

Woodside Energy Monthly Recordable Environment Incident Notification



Please check the following boxes if applicable to this report						Nil Incident Report: ☐	Final report for this activity: ☐
RMS Assessment: 7780							
Titleholder name:	Woodside Energy (Victoria) Pty Ltd	Titleholder business address:	Mia Yellagonga, 11 Mount St Perth WA 6000	Title of environment plan for the activity:	Minerva Decommissioning and Field Management (State) Environment Plan		
Activity type: (e.g. drilling, seismic, production)	Decommissioning	Month, Year:	April 2025	Facility name and type: (e.g. MODU, Seismic Vessel, FPSO)	Minerva Pipeline (VIC/L22)		
Contact person:	[REDACTED]	Email:	[REDACTED]@woodside.com	Phone:	[REDACTED]		
Incident date	All material facts and circumstances (including release volumes to environment if applicable)	Performance outcome(s) and/or standard(s) breached	Action taken to avoid or mitigate any adverse environmental impacts of the incident	Corrective action taken, or proposed, to stop, control or remedy this incident	Action taken, or proposed, to prevent a similar incident occurring in future		
16/04/2025	The Seven Sisters was decommissioning the Minerva Pipeline bundle in State Waters from 16 April to the 2 May 2025. The Minerva pipeline bundle comprises of approximately 4.9 km of 10-inch concrete coated rigid-steel flowline, bundled with an electro-hydraulic umbilical and two 2-inch steel chemical injection lines in Pipeline Licence VIC-PL33. The Minerva pipeline bundle is secured together with polypropylene piggyback clamps spaced 6m apart and secured together with two stainless steel	PS 9.2 Debris greater than 300 mm x 300 mm created during Minerva subsea infrastructure removal will be recovered where practicable.	Work Stoppage and Initial Assessment: Operations were immediately halted upon identification of the incident. Recovery efforts were initiated, accompanied by an assessment of safety and practicality. Incident Investigation: A formal investigation was commenced to determine root causes and contributing factors. Recovery Measures: Initiated procurement of telescopic poles with nets as an additional recovery measure.	Following the additional losses experienced in Commonwealth Waters March, a comprehensive assessment was carried out by Woodside to quantify the potential impact including mobilisation of Environmental Advisors to the vessel during pipe cutting and retrieval operations. Woodside Environmental Advisors also conducted a review of all pipe recovered from Commonwealth Waters during March at the onshore AusDecom yard to quantify	Hydrodynamic Drift Modeling a [REDACTED] Hydrodynamic drift modeling has been conducted to inform potential shoreline contact and recovery. A number of modelling runs have been conducted for each instance of clamp component loss identified, ensuring a comprehensive understanding of potential dispersion patterns over the period from losses between 16/04/2025 until 02/05/2025. [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]		

	tensioned straps. The pipeline was laid in 2003 and the clamps have now reached the end of their 20 year design life. It has been observed on ROV footage during pipeline cutting with the hydraulic shears, fragments of piggyback clamps being dislodged and floating to the surface. Stored energy held within the 2-inch injection line and 5-inch umbilical is released placing stress on the piggyback clamps resulting in the breaking of stainless steel straps and releasing piggyback clamp components to the marine environment. The piggyback clamps consist of 11 separate components that are held together with two stainless-steel straps (see Figure 3, Appendix A). It has been estimated that approximately 269 individual components have been lost in State Waters in April and May, resulting in the release of approximately 99 kilograms of polypropylene into the marine environment over the period from the 16/04/2025 to 02/05/2025. Whilst the dimensions of some of the individual components are below PS 9.2 debris criteria of 300 mm x 300 mm, this report includes all components lost as a		Reinforced instructions to vessel personnel to remain vigilant and report any sightings of marine debris or foreign objects floating in the water or observed on ROV footage during pipeline cutting. Procedural Enhancements: Undertook a procedural review of the cutting methodology to cut at least 0.5 m either side of the clamp, to minimise the release of stored energy and reducing stress exerted on the bundle clamps.	the number of clamps lost during recovery. A detailed tracking process for piggyback clamp condition was implemented, with assessments conducted on each pipe and clamp as they were recovered onto the vessel deck. This allows for evaluation of saddle integrity and identification of any lost or damaged components. In parallel, the shear cutting methodology was revised. Adjustments included targeting cuts at field joints to reduce the number of cuts and the associated stress on both the pipe bundle and clamps. The closure of the shear gap enabled cleaner cuts, which should further minimised stress on the pipe bundle clamps.	Fate and Transport Analysis: Assess the final resting locations and conditions of the lost components to determine how hydrodynamic and environmental factors influenced their movement post-release. Coastal Survey Woodside conducted an initial targeted coastal survey was conducted on the 10th April and a secondary broader coastal survey from the 23rd to 25th of April to identify and retrieve any dislodged piggyback clamps. These coastal surveys utilised a combination of visual inspections from lookout locations using binoculars and beach inspection where access is safe, focusing on likely landing locations from the drift trajectories as determined by hydrodynamic modeling. Further coastline surveys will be conducted in the week commencing 12/05/2025. Woodside have seconded SCAADA, a local environmental consultancy service and emergency response team to conduct these surveys across the south-western Victorian coastline in response to current and continual drift modelling. Environmental Risk Assessment: An environmental risk assessment was undertaken to review the risk from unplanned release of plastic piggyback clamps to the marine environment, in response to this incident. The risk assessment includes a review of ecological effects resulting from the presence,
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	cumulative total during April and May 2025. Refer to Appendix A for images and descriptions of the plastic piggyback clamps. As of 8 May 2025, total progress for the Minerva Pipeline cutting and removal is sitting at 45% complete. It has been estimated that approximately 429 individual components have been released from Commonwealth and Victorian State Waters, resulting in a release of 186 kg of polypropylene into the marine environment over the period from the 12 January until the 2 May 2025. This equates to an overall release rate of approximately 2.6% of the piggyback saddles over the 4.5km of Minerva pipeline bundle recovered to date. As of 8 May 2025, current estimated releases in Commonwealth and Victorian State Waters (under the two EPs) are: • Commonwealth: 160 individual components weighing 87 kg of polypropylene, over a period from 12 January until 24 April 2025				movement, or degradation of the lost components within the marine and coastal environment. The assessment includes consideration of all controls, analysis of the risk reduction proportional to the benefit gained and final acceptance or justification if the control was not considered suitable. The assessment demonstrates that the impacts and risks are reduced to ALARP and are of an acceptable level. The Environmental Risk Assessment will be included in a Management of Change to the Minerva Decommissioning and Field Management (State) EP, with additional control measures incorporated into the Environmental Commitment and Assessment Register. This incident has also been reported to NOPSEMA (the Commonwealth regulator for the Minerva Decommissioning and Field Management (Cth) EP) on 15/04/2025 for plastic losses between 12/01/2025 and 30/3/2025 (Appendix B).
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	• Victorian State Waters: 269 individual components weighing 99 kg of polypropylene, over a period from 16 April until 2 May 2025.				
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Appendix A:

Figure 1: Piggyback clamp



Figure 2: Piggyback clamp during construction/installation



Figure 4: Piggyback clamp being recovered to deck using pool scoop.

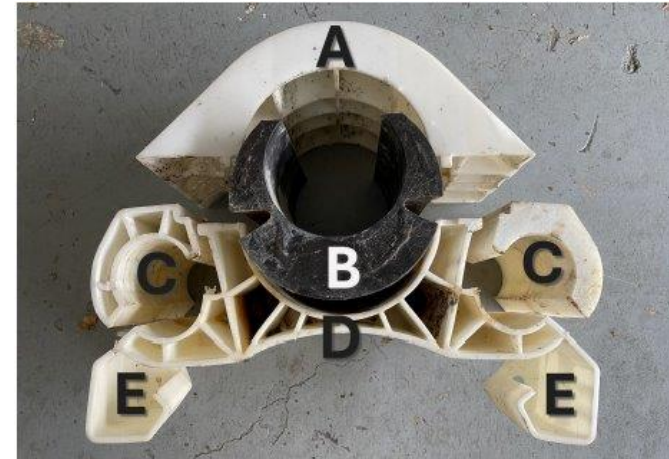


Figure 3: Labelled piggyback clamp

Description	#	Code	Weight (g)	Float	Dimensions (mm)
Top saddle	1	A	958	Yes	337 L x 150 W x 200 D
Black Rubber	1	B	2538	Yes	223 L x 160 W x 1800 D
Two Inch Saddle	4	C	172 x 4 = 688	Yes	120 L x 100 W x 70 D
Base Plate (with bolts)	1	D	1876	Yes	400 L x 200 W x 200 D
Separate Wing	4	E	88 x 4 = 352	Yes	100 L x 90 W x 65 D
Steel Strap	2		422 x 2 = 844	No	Approx 100 L x 32 W

Infrastructure	Quantity	Approximate Dimensions	Weight	Primary Materials	Current Status and Condition ¹	Removal under this EP?
Piggyback Clamps	821	360 x 446 x 400 mm	3.1 Te	Polypropylene Nickel-based alloy	Current Status: Design life of 20 years. Clamps still holding piggybacked lines onto the pipeline. Burial: Predominately buried. Condition: Good condition.	Yes Victorian coastal waters component only.

Figure 5: Description of piggyback clamp from EP