

Appendix A: Change notice – Regulation 22

Interest holder	Tamboran B2 Pty Ltd	EMP Title	Beetaloo Sub-basin Shenandoah South Sand Wash Plant EMP		Unique EMP ID	TAM4-2	Mod #	1	Date	13 November 2025
Brief Description	Construct and operate a small short-term and temporary sand wash plant site on and adjacent to the existing Kyalla N2 117 well pad, primarily to re-process / recycle proppant from damaged bags which has come into contact and mixed with the inert substrate material (e.g. sand/silt/gravel/organic matter and other impurities) to enable its use in the completion of wells approved under the TAM1-3 EMP.									
Geospatial files included?	Yes									
Does the proposed change result in a new, or increased, or potential or actual environmental impact or risk?	If an INCREASE in the existing potential or actual environmental risk, is it provided for in the EMP?	Does the proposed change require additional mitigation measures to be included?	Has additional stakeholder engagement been conducted?	Does it require additional environmental performance standards and measurement criteria?	Does it affect compliances with Sacred Site Authority Certificates?	Does it affect current rehabilitation, weed fire, wastewater, erosion and sediment control, spill or emergency response plans?	Will the environmental outcome continue to be achieved and will the impacts and risks be managed to ALARP and acceptable?			
No. There are no new or increased environmental impacts. Process water treatment and management has been previously assessed to have a risk that is low and acceptable, noting that it is not considered to be wastewater and is of significantly better quality than the wastewater streams that are generated during Tamboran’s activities). The deposition of small volumes of process (i.e. turbid) water on the TSWP site does not constitute a new or increased potential or actual environmental risk, particularly due to the short duration of the activity and the fact that no off-site releases will be undertaken.	N/A No increased impact or risk with sufficient controls outlined in the spill management plan and wastewater management plan.	No No new mitigation measures are required for the TSWP site are required beyond those already proposed for the SWP site. Existing mitigation measures are in place covering spill management and process water management, etc.	Yes Additional stakeholder engagement has been undertaken with the pastoralist regarding this activity, noting that the footprint is located on/adjacent to the Kyalla well pad, is constrained to within an existing fenced area surrounding the well pad, and only occupies 0.3 ha.	No. Environmental performance standards and measurement criteria within the existing approved EMP are sufficient.	No. Activity covered under the existing AAPA certificate C2024-065 (variation approved 30 October 2025).	Yes Plans have been updated to incorporate sand washing activities (RMP only)	Yes. Mandatory groundwater monitoring required by the Code as outlined in <i>Table 34 Monitoring program summary</i> , will be met.			
Additional contextual information	The installation and use of the temporary sand wash plant site to the TAM4-2 EMP through a Regulation 22 will enable the recycling of proppant which has split to grade and mixed with the substrate material and which would otherwise be unable to be used in the completion (hydraulic fracture stimulation) of wells approved under the TAM1-3 EMP.									

Interest holder	Tamboran B2 Pty Ltd	EMP Title	Beetaloo Sub-basin Shenandoah South Sand Wash Plant EMP	Unique EMP ID	TAM4-2	Mod #	1	Date	13 November 2025												
Current EMP text				Amended EMP text																	
Executive Summary The proposed Shenandoah South sand wash plant (SWP) will process locally sourced sand to a suitable quality for use as a proppant for use in the HFS of E&A wells developed by Tamboran. The SWP is intended to provide sand for E&A appraisal activities only, is not related to production activities (as defined in the NT Petroleum Act 1984) and will not be sold to third parties. The SWP is anticipated to operate as a trial for the first 2 years and may be further utilised for a period of up to 5 years if the trial is successful.				Executive Summary The proposed Shenandoah South sand wash plant (SWP) will process locally sourced sand to a suitable quality for use as a proppant for use in the HFS of E&A wells developed by Tamboran. The SWP is intended to provide sand for E&A appraisal activities only, is not related to production activities (as defined in the NT Petroleum Act 1984) and will not be sold to third parties. The SWP is anticipated to operate as a trial for the first 2 years and may be further utilised for a period of up to 5 years if the trial is successful. A temporary sand wash plant site (TSWP) will initially be established and utilised on/adjacent to the Kyalla N2 well pad for a short period while the SWP site is being established. The TSWP will be utilised to reprocess previously imported proppant and raw sand from within the footprint of the site.																	
Executive Summary Table 1: Description of the proposed activities for the SWP <table border="1"> <thead> <tr> <th>Activity</th> <th>Parameter</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td>•</td> </tr> </tbody> </table>				Activity	Parameter	Description			•	Executive Summary Table 1: Description of the proposed new exploration and appraisal activities for the Shenandoah South E&A program, including 2D seismic acquisition <table border="1"> <thead> <tr> <th>Activity</th> <th>Parameter</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Temporary Sand Wash Plant Site</td> <td><7 kt of proppant to be processed</td> <td>• Installation of a small temporary sand wash plant site to enable reprocessing of proppant/processing of raw sand for a period of 1 month.</td> </tr> </tbody> </table>						Activity	Parameter	Description	Temporary Sand Wash Plant Site	<7 kt of proppant to be processed	• Installation of a small temporary sand wash plant site to enable reprocessing of proppant/processing of raw sand for a period of 1 month.
Activity	Parameter	Description																			
		•																			
Activity	Parameter	Description																			
Temporary Sand Wash Plant Site	<7 kt of proppant to be processed	• Installation of a small temporary sand wash plant site to enable reprocessing of proppant/processing of raw sand for a period of 1 month.																			
3.1 Activity summary Table 9: Site activity summary <table border="1"> <thead> <tr> <th>Activity</th> <th>Parameter</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td>•</td> </tr> </tbody> </table>				Activity	Parameter	Description			•	3.1 Activity summary Table 9: Site activity summary <table border="1"> <thead> <tr> <th>Activity</th> <th>Parameter</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Temporary Sand Wash Plant Site</td> <td><7 kt of proppant to be processed</td> <td>• Installation of a small temporary sand wash plant site to enable reprocessing of proppant/processing of raw sand for a period of 1 month.</td> </tr> </tbody> </table>						Activity	Parameter	Description	Temporary Sand Wash Plant Site	<7 kt of proppant to be processed	• Installation of a small temporary sand wash plant site to enable reprocessing of proppant/processing of raw sand for a period of 1 month.
Activity	Parameter	Description																			
		•																			
Activity	Parameter	Description																			
Temporary Sand Wash Plant Site	<7 kt of proppant to be processed	• Installation of a small temporary sand wash plant site to enable reprocessing of proppant/processing of raw sand for a period of 1 month.																			

Interest holder	Tamboran B2 Pty Ltd	EMP Title	Beetaloo Sub-basin Shenandoah South Sand Wash Plant EMP	Unique EMP ID	TAM4-2	Mod #	1	Date	13 November 2025
------------------------	---------------------	------------------	---	----------------------	--------	--------------	---	-------------	------------------

Current EMP text	Amended EMP text
-------------------------	-------------------------

3.2 Schedule
Table 8: Indicative SWP Activities

Activity	Estimated Duration	Indicative Timeframe
Site establishment	2 weeks	~October-November 2025
Wash plant/mobile plant mobilisation and installation*	1 week	~October-November 2025
Commissioning*	1 week	~October-November 2025
Initial sand washing trial	10 weeks	~November 2025 – January 2026
Demobilisation	1 week	~January 2026
2026 sand washing	~12 weeks	During the period April-October 2026**
2027 sand washing	~12 weeks	During the period April-October 2027**
2028 sand washing	~12 weeks	During the period April-October 2028**
2029 sand washing	~12 weeks	During the period April-October 2028**
Rehabilitation**	4 weeks	During the period April-October 2030
Rehabilitation Monitoring	Every 6 months for first 12 months following the completion of rehabilitation, then every 12 months over 5 years	Annually for a period of 5 years***

*Activity can occur concurrently with previous activity.
 **The SWP assumes the trial is successful and periodic washing of sand for the completion of exploration and appraisal wells will continue on an annual basis (subject to sand demand for E&A activities).
 ***Dependent on the success of rehabilitation. If data obtained confirms early rehabilitation success, the 5-year duration may be reduced.

3.2 Schedule
Table 8: Indicative SWP Activities

Activity	Estimated Duration	Indicative Timeframe
Temporary Sand Wash Plant Establishment and Operation	4 weeks	~ November-December 2025
Site establishment	2 weeks	~November 2025
Wash plant/mobile plant mobilisation and installation*	1 week	~November-December 2025
Commissioning*	1 week	~November-December 2025
Initial sand washing trial	10 weeks	~November 2025 – January 2026
Demobilisation	1 week	~January 2026
2026 sand washing	~12 weeks	During the period April-October 2026**
2027 sand washing	~12 weeks	During the period April-October 2027**
2028 sand washing	~12 weeks	During the period April-October 2028**
2029 sand washing	~12 weeks	During the period April-October 2028**
Rehabilitation**	4 weeks	During the period April-October 2030
Rehabilitation Monitoring	Every 6 months for first 12 months following the completion of rehabilitation, then every 12 months over 5 years	Annually for a period of 5 years***

*Activity can occur concurrently with previous activity.
 **The SWP assumes the trial is successful and periodic washing of sand for the completion of exploration and appraisal wells will continue on an annual basis (subject to sand demand for E&A activities).
 ***Dependent on the success of rehabilitation. If data obtained confirms early rehabilitation success, the 5-year duration may be reduced.

3.7.7 Temporary Sand Wash Plant Establishment

A small, short-term and temporary sand wash plant (TSWP) site will be installed immediately on and adjacent to the existing Kyalla 117 N2 well pad (see Figure 11) to recycle / re-process imported bagged proppant (washed fine silica sand) which has spilt to grade due to bag failure during storage and handling prior to usage in well completions. The proppant has mixed with the inert subgrade material, rendering it unsuitable for use as proppant without reprocessing.

The majority of the TSWP site will be set-up on the existing Kyalla well pad to minimise clearing and take advantage of existing infrastructure (tracks, camps, bores), however an additional ~0.3 ha (40m*75m) of clearing immediately adjacent to the existing pad will be required. Minimal woody vegetation will require removal as part of this clearing. Tamboran will establish the TSWP site to re-process proppant immediately prior to and during the 2025 stimulation campaign to enable the usage of this material in the stimulation activities as required. It is expected the TSWP site will be utilised for a period of less than 1 month (i.e. commencing mid-November 2025).

During handling onsite, numerous bags of imported proppant have failed, which has resulted in large amounts of proppant being split to the ground. The spillage of the proppant to grade (typically within the proppant storage areas on/adjacent to the well pads) results in the material mixing with the substrate material which may contain out of specification raw sand, silt, gravel, rocks and organic matter and some plastic residue from degraded bags. This mixing renders the material unsuitable for use as proppant. To enable the usage of the spilt sand as proppant, recovery of the material and re-processing through a small mobile wash plant located at the Kyalla well pad will be required to remove the unsuitable substrate material. Sandy material extracted during construction of the TSWP site will also be processed as required.

Interest holder	Tamboran B2 Pty Ltd	EMP Title	Beetaloo Sub-basin Shenandoah South Sand Wash Plant EMP	Unique EMP ID	TAM4-2	Mod #	1	Date	13 November 2025
Current EMP text			Amended EMP text						
			<p>The establishment of the TSWP site will require clearing of the additional 0.3ha area, excavation of two small settlement basins sized for the anticipated volume of material to be processed and the associated process water (including allowance for a minimum 580mm operating freeboard with additional volumetric freeboard while the facility is in use to ensure overtopping does not occur), and the deployment and operation of the processing equipment (a small mobile wash plant and associated hoppers and stackers). Plastic from degraded bags within the proppant material will be primarily removed through the washing process itself, with any free plastic material which passes through the wash plant to be skimmed from the surface of the settlement basins prior to backfilling.</p> <p>Although the exact extent of likely bag failure is difficult to anticipate, Tamboran anticipates up to 5,000t of imported proppant may be impacted, with less than 700 of sand in total expected to be processed through the TSWP site. The characteristics of both the bagged proppant and raw sand to be extracted from within the site is well known, with previous testing of this material available (including XRF and acid solubility) – this aligns with the process outlined in section 3.5 of the EMP for testing raw sand and sand from third parties before use. The raw material to be extracted during construction of the TSWP site is consistent with the sand to be extracted from within larger SWP site (the sites are <100m apart), and the bagged sand is also inert silica sand with no contaminants of concern (noting that this material has previously/will be utilised in the completion of Tamboran’s E&A wells).</p> <p>Upon completion of activities within the TSWP (expected to be <1 month), the area outside the existing Kyalla lease pad will be reinstated by dewatering the settlement basins (by transferring the process water to the sand wash plant site covered by the TAM4-2 EMP) and backfilling/reshaping the area to the approximate natural ground level and reinstating the topsoil. The area on the Kyalla 117 lease used for the TSWP will have any materials associated with the TSWP activities removed and will continue to be utilised for activities associated with Tamboran’s E&A programs.</p> <p>The TSWP will:</p> <ul style="list-style-type: none"> • Utilise existing erosion and sediment controls for the processing area on the Kyalla 117 well pad • Have a separate self-contained bunded area for managing process water (turbid water) adjacent to the existing lease pad, which will be operated as a nil-release site. • Utilise existing plant and equipment that is onsite for Tamboran’s activities (with the exception of the wash plant itself which will be mobilised to the site). • Utilise minimal raw water (<2ML sourced from Tamboran’s existing WELs) • Not required a net increase in the approved disturbance footprint for the Kyalla 117 well pad (noting that the lease pad has not been developed to its full extent. • Be utilised for a period of <1 month, at which time it will be reinstated. 						

Interest holder	Tamboran B2 Pty Ltd	EMP Title	Beetaloo Sub-basin Shenandoah South Sand Wash Plant EMP	Unique EMP ID	TAM4-2	Mod #	1	Date	13 November 2025
------------------------	---------------------	------------------	---	----------------------	--------	--------------	---	-------------	------------------

Current EMP text

Amended EMP text

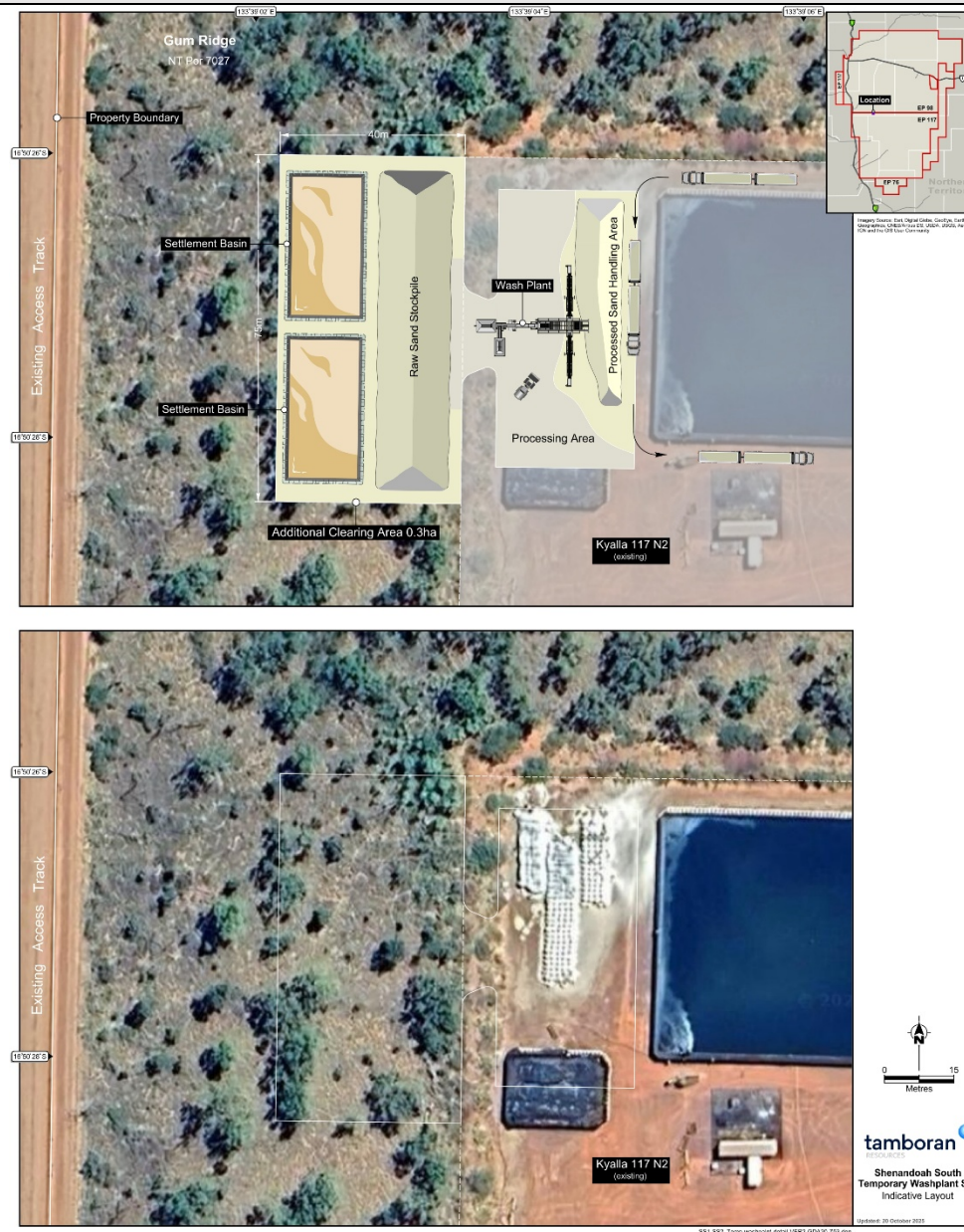


Figure 11 – Temporary Sand Wash Plant Site

Ref	Environmental Factor	Risk scenario description	Risk Source	Activity			Code of Practice	Control / mitigation measures			Risk rating (final)			ALARP criteria achieved?	Residual risk ALARP and Acceptable Statement	Acceptable criteria achieved?	Scientific Uncertainty Ranking
				Construction & commissioning	Ops & emergency management	Decommissioning & rehabilitation		Prevent	Detect	Recover	Consequence	Likelihood	Risk Rating				
1	Hydrological processes	Contamination of aquifer from surface activities (chemical and waste storage, handling, treatment, piping, recycling and spills) impacting a receptor (groundwater user or GDE).	Storage, handling and transportation of chemicals, hydrocarbons and wastes, including during the wet season. Surface spills from the handling and transferring of process water (including process water pipelines). Storage and management of oily waste.	X	X		A.3.8 Containment of Contaminants C.3 Wastewater Management Framework C.7.1 Wastewater Management Plan C.7.2 Spill Management Plan	<ul style="list-style-type: none"> No wastewater will be generated at the SWP and TSWP during routine operations. Process water will be raw water mixed with reject from the SWP and TSWP with the only 'contaminant' being sediment. Reject sand is primarily inert silica dioxide with no identified contaminants present. Process water will not be released from the site. Following completion of activities on the TSWP, process water will be transferred to the SWP site. Captured stormwater may be reused as process water in preference to release, in which case the stormwater will be transferred to settlement basins and be considered to be process water. All chemicals stored in designated areas with secondary containment. Spill Management Plan implemented to prevent, detect and respond to spills. Chemical storage & handling areas to have secondary containment, with an impermeable membrane with coefficient of permeability of <10-9 m/s. Separation between pipework/ chemical/ waste storages and closest aquifer over 70 m, with interbedded clays likely to limit any contaminant migration. Licensed chemical and waste transporters are used for all dangerous goods and listed waste transportation. No chemical transportation during the wet season, unless transportation is undertaken in accordance with a risk assessment that has determined the activity is safe and low risk. Nearest pastoral extraction bore 2.5 km away. Spills and leaks to be cleaned up immediately. No major GDE linked to CLA within 20 km of extraction point, although stygofauna eDNA has been detected in the Amungee NW1 bore; impact likely to be localised. 	<ul style="list-style-type: none"> Weekly inspections to identify any potential leaks or spills from storage and handling areas. Transport incident statistics collected and monitored. Onsite assurances and fit for work assessments completed periodically on transport companies. 	<ul style="list-style-type: none"> Spill management plan implemented outlining leak classification, response and reporting requirements All leaks to be cleaned up as soon as practicable. Emergency Response Plan implemented to prevent, detect and respond to spills. Contractor performance reviews completed where breaches in requirements are escalated and actions implemented to rectify defects. Any contamination event to be characterised and have remediation plans developed and executed in accordance with the process outlined in Appendix A National Environment Protection (Assessment of Site Contamination) Measure 1999 (the ASC NEPM). 	2	1	L	Yes	<p>The regulatory regime legislating the storage, handling and transportation of dangerous goods and combustible liquids in Australia is mature.</p> <p>Regulatory requirements covering wastewater and containment of contaminants is extensive.</p> <p>Double lined tanks will be used which will reduce the potential for spills/ leaks. Any spillage is likely to be locally restricted, small and rapidly detected. Consequences are considered moderate, with impacts spatially restricted to the SWP pad, primarily located on the surface and is likely to be of a short term (days to weeks). The likelihood of contamination is influenced by the rapid detection, separation distance between aquifer and the surface and rapid detection of any spills.</p> <p>The likelihood of a groundwater event from chemical spills is considered remote with a <1% probability. This is primarily influenced by the lack of spill sources, separation distance between aquifers and the surface, and implementation of the spill management plan that will rapidly detect any spills.</p>	Yes	Low
2	Inland water environmental quality	Contamination of surface water or soils from surface activities.	Storage, handling and transportation of chemicals, hydrocarbons and wastes/ wastewater, including during the wet season. Surface spills from storage, handling, treatment, piping and transportation of process water. Chemical and waste transportation accident.	X	X		A.3.8 Containment of Contaminants C.7.2 Spill Management Plan	<ul style="list-style-type: none"> No wastewater will be generated at the SWP and TSWP during routine operations. Process water will be raw water mixed with reject from the SWP and TSWP with the only 'contaminant' being sediment. Reject sand is primarily inert silica dioxide with no identified contaminants present. Process water will not be released from the site. Following completion of activities on the TSWP, process water will be transferred to the SWP site. Captured stormwater may be reused as process water in preference to release, in which case the stormwater will be transferred to settlement basins and be considered to be process water. All chemicals stored in designated areas with secondary containment. Spill Management Plan implemented to prevent, detect and respond to spills. Chemical storage & handling areas to have secondary containment, with an impermeable membrane with coefficient of permeability of <10-9 m/s. All oily water tanks to be double skinned Separation between surface and closest aquifer over 70 m, with interbedded clays likely to limit any contaminant migration. Licensed chemical and waste transporters are used for all dangerous goods and listed waste transportation in accordance with the NT Dangerous Goods Act and Waste Management Pollution Control Act. No chemical or waste oily water transport during the wet season, unless transportation is undertaken in accordance with the EMP stated controls and a risk assessment that has determined the activity is safe and low risk. All wastes, to be disposed of to offsite licenced facilities using authorised transporters under the WMPC Act. Nearest pastoral extraction bore 2.5 km away. Spills and leaks to be cleaned up immediately. No major GDE linked to CLA within 20 km of extraction point, although stygofauna eDNA has been detected in the Amungee NW1 bore; impact likely to be localised. 	<ul style="list-style-type: none"> Daily inspections during operations Weekly site inspections to check levels, identify any potential leaks or spills from storage and handling areas. Daily wet season inspections during rainfall events to check levels Weekly dry season inspections of all secondary containment. Transport incident statistics tracked through incident management system Onsite assurances and fit for work assessments completed periodically on transport companies. 	<ul style="list-style-type: none"> Spill management plan implemented outlining leak classification, response and reporting requirements All leaks to be cleaned up as soon as practicable. Emergency Response Plan implemented to prevent, detect and respond to spills. Contractor performance reviews completed where breaches in requirements are escalated and actions implemented to rectify defects. Any contamination event to be characterised and have remediation plans developed and executed in accordance with the process outlined in Appendix A of the ASC NEPM. 	3	1	L	Yes	<p>The transportation of wastes and chemicals is a tightly controlled industry with mature practices designed to prevent, detect and respond to transportation spills. Any accident is likely to be restricted to road corridors and result in "serious", short term (days-weeks) reversible impacts. All contractors must be appropriately licenced, with National uniform legislation in place to offer a high level of regulatory protection.</p> <p>This risk is considered identical to that of bulk diesel and other dangerous goods transportation- a common activity throughout Australia. Fuel and chemical transport accidents are rare given the number of transportation movements in Australia.</p> <p>The likelihood of an event occurring is therefore considered "remote", what a probability of less than 1%.</p>	Yes	Low
3	Inland water environmental quality	Contamination of surface water or soils from surface activities.	Release of contaminated stormwater from activities to surface water, including during flooding. Land clearing and access track sediment releases	X	X		A.3.1 Site selection and planning A.3.4 Erosion and sediment control and hydrology	<ul style="list-style-type: none"> Clearing under this EMP has been minimised to 11.5 ha total by utilising existing excillary infrastructure where possible (Kyalla 117 pad, camp, existing access tracks, etc. All oily water tanks to be double skinned External stormwater to be diverted around the sites using bunds, etc. Erosion and sediment controls implemented around the sites and access tracks to minimise erosion and sediment releases. Existing access tracks used, with maintenance completed to minimise erosion and sediment releases. Stockpiled debris to be used to discourage water concentration. Site to be maintained, with vegetation cover on exposed (non-operational) bunds/ stockpiles established and erosion and sediment controls kept in working order. No offsite releases of process water. Following completion of activities on the TSWP, process water will be transferred to the SWP site. Operational settlement basins installed onsite will be operated with at least 300mm dry season freeboard (1:1000 ARI dry season rainfall) and a 580mm Wet season freeboard (1:100 7-day rainfall event) with additional volumetric capacity to be available to prevent the release of process water. Decant ponds/basins will be operated with a minimum 300mm freeboard, with a spillway to divert any releases into the settlement basins to utilise the available volumetric freeboard Raw water ponds pose no risk to the environment, however will be maintained with a 300mm freeboard with any overflow to be directed to a settlement basin to utilise the available volumetric freeboard Captured stormwater may be reused as process water in preference to release, in which case the stormwater will be transferred to settlement basins and be considered to be process water. Routine weekly monitoring of sediment/settlement basin water quality and freeboard during wet season and monthly during dry season. Daily monitoring of sediment and settlement basin levels will be undertaken during periods of high rainfall Contaminated stormwater (e.g. from fuel/chemical spills) to be transferred to wastewater tanks. All wastes to be disposed of to offsite licenced facilities using authorised transporters under the WMPC Act. 	<ul style="list-style-type: none"> Pre-wet season site assessment completed to identify any maintenance requirements on pads and access tracks. Stormwater captured in the SWP sediment basins and process water stored in the settlement basins to be routinely tested and levels checked. Weekly site inspections designed to identify any issues during the wet season. 	<ul style="list-style-type: none"> Maintenance to be undertaken on erosion and sediment controls to ensure ongoing functionality Any spills to be investigated and corrective actions implemented. Pumping/decanting of process water between settling basins to maintain freeboard levels Washing to cease where operational settlement basin levels are above freeboard. 	1	2	L	Yes	<p>External stormwater to be diverted around the site using bunds, etc.</p> <p>All stormwater within the SWP site will be directed to a sediment basin where it will be allowed to settle out sediment. Weekly testing of the sediment basin during the wet season will ensure no contamination has occurred. Captured stormwater may be reused as process water in preference to release, which will involve its transfer to a settlement basin to become part of the process water inventory.</p> <p>Process water will not be released from the site.</p> <p>Dirty stormwater from drip trays and bunds will be collected and treated, with wastewater sent to the existing wastewater tanks. The segregation of clean and dirty water ensures the risk of contamination is minimised.</p> <p>The likelihood is reduced down to remote (<1% probability of occurring) based on the 27 km separation distance between the SWP site and the nearest mapped water course.</p>	Yes	Low
4	Inland water environmental quality	Contamination of surface water or soils from surface activities.	Uncontrolled release of waste oily water, chemicals or fuel from site due to regional flooding.		X		A.3.1 Site selection and planning A.3.4 Erosion and sediment control and hydrology	<ul style="list-style-type: none"> No offsite release of chemicals or oils. Stormwater collected in bunds and drip trays/ other contaminated stormwater to be transferred to SS2 wastewater tanks. Area is remote with closest watercourse 27 km to the west of the SWP/TSWP No major wetlands in the vicinity of the SWP site, with Longreach Lagoon 50 km+, Lake Woods 90 km+. Flood modelling of well pad, including SWP pad completed to optimise site location, away from regional flow paths with low erosivity of flood anticipated. External stormwater to be diverted around the site using bunds, etc. Erosion and sediment controls implemented around the sites to minimise erosion and sediment releases, including diversion bunds. Stockpiled debris to be used to discourage water concentration. Settlement basin installed onsite with significant airspace/operational freeboard to prevent release of process water. Captured stormwater may be reused as process water in preference to release, in which case the stormwater will be transferred to settlement basins and be considered to be process water. Weekly monitoring of sediment/settlement basin quality during wet season and monthly during dry season. The site will be maintained, with vegetation cover on exposed (non-operational) bunds/ stockpiles established and erosion and sediment controls kept in working order. Spill Management Plan implemented to prevent, detect and respond to spills. Regional flooding would involve order of magnitude larger volume of low electrical conductivity water (many GL) mixing with relatively small volumes of contaminants. Dilution would reduce any potential contamination impact down to negligible. 	<ul style="list-style-type: none"> Pre-wet and post season site assessment completed to identify any erosion/sediment maintenance requirements. Stormwater captured in sediment basin to be routinely tested and released offsite in a controlled manner. 	<ul style="list-style-type: none"> Maintenance to be undertaken on erosion and sediment controls to ensure ongoing functionality. Areas with poor rehabilitation will be maintained to reduce impact. 	1	2	L	Yes	<p>External stormwater to be diverted around the site using bunds, etc.</p> <p>All stormwater within the SWP site will be directed to a sediment basin where it will be allowed to settle out sediment. Weekly testing of the sediment basin during the wet season will ensure no contamination has occurred. Captured stormwater may be reused as process water in preference to release, which will involve its transfer to a settlement basin to become part of the process water inventory.</p> <p>The area is not in close proximity to major watercourse with 27 km separation distance between the SWP site and the nearest mapped watercourse. The likelihood is reduced down to remote (<1% probability of occurring).</p>	Yes	Low
5	Terrestrial environmental quality	Loss in long-term soil productivity and viability through soil destabilisation, increased risk of erosion and sedimentation, compaction and dust.	Soil compaction of the SWP pad. Soil erosion from cleared areas.	X	X		A.3.1 Site selection and planning A.3.4 Erosion and sediment control and hydrology A.3.9 Rehabilitation	<ul style="list-style-type: none"> Clearing under this EMP has been minimised to 11.5 ha by utilising existing excillary infrastructure where possible (Kyalla 117 pad, camp, existing access tracks, etc. The SWP pad will be rehabilitated to reduce impacts associated with compaction. The total disturbance area is small (<0.01% of EP 98 and <0.006% of total tenure area). Average grade of SWP and TSWP sites is <1%. Erosion and Sediment Control Plan in place and maintained in functioning condition. The site will be maintained, with erosion and sediment controls kept in working order. Stockpiled debris to be used to discourage water concentration. Sediment basin used to settle out sediment from run-off. Captured stormwater may be reused as process water in preference to release, in which case the stormwater will be transferred to settlement basins and be considered to be process water. 	<ul style="list-style-type: none"> Pre-wet season site assessment completed to identify any erosion/sediment maintenance requirements. Rehabilitation monitoring to assess soil productivity impacts. 	<ul style="list-style-type: none"> Maintenance to be undertaken on erosion and sediment controls to ensure ongoing functionality. Areas with poor rehabilitation will be maintained to reduce impact. 	1	3	L	Yes	<p>The SWP site will be compacted/sheeted as required during construction. Long term impacts of this compaction will be addressed during the rehabilitation of the site. A loss of productivity is anticipated in the earlier stages of rehabilitation, returning back to pre-disturbed state within ~10 years. This will be accelerated through removal of hard stand areas, ripping and scarifying compacted surface, the consequences is likely to be "moderate", being locally restricted, with a moderate- long (years) recovery time.</p> <p>The likelihood of long term productivity impairment is considered "unlikely" (probability <30%), given the observed rehabilitation from previous disturbance activities.</p>	Yes	Low

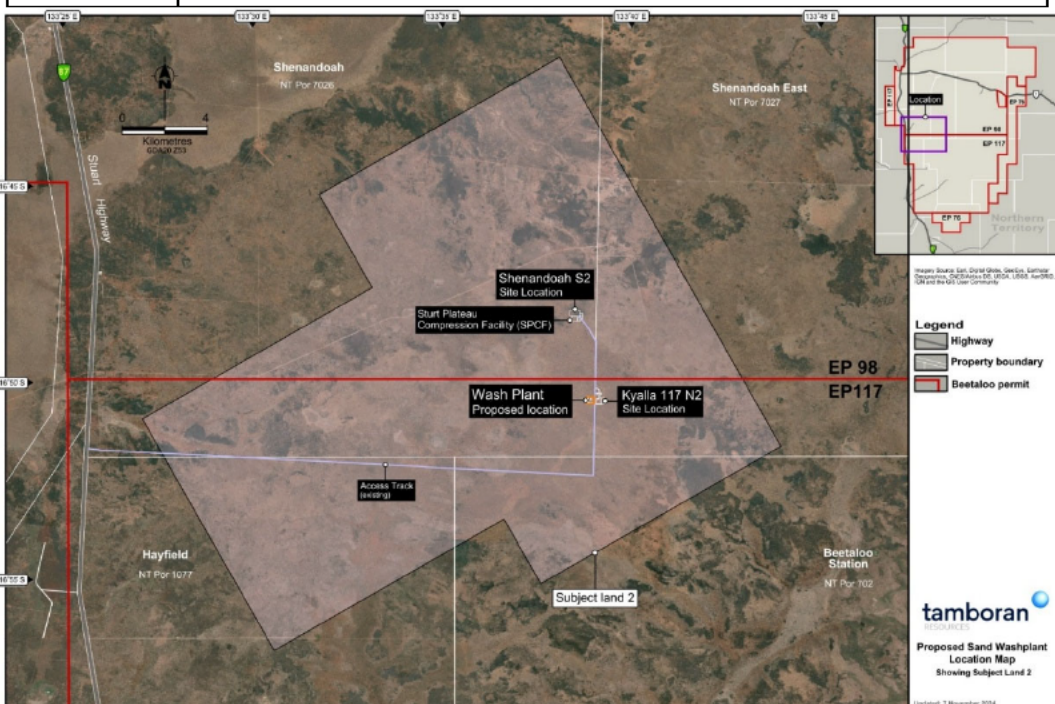
Ref	Environmental Factor	Risk scenario description	Risk Source	Activity			Code of Practice	Control / mitigation measures			Risk rating (final)			ALARP criteria achieved?	Residual risk ALARP and Acceptable Statement	Acceptable criteria achieved?	Scientific Uncertainty Ranking
				Construction & commissioning	Ops & emergency management	Decommissioning & rehabilitation		Prevent	Detect	Recover	Consequence	Likelihood	Risk Rating				
6	Terrestrial ecosystems	Impact to listed threatened habitats and listed threatened flora and fauna, including habitat fragmentation, impacts to non-listed fauna and livestock from SWP activities.	Activity (vehicle, machinery and equipment) noise and lighting.	X	X	X	A.3.1 Site selection and planning A.3.3 Noise	- Site locations avoids areas of high conservation value as a priority. - Areas are not considered high conservation value, are not threatened/angered and not fragmented, with impacts unlikely to result in significant disturbance to threatened/angered species. - Impacts likely to be temporal, with fauna able to move to adjacent areas to escape impacts. - Fauna monitoring at Kyalla has not identified any impacts, with fauna identified in areas around operations. - Noise and activity at SWP/TSWP likely to deter fauna from interacting with facility. - Sites will be fenced. - Buried raw water pipelines will be limited to the section which underlies the nearby access tracks (<20m). When this section of the pipeline is being deployed, it is expected that the associated trench will be open for ~1 hour with mobile plant and personnel in attendance during this time, minimising the likelihood of fauna entrapment.	- Anecdotal evidence from pastoralists and Traditional Owners. - Impacts are likely to be temporal, with detection extremely difficult.	- Where impacts are identified, practices will be reviewed and modified to reduce impact on fauna.	1	3	L	Yes	Fauna may be disturbed through transport movements along access tracks around the SWP. The consequence of activity nuisance is anticipated to be minor, with localised, short term impacts to areas immediately adjacent to access tracks. The likelihood of the risk is reduced through the isolated location (lack of environmental and community receptors), regionally extensive vegetation communities (good outside refuge away from access tracks and limited transport movements during the evenings). The impact to fauna is considered highly unlikely given the ability of fauna to move to other areas of refuge away from SWP activities.	Yes	Low
7	Terrestrial ecosystems	Impact to listed threatened habitats and listed threatened flora and fauna, including habitat fragmentation, impacts to non-listed fauna and livestock from SWP activities.	Introduction and spread of weeds from the SWP site. Poor rehabilitation of the site reduces regional habitat and promotes weeds. Land clearing.	X	X		A.3.1 Site selection A.3.6 Weed management A.3.9 Rehabilitation	- Clearing under this EMP has been minimised to 11.5 ha by utilising existing excillary infrastructure where possible (Kyalla 117 pad, camp, existing access tracks, etc.) - Activity located away from threatened species nesting locations. - Land clearing undertaken in accordance with NT Land Clearing Guidelines. - Vegetation clearing at SWP/TSWP to be conducted with visual checks to identify fauna/fauna habitat during clearing- specifically grey falcon nests. - Large habitat trees to be avoided where possible (none identified to date). - Scouting completed prior to clearing to identify threatened species - All equipment and vehicles to be washed-down and to have a Biosecurity Declaration Certificate prior to access to site - Areas of proposed exploration have been surveyed and are deemed to have low weed abundance - Activity will be restricted to defined SWP/TSWP sites and existing approved ancillary activity areas such as access tracks, gravel pits, etc. - A site specific Rehabilitation Plan has been developed and will be implemented progressively. - Areas will have infrastructure and wastes removed, topsoil respread and vegetation re-introduced. - Rehabilitation timing will consider seasonal constraints, with rehab completed prior to the wet season to maximise revegetation.	- 6 monthly monitoring implemented around infrastructure to detect the spread/introduction of weed species. - Tamboran assurance activities to target equipment wash-down certificates to ensure standards are being met. - Rehabilitation monitoring to be undertaken to track rehabilitation progress.	- Where weed outbreaks are identified associated with Tamboran's activities, infestations will be treated in accordance with the Weed Management Plan. - Corrective actions implemented where ongoing biosecurity breaches are identified. - Rehabilitation maintenance will be undertaken periodically to fix any defects.	2	2	L	Yes	The area in the vicinity of the SWP is free of weeds. Weeds are present across the broader property. Any introduction of weeds is likely to result in localised impact, with weed management requirements likely to reduce the consequence down to "moderate, short term". Risks associated with land clearing and rehabilitation are well known. Due to the inherent nature of weed prevention the risk likelihood is considered unlikely, with a probability less than <30%.	Yes	Low
8	Terrestrial ecosystems	Impact to listed threatened habitats and listed threatened flora and fauna, including habitat fragmentation, impacts to non-listed fauna and livestock from SWP activities.	Accidental ignition of fire during civil construction	X			A.3.7 Fire management	- Activity located away from threatened species nesting locations. - Scouting completed prior to clearing to identify threatened species. - Bushfire management plan implemented to prevent and respond to bushfires- including establishment of communication and fire response protocols with pastoralists. - Bushfire awareness included in site inductions. - Designated smoking areas on-site. - Firefighting equipment to be available to deal with fires. - Fire breaks will be constructed around the SWP site. - SWP activities do not involve any flaring/naked flames/significant ignition sources - Permit to work system to be utilised for all operational and maintenance activities with the potential to cause ignition - Activities will comply with pastoralist and regional bushfire management plans. - Area in the vicinity of the SWP site have had recent (within 1-2 years) fire activity, reducing the fuel load.	- Annual fire preparedness assurance activities completed where activities are proposed during high fire risk periods. - Daily monitoring of bushfires in the region during periods of high fire danger - Annual fire frequency mapping using the Northern Australia fire information fire history database. - Risk based equipment/ piping inspection and condition monitoring program.	- Fire hazard reduction strategies (such as back burning) to be implemented to reduce the risk of fire ignition/ impact as required. - Where a bushfire is started and cannot be controlled, Tamboran to engage with pastoralist to coordinate response activities.	3	1	L	Yes	Fire is a common occurrence within the Barkly Region. A fire is likely to have a serious impact, with moderate term reversible impacts (years). With the appropriate controls, such as separation distances, firebreaks, and adherence to the Bushfires Management Act 2016, the likelihood of causing a fire from operation of the SWP is anticipated to be remote, with a predicted occurrence of <1%.	Yes	Low
9	Terrestrial ecosystems	Impacts to listed threatened habitats and listed threatened flora and fauna, impacts to non-listed fauna and livestock from SWP activities.	Contaminants in water and soil pass through the food chain and bioaccumulate in fauna causing detrimental impacts to local species and communities.	X	X		A.3.8 Containment of Contaminants C.7.2 Spill Management Plan	- No wastewater will be generated at the SWP/TSWP during routine operations. - Process water will be raw water mixed with mixed reject from the SWP with the only 'contaminant' being sediment. Reject sand is primarily inert silica dioxide with no identified contaminants present. - Process water will not be released from the site.Following completion of activities on the TSWP, process water will be transferred to the SWP site. - Activity located away from threatened species nesting locations. - All chemical are stored in designated areas with secondary containment. - The SWP will be fenced to prevent livestock accesses. - All wastes to be disposed of to offsite licenced facilities using authorised transporters under the WMPC Act.	- Routine site weekly inspections to identify poor chemical handling or wastewater storage practices. - Daily inspections of secondary containment during the wet season and weekly during dry season. - Monitoring of fauna interactions of the site.	- Where ongoing fauna interactions with water storages or chemicals are identified through monitoring, additional controls shall be implemented as appropriate to reduce the potential for exposure (such as additional fencing, deterrents etc.) - All spills are to be cleaned up immediately, preventing the exposure to livestock and fauna.	2	1	L	Yes	The risks associated with fauna ingestion of chemicals is well known and measures to prevent ingestion (such as fences and separation distances to activity) are deployed as standard practice. Tamboran has extensive operational experience to date with no evidence of impacts on biota from chemicals. Combined with the availability of habitat in the area which would be impacted by a release/ spill- the risk is considered minor, with the likelihood remote.	Yes	Low
10	Terrestrial ecosystems	Impact to listed threatened habitats and listed threatened flora and fauna, impacts to non-listed fauna and livestock from SWP activities.	Vehicle and machinery collisions result in a localised impact to listed threatened species.	X	X	X	A.3.5 Biodiversity protection	- Activity located away from threatened species nesting locations. - SWP/TSWP noise will typically deter fauna from interacting with plant during operations. - Vehicle speed limited to 60 km/hr to be reduced around areas of high risk of fauna collision. - Vehicle movements to minimise driving at night. - Fauna collisions observed during the existing activities have been minimal, with collision restricted to several wallabies along access tracks. - Absence of listed threatened species identified in the vicinity of the SWP site during the land condition assessment.	- Fauna mortality data is collected as part of Tamboran's incident and observation management procedures.	- Where ongoing fauna collisions are reported, additional controls shall be implemented, such as reduced speed limits in high risk areas will be implemented.	1	3	L	Yes	The estimated traffic increase for the SWP is ~23 vehicles per day. Fauna collisions with vehicles are a commonly associated with roads. It is anticipated that a small number of fauna collisions will be experienced during the activity (1-2 animals per month), with minor, short term, reversible impacts to local fauna populations. The likelihood of causing a localised decline in species abundance is considered remote.	Yes	Low
11	Terrestrial ecosystems	Impact to listed threatened habitats and listed threatened flora and fauna, impacts to non-listed fauna and livestock from SWP activities.	Encouragement of feral animals and other pest species increases leading to competition with native species. This includes the introduction of cane toads.	X	X	X	A.3.5 Biodiversity protection	- Wastes storages to be animal proof. - All food scraps to be removed from site and disposed of at a licenced facility. - Food scraps to be frozen and stored within freezer during wet season. - Experience from existing activities has not detected increased feral animal prevalence, with only 1 feral dog identified in 6 months of camp operations. - Equipment inspections.	- Feral fauna observation data is collected as part of Tamboran's incident and observation management procedure.	- Where ongoing feral animal presence is detected, additional controls will be investigated in consultation with the pastoralist (such as fencing, removal of water sources etc.)	1	3	L	Yes	Feral animals may be increased through the provision of access to water, food (camps) and hunting habitat (such as road corridors). The use of the existing site and access tracks limits the additional risk associated with the provision of additional hunting habitat. Food scraps and waste will be frozen and disposed of offsite, which will reduce the food availability for pests. The anticipated consequence is minor, with the potential pest species increase anticipated to be small. The likelihood is determined to be unlikely, with a probability of less than 30%.	Yes	Low
12	Culture and heritage	Disturbance of sacred site or culturally sensitive area, loss of spiritual connection with land and decline in environmental value of area used for hunting, foraging and enjoyment.	Sites disturbed directly by SWP activities. Personnel unauthorised access to sacred site.	X	X	X	A.3.1 Site selection and planning	- Exploration Agreements in place with traditional owners covering all proposed exploration activities. - All areas of the proposed activity to be cleared by NLC anthropologist and archaeologist. - An AAPA certificate for the SS E&A activities is in place, a variation to this has been obtained to include the activities proposed in this EMP. - Areas of cultural significance in the vicinity of the SWP/TSWP are identified through Restricted Work Areas - Implementation of the unexpected heritage finds procedure. - All staff, contractors and visitors to be inducted covering restricted work areas and cultural heritage. - Access off lease not permitted.	- Archaeologists complete cultural heritage assessment to identify culturally sensitive areas. - Tamboran completes assurance activities to verify that personnel/vehicles/equipment have not left the approved work area.	- N/A- no access to sacred sites anticipated.	3	1	L	Yes	All sites of the proposed activity must have Traditional Owner clearance via the NLC and informed by Cultural Heritage Assessment by a trained archaeologist. AAPA certificates are required for all activities to ensure sacred sites are not impacted by activities. The remote location of the activity, lack of sacred sites in the vicinity of the SWP and contractual requirements prohibiting access reduce the likelihood down to "remote", with a probability lower than 1%.	Yes	Low
13	Culture and heritage	Disturbance of sacred site or culturally sensitive area, loss of spiritual connection with land and decline in environmental value of area used for hunting, foraging and enjoyment.	Accidental ignition (fire) by site activities.	X	X		A.3.7 Fire management	- Bushfire management plan implemented to prevent and respond to bushfires- including establishment of communication and fire response protocols with pastoralists. - Bushfire awareness included in site inductions. - Designated smoking areas on-site. - Firefighting equipment to be available to deal with fires. - Fire breaks will be constructed around the SWP site. - SWP activities do not involve any flaring/naked flames/significant ignition sources - Permit to work system to be utilised for all operational and maintenance activities with the potential to cause ignition - Activities will comply with pastoralist and regional bushfire management plans. - Area in the vicinity of the SWP site have had recent (within 1-2 years) fire activity, reducing the fuel load.	- Annual fire preparedness assurance activities completed where activities are proposed during high fire risk periods. - Daily monitoring of bushfires in the region during periods of high fire danger. - Annual fire frequency mapping using the Northern Australia Fire Information fire history database.	- Fire hazard reduction strategies (such as back burning) to be implemented to reduce the risk of fire ignition/ impact as required - Where a bushfire is started and cannot be controlled, Tamboran to engage with pastoralist to coordinate response activities	3	1	L	Yes	Fire is a common occurrence within the Barkly Region. A fire is likely to have a serious impact, with moderate term reversible impacts (years). With the appropriate controls, such as separation distances, firebreaks, and adherence to the Bushfire Management Act 2016, the likelihood of causing a fire from operation of the SWP is anticipated to be highly unlikely, with a predicted occurrence of <10%.	Yes	Low
14	Culture and heritage	Disturbance of sacred site or culturally sensitive area, loss of spiritual connection with land and decline in environmental value of area used for hunting, foraging and enjoyment by community (including native title holders).	Contaminants in water and soil pass through the food chain and bioaccumulate in fauna (livestock and native animals) causing detrimental impacts to local species and communities that rely on the animals for food/ livelihood / spiritual connection.		X		A.3.8 Containment of Contaminants C.7.2 Spill Management Plan	- Environmental management plan in place to prevent release of contaminants into the environment to protect country and maintain ability to forage and support Native Title Holders ongoing way of life. - Stakeholder engaging with Native Title Holders and community to provide descriptions of regulated activity and controls. - All chemicals and waste oils stored in designated areas with secondary containment. - No offsite process water or waste discharge. - Spill management plan implemented with all spills cleaned up immediately. - The SWP/TSWP sites will be fenced to prevent livestock accesses. - Air dispersion modelling confirms no impact to air quality from operations. - Sediment/settlement basins used to minimise sediment releases, with routine testing of water from facility. - All wastes to be appropriately stored onsite and removed to a licenced waste facility.	- Routine site weekly inspections to identify poor chemical handling or storage practices. - Monitoring of fauna interactions on site.	- All spills are to be cleaned up immediately, preventing the exposure to livestock and fauna.	2	1	L	Yes	The risks associated with fauna ingestion of chemicals is well known and measures to prevent ingestion (such as fences and separation distances to the activity) are deployed as standard practice. Tamboran has extensive operational experience with no evidence of impacts on biota from chemicals. Combined with the availability of habitat in the area which would be impacted by a release/ spill- the risk is considered minor, with the likelihood remote (1%).	Yes	Low

Ref	Environmental Factor	Risk scenario description	Risk Source	Activity			Code of Practice	Control / mitigation measures			Risk rating (final)			ALARP criteria achieved?	Residual risk ALARP and Acceptable Statement	Acceptable criteria achieved?	Scientific Uncertainty Ranking
				Construction & commissioning	Ops & emergency management	Decommissioning & rehabilitation		Prevent	Detect	Recover	Consequence	Likelihood	Risk Rating				
15	Community and economy	Loss of visual amenity, experience and sense of place for pastoralist, community members and tourists.	Industrialisation of landscape. Increased traffic. Light emissions impact on community receptor (e.g. pastoralist) Influx of workers to region. Noise emissions from activities.		X		A.3.1 Site selection and planning A.3.3 Noise A.3.9 Rehabilitation	- SWP/TSWP sites are located away from environmental and community receptors and not clearly visible from main roads. - Traffic impact assessment completed assessing the increased traffic levels as negligible: reflective of limited size and scope of activity. - Traffic impacts are expected to be primarily associated with construction, with impacts temporary. Ongoing SWP operational traffic is anticipated to be minor. - Access route is away from Hayfields Homesteads. - Activity intensity is restricted to specific periods, with most activity restricted to the adjoining well pad and SWP site. - Workers are flown in and out of Daly waters from Darwin. Buses are used to limit vehicle transport movements between the Daly Waters airport and remote camps- there is limited drive in/drive out workers into the Beetaloo, except where local or regional contractors are used. - Camps used to minimise impact on local accommodation and tourism. - Where practical, the noisiest works will be undertaken during the recommended standard hours. - Plant will be regularly maintained; equipment that becomes noisy will be repaired or replaced. - Noise modelling completed confirming impacts from noise restricted to immediate vicinity of site. - Progressive rehabilitation to occur when sites are no longer required for future operations. - Community living areas are not located near the planned activities, with Jingaloo located 35 km and Lily Hole 50 km from activity.	- Ongoing pastoralist and community engagement to monitor performance and identify potential impacts from activity on local amenity.	- N/A- site location and activity intensity is unable to be changed. - Complaints will be dealt through Tamboran's complaint resolution process. Where valid complaints are received, additional controls will be implemented to address community complaints (such as changes to vehicle load movements, etc.)	1	1	L	Yes	The SWP site is located away from major transport routes, homesteads and communities. The consequences of activities may result in minor changes to the aesthetics in the vicinity through visibility of exploration activities (e.g. presence of workers and vehicles). A noise modelling and assessment indicates all representative receptors are predicted to comply with the relevant external operational noise limits during the operation of the SWP. The probability that the activity will result in an industrialisation of the landscape is considered remote, with a probability less than 1%.	Yes	Low
16	Community and economy	Reduction in land productivity.	Introduction and spread of weeds in the area. Bushfire from accidental ignition.	X	X		A.3.6 Weed management A.3.7 Fire management	- All equipment and vehicles to be washed-down and to have a Biosecurity Declaration Certificate prior to access to site. - Areas of proposed exploration have been surveyed and are deemed to have low weed abundance. - Activity will be restricted to defined SWP site. - Bushfire management plan implemented to prevent and respond to bushfires- including establishment of communication and fire response protocols with pastoralists. - Bushfire awareness included in site inductions. - Designated smoking areas on-site. - Firefighting equipment to be available to deal with fires. - Fire breaks will be installed around infrastructure. - Permit to work system to be utilised for all operational and maintenance activities with the potential to cause ignition - SWP activities do not involve any flaring/naked flames/significant ignition sources. - Activities will comply with pastoralist and regional bushfire management plans.	- 6 monthly monitoring implemented around infrastructure to detect the spread/introduction of weed species. - Tamboran assurance activities to target equipment wash-down certificates to ensure standards are being met. - Annual fire preparedness assurance activities completed where activities are proposed during high fire risk periods. - Daily monitoring of bushfires in the region during periods of high fire danger. - Annual fire frequency mapping using the Northern Australia Fire Information fire history database. - risk based corrosion and integrity inspections of pipelines and equipment	- Where weed outbreaks are identified associated with Tamboran's activities, infestations will be treated in accordance with the Weed Management Plan. - Fire hazard reduction strategies (such as back burning) to be implemented to reduce the risk of fire ignition/ impact as required. - Where a bushfire is started and cannot be controlled, Tamboran to engage with pastoralist to coordinate response activities.	3	2	M	Yes	The area in the vicinity of the SWP is free of weeds. Weeds are present across the broader property. Any introduction of weeds is likely to result in localised impact, with weed management requirements likely to reduce the consequence down to moderate, short term. Due to the inherent nature of weed prevention the risk likelihood is considered unlikely, with a probability less than <30%. Fire is a common occurrence within the Barkly Region. A fire is likely to have a serious impact, with moderate term reversible impacts (years). With the appropriate controls, such as separation distances, firebreaks, and adherence to Bushfires Management Act, the likelihood of causing a fire from SWP activities is anticipated to be highly unlikely, with a predicted occurrence of <10%.	Yes	Low
17	Community and economy	Reduction in land productivity.	Impact to surface hydrology changes water flows impacting the land use/productivity	X			A.3.1 Site selection and planning A.3.4 Erosion and sediment control and hydrology	- The SWP/TSWP site is located away from watercourses and regional flow paths, with closest watercourse ~27 km west of the SWP site. - The sites are designed to divert stormwater around, without impeding natural surface water flows. - Erosion and sediment controls implemented around the sites to minimise erosion and sediment releases, including diversion bunds. - Process water will not be released from the site. - Captured stormwater may be reused as process water in preference to release, in which case the stormwater will be transferred to settlement basins and be considered to be process water. - Stockpiled debris to be used to discourage water concentration, with vegetation establish on stockpiles to reduce exposed surfaces - Area is remote.	- Erosion and Sediment Control Plan in place with routine pre and post wet season inspection and maintenance.	- Maintenance to be undertaken on erosion and sediment controls to ensure ongoing functionality and the controls are adequate.	1	1	L	Yes	The SWP has been located outside the major regional flow paths and designed to divert stormwater around the infrastructure. The consequence is anticipated to be minor, with the likelihood remote (based on the site location, soils and nature of the activities).	Yes	Low
18	Community and economy	Reduction in land productivity and surface water quality	Loss of sense of place and connection to land and country Reduction in foraging and support of traditional lifestyle Poor rehabilitation/ reinstatement of exploration infrastructure. Impacts on surface water quality due to sediment releases			X	A.3.1 Site selection and planning A.3.4 Erosion and sediment control and hydrology A.3.9 Rehabilitation	- All exploration activities are undertaken under Exploration agreements with Native Title Holders. - Environmental management plan in place to prevent release of contaminants into the environment to protect country and maintain ability to forage and support Native Title Holders ongoing way of life. - Existing access tracks utilised, with erosion and sediment controls in place to minimise sediment releases - Process water will be raw water mixed with reject from the SWP with the only 'contaminant' being sediment. Reject sand is primarily inert silica dioxide with no identified contaminants present. - Process water will not be released from the site. Following completion of activities on the TSWP, process water will be transferred to the SWP site. - Settlement basins installed onsite operated with at least 300mm dry season freeboard (1:1000 ARI dry season rainfall) and a 580mm Wet season freeboard (1:100 7-day rainfall event) with additional volumetric capacity to be available to prevent the release of process water. - Captured stormwater may be reused as process water in preference to release, in which case the stormwater will be transferred to settlement basins and be considered to be process water. - Exploration agreements have specific environmental and reporting requirements. - Native title holders receive royalties and employment from exploration activities. - On country meetings held to discuss activities, risk and controls. - Site inspections held with Native Title Holders prior to commencement of activities and routinely to inspect activities as they progress. - Cultural managers used to perform sacred site clearances and heritage surveys to identify features required to be protected. - Cultural managers used for pre-clearance surveys. - Community living areas are not located near to, or downstream of the planned activities, with Jingaloo located 35 km and Lily Hole 50 km from activity. - A site specific Rehabilitation Plan has been developed and will be implemented progressively. - Areas will have infrastructure and wastes removed, topsoil spread and vegetation re-introduced. - Rehabilitation timing will consider seasonal constraints, with rehab completed prior to the wet season to maximise revegetation chance.	- Routine meetings are held with Native Title Holders to discuss activities, with any concerns raised responded to. - Rehabilitation monitoring to be undertaken to track rehabilitation progress.	- Complaints regarding Tamboran's activities will be dealt through Tamboran's complaint resolution process. Where complaints are received, Tamboran will investigate and work with the party to attempt to come to an amicable resolution. - Rehabilitation maintenance will be undertaken periodically to fix any defects. - Pumping of process water between settling basins to maintain freeboard levels - Washing to cease where settling basin levels are above freeboard.	2	2	L	Yes	Exploration Agreements under the Native Title Act are required to be in force covering all exploration activities. These dictate ongoing engagement and consent processes with Native Title Holders. Tamboran provides information on their proposed activities, including the avoidance of impacts and risk mitigation strategies. The Code outlines extensive controls which fundamentally protect the environment and therefore the interests of Native Title Holders. Rehabilitation success will be determined through the timing of rehabilitation, with rehab activities undertaken before the wet season to maximise success. Ongoing monitoring and maintenance of rehabilitated areas will be critical to identify and repair areas where rehabilitated success is poor. Consequences are likely to be moderate, with impacts likely to have moderate, locally restricted and medium to long term (1-5 years). The likelihood is influenced by the requirement for security provisions, rehabilitation plan requirements and Code conditions. The likelihood is anticipated to be highly unlikely, with a probability below 10%.	Yes	Low
19	Community and economy	Reduction in land productivity.	Disruption of agricultural operations due to ongoing access, traffic, helicopter movements, etc.	X	X		A.3.1 Site selection and planning A.3.3 Noise	- All activities require engagement with pastoralists. - The site has been located to avoid disruption to agriculture operations and infrastructure. - Engagement has/will be undertaken in accordance with NT Petroleum (Environment) Regulations. - Traffic levels are anticipated to be small- as per traffic impact assessment. - Compensation to be paid for disruption to pastoral activities from construction and operational activities. - The implementation of the SWP will reduce the use of property access tracks to deliver imported sand.	- Ongoing pastoralist engagement to monitor performance and identify potential impacts from activity on local amenity.	- Complaints regarding Tamboran's activities will be dealt through Tamboran's complaint resolution process. Where complaints are received, Tamboran will investigate if additional controls are needed and implement to address the complaint (such as shrouds, changes to flare configuration etc.)	1	1	L	Yes	Tamboran has extensive experience in co-existing its activities with agricultural users. Consultation with pastoralists is undertaken to ensure impacts on their activities are mitigated. These impacts are addressed in the compensation agreements and access guidelines. It is noted that there is an impact on stakeholder in regards to working with proponents to plan E&A activities, this is unavoidable and required to ensure the activities can be designed to accommodate the activities of both parties. Consequences are anticipated to be minor for E&A activities, with the likelihood unlikely.	Yes	Low
20	Community and economy	Increased traffic movements impacts pastoralists, community (including native title holders), tourists, workers and contractors	Vehicle (light or heavy) accident.	X	X	X	A.3.1 Site selection and Planning	- Traffic impact assessment completed, with traffic levels are anticipated to be small. - Alcohol and drug policy implemented with zero tolerance (0.00% BAC and no illicit substances). - Land Transport Procedures. - Workers are flown in and out of Daly waters from Darwin. Buses are used to limit vehicle transport movements between the Daly Waters airport and remote camps- there is limited Drive In/Drive Out workers into the Beetaloo, except where local or regional contractors are used. - The camp is located away from major roads with most movements on internal property access road between the camp, SWP and other approved areas. - The implementation of the SWP will reduce the use of local and regional roads and property access tracks to deliver imported sand. - Stuart Highway intersection design to be approved by DIPL with appreciate line of site provided for vehicles to identify turning vehicles. - Stuart Highway upgrade to be upgraded with turning lanes as per DIPL requirements and approvals. - Ongoing engagement with DIPL. - Community living areas are not located near the planned activities, with Jingaloo located 35 km and Lily Hole 50 km from activity.	- Ongoing community engagement to monitor performance and identify potential impacts from activity on local amenity.	- Complaints regarding Tamboran's activities will be dealt through Tamboran's complaint resolution process. Where valid complaints are received, additional controls will be implemented to address community complaint. - Emergency response plan implemented.	4	2	M	Yes	Cumulative E&A activities will increase traffic levels up to an estimated 31 vehicles per day during the peak. This traffic volume is well below the Level of Service for the highway, which is estimated to be above 1100 vehicles per hour. Accidents from trucks turning into access tracks or from general vehicle accidents could have a major consequence, with an injury to community members/ tourist requiring hospitalisation. Upgrades to the intersection required by DIPL will reduce the likelihood of this incident from occurring. Smaller volumes of traffic are required for Beetaloo, combined with the lack of road users, traffic management plan for all access track turn ins, zero tolerance for alcohol and drugs and use of trained drivers to minimise the risk. Given traffic accidents can result in injuries, the consequence remains major with a likelihood probability of <10%.	Yes	Low
21	Community and economy	Labour competition with local businesses and agricultural procedures.	SWP activities compete with agricultural industry for resources.	X	X	X	N/A	- Proposed activity is temporary with no major labour requirements. - Ongoing stakeholder engagement to ensure they know the temporal nature of work. - Local and regional contractors will be utilised where available, representing a significant benefit to local suppliers. - Some operational and maintenance work will require a skilled workforce sourced regionally/interstate. - Contracts will be structured to reduce 'boom and bust' cycle (clear understanding of limited scope of work).	- Ongoing community engagement to monitor performance and identify potential impacts from activity on local amenity.	- Complaints regarding Tamboran's activities will be dealt through Tamboran's complaint resolution process. Where valid complaints are received, additional controls will be implemented to address community complaint.	1	1	L	Yes	Labour competition is a consequence that may occur in a full scale shale development and is not anticipated to have a major impact during E&A activities (including the SWP) which are generally short term campaigns and are completed similar to most small infrastructure projects (such as road upgrades). Local contractors are to be used where available, with a priority on using Traditional Owner businesses. The consequence of labour competition during E&A is minor, with a likelihood of remote (<1% probability).	Yes	Low

Ref	Environmental Factor	Risk scenario description	Risk Source	Activity			Code of Practice	Control / mitigation measures			Risk rating (final)			ALARP criteria achieved?	Residual risk ALARP and Acceptable Statement	Acceptable criteria achieved?	Scientific Uncertainty Ranking
				Construction & commissioning	Ops & emergency management	Decommissioning & rehabilitation		Prevent	Detect	Recover	Consequence	Likelihood	Risk Rating				
22	Air quality	Reduction in air quality.	Emissions from the combustion of diesel engines and generators. Air emissions from chemical releases during SWP activities.	X	X	X	A.3.1 Site selection and planning D.4.1 Baseline assessment	- Low emission equipment to be used, with catalytic converters used on selected engines. - All equipment to be maintained in accordance with the manufacturer's recommendations. - No community receptors within 15 km. Nearest environmental receptor (pastoral bore) is 2.5 km away. - National Occupational Health and Safety Codes: Code of Practice for the Control of Workplace Hazardous Substances. - Chemical handling and mixing practices to reduce particulate emissions. - Community living areas are not located near the planned activities, with Jingaloo located 35 km and Lily Hole 50 km from activity.	- Regular equipment condition monitoring and maintenance. - Routine site inspections and assurance undertaken to ensure equipment is maintained and operated as per manufacturers' requirements. - Routine site inspections and assurance undertaken to ensure ongoing chemical handling practices do not result in an offsite release of substances.	- All equipment defects identified by site inspection and assurances to be rectified promptly. - Corrective actions implemented to address poor chemical handling and mixing practices.	1	1	L	Yes	Impacts to environmental or community receptors are not anticipated, with the closest receptor at least 15 km away. Low emission equipment, such as catalytic converters is a standard practice to minimise emissions. Potential air quality issues from the SWP are not anticipated due to lack of regional sources and low emission intensity of activity. Due to the limited scale of activities, overriding occupational health safety requirements to limit worker exposure and lack of local receptors, the consequence is anticipated to be minor. The likelihood of a receptor being exposed to emissions above the NEPM guidelines is remote (<1%), given the large separation distances between the activity and closest receptors, being >15 km.	Yes	Low
23	Air quality	Increased nuisance from dust and particulate emissions associated with the SWP activities caused impacts to regional ecosystems and fauna	Traffic movements. Dust emissions from SWP activities Bushfire from accidental ignition source.	X	X		A.3.7 Fire management	- Water trucks will be used to decrease dust emissions; roads maintained to prevent bull dust generation during construction. - Roads appropriately maintained to minimise bull dust generation. - The implementation of the SWP will reduce the use of local and regional roads and property access tracks to deliver imported sand and associated dust emissions. - Bushfire management plan implemented to prevent and respond to bushfires- including establishment of communication and fire response protocols with pastoralists. - Bushfire awareness included in site inductions. - Firefighting equipment to be available to deal with fires. - Fire breaks will be installed around infrastructure. - Activities will comply with pastoralist and regional bushfire management plans. - Vehicles to be equipped with fire extinguishers. - Activities will comply with pastoralist and regional bushfire management plans. - Permit to work system introduced to control routine and non-routine activities within SWP. - Community living areas are not located near the planned activities, with Jingaloo located 35 km and Lily Hole 50 km from activity.	- Routine site inspections and assurance undertaken to identify and rectify high dust emissions. - Annual fire preparedness assurance activities completed where activities are proposed during high fire risk periods. - Daily monitoring of bushfires in the region during periods of high fire danger - Annual fire frequency mapping using the Northern Australia fire Information fire history database. - Incident management system to detect complaints and incidents associated with dust generation.	- Dust control to be implemented where unacceptable dust from transport activities occur. - maintenance of roads triggered where unacceptable dust generation occurs. - Fire hazard reduction strategies (such as back burning) to be implemented to reduce the risk of fire ignition/ impact as required. - Where a bushfire is started and cannot be controlled, Tamboran to engage with pastoralist to coordinate response activities. - Emergency response plan in place to respond to bushfires	3	2	M	Yes	Dust will be generated through operation of the SWP and transport movements along access tracks and around the site. The consequence of dust is anticipated to be moderate, with localised, short term impacts to areas immediately adjacent to access tracks. The likelihood of the risk is reduced through the isolated location (lack of environmental or community receptors), regionally extensive vegetation communities (good outside refuge away from access tracks and use of dust suppression. Fire is a common occurrence within the Barkly Region. A fire is likely to have a serious impact, with moderate term reversible impacts (years). With the appropriate controls, such as separation distances, firebreaks, and adherence to total fire bans (including permit exemptions), the likelihood of causing a fire operation of the SWP is anticipated to be highly unlikely, with a predicted occurrence of <10%.	Yes	Low
24	Atmospheric processes	Greenhouse gas emissions from the activity have a direct and measurable adverse impact on climate	Combustion of diesel for SWP	X	X		A.3.1 Site selection and planning	- Australian emission standards adopted for all equipment ensures minimum operating efficiency. - All equipment to be maintained in accordance with the manufacturer's recommendations. - Total worst case emissions from activity are not significant- being ~1.3% of NT's Total GHG emissions and 0.05% of Australia's GHG emissions.	- Equipment condition and maintenance to be built into contract - Routine site inspections and assurance undertaken to ensure equipment is maintained and operated as per manufacturers requirements.	- All equipment defects identified by site inspection and assurances to be rectified promptly. - Emergency response plan implemented.	2	2	L	Yes	The risks associated with GHG generation are well documented in literature and domestic/international greenhouse policy (such as NGERs and IPCC). The SWP activities can be conducted with minimal GHG emissions. The consequences of GHG generation from exploration activities is moderate, with less than 1% of the NT emissions generated. The likelihood of the level of GHG production being unsustainable is considered remote, with a probability less than 1%.	Yes	Low
25	Cumulative risk	Cumulative impacts on groundwater quantity, including unsustainable groundwater extraction impacts on pastoralists and GDEs.	Groundwater take from surrounding land users exceeds the natural recharge rate of the Basin.	X	X		Water extraction licences under the NT Water Act	- Estimated groundwater take for the SWP/TSWP is minimal: <100 ML/year over the life of the Project due to recycling/reuse of process water. - Groundwater take is authorised under a Water Allocation Plan which considers cumulative, current and future groundwater users. - Petroleum allocation under the Water Allocation Plan is 10,000 ML/year or 4% of total allocation. - Water Extraction Licence value of 450 ML/year is 0.001% of total available resource The total quantity of existing petroleum activity groundwater extraction licences for the region is 752.5 ML/year. - Cumulative impacts considered in the water extraction licence under the NT Water Act. - Groundwater extraction volumes are monitored and kept below WEL. - Strategic Regional Environmental Baseline Assessment (SREBA) completed to collect baseline environmental data, with environmental impact assessments completed to address cumulative impacts from industry.	- Groundwater monitoring of control and impact monitoring bores will detect localised groundwater depressurisation before regional impacts occur.	- Where sustained groundwater depletion is observed in regional aquifers, alternative water supplies may be required, such as deeper aquifers with limited extraction. - Water Act make good provisions to ensure any impacts on users from exploration activities are "made good".	2	1	L	Yes	The regional understanding of the CLA is sufficient to understand the risks associated with groundwater extraction. The absence of users and small exploration take reduces the uncertainty of the activity. This risk has been assessed as a part of the WEL application and approval. Due to the lack of receptors, the consequence is considered moderate (i.e. 1 user within 16km) and likelihood remote (probability less than 1%)	Yes	Low
26	Cumulative risk	Cumulative impacts on terrestrial ecology.	SWP activities (including use of ancillary access tracks etc), and other approved E&A activities in addition to existing agricultural activities results in impacts to vegetation communities, fragmentation and poses a threat to protected flora and fauna.	X			A.3.1 Site selection and planning A.3.5 Biodiversity Protection	- Area has limited development with no widespread land clearing or other pressures from agriculture or other users. - Petroleum activity is limited in scale (0.0227% of total area) and will not materially decrease availability of habitat across the region. - Cumulative clearing impacts from E&A activities are an order of magnitude lower than existing land users (~900 ha versus ~26,000 ha). - The SWP site is located in close proximity to existing access tracks to minimise disturbance and habitat fragmentation. - SREBA completed to collect baseline environmental data, with environmental impact assessments completed to address cumulative impacts from industry.	- Ongoing scouting and infrastructure design will be undertaken to ensure scope creep does not result in increased habitat fragmentation.	- All disturbance to be rehabilitated to pre-existing levels in accordance with the Code.	2	1	L	Yes	The region has low land clearing pressure with no applications for large scale land clearing present. The level of disturbance proposed is small (11.2 ha total), with field ecological scouting confirming the ecological communities present. The consequence of habitat fragmentation from this Project, posing a threat to protected flora and fauna is considered moderate from a cumulative perspective with a likelihood of highly unlikely.	Yes	Low
27	Cumulative risk	Cumulative impacts on amenity.	SWP activities (including use of ancillary access tracks etc), and other approved E&A activities further reduces amenity (visual, noise, traffic and lighting) through additional landscape modification, dust, noise, light and traffic.	X	X		A.3.1 Site selection and planning	- The SWP and TSWP sites are located in a remote/rural landscape, away from environmental and community receptors. - Cumulative clearing impact from E&A activities are an order of magnitude lower than existing land users (~900 ha versus ~26,000 ha). - Additional traffic volumes are anticipated to be small (31 additional vehicles during peak mobilisation), well below existing industries and will not impact on the level of service of the Stuart Highway. - A traffic management plan covering the intersection upgrade work will be submitted to DPIL for approval prior to the commencement of works. - Low level of development activity within the region, with activity unlikely to cause declines in amenity.	- Community complaints regarding nuisance (including dust, traffic, etc) to be used to detect cumulative impacts.	- Complaints are to be investigated and additional controls implemented where appropriate.	1	2	L	Yes	The region is under-developed with the activity located away from major transportation routes, homesteads and communities. The SWP activity is of a small size and unlikely to result in any loss of amenity. Any loss of amenity is therefore likely to be minor, with a likelihood of highly unlikely.	Yes	Low
28	Cumulative risk	Cumulative impacts on surface water quality.	SWP activities (including use of ancillary access tracks etc), and other approved E&A activities in addition to existing surrounding land use (agriculture) reduces surface water quality.		X		A.3.1 Site selection and planning A.3.4 Erosion and sediment control and hydrology	- Controls in place to mitigate spills and offsite releases. - Area has limited development with no widespread land clearing pressures from agriculture or other users likely to reduce water quality. - Land clearing practices and erosion and sediment controls ensure impacts to surface water from sediment and changes in hydrology are reduced to ALARP. - Clearing under this EMP has been minimised to 11.5 ha by utilising existing ancillary infrastructure where possible (Kyalla 117 pad, camp, existing access tracks, etc). - Access tracks maintained to minimise erosion and sediment controls. - No surface water take or wastewater releases permitted. - SREBA completed to collect baseline environmental data, with an environmental impact assessment completed to address cumulative impacts from industry.	- Incident management system tracks incidents which could potentially threatened regional surface water quality like spills and releases	- Emergency response plan and incident management system in place to respond to incidents ensuring regional impacts do not occur.	1	1	L	Yes	The region is under-developed with the activity located away from major flow pathways with limited topographic variation. The SWP activity is of a small size and unlikely to result in any material increase in sediment loads to surface waters.	Yes	Low
29	Cumulative risk	Cumulative impacts- greenhouse gas emissions from the Beetaloo have a direct and measurable adverse impact on climate	The release of GHG emissions during exploration activities materially increases the NT's and Australia's Greenhouse Gas emissions, and increasing climate change impacts on the environment		X		N/A	- Total greenhouse gas emissions for the Beetaloo Sub-basin are low compared to the total NT and broader Australia greenhouse gas emissions. The percentage of total NT and Australian GHG emissions is estimated at 1.35% and 0.04% respectively. - Climate change is a global issue resulting from a culmination of human activities and natural processes across the planet. This activity will not cause climate change, but will contribute to the carbon budget of the atmosphere. - Management of climate related impacts are required at a national and internal level. Tamboran will abate a % of residual GHG emissions in alignment with the NT net zero by 2050 trajectory. For example, emission offsets will increase year on year by 3.7% based on a baseline FY of 2023 to achieve net zero by 2050. - All emissions over 100 KT CO2 to be offset using ACCUs in accordance with the NGERs Safeguard Mechanisms. - Implementation of onsite sand processing will reduce emissions compared to imported sand. - Full development (if technically and commercially viable) likely to provide a viable transition fuel with up to 50% emissions of coal - Full development to be scope 1 neutral. - SREBA completed, with an environmental impact assessment completed to address cumulative impacts from industry.	N/A: Greenhouse gas emissions are approved prior to commencement of activity.	N/A: Greenhouse gas emissions are approved prior to commencement of activity	1	1	L	Yes	The beneficial use of gas is specifically designed to minimise GHG emissions required for long term appraisal. Tamboran has aligned its emission reductions strategies in accordance with the Code, NT Large Emitters policy, and the net zero objective of the NT and Commonwealth, and the Commonwealth NGERs safeguard mechanism emission requirements. The role natural gas plays as a low carbon intensity transition fuel to support renewable energy use is well known. Broad adoption of natural gas within the US has replaced coal in energy production and has been responsible for a continued decline in carbon emissions. The use of natural gas is one of the lowest carbon intensity fuels required to reduce carbon emissions in the near term, with wide recognition of the importance of ensuring energy security during the energy transition.	Yes	Low

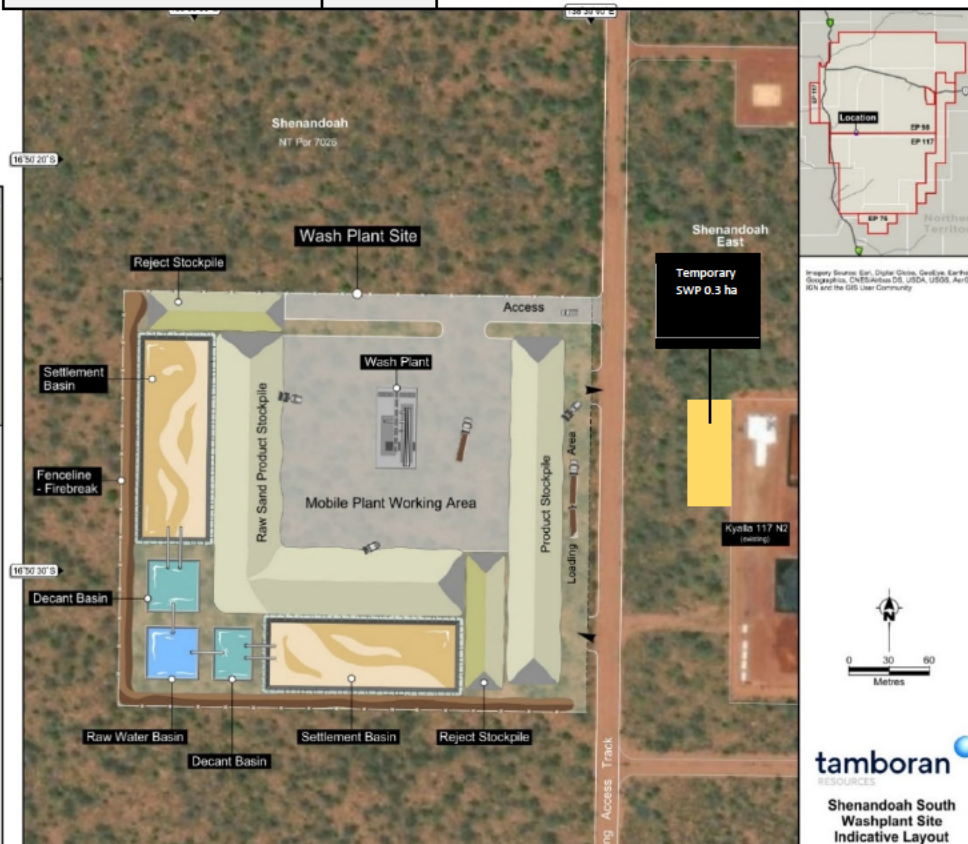
Location of Sand Wash Plant

Property and land uses	Gas exploration, cattle grazing, and native title rights and interests recognised by the native title determinations over the land and waters.
Climate	The permit area is described as arid to semi-arid. Climate is influenced by the monsoon and there is a distinct wet and dry season. Most rainfall (90%) occurs during the summer months, between October and March. Annual rainfall varies across the permit area is around 680 mm, with rainfall totals show moderate variability and drought conditions are known to occur every 10 years.
Pre-disturbance land condition summary	Shenandoah South SWP location (GDA94, zone 53, 355995m E, 8137514m N) is on EP 117. The natural vegetation community that exists at SWP is of Eucalyptus low woodland which is broadly dominated by <i>Corymbia dichromophloia</i> and ground cover of <i>Triodia bitextura</i> . The landform at SWP is characterised by plains and rises associated with deeply weathered lateritic profiles, including sand sheets. Soils at this site are sandy at the surface, with a loamy sand to sandy loam A horizon. The site is in good ecological condition. The site contained moderate to high habitat values for wildlife, with coverage of leaf litter, grass cover and woody debris. Seemingly good continuous cover exists adjoining adjacent woodland habitat. Minor disturbance was evident from recent grazing and burning impacts. There is no evidence of weeds or feral animals.



Rehabilitation Officers	Contact Details	
	[Redacted]	[Redacted]

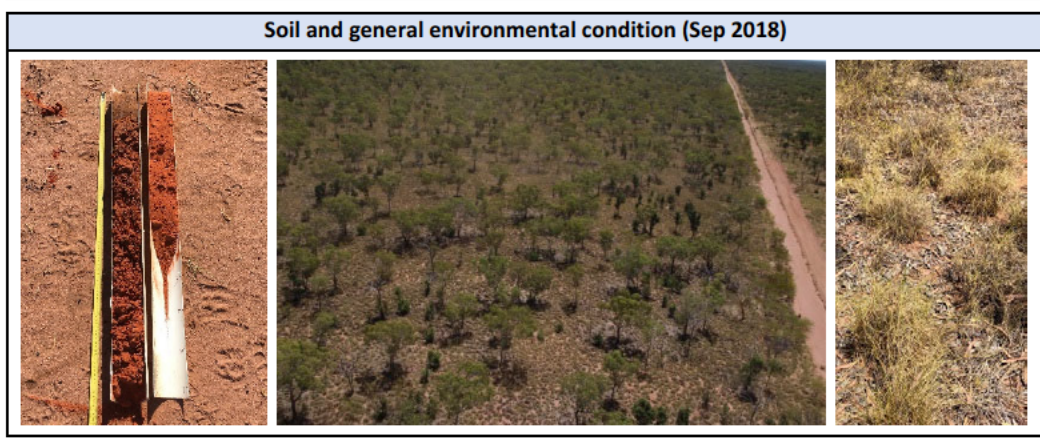
Rehabilitation zones			
Infrastructure	Size (ha)	Soil type / slope	Vegetation community / dominant species
Sand Wash Plant	11.2	Lateritic plains and rises associated with deeply weathered profiles (laterite) including sand sheets and other depositional products, sandy and earth soils.	Comm 2a-Corymbia dichromophloia ± Erythrophleum chlorostachys open woodland, over Acacia difficilis ± Terminalia canescens, Erythrophleum chlorostachys open shrubland, over hummock grassland.
Temporary sand wash plant area	0.3	<1% slope.	
Disturbance	11.5		



Rehabilitation strategy		
Parameter	Methods	Objective
Vegetation	<ul style="list-style-type: none"> Rehabilitation will be implemented for disturbance areas following completion of the individual activity within 12 months. Disturbed areas to be allowed to naturally regenerate or revegetate on completion of the regulated activity. All compacted areas to be ripped and scarified to promote regeneration of vegetation, this may require assistance through spread of native seed stock. Where possible, native seed stock would be supplied by local indigenous suppliers. 	<ul style="list-style-type: none"> Establish vegetation trending toward the target vegetation community for the area disturbed (i.e. species richness, %cover and structure) and in accordance with the Code (Clause A.3.9(d)). Reinstate disturbance area to its pre-disturbed condition. The type of ground cover applied to completed earthworks is to be compatible with the anticipated long-term land use, environmental risk, and site rehabilitation measures.
Ground cover	<ul style="list-style-type: none"> Previously removed vegetation and topsoil will be uniformly respread over disturbed area. This will assist with the rehabilitation process by increasing infiltration and returning seed-bearing topsoil, as well as reducing erosion. After first 12 months, additional input of native seed mix may be required from the area to assist rehabilitation process. 	
Landform stability	<ul style="list-style-type: none"> All windrows are to be removed post construction and at completion of the activities. 	

Final success criteria	
Area to be rehabilitated	<ul style="list-style-type: none"> Total area of approved surface disturbance is 11.50 ha. Total area required for rehabilitation 11.50 ha.
Vegetation composition returned to an agreed and as close to pre-disturbance level that requires little or no ongoing management	<ul style="list-style-type: none"> Vegetation composition (i.e. type, density) equivalent to 60% of the analogue site, showing a trajectory to becoming ecologically integrated into the surrounding area and self-sustaining. Perennial species cover, including woody species such as trees and shrubs (i.e. Acacia, Eucalypt and Bullwaddy) and perennial grass/forb species equivalent to 60% of the analogue site. Ground foliage cover equivalent to 60% of the target vegetation community. The dominant flora species in the mid and ground strata equivalent to 80% of the analogue site. Organic litter and coarse woody debris equivalent to 50% of the analogue site. Evidence of native fauna using habitat (i.e. tracks, scats, burrows).
Watercourse crossings	<ul style="list-style-type: none"> All stream crossings, where intersected, to be reinstated to the original topography. No evidence of erosion as result of activity present within water course by end of first 12 months.
Erosion	<ul style="list-style-type: none"> Less than 5 % erosion evident after the first 12 months and no rill/sheet/gully erosion evident by year 5.
Weeds	<ul style="list-style-type: none"> No weed infestations in rehabilitated area that are declared under the NT Weeds Management Act.
Hazardous materials and waste	<ul style="list-style-type: none"> All hazardous material and waste removed from site upon completion of works to licensed landfill facilities or recycling facilities.
Safety for humans and wildlife	<ul style="list-style-type: none"> Rehabilitation of disturbance areas should be similar in landform to the surrounding area. No steep slopes or barriers to remain on site that endanger wildlife, livestock or humans. No windrows remaining as result of exploration activity. 100% of all surface facilities removed including fencing (star pickets / fencing wire).

Rehabilitation aims and objectives	
Site management aim	The aim is to rehabilitate any part of the land affected by the regulated activity to a safe condition consistent with industry standards, the Code and in consultation with the landholder.
Rehabilitation objectives	The rehabilitation objective is to provide a stable landform, which supports a) the rights and interests of the Native Title Holders in the land and water, and b) a resilient self-sustaining vegetation community that can withstand impacts including fire and cattle grazing and is safe to humans and wildlife.



Rehabilitation risk	
Key Risks	Controls
Drought - impacting the establishment of rehabilitated vegetation	<ul style="list-style-type: none"> Time rehabilitation actions to coincide with the beginning of the wet season, to ensure access to the site and maximise the establishment period of vegetation over the wet season. Re-spread topsoil across the site to utilise the local seed bank. Ongoing monitoring to identify if further seed inputs are required. Collection of seed from the local area to ensure seed stock is suited to the climatic conditions of the site.
Fire - impacting revegetation	<ul style="list-style-type: none"> Establish a mix of perennial and annual grass species. Establish a mix of resprouting (e.g., Eucalyptus spp. and Corymbia spp.) and reseeding species (e.g., Acacia spp.). Ongoing monitoring to determine fire impacts on revegetation. Ongoing monitoring to determine if further seed inputs are required.
Grazing - impacting revegetation	<ul style="list-style-type: none"> Establish a mix of perennial and annual grass species. Re-spread timber with topsoil. Ongoing monitoring to determine grazing impacts on revegetation. Ongoing monitoring to determine if further seed inputs are required. Ongoing monitoring to determine if fencing is required.
Exposed ground - leading to an increase in weed establishment and/or erosion	<ul style="list-style-type: none"> Remove windrows and topsoils. Respread of topsoil and vegetated matter across the site. Annual weed surveys of rehabilitated area once rehabilitation is established. Control of any weed incursions.

Monitoring program and schedule				
Stage	Timing	Method	Measurable attributes (Record of data/description, GPS and photographic evidence)	Corrective Actions
Planning and Design	Prior to commencement of clearing and grubbing	<ul style="list-style-type: none"> Ground truth/pre-disturbance survey to obtain geospatial data prior to disturbance including planned access routes, buffers and identify hazards and obstacles including existing erosion areas or weeds. Identify proposed analogue sites. 	<ul style="list-style-type: none"> Weed species/patch. Erosion areas. Waterlogged areas. 	<ul style="list-style-type: none"> Weed management. Establish buffers as per EMP requirements.
Progressive rehabilitation	Within 6-12 weeks of completion of activities	<ul style="list-style-type: none"> Ripping of compacted areas. Topsoil, windrows and cleared vegetation stockpiled are to be respread across the disturbed area. Refer to detail in Tamboran's Erosion and Sediment Control Plan 	<ul style="list-style-type: none"> All disturbed areas must be considered suitably stabilised as per IECA Table in the Tamboran's Erosion and Sediment Control Plan (Appendix E). 	<ul style="list-style-type: none"> N/A
Preliminary assessment	Post rehabilitation, end of wet season survey (ideally between February to July) within 12 months of rehabilitation completion.	<ul style="list-style-type: none"> Analogue sites will be established for the one vegetation community identified in the baseline Land Condition Assessment (AECOM 2025) at adjacent undisturbed sites. Permanent 100 m x 4 m transects (one or more per vegetation community based on the level of disturbance of the type of community), will be established at disturbed and analogue sites including photo monitoring point(s). Collect 1 x 1 m ground cover quadrats every 10 m along each 100 m transect. Transects to be positioned <20 m from pastoral and gas infrastructure assets (i.e. access tracks, fence lines, well pads, water troughs) to reduce edge effects. 	<ul style="list-style-type: none"> Weed presence/absence (species and density). Disturbance (fire frequency and intensity, evidence of feral animal/cattle). Evidence of erosion (type of erosion, approximate area of erosion). Vegetation condition (comparison to analogue sites): <ul style="list-style-type: none"> Seedling/sapling density of dominant species respective to each vegetation community. % ground cover. % annual cover vs % perennial cover. number of species at canopy, mid and ground strata. 	Corrective action as required based on third-party report and/landholder feedback: <ul style="list-style-type: none"> Erosion remediated Weed management Additional seeding Soil amelioration
Early rehabilitation	Years 1, 2 and 3 post rehabilitation, end of wet season survey (February to July).	<ul style="list-style-type: none"> Monitoring to be undertaken using permanent transects at analogue and disturbed sites. Collect data as per preliminary methods. Compare results from monitoring sites with analogue sites and previous year's assessment to determine if require additional management inputs (i.e. seeding, stabilisation). Annually review success criteria. 	<ul style="list-style-type: none"> Early assessment of rehabilitation will determine attributes of woody plants in each 100 m x 4 m transect. Assessment of species richness, DBH (>1.5 cm) and height (>2 m), in addition to measurable attributes described within the preliminary assessment. 	
Long-term rehabilitation	Annually until final success criteria has been met, end of wet season survey (February to July).	<ul style="list-style-type: none"> Annually review success criteria. 	<ul style="list-style-type: none"> Long-term assessment to determine establishment, recruitment, and growth rate attributes of plant species, in addition to parameters described during preliminary and early rehabilitation stage. 	
Completion of rehabilitation	5 years post rehabilitation or when achieve final success criteria.	<ul style="list-style-type: none"> Final inspection and report prepared by a suitably qualified person as per rehabilitation monitoring program. Signoff by landowner and regulator 	<ul style="list-style-type: none"> As per final success criteria. 	<ul style="list-style-type: none"> N/A

