



Annual Audit Compliance Report Form

Environmental Protection Act 1986, Part V Division 3

Once completed, please submit this form either via email to info@dwer.wa.gov.au, or to the below postal address:

Department of Water and Environmental Regulation
Locked Bag 10
Joondalup DC WA 6919

Section A – Licence details			
Licence number:	L7184/1997/11	Licence file number:	DEC10847
Licence holder name:	Shark Bay Resources Pty Ltd		
Trading as:	Shark Bay Resources		
ACN:	079088500		
Registered business address:	M 260SA, G9/1, G9/2 Useless Loop, WA 6537		
Reporting period:	01/01/2021 to 31/12/2021		

Section B – Statement of compliance with licence conditions
Did you comply with all of your licence conditions during the reporting period? (please tick the appropriate box)
<input type="checkbox"/> Yes – please complete: <ul style="list-style-type: none">• section C;• section D (if required); and• sign the declaration in Section F.
<input checked="" type="checkbox"/> No – please complete: <ul style="list-style-type: none">• section C;• section D (if required);• section E; and• sign the declaration in Section F.

Section C – Statement of actual production	
Provide the actual production quantity for this reporting period. Supporting documentation is to be attached.	
Prescribed premises category	Actual production quantity
14, 58A	1,290,423 tonnes of salt

Section D – Statement of actual Part 2 waste discharge quantity	
Provide the actual Part 2 waste discharge quantity for this reporting period. Supporting documentation is to be attached.	
Prescribed premises category	Actual Part 2 waste discharge quantity
14	2,849,810 m ³ of bitterns

Section E – Details of non-compliance with licence condition			
Please use a separate page for each condition with which the licence holder was non-compliant at a time during the reporting period.			
Condition no:	9	Date(s) of non-compliance:	12 April 2021 to 10 September 2021
Details of non-compliance:			
<p>A breach of the sea wall forming the first pond of SBR's salt concentrator pond system (PM-1) during Tropical Cyclone Seroja, resulting in the release of approximately 112 gigalitres of saline water (specific gravity of 1.043 @20°C) into Useless Inlet (specific gravity of 1.030 @20°C) via a process of tidal movement and dilution / dispersion.</p> <p>SBR has adopted a precautionary position and reported this release as a non-compliance against Condition 9 of L7184/1997/11. However, SBR consider that the saline waters released are unlikely to meet the threshold of 'concentrated brines' as required by that condition for the following reasons:</p> <ul style="list-style-type: none"> • PM-1 is the first pond in SBR's salt production system and is therefore subject to the least intervention of the salt making process. • PM-1 waters are entirely composed of water drawn from Useless Inlet via a tidal gate. • PM-1 waters are subject only to natural evaporation via wind and sun and are consistent with natural hypersaline conditions which occurred in the southern portions of Useless Inlet prior to construction of the salt field and persist in southern portions of Boathaven Loop and Henri Freycinet Harbour (located east of Useless Inlet). • Mean specific gravity for PM-1 measured during 2021 (prior to the breach) was 1.043 (@20°C), using Bassegio (1973) this equates to a total chloride content of ~ 32.04 ppt and total salinity of ~57.8 ppt (consistent with natural hypersaline conditions as described above). • Furthermore, Bassegio (1973) notes that the ionic composition of seawater remains constant until a specific gravity of ~1.0897 is reached as this is the point at which gypsum (CaSO₄2H₂O) precipitates from solution. This point is only reached a pond 3b in SBRs pond system after approximately 9 months of controlled evaporation within the concentrator pond system. • Consistent with the above no adverse environmental impacts have been observed as a result of the breach to date. 			
What was the actual (or suspected) environmental impact of the non-compliance?			
<p>NOTE – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.</p>			
Negligible. See Appendix B of the Shark Bay Resources Annual Environmental Report 2021 for full details.			
<p>An extensive environmental research program has been undertaken including:</p> <ul style="list-style-type: none"> • Predictive modelling of the saline discharge into Unless Inlet to identify salinity gradients and the fate, dilution and dispersion of the saline waters resulting from the breach. • Ecotoxicological analysis of the PM-1 saline waters (sample collected form the southern extent of PM-1 shortly after the breach occurred, prior to any dilution in that location). • Detailed benthic habitat mapping of the entire Useless Inlet area with ground truthing by towed camera and spot dives. • Quantitative risk assessment of exposure areas within Useless Inlet based on ecotoxicological data and predictive modelling of saline discharge and benthic habitat mapping of sensitive receptors. 			

Section E – Details of non-compliance with licence condition	
<ul style="list-style-type: none"> Qualitative assessment of water quality and habitat condition over 3 triannual site visits (April 2021, August 2021, March 2022). 	
No observable impacts have been noted from the release to date.	
Cause (or suspected cause) of non-compliance:	
Tropical Cyclone Seroja caused a major storm surge within Shark Bay that resulted in structural failure of the PM-1 seawall by sustained wave overtopping (Advisian 2021).	
It is expected that extreme weather events and storm surges will continue to increase in frequency over the next century due to the impacts of anthropogenic climate change.	
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:	
SBR initiated a comprehensive environmental sampling and risk assessment program and engaged RPS (specialist marine environmental consultants) to undertake the environmental assessments.	
SBR engaged Advisian (specialist marine engineering consultants) to develop the breach closure design and methodology. The breach was closed successfully on 10 September 2021 during a neap tide window following Advisian's Breach Closure Plan.	
SBR are now in the initial design stages of seaward facing infrastructure upgrades to ensure that all marine infrastructure can withstand the increasing coastal risks presented by climate change during this century.	
Was this non-compliance previously reported to DWER?	
<input checked="" type="checkbox"/> Yes, and	
<input checked="" type="checkbox"/> Reported to DWER verbally	Date: 13 / 04 / 2021
<input checked="" type="checkbox"/> Reported to DWER in writing	Date: 14 / 04 / 2021

Section F – Declaration

I / We declare that the information in this Annual Audit Compliance Report is true and correct and is not false or misleading in a material particular¹.

I / We consent to the Annual Audit Compliance Report being published on the Department of Water and Environmental Regulation’s (DWER) website.

Signature ² :		Signature:	
Name: (printed)		Name: (printed)	
Position:		Position:	
Date:		18 March 2022	Date:
Seal (if signing under seal):			

¹ It is an offence under section 112 of the *Environmental Protection Act 1986* for a person to give information on this form that to their knowledge is false or misleading in a material particular.

² AACRs can only be signed by the licence holder or an authorised person with the legal authority to sign on behalf of the licence holder.