Change notice – Regulation 22

Interest holder	Tamboran B2 Pty Ltd	EMP Title	Beetaloo	o Sub-basin Shenandoah	South E&A Program EMP	Unique EMP ID	TAM1-3	Mod #	2	Date	26 August 2024		
Brief Description	Inclusion of additional a	equisition of two	new seis	smic lines under the Shen	andoah South E&A Program	EMP.							
Geospatial files included?	Yes												
Does the proposed change	If an INCREASE in the	INCREASE in the Does the proposed Has additional Does it require additional Does it affect Does it affect current Will the environmental outco											
result in a new, or	existing potential or	change require		stakeholder	environmental	compliances v	with Sacred	rehabil	itation, w	eed, fire,	continue to be achieved and will		
increased, or potential or	actual environmental	additional mitig	gation	engagement been	performance standards	Site Authority	1	wastev	vater, ero	sion and	the impacts and risks be managed		
actual environmental	risk, is it provided for	measures to be		conducted?	and measurement	Certificates?		sedime	nt contro	l, spill or	to ALARP and acceptable?		
impact or risk?	n the EMP? included? criteria? emergency response plans?												
No	N/A	No		Yes	No	No.		Yes			Yes.		
There are no new or	No increased impact	Existing mitigati	g mitigation Additional stakeholder Environmental Activity covered under No specific changes to plans All e								All environmental outcomes will be		
increased environmental	or risk with sufficient	risk with sufficient measures are in place engagement has performance standards the existing AAPA associated with TAM1-3 EMP. All act							achieved under current TAM1-3				
impacts or risks through the	the controls outlined in covering 2D seismic occurred. Specifically, within the existing certificates C2024-030 plans remain valid and EN								EMP with all impacts and risks				
addition of the two new	the Shenandoah	e Shenandoah acquisition. the Hayfield approved EMP are and C2024-031. appropriate. m								managed to ALARP and acceptable.			
seismic lines. The activity	outh E&A Program Shenandoah Station sufficient.												
will not result in any	EMP.			owners regarding the									
additional vegetation				modification, with the									
clearing with both lines				activity covered under									
being acquired on an				existing engagement									
existing access tracks. No				with Traditional									
vegetation clearing is				Owners									
required or proposed. The													
additional activity risk is													
considered low and													
acceptable.													
Additional contextual	Tamboran have identi	Tamboran have identified the need for two additional 2D seismic lines in proximity to Shenandoah South 2 well pad.											
information	Description of the two	seismic lines is a	s follows:	:									
	 Additional seismic required in the sur Additional seismic 	line through She rounding area. line on existing a	nandoah access trad	South 2 well site (SS2 pa ck - 5.4 km – no clearing	d 2D line) – 1.66 km – noting of vegetation required.	survey will be	located on t	he existing	g SS2 acce	ss track and pad w	vith no clearing of vegetation		
	These seismic lines are	in addition to the	e original 2	2D seismic lines describe	d in the Shenandoah South E	&A Program EN	ир (там1-3).					



Interest holder	Tamboran B2 Pty Ltd	EMP Title	Beetaloo Sub-basin Shenandoah South E&	A Program EMP	Unique EMP ID	TAM1-3	Mod #	2	Date	26 August 2024
	Curren	t EMP text				Amei	nded EMP	text		
 Executive Summary (pg. 1) & Son Activities proposed in this EMP Seismic acquisition of a tot Acquisition of 3 x and 98. Acquisition of an 	ection 1.1 Purpose (pg. 24 include: al of 77 km of 2D seismic 2D seismic surveys totall additional 39 km of 2D se	4) (EP 98 and EP 117) ing approximately 3 eismic along existing	l: 38 km (19 ha disturbance) across EP 117 g access tracks with no disturbance.	 Executive Summary (pg. 1) & S Activities proposed in this EMP Seismic acquisition of a tot Acquisition of a tot Acquisition of 3 or and 98. Acquisition of a model 	section 1.1 P include: tal of <mark>84.06 l</mark> x 2D seismic new 2D seisr iginal 39 km	urpose (pg. cm of 2D se surveys tot nic survey t and additic	24) ismic (EP 9 alling appro otalling 0.6 onal <mark>5.4 km</mark>	98 and EP 1 oximately 3 53 km on S of 2D seis	. 17): 38 km (19 henandoal mic along	ha disturbance) across EP 117 <mark>n South 2 access track in EP 98,</mark> existing access tracks with no
Location of the regulated activ	ities (Executive summary	pg. 2 & 3 and section	on 3.3.2 pg. 44)	Location of the regulated activ	v ities (Execut	ive summa	ry pg. 2 & 3	3 and section	on 3.3.2 pg	g. 44)
The location of the proposed ac	tivities is provided in Figur			The location of the proposed ac	ctivities is pro	ovided in Fig	gure 1.			

Interest holder	Tamboran B2 Pty Ltd	EMP Title	Beetaloo Sub-basin Shenandoah South E8	&A Program EMP	Unique EMP ID	TAM1-3	Mod #
	Current	t EMP text			·	Amer	nded EMP te
Figure 1: Location of new I Beetaloo W-1 infrastructure	ease pads, gravel pit (SS	GP3), proposed s	eismic and existing Kyalla 117 N2 and	Figure 2: Location of new legal Section 3 Description of regul	ease pads, g	pravel pit (state)	EP 98 EP 117 EP 117 EP 117 EP 117 ESSGP3), pro



Interest holder	Tamboran B2 Pty L	td EMP Title	Beetaloo Sub-basin Shenandoah South	1 E&/	A Program EMP		Unique EMP ID	TAM1-3	Mod #	2	Date	26 August 2024	
	C	Current EMP text						Am	ended EMP	text	•	·	
Collection of app the evaluation of	proximately 77km (19 ha di f the underlying shale reso	sturbance) of 2D seismic urces in the vicinity of th	survey on EP 98 and EP 117 to support e proposed exploration sites (Figure 6).		 Collection of approximately 83.03 km (19 ha disturbance) of 2D seismic survey on EP 98 and EP 117 to support the evaluation of the underlying shale resources in the vicinity of the proposed exploration sites (Figure 6). 								
Description of the activit Table 1: Description of program, including 2D se	ty (Table 1, pg 8) & Section the proposed new explo eismic acquisition	n 3.1 Activity Summary (pration and appraisal a	Table 9, pg. 40) ctivites for the Shenandoah South E&	kΑ	Description of the acti Table 1: Description program, including 2D	ivity (Ta of the) seismic	able 1, pg 8) & proposed new ic acquisition	Section w explor	3.1 Activity S ation and a	Summary ppraisal a	(Table 9, p activities	g. 40) for the Shenandoah South E&A	
Activity P	Parameter	Description			Activity	Param	neter		Description				
Seismic acquisition	 38 km (19.0 ha listurbance) 39 km along existing access tracks (no additional listurbance) 	 Seismic program to optimal energy sour Civil construction of Clearing of approxin cleared track width. Seismic lines to be least resistance. Slauntraversable veget constructed in a way equipment/vehicles (minimum 15 m turn A small turning circl seismic line to allow A 250 m buffer /dev pre-plot data where or obstacles. Estimated maximum that all efforts will be Estimated groundwa Construction of 2 fe explosive storage m lines: Fenced areas to be Gates minimum 4 m Surface within the n and free of debris, k Surface compaction Shot hole drilling for 100 mm OD at a sh Low disturbance no Seismic acquisition, charge detonation a Rehabilitation of cle respreading any wir from stockpiled area 	use 2 energy sources to evaluate ce type: vibroseis and seismic charges $3 \times 2D$ seismic lines: nately 38 km of seismic lines with a 5 m weaved through vegetation to a path of ashing can be utilised in otherwise ation. Deviations in lines must be y that is accessible by such as heavy-rigid body trucks ing radius). e to be constructed at the end of each equipment and vehicles to exit. iation from either side of the centreline required to avoid any unsuitable terrain n surface disturbance of 19.0 ha, noting e deployed to avoid clearing. ater use $\sim 0.5 - 1.0$ ML. nced areas $12 \text{ m(L)} \times 9 \text{ m (W)}$ for lagazines (AS2187) along cleared constructed as per AS1725. n opening. hagazine storage area to be smooth tose zones and soft spots. $1 \ge 100 \text{ kPa}.$ $400 \times 20 \text{ m}$ depth holes @ 80 mm – ot hole interval of 60 m. de deployment. including vibroseis deployment, and data collection. ared lines and shot holes by adrowed soil and reinstating vegetation a back across the seismic line.		Seismic acquisition	~ 38 km ~ 45.00 access disturt	cm (19.0 disturba)3 km along exis s tracks (no addi bance)	ance) sting itional	 Seismic optimal e optimal e Civil conservation optimal e Civil conservation optimal e Civil conservation optimal e Seismic I least residuntravers construct equipme (minimur A small t seismic I A 250 m pre-plot of or obstate that all e Estimate that all e Estimate that all e Estimate construct explosive Fenced a Gates mit Surface of and free Surface of Shot hole 100 mm Low disture that all e Seismic form store that all e Surface of and free surface of and free surface of the Surface of Shot hole 100 mm 	orogram to energy sou struction of of approxi- rack width ines to be stance. Sl sable vege- ted in a wa nt/vehicles n 15 m tur urning circo ine to allow buffer /de data where cles. d maximu forts will b d groundw tion of 2 fe e storage r areas to be nimum 4 n within the of debris, compactio e drilling fo OD at a sl urbance no acquisitior on and dat ation of cle ing any with chyled are	b use 2 en ince type: N if 3 x 2D se imately 38 weaved the lashing called tashing called as such as level as as as level as as a	ergy sources to evaluate vibroseis and seismic charges eismic lines: km of seismic lines with a 5 m hrough vegetation to a path of n be utilised in otherwise viations in lines must be accessible by neavy-rigid body trucks s). onstructed at the end of each ent and vehicles to exit. m either side of the centreline to avoid any unsuitable terrain disturbance of 19 ha, noting d to avoid clearing. -0.5 – 1.0 ML. as 12 m(L) x 9 m (W) for a (AS2187) along cleared lines: ted as per AS1725. storage area to be smooth es and soft spots. Pa. m depth holes @ 80 mm – terval of 60 m. yment. g vibroseis deployment, charge n. s and shot holes by soil and reinstating vegetation ross the seismic line.	

Interest holder	Tamboran B2 Pty Ltd	EMP Title	Beetaloo Sub-basin Shenandoah South E&A Program EMP			TAM1-3	Mod #	2	Date	26 August 2024
	Current			Ame	nded EMP	text				

Section 3.3.2, Table 10 (pg. 45)

Table 10: Location and disturbance summary of infrastructure on EP 117 and EP 98

Section 3.3.2, Table 10 (pg. 45)

Table 10: Location and disturbance summary of infrastructure on EP 117 and EP 98

Infrastructure	EP	Zone*	Easting (approx.)	Northing (approx.)	Existing disturbance (ha)	New proposed disturbance (ha)	Total disturbance (ha)	Infrastructure	EP	Zone*	Easting (approx.)	Northing (approx.)	Existing disturbance (ha)	New proposed disturbance (ha)	Total disturbance (ha)
Kyalla 117 N2: lease pad, access track(s) and associated infrastructure ²	117	53	356379.72	8137498.48	11.65	4.30	15.95	Kyalla 117 N2: lease pad, access track(s) and associated infrastructure ³	117	53	356379.72	8137498.48	11.65	4.30	15.95
Kyalla 117: gravel pit SSGP1 (former gravel pit A)	117	52	333877.96	8135080.04	2.50	-	2.50	Kyalla 117: gravel pit SSGP1 (former gravel pit A)	117	52	333877.96	8135080.04	2.50	-	2.50
Kyalla 117: gravel pit SSGP2 (former gravel pit 3)	117	53	362753.93	8135089.25	6.25	-	6.25	Kyalla 117: gravel pit SSGP2 (former gravel pit 3)	117	53	362753.93	8135089.25	6.25	-	6.25
Shenandoah S2: lease pad, access track and associated infrastructure	98	53	355291	8140676	-	29.50	29.50	Shenandoah S2: lease pad, access track and associated infrastructure	98	53	355291	8140676	-	29.50	29.50
Shenandoah S2: gravel pit SSGP3	98	53	355823.97	8140510.08	5.00	5.00	5.00	Shenandoah S2: gravel pit SSGP3	98	53	355823.97	8140510.08	5.00	5.00	5.00
Shenandoah S B: lease pad, access track(s), laydown and associated infrastructure	117	53	345035	8135464	-	23.30	23.30	Shenandoah S B: lease pad, access track(s), laydown and associated infrastructure	117	53	345035	8135464	-	23.30	23.30
Shenandoah S C: lease pad, access track(s) and associated infrastructure	117	53	343471	8133330	-	17.30	17.30	Shenandoah S C: lease pad, access track(s) and associated infrastructure	117	53	343471	8133330	-	17.30	17.30
Gathering line: Kyalla 117 N2 to/from Shenandoah S2 (start to end)	117 & 98	53	356274 355060	8137505 8140071	-	4.50	4.50	Gathering line: Kyalla 117 N2 to/from Shenandoah S2 (start to end)	117 & 98	53	356274 355060	8137505 8140071	-	4.50	4.50
Gathering line: Shenandoah S B to / from Shenandoah S C (start to end)	117	53	345035 343442	8135461 8133331	-	4.11	4.11	Gathering line: Shenandoah S B to / from Shenandoah S C (start to end)	117	53	345035 343442	8135461 8133331	-	4.11	4.11
Shenandoah NA: lease pad, camp pad, access track(s) and associated infrastructure	98	53	356687	8163762	-	12.00	12.00	Shenandoah NA: lease pad, camp pad, access track(s) and associated infrastructure	98	53	356687	8163762	-	12.00	12.00
Beetaloo W: lease pad, camp pad, access track(s)	117	53	368276.05	8106695.96	4.60	-	4.60	Beetaloo W: lease pad, camp pad, access track(s)	117	53	368276.05	8106695.96	4.60	-	4.60

² The combined disturbance approved under the Beetaloo Basin Kyalla 117 N2 Civil Construction EP117 EMP, approved 6 June 2019 and Beetaloo Basin groundwater monitoring bore installation program – Kyalla 117 EMP, approved 10 December 2018, excluding gravel pit disturbance listed separately.

Interest holder	Tar	nboran E	32 Pty Ltd	EMP Title	Beetaloo	Sub-basin Shen	andoah South E	&A Program EMP	Uni EMI	que P ID	TAM1-3	Mod #	2	Date	26 August 2024	
			Curren	t EMP text	•				•		Ameno	ded EMP	text			
and associated infrastructure								and associated infrastructure								
Beetaloo W: gravel pit BGP1	117	53	341183.95	8106346.05	0.50	-	0.50	Beetaloo W: gravel pit BGP1	117	53	341183.9	5 81063	46.05	0.50	-	0.50
Beetaloo W: gravel pit BGP2	117	53	348618.29	8106405.96	0.50	-	0.50	Beetaloo W: gravel pit BGP2	117	53	348618.29	81064	05.96	0.50	-	0.50
Beetaloo W: gravel pit BGP3	117	53	355401.32	8106544.53	0.25	-	0.25	Beetaloo W: gravel pit BGP3	117	53	355401.32	2 81065	44.53	0.25	-	0.25
Seismic: Shenandoah South Line A (13.00 km)**	117	53	337174.05 346089.96	337174.05 8128616.75	-	6.50	6.50	Seismic: Shenandoah South Line A (13.00 km)**	117	53	337174.0	5 3371 5 81286	74.05	-	6.50	6.50
Seismic: Shenandoah South Line B (12.50 km)**	98 & 117	53	341094.69 349560.21	341094.69 8131483.21	-	6.50	6.50	Seismic: Shenandoah South Line B (12.50 km)**	98 & 117	53	341094.69 349560.21	9 34109 I 81314	94.69 83.21	-	6.50	6.50
Seismic: Shenandoah South Line C (12.50 km)**	98 & 117	53	338588.93 347420.93	338588.93 8129410.23	-	6.25	6.25	Seismic: Shenandoah South Line C (12.50 km)**	98 & 117	53	338588.93 347420.93	3 33858 3 81294	38.93 10.23	-	6.25	6.25
Seismic: Shenandoah access track(s) seismic line(s) (39.00 km)**	98 & 117	53	332988 356365	332988 8150204	-	-	-	Seismic: Shenandoah South 2 Well Site Seismic Line (0.63 km)	<mark>98</mark>	<mark>53</mark>	355597.53 355080.83	8 8141 8 81417	451.8 16.61	·	-	ł
*Universal Transverse Merca	ator (U	TM) geo	Total	clearing (ha)	26.25 Geocentric Da	119.01 atum of Australia	145.26 a (GDA) 94.	Seismic: Shenandoah access track(s) seismic line(s) (39.00 km)**	98 & 117	53	332988.00 356365.00) 33298) 81502	88.00 04.00	-	-	-
**Footprint area for 2D seism	nic bas	ed on 5	m wide seisn	nic lines.				Seismic: Shenandoah new access track seismic line	98	<mark>53</mark>	352372.00 357708.00	0 81484 0 81479	74.00 21.00	-	-	-
											Tota	l clearing	g (ha)	26.25	119.01	145.26
								*Universal Transverse Merca **Footprint area for 2D seisn	ator (U nic bas	TM) geo ed on 5	ographic coo m wide seis	rdinate sy mic lines.	stem is (Geocentric D	atum of Australia	(GDA) 94.
Section 3.4 Seismic survey (p	g. 51)							Section 3.4 Seismic survey (p	og. 51)							I
Approximately 77 km of 2D se	eismic	acquisiti	ion will be co	mpleted (Figure	8), comprising	<u>;</u>		Approximately 83.03 km of 2	D seisn	nic acqu	isition will b	e comple	ted (Figu	re 8), compr	ising:	
• 39.66 km of 2D seism	ic acq	uisition i	n the vicinity	of the Shenando	oah SB and SC	lease pads:		 <u>38.00</u> km of 2D seism 	nic acqu	uisition	in the vicinit	y of the S	henando	ah SB and SC	Clease pads:	
○ Line A – 13.0	km (6.	50 ha)						○ Line A – 13.0	km (6.	50 ha)						
○ Line B – 12.5	km (6.	25 ha)						○ Line B – 12.5	km (6.	25 ha)						
○ Line C – 12.5 l	km (6.	25 ha)						○ Line C – 12.5	km (6.	25 ha)						
• 39 km of 2D seismic a	cquisi	tion will	occur along e	existing access tr	acks.			 Shenandoah 	South 3	<mark>2 Seism</mark>	<mark>ic Line – 0.63</mark>	<mark>l km</mark>				
The seismic survey will involve clearing level is likely to be sig cumulative impact of surface	e a ma gnifica distur	ximum g ntly lowe bance ac	ground distur er through the cross EPs is di	bance of up to 1 e deployment of scussed further i	9.0 ha (Table f clearance ave in section 3.6.	10). The actual pidance measur 4.	vegetation res. The	• 44.4 km of 2D seismic The seismic survey will involv clearing level is likely to be sig cumulative impact of surface	c acqui 'e a ma gnificar disturl	sition w ximum ntly low bance a	vill occur alor ground distu er through th cross EPs is c	ng existing rbance o ne deploy liscussed	g access t f up to 19 ment of further in	tracks. 9.0 ha (Table clearance av n section 3.6	10). The actual v oidance measure .4.	egetation s. The

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			Amer	nded EMP 1	text					

