Section 5
Draft Statement of Commitments

This section has been prepared in accordance with the requirements of Part 3A of the Environmental Planning and Assessment Act 1979, and presents a compilation of the actions and initiatives the Proponent commits to implement if the Narrabri Coal Project is approved. These commitments are designed to effectively manage, mitigate, guide and monitor the project through its various phases.

The Environmental Assessment of the project has identified a range of environmental, social and management outcomes and measures, all required to avoid or reduce the environmental and social impacts of the project.

*All parties involved in the design, establishment and operational phases of the project will be required to undertake their work in accordance with the commitments. The commitments are presented in tabular form (**Table 5.1**) and identify the desired outcome, action and timing of commitments, arranged initially by operational activity and then by environmental issues.*

***Figure 5A** (on Page 5-17) provides the site layout of the Pit Top Area and Ventilation Shaft Area and **Figure 5B** (on Page 5-19) records the locations of surrounding residences and monitoring locations relevant to these commitments. These are intentionally fold-out plans to assist readers when reviewing this section.*

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Table 5.1
Draft Statement of Commitments for Site Operations and Management

Desired Outcome	Action		Timing
1. Area of Activities			
All approved activities are undertaken in the area(s) nominated on the approved plans and figures (unless moved slightly to avoid individual trees).	1.1	Survey and mark the boundaries of the areas of disturbance on the ground.	Prior to any vegetation clearing within the sand removal areas.
	1.2	Survey and peg the centre line of the site access road.	Prior to construction of the Site Access Road.
2. Operating Hours – Site Establishment			
Management of site establishment activities in accordance with the approved operating hours.	2.1	Undertake vegetation clearing/soil removal within the hours: 7:00am to 6:00pm / 7 days	Continuous.
	2.2	Undertake construction of Surface Infrastructure and Pit Top Area within the hours of: 7:00am to 10:00pm / 7days	Continuous.
	2.3	Undertake Pit Bottom Development within the hours of : 24 hours / 7 days	Continuous.
	2.4	Undertake raw materials / supply delivery within the hours: 7:00am to 10:00pm / 7 days	Continuous.
3. Operating Hours – Operations			
Management of operating hours of work in accordance with the approved consent conditions.	3.1	Undertake underground mining within the hours: 24 hours / 7 days	Continuous.
	3.2	Undertake crushing and stockpiling within the hours: 24 hours / 7 days	Continuous.
	3.3	Undertake rail loading and transportation within the hours: 24 hours / 7 days	Continuous.
	3.4	Undertake surface maintenance within the hours: 24 hours / 7 days	Continuous.
	3.5	Undertake raw materials / supply delivery within the hours: 7.00am to 10.00pm / 7 days	Continuous.
4. Waste Management			
Minimisation of general waste creation and recycle wherever possible. Minimisation of the potential risk of environmental impact due to waste creation, storage and/or disposal.	4.1	Dispose all paper and general waste in 205L drums and 240L mobile bins.	Ongoing.
	4.2	Collect general waste bins daily and place contents in large, lidded waste storage receptacles or dumpsters to await removal by licensed contractor.	Ongoing.
	4.3	Collect industrial waste fortnightly, or more frequently if required.	At least fortnightly.

Table 5.1 (Cont'd)
Draft Statement of Commitments for Site Operations and Management

Desired Outcome	Action		Timing
4. Waste Management (Cont'd)			
Minimisation of general waste creation and recycle wherever possible.	4.4	Install separate containers for the collection of recyclable items and despatch off site at appropriate intervals.	Ongoing.
Minimisation of the potential risk of environmental impact due to waste creation, storage and/or disposal.	4.5	Employ a licensed waste collection contractor for all general waste / garbage at least on a weekly basis.	Ongoing.
	4.6	Collect waste oils and grease and pump to bulk storage tanks.	As required.
	4.7	Collect all parts and packaging and transfer to the maintenance workshop for disposal or recycling.	As required.
	4.8	Install adequate toilet and ablution facilities within the mine facilities area for the site workforce and visitors.	Initial activities of site establishment phase.
	4.9	Install a self irrigating septic sewage system approved by Narrabri Shire Council.	Initial activities of site establishment phase.
	4.10	Service facilities by a licenced sewage collection / disposal contractor.	As required.
5. Rehabilitation			
The creation of a stable final landform, available for the proposed future use(s) of agriculture and/or nature conservation.	5.1	Stabilise all earthworks, drainage lines and disturbed areas no longer required for mine-related activities in order to minimise erosion and sedimentation, and to reduce the visibility of the activities from adjacent properties and the local road network.	As required.
	5.2	Provide a low maintenance, stable and safe landform that blends with the surrounding topography and which is commensurate with re-established agricultural land uses.	Prior to mine closure.
	5.3	Ensure any areas of disturbance that require profiling meet the requirements of the final landform.	As area becomes available.
	5.4	Replace subsoil and topsoil over areas of disturbance in the same order and approximately same depths as it was removed.	As area becomes available.
	5.5	Undertake consultation with the future landowner / land user to determine the most appropriate crop / pasture species to be replanted.	As area becomes available.
	5.6	Conduct ongoing rehabilitation monitoring and maintenance throughout and beyond the operation.	Ongoing.

Table 5.1 (Cont'd)
Draft Statement of Commitments for Site Operations and Management

Desired Outcome	Action		Timing
5. Rehabilitation (Cont'd)			
The creation of a stable final landform, available for the proposed future use(s) of agriculture and/or nature conservation.	5.7	Prevent excessive development of weeds within the rehabilitated areas.	As area becomes available.
	5.8	Undertake noxious weed control or eradication in consultation with DPI (Agriculture) and/or local Noxious Weeds Inspector.	For life of project.
	5.9	Implement principles of responsible land ownership and ensure that feral animals and weeds are managed.	For life of project.
6. Surface Water			
Minimisation of changes to existing drainage patterns of the Project Site.	6.1	Retain selected surface water structures such as the farm dams and diversion swales to allow for continued water management across the Pit Top Area.	During construction period.
	6.2	Construct concrete causeways or pipe culverts at natural drainage lines along the alignment of the Site Access Road.	During construction period.
Prevention of discharge of dirty, saline or contaminated water from the Project Site.	6.3	Direct runoff collected by the catch drains to the sediment basin and/or storage dams in the Pit Top Area.	Ongoing.
	6.4	Design and construct sediment basins to allow sufficient settlement time for dirty water.	Site establishment phase.
	6.5	Direct all water from wash-down areas and workshops to oil/water separators and containment systems.	Ongoing.
	6.6	Ensure all storage tanks are either self-bunded tanks or bunded with an impermeable surface and have a capacity to contain a minimum 110% of the largest storage tank capacity.	Ongoing.
Prevention of discharge of dirty, saline or contaminated water from the Project Site.	6.7	Securely store all hydrocarbon products.	Ongoing.
	6.8	Refuel all of the Proponent's mining fleet within designated areas of the project surface facilities.	Ongoing.
		Construct evaporation / storage pond floors and walls using compacted subsoil with saturated hydraulic conductivity $<1.0x10^{9}$m/s or impermeable plastic liner.	Prior to construction.
	6.9	Maintain sufficient freeboard within evaporation / storage ponds to cater for design 1 in 100 year ARI event.	Ongoing.

Table 5.1 (Cont'd)
Draft Statement of Commitments for Site Operations and Management

Desired Outcome	Action		Timing
6. Surface Water (Cont'd)			
Manage dewatered groundwater to prevent saline contamination of the surrounding landform and downstream drainage.	6.10	Prepare a formal Dewatering Contingency Plan which provides for additional management measures should the dewatering requirements indicate the eventual exceedance of the 1 in 100 year ARI capacity of the evaporation / storage ponds.	Prior to construction of Pond C.
	6.11	Provide for the construction and operation of a water conditioning plant, the design of which would be based on the concept design plan provided by Parsons Brinckerhoff (2007) (Appendix 4).	In the event this action triggered under Dewatering Contingency Plan.
Minimisation of impact from contamination event.	6.12	Prepare formal contingency plans for contamination events as described in Section 4B.1.5.	Prior to commencement of project.
Minimisation of Erosion and sedimentation.	6.13	Maintain a ground cover of vegetation at 70% or better over areas disturbed but no longer required by the project.	Ongoing.
	6.14	Construct the Site Access Road with a crowned surface to divert water that falls onto the road into roadside drains either side of the road surface. Immediately grass the roadside drains to provide erosion and sediment control and install sediment fencing within the minor drainage lines, if required.	Ongoing.
	6.15	Armour the banks of the rail loop with ballast (larger diameter competent rock).	Ongoing.
	6.16	Inspect the banks of the rail loop and remediate erosion damage within Kurrajong Creek Tributary 1.	Following flood events.
Prevent the occurrence of dryland salinity over the Project Site.	6.17	Maintaining and/or enhance as much vegetation on the Project Site as possible, particularly trees.	Ongoing.
7. Groundwater			
To minimise the volume of mine in-flow to the underground workings.	7.1	Seal the mine drifts and ventilation shaft using in-strata grouting or hydrophobic sealant.	Ongoing.
	7.2	Commission an annual review of the results and frequency of monitoring by a qualified hydrogeologist to determine the adequacy of monitoring program and to provide interim assessment of operational impacts on groundwater levels	Annually following commencement of mining

Table 5.1 (Cont'd)
Draft Statement of Commitments for Site Operations and Management

Desired Outcome	Action		Timing
7. Groundwater (Cont'd)			
Preparation of a contingency plan in the event that the availability or quality of groundwater is reduced for local groundwater users.	7.3	Undertake remedial action if the available drawdown attributable to the mine for the existing groundwater users is reduced by over 15%. The remedial actions that may be appropriate for the deeper bores includes lowering of the pump sets, installation of pumps with higher lift if casing diameter allow or possibly replacement of bores to accommodate deeper, high lift pumps. For the shallower alluvium bores, deepening of the bores to provide a greater saturated thickness may be required.	As required.
8. Ecological Management			
Minimise long term impact on flora and fauna on and around the Project Site.	8.1	Clearly identify the boundaries of the Pit Top and Ventilation Shaft construction areas. Ensure no clearing occurs outside these boundaries.	Prior to clearing. (see also commitments 1.1 and 1.2)
	8.2	Minimise clearing as much as practicable within the Pit Top Area.	During clearing.
	8.3	Avoid clearing of native trees within the Ventilation Shaft Area and along route of power line to Ventilation Shaft Area.	Ongoing Prior to clearing.
	8.4	Conduct a tree hollow survey (by a qualified ecologist) of any individual trees to be cleared. Provide replacement hollows in the form of an equivalent number of nest boxes on suitable trees to be retained (within the Pit Top Area).	During clearing.
	8.5	Re-site all hollow-bearing trees removed where practicable.	Prior to clearing.
	8.6	Conduct a pre-clearance survey by a qualified ecologist to identify and relocate any fauna species residing in any of the individual trees to be cleared.	During clearing.
	8.7	Break up the trees cleared into small sections and used as mulch.	During construction.
	8.8	Construct the ventilation shaft in an area already cleared of native vegetation.	During construction.
	8.9	Strip all groundcover vegetation with the topsoil to ensure maximum retention of nutrients and native seeds to facilitate rapid vegetation of the soil stockpiles.	Following clearing if areas available, otherwise when revegetation area available.

Table 5.1 (Cont'd)
Draft Statement of Commitments for Site Operations and Management

Desired Outcome	Action		Timing
8. Ecological Management (Cont'd)			
Minimisation of long term impact on flora and fauna on and around the Project Site.	8.10	Spread all cleared native vegetation in area around Ventilation Shaft Area.	Continuous.
	8.11	Ensure that weeds are managed and excessive weed development is prevented.	Continuous.
	8.12	Undertake noxious weed control or eradication in consultation with DPI (Agriculture), Rural Lands Protection officer and/or local Noxious Weeds Inspector (Narrabri Council weeds officer).	Annually.
	8.13	Undertake regular reviews of the revegetation program to ensure it remains relevant.	Annually.
	8.14	Time clearing within woodland communities, where practicable, to avoid fauna breeding seasons.	During clearing.
	8.15	Implement a feral baiting and/ or trapping program, consistent with the existing feral animal control strategy.	Prior to clearing.
	8.16	Undertake progressive and final rehabilitation across the Project Site to recreate a final land use of agriculture and native vegetation.	As required.
9. Indigenous Heritage			
Employees who are sensitive to, and respectful of, possible Aboriginal heritage on the Project Site.	9.1	Involve all site employees and contractors in an awareness program re: Aboriginal heritage issues.	At Site Induction (and re-induction).
Appropriate protection provided for identified Aboriginal sites and artefacts.	9.2	Identify and mark the location of Aboriginal Sites 3 to 6 for long term protection.	Prior to clearing.
Minimise potential to disturb unidentified sites.	9.3	Conduct all Pit Top Area activities outside Zone 1 (watercourses) with the exception of a minor section of the rail loop.	Ongoing.
	9.4	Undertake further detailed survey work and possibly test pitting and seek advice from the consulting archaeologist and Narrabri LALC, should for for any reason, disturbance be required within Zone 1.	In the event of an Aboriginal site or artefact being identified.
	9.5	Invite a representative of the Narrabri Local Aboriginal Land Council to monitor digging activities of the top 40cm to 50cm of soils and felling of individual large trees within the Pit Top Area.	Prior to and during all ground disturbing activities.

Table 5.1 (Cont'd)
Draft Statement of Commitments for Site Operations and Management

Desired Outcome	Action		Timing
9. Indigenous Heritage (Cont'd)			
Appropriate protection and/or salvage of Aboriginal sites and artefacts identified following the commencement of the project.	9.6	Invite a representative of the Narrabri Local Aboriginal Land Council to monitor digging activities of the top 40cm to 50cm of soils and felling of individual large trees within the Ventilation Shaft Area.	Prior to and during all ground disturbing activities.
	9.7	Ensure that if any further Aboriginal objects are uncovered at any time during the course of the project, work at the area ceases and the Proponent contacts the NSW DEC for advice.	In the event of an Aboriginal site or artefact being identified.
	9.8	Ensure that, if a tree to be felled is identified as having culturally made scars it is retained *in situ* and protected.	In the event of a scarred tree being identified.
	9.9	Ensure that, where it is not possible to retain the scarred trees *in-situ,* they are cut to preserve the scar, and relocated into a designated protected area. Salvage any sites prior to disturbance of this area.	In the event of a scarred tree being identified.
10. Soils and Land Capability			
Maintenance of soil value for rehabilitation and minimisation of soil loss though erosion.	10.1	Avoid stripping subsoils in SMU 1 below 40cm in depth.	During stripping operations.
	10.2	Carefully select soil stockpile locations to avoid subsequent movement, to ensure that the soil structure is not degraded.	During soil stripping operations.
	10.3	Avoid stripping or replacing under wet conditions.	During soil stripping operations.
	10.4	Position soil stockpiles inside the Pit Top Area perimeter bund to prevent surface water runoff coming into contact with the soil stockpiles.	During soil stockpiling operations.
	10.5	Install protective earthworks such as straw bale or contour bank protection to protect the soil stockpile from overland flow as required.	Following stockpile construction.
	10.6	Install silt-stop fencing or similar protection immediately downslope of stockpiles and retain until such time as they develop a stable cover of vegetation.	Following stockpile construction.
	10.7	Strip topsoil to a depth of 15cm and strip subsoil to a depth of 25cm (where sufficient soil depths are available).	During soil stripping operations.
	10.8	Stockpile topsoil and subsoil separately with topsoil stockpiles not exceeding 2m in height and subsoil stockpiles not exceeding 3m in height.	During stockpiling operations.

Table 5.1 (Cont'd)
Draft Statement of Commitments for Site Operations and Management

Desired Outcome	Action		Timing
10. Soils and Land Capability (Cont'd)			
Maintenance of soil value for rehabilitation and minimisation of soil loss though erosion.	10.9	Remove and re-install / redesign soil conservation banking systems on farmland if it is to be re-used for cropping or in areas where water flow has been concentrated following subsidence.	Continuous.
	10.10	Prevent mobile equipment, including light vehicles, from accessing soil stockpiles once created.	Continuous.
	10.11	Install well maintained upslope water diversion banks or swales where overland surface water flow has the potential to impact on the soil stockpiles.	Continuous.
	10.12	Implement downslope sedimentation controls as required.	Until the surface of the soil stockpile is stabilised.
	10.13	Ensure soil stockpile surfaces have a generally even surface that is as 'rough' as possible, in a micro-sense, to assist in runoff control and seed retention and germination.	During stockpiling operations.
	10.14	Sow surfaces of soil stockpiles with appropriate groundcover species.	Following construction.
11. Visual			
The operation of the Siding Springs Observatory is not affected by project operations.	11.1	Use soft lighting on the Pit Top Area to minimise impact on surrounding residents while allowing for evening maintenance and deliveries and night train loading activities.	Night-time operations.
Restriction of vantage points of project activities from neighbouring residences and public roads.	11.2	Construct the perimeter amenity bund and vegetate with native grasses, shrubs and trees.	During the site establishment phase.
	11.3	Construct the ventilation shaft in an area surrounded by tall vegetation to provide a visual screen.	During the site establishment phase.
	11.4	Construct and vegetate a bund wall around the ventilation shaft to restrict the visibility of the activities from neighbouring residences.	During the site establishment phase.
12. Air Quality			
Site activities are undertaken without exceeding DEC air quality criteria or goals.	12.1	Avoid disturbing areas outside approved	During construction periods.
Site activities are undertaken without exceeding DEC air quality criteria or goals.	12.2	Apply water for dust suppression at critical locations such as the continuous miner, the breaker feeder, at all conveyor transfer and discharge points, the feed hopper, the crusher, stockpiles, hardstand areas, the rail load-out facility and unsealed roads, etc.	Ongoing.

Table 5.1 (Cont'd)
Draft Statement of Commitments for Site Operations and Management

Desired Outcome	Action		Timing
12. Air Quality (Cont'd)			
Site activities are undertaken without exceeding DEC air quality criteria or goals.	12.3	Fit all conveyors with appropriate cleaning and collection devices to minimise the amount of material falling from the return conveyor belts.	During site establishment phase.
	12.4	Partly enclose all surface conveyors to minimise dust lift off.	During site establishment phase.
	12.5	Undertake soil stripping at times when most appropriate (such as when there is sufficient soil moisture to prevent significant lift-off of dust and at times other than periods of high winds).	Ongoing.
	12.6	Progressively rehabilitate of areas of disturbance including topsoil and subsoil stockpiles.	Ongoing.
	12.7	Construct the perimeter amenity bund and windbreaks.	Ongoing.
	12.8	Progressively rehabilitate areas no longer required for operational purposes.	As required.
To minimise the potential for spontaneous combustion of the coal stored and handled on site.	12.9	Minimise the length of time coal is held in stockpiles.	Ongoing.
	12.10	Monitor coal stockpiles for signs of spontaneous combustion.	Ongoing.
	12.11	Immediately report incidents.	Ongoing.
	12.12	Extinguish fire by removal from stockpile, spreading and saturation with water.	In the event of ignition.
To ensure no employee's health is adversely affected as a result of employment at the project.	12.13	Install underground ventilation system to provide fresh air to employees.	Prior to commencement.
13. Traffic and Transport			
All motorists travel safely to and from the Project Site with minimal disruption to Kamilaroi Highway or Kurrajong Creek Road traffic.	13.1	Transport coal entirely by rail.	Ongoing.
	13.2	Construct the Site Access Road as a two lane, sealed road of 8m pavement width with 1m wide unsealed shoulders.	During site establishment phase.
	13.3	Construct the Kurrajong Creek Road Level Crossing with flashing lights and warning bells.	During site establishment phase.

Table 5.1 (Cont'd)
Draft Statement of Commitments for Site Operations and Management

Desired Outcome	Action		Timing
13. Traffic and Transport (Cont'd)			
All motorists travel safely to and from the Project Site with minimal disruption to Kamilaroi Highway or Kurrajong Creek Road traffic.	13.4	Construct the Kurrajong Creek Road - Site Access Road intersection as a "T" intersection to emphasize the changed priority on Kurrajong Creek Road. Erect a "Stop" sign on Kurrajong Creek Road at the intersection to control the movement of traffic into the intersection.	During site establishment phase.
	13.5	Construct a channelised right turn lane, including lane development, storage for worst-case rail crossing closure and decelaration distance of 198m for southbound traffic at the intersection of the Kamilaroi Highway with Kurrajong Creek Road. Similarly, construct a 165m channelised left turn lane with a deceleration lane taper for northbound traffic.	During site establishment phase.
	13.6	Construct a purpose-built intersection with the Kamilaroi Highway for project related traffic from the "Bow Hills" gravel quarry. This intersection will be immediately opposite the railway level crossing, removing the requirement for these vehicles to enter the Kamilaroi Highway and increase the number of vehicles that might be required to wait in the right turn lane during level crossing closure.	During site establishment phase.
	13.7	Erect appropriate road signage.	As required.
	13.8	Ensure all employees and contractors are regularly informed about the safe driving requirements to and from the Project Site.	Ongoing.
	13.9	Transport all oversize loads with all necessary permits.	As required.
	13.10	Erect and update twice daily a notice board notifying traffic of the next railway level crossing closure.	Prior to the arrival of project-related coal trains each day.

Table 5.1 (Cont'd)
Draft Statement of Commitments for Site Operations and Management

Desired Outcome	Action		Timing
13. Traffic and Transport (Cont'd)			
Minimisation of disruption to users of the Kamilaroi Highway and Kurrajong Creek Road during the upgrade of the intersection.	13.11	Prepare a Traffic Management Plan to RTA standards to ensure appropriate procedures are in place for the management of both mine-related and public traffic during the road upgrade activities.	Prior to commencement of construction activities.
14. Noise and Vibration			
All activities are undertaken in such a manner as to reduce the noise level generated and minimise impacts on surrounding landholders and/or residents.	14.1	Use equipment with lower sound power levels in preference to more noisy equipment.	Ongoing.
	14.2	Regularly service all equipment used onsite to ensure the sound power levels remain at or below the levels used in the modelling to assess generated noise levels and compliance with the criteria.	Ongoing.
	14.3	Maintain a dialogue between the Proponent and surrounding neighbours and the local community to ensure any concerns over construction, operational or transport noise are addressed.	At regular intervals for the life of the project.
Noise generated by site establishment and construction activities does not exceed DEC nominated criteria nor significantly impact on neighbouring landowners and/or residents.	14.4	Ensure construction of the eastern end of the rail loop does not occur at times when temperature inversions are likely.	During site establishment phase.
	14.5	Ensure that excavation of the box cut does not occur under temperature inversion conditions or when winds from the south and east (bearing 90^{o} – 225^{o}) exceed 3m/s until the excavator can be operated below natural surface topography.	During site establishment phase.
	14.6	Use excavated material from the ventilation shaft and elsewhere to construct a 4m acoustic bund between the ventilation shaft and the "Westhaven" residence.	During site establishment phase.
Noise generated by mining and other operational activities does not exceed DEC nominated criteria nor significantly impact on neighbouring landowners and/or residents.	14.7	Enclose the ventilation fan located within the Ventilation Shaft Area to reduce the sound power level of the fan to 102 dB(A).	During site establishment phase.
	14.8	Ensure that the approved hours of operation are adhered to.	Ongoing.

Table 5.1 (Cont'd)
Draft Statement of Commitments for Site Operations and Management

Desired Outcome	Action		Timing
14. Noise and Vibration (Cont'd)			
Noise generated by mining and other operational activities does not exceed DEC nominated criteria nor significantly impact on neighbouring landowners and/or residents.	14.9	Prepare a Noise Management Protocol prior to the commencement of mining activities. Incorporate within the Protocol the specific details of all noise controls and the measures to address noise criteria exceedances and/or complaints.	Prior to commencement of project.
Noise generated by road and rail transport activities does not exceed DEC nominated criteria nor significantly impact on neighbouring landowners and/or residents	14.10	Maintain the on-site road network to limit body noise from empty trucks travelling on internal roads.	Ongoing.
	14.11	Seal and regularly maintain the Site Access Road.	During site establishment phase and ongoing.
Noise generated by road and rail transport activities does not exceed DEC nominated criteria nor significantly impact on neighbouring landowners and/or residents	14.12	Ensure strict adherence to hours of operation, including transport activities through enforcement by Mine Management.	Ongoing.
	14.13	Instruct project employees and contractors to enter and exit the Project Site in a courteous manner and without causing undue traffic noise.	Ongoing.
	14.14	Vehicle movement between the "Bow Hills" gravel quarry and the Project Site is limited to day-time hours and heavy vehicle movements do not exceed 50 per day.	During site establishment phase
15. Community Relationships			
Keep surrounding land owners and land users informed about site activities.	15.1	Establish a Community Consultative Committee or similar and include local community representatives.	Prior to the commencement of the project.
	15.2	Provide regular newsletters regarding project progress and operations.	Ongoing.
Keep surrounding land owners and land users informed about site activities.	15.3	Establish a Community Consultative Committee or similar and include local community representatives.	Prior to the commencement of the project.
	15.4	Provide regular newsletters regarding project progress and operations.	Ongoing.
Keep surrounding land owners and land users informed about site activities.	15.5	Establish a Community Consultative Committee or similar and include local community representatives.	Prior to the commencement of the project.
	15.6	Provide regular newsletters regarding project progress and operations.	Ongoing.

Table 5.1 (Cont'd)
Draft Statement of Commitments for Site Operations and Management

Desired Outcome	Action		Timing
16. Environmental Monitoring			
Record local surface water environment parameters during site establishment and construction.	16.1	Monitor surface water quality for: pH, EC, TDS, TSS, Total Organic Carbon.	Prior to activity / quarterly / events.
Record local surface water environment parameters to be affected during operations.	16.2	Monitor surface water quality for: pH, EC, TDS, TSS, Total Organic Carbon.	Quarterly / events.
	16.3	Complete a survey to determine the current status, depth, standing water levels and location of all licenced extraction	Prior to commencement of mining.
To implement a comprehensive and ongoing groundwater monitoring program.	16.4	Measure the standing water levels in the existing monitoring bores on a monthly basis for up to 12 months prior to commencement of mining to establish baseline data and seasonal trends in groundwater levels. Suitable bores would be located in areas above and adjacent to the planned underground workings and may include bores NC98D, NC98S in the drift area and NC122, NC123R and NC127 depending on the monitoring period available and mining rates.	Prior to the commencement of coal production.
To implement a comprehensive and ongoing groundwater monitoring program.	16.5	Undertake groundwater monitoring beyond initial 12 months of monitoring.	Quarterly for the life of the project.
	16.6	Include the following registered bores in the groundwater monitoring program: GW022595, GW966836, GW000013, GW000014, GW000018 and GW005023. Use data obtained to review impact predictions and trigger remedial action if reductions in available drawdown exceeds 15%.	Continuing for the life of the project (ie quarterly).
	16.7	Undertake groundwater quality sampling from all bores in the Project Site in the first year to establish seasonal variations in groundwater quality. The sample analysis will include pH, TDS, EC, major ions and heavy metals.	Six monthly.
	16.8	Develop the groundwater monitoring program in consultation with the Proponent's consultant hydrogeologist, the Department of Natural Resources and those groundwater users potentially affected by the project.	Within 6 months of the commencement of operations.

Table 5.1 (Cont'd)
Draft Statement of Commitments for Site Operations and Management

Desired Outcome	Action		Timing
16. Environmental Monitoring (Cont'd)			
To implement a comprehensive and ongoing groundwater monitoring program.	16.9	Commission a review by a qualified hydrogeologist of the results and frequency of monitoring to determine the adequacy of the monitoring program and to provide interim assessment of operational impacts on groundwater levels and identify data gaps in monitoring or impact assessment needs.	Within 12 months of the commencement of operations.
	16.10	Monitor deposited dust levels at 11 sites.	Monthly.
Implementation of an appropriate air quality monitoring program to ensure continuing compliance with DEC guideline levels.	16.11	Review and submit dust monitoring result to DEC.	Annual.
	16.12	Undertake noise monitoring at the residences most likely to be affected by construction noise.	As specified in project approval.
	16.13	Review and submit noise monitoring results to the DEC.	Annual
17. Documentation			
A systematic set of documents are in place to guide the planning and implementation of all environmental management strategies.	17.1	Incorporate the environmental procedures in an on-site management system.	Prior to relevant activity.
	17.2	Update the Mining Operations Plan for the mine site.	As required.
	17.3	Incorporate relevant environmental data / information in Annual Environmental Management Reports.	Annually.
18. General			
All buildings meet necessary building codes and specifications.	18.1	Construct all buildings with certification by Narrabri Shire Council.	During site establishment phase.
All employees and contractors are trained and assessed as competent to undertake those activities influencing the environment.	18.2	Implement a policy encouraging employment of local district personnel, with arrangements for training and certification.	Prior to commencement of project.
	18.3	Include environmental issues in the site induction process for new employees and/or contractors.	Prior to commencement of project.
	18.4	Develop and incorporate an environmental training program to ensure all employees and contractors are environmentally responsible and follow all relevant site-specific procedures.	Prior to commencement of project.
	18.5	Include environmental issues in the agenda for toolbox meetings with employees and/or contractors.	Ongoing.

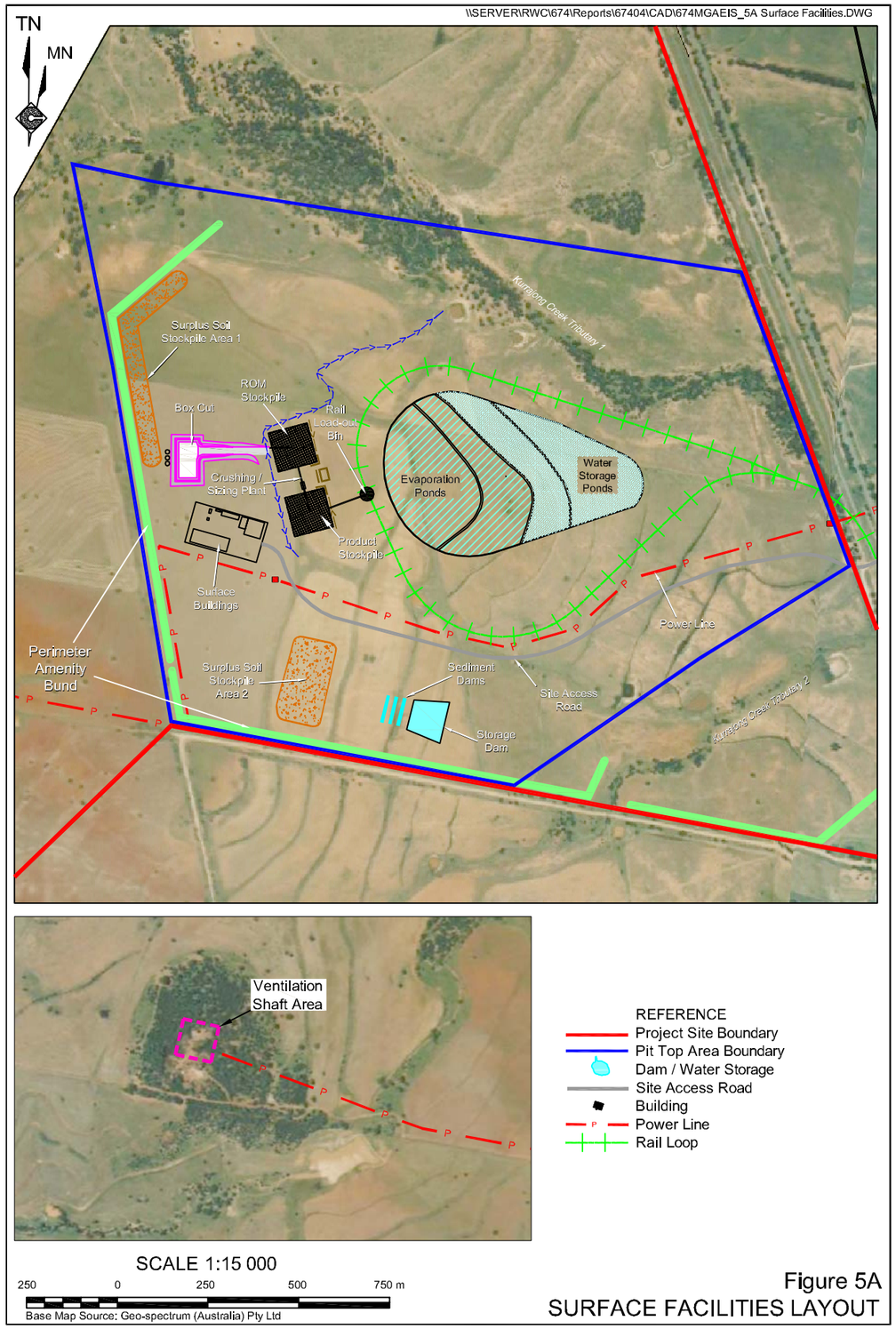

Figure 5A
SURFACE FACILITIES LAYOUT

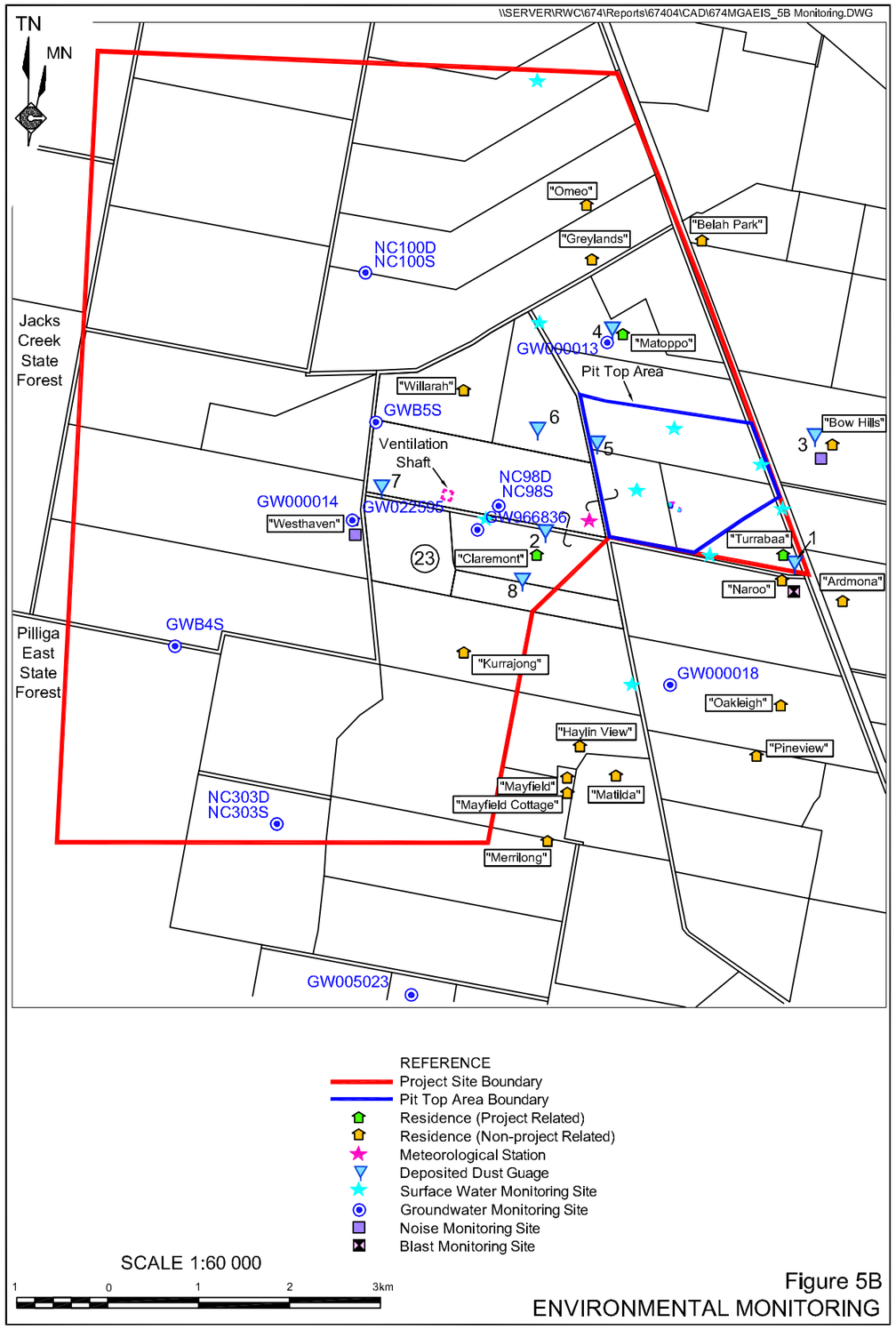

Figure 5B
ENVIRONMENTAL MONITORING