of the TSF. The overall environmental impacts are considered to be manageable.

It is considered that this assessment identifies the proposed TSF as being of significance to the Hunter Region, and the State of NSW, both in terms of its initial investment value through construction, but also in terms on the on-going contribution to the economy. The efficiencies gained in the coal transport chain are important to ensure growth in coal exports and the returning economic benefits. The significant economic benefits and employment opportunities arising from the proposal, in combination with the comprehensive measures to be undertaken to minimise any adverse impacts on the receiving environment, confirm that the development is justified and worthy of approval.