



Incident Summary Notice

Environmental – Marine Debris

Date: 12/01/2025
Location: Seven Sisters



Contents

- Incident Details
- Description of Incident
- Incident Consequence
- Incident Consequence: EP Context
- Additional Information
- Causes
- Photographs
- Actions

Incident Details

- Synergi Case Number: 24929200
- Project: Minerva Decommissioning
- Project Location: Minerva Field
- Specific Location: KP9 vicinity
- Work Process / Activity: Dredging
- Incident Classification: Environmental consequence - marine debris

Notification & Reporting Details

- Time / Date of event: 09:30hrs 12/01/2025
- Time / Date reported: 10:00hrs 12/01/2025

Description of Incident

On the 12/01/25, whilst the vessel was dredging in the vicinity of KP9, a white plastic saddle less than 100mm x 100mm was observed floating on the port side of the vessel. Initial assessments were that the item became dislodged during the dredging activities however it is not known if it was due to the dredging equipment contacting the plastic bundle or from the water pressure of the dredger. A risk assessment was undertaken to determine if recovery was safe and practicable. The debris could not be reached from the vessel and it was deemed not safe or practicable to launch the rescue craft given the safety risk to personnel was significantly higher to attempt recovery than the environmental impact of the bundle spacer lost to the marine environment.

Additional information:

- The wind was approximately 5 knots and wave height of 1.5m at time of incident.
- There are approximately 1000 of the plastic saddles currently subsea on the infrastructure with a risk of these becoming dislodged during the activity. The risk is likely to increase during the pipe cutting stage and if the cutting device is close to the plastic saddle.
- The pipe bundle will typically be cut into 11m sections for recovery and saddles are typically spaced 6m apart.
- The plastic saddles and banding straps are over 20 years so their structural integrity may have reduced.

Incident Consequence

Actual Consequence

- Environmental Damage: slight severity
 - A plastic saddle less than 100mm x 100mm was lost during dredging and corrective action could not be undertaken due to safety considerations. Consequence for the loss of one plastic saddle is slight against the Subsea 7 risk analysis matrix. The loss of plastic debris has the potential to harm individual fauna, however is very unlikely to impact species at a population level. The severity against Woodside's Minerva Decommissioning and Field Management EP severity definitions is level 2 as potential impacts are measurable but limited.

Potential Consequence

- Environmental Damage: slight severity & probability possible
 - Marine fauna may interact with the lost plastic saddle. If ingested this may lead to injury and death of individual animals. Migratory and threatened species may transit through the operational area, including cetaceans, seabirds, and sharks. Impacts would be at individual level only.

Note: Risk Analysis Matrix shows the potential consequence

Hazard Severity Category	Descriptive Words	Actual/Potential Consequences			Probability Rating				
		Personal Injury / Illness	Environmental Damage	Financial Impact USD	A Very Likely	B Likely	C Possible	D Unlikely	E Very Unlikely
I	Very High	Fatality(s), terminal condition, permanent debility	Very High level of major widespread long term irreversible damage.	>1M	1				
II	High	Serious injury, poisoning or dangerous infection	High level of significant long term irreversible damage.	>250k					
III	Moderate	Injury leading to a lost time accident	Moderate damage that requires significant corrective action.	>50k			2		
IV	Slight	Minor Injury requiring First Aid treatment or headache, nausea, dizziness	Slight reversible damage that requires corrective action.	>10k					
V	Negligible	Negligible injury or health implications, no absence from work	Negligible damage and requires minor corrective action.	<10k					3

PROBABILITY RATING

A VERY LIKELY: Almost inevitable that an incident would result.
 B LIKELY: Not Certain to happen but an additional factor may result in an incident.
 C POSSIBLE: Could happen when additional factors are present but otherwise unlikely to occur.
 D UNLIKELY: A rare combination of factors would be required for an incident to result.
 E VERY UNLIKELY: A freak combination of factors would be required for an incident to result.

RISK PRIORITY CODE (RPC)

1 HIGH RISK: Must not proceed. Change task or further control measures required to reduce the risk.
 2 MEDIUM RISK: Can only proceed with senior management review and written authorisation.
 3 LOW RISK: Permissible by those trained and authorised to do so but a review should be carried out to see if risk can be reduced further.

1,2 and 3 above represent the RISK PRIORITY CODE (RPC)

subsea 7

Table 6-3: Woodside severity level definitions for environmental and community

Severity Level	Descriptor	Severity Factor
5	- Severe impact to the environment and where recovery of ecosystem function takes 10 years or more; or - Severe impact on community lasting more than 12 months or a substantiated human rights violation impacting 6 or more people	1000
4	- Serious impact to the environment, where recovery of ecosystem function takes between 3 and up to 10 years; or - Serious impact on community lasting 6-12 months or a substantiated human rights violation impacting 1-5 persons	300
3	- Substantial impact to the environment, where recovery of ecosystem function takes between 1 and up to 3 years; or - Substantial impact on community lasting 2-6 months	100
2	- Measurable but limited impact to the environment, where recovery of ecosystem function takes less than 1 year; or - Measurable but limited community impact lasting less than one month	30
1	- Minor, temporary impact to the environment, where the ecosystem recovers with little intervention; or - Minor, temporary community impact that recovers with little intervention	10

Incident Consequence: EP Context

The Woodside Minerva Decommissioning and Field Management Environmental Plan describes the potential impact of waste lost to the marine environment (note: written in the context of waste lost overboard):

'The potential impacts of solid wastes accidentally discharged to the marine environment include pollution (debris) and disturbance of the seabed. Marine fauna may interact with the lost waste, resulting in entanglement or ingestion, leading to injury and death of individual animals. Migratory and threatened species may transit through the operational area, including cetaceans, seabirds, and sharks.'

This has been considered in the consequence rating for this incident.

Causes

Contributing Factors

- **Critical Safety Behaviours**
 - There were no critical safety behaviours identified that contributed to this event.
- **Job Factor:** Inadequate standard/specification; or **Unsafe Condition:** Misplaced, loose or falling object
 - ROV, dredging and project engineer personnel are unable to conclusively determine what caused the saddle to become dislodged. Dredging activities causes sand to spread out in all directions which reduces visibility subsea for a short period of time until dredging stops and the sand settles down on the seabed. Due to this, it is possible that either the dredging equipment made contact with the plastic saddle or the force from the water pressure of the dredger was enough to dislodge it.
- **Job Factor:** Inadequate tools/equipment
 - The vessel did not have any equipment or tools to reach overboard from the main deck to attempt to grab the object. Furthermore, it is deemed not reasonably practicable to launch the fast rescue craft (FRC) to attempt to recover the small object. The FRC is primarily reserved for rescuing personnel if they fall overboard.

Life Saving Rules:

- No breach of life saving rules.

Considerations For Future Planned Activities

Contributing Factors

- **Job Factor:** Inadequate engineering/design or procedure/instructions
 - Whilst cutting activities was not occurring at the time, it is anticipated that doing so closer to the saddle may increase the risk of further saddles becoming dislodged as this is a planned activity.
 - Project specifications impose restrictions on cutting locations:
 - Pipe cut lengths to be limited to 11.3m max. to enable storage into flat racks;
 - No cutting at field joint coating to avoid risks of losing FJC debris to the environment;
 - No cutting at saddles in order to minimise blunting to the shear cutters and to minimise debris loss to the environment.
 - Cutting is planned to occur in between two saddles and based on 11m cut lengths, with periodic shorter length cuts in order to reset the cut length and stay away from saddle locations. It is possible that using other cutting methods such as chapsaw and diamond wire saw would reduce the likelihood of plastic saddles dislodging however this would require full de-burial at cut points. This methodology would increase the project schedule greatly and is not considered reasonably practicable.

Photographs

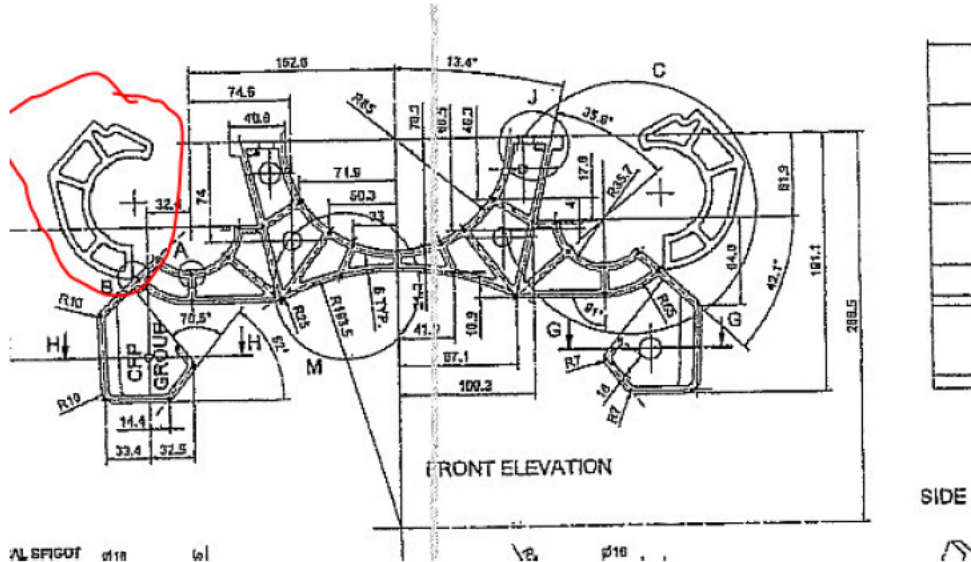


#1: Plastic saddle sighted in water.



#2: Plastic saddle sighted in water.

Photographs



#2: Detail of bottom part of plastic saddle. Circled in red is the part that was identified in the water.



#4: An existing photo during construction showing the plastic saddle bundled together with other pipes.

Actions

- #1
- Action type: Temporary
- Deadline: 12/01/25
- Action required: Attempt to safely recover the plastic saddle.
- Person responsible for action: [REDACTED]
- Status: Attempt unsuccessful
- Action taken: [REDACTED] was advised and attempt to recover considered however, could not be reached from the vessel and sea conditions were not amenable to launch a recovery vessel. Personnel safety and practicability assessment was undertaken, and the decision was made that the safety risk to personnel was significantly higher to attempt recovery than the environmental impact of the plastic saddle lost to the marine environment. Recovery was deemed to not be practicable which also includes the risk of launching and using the fast rescue craft.
- Action completion date: N/A

Actions

- #2
- Action type: Preventive
- Deadline: 14/01/25
- Action required: Remind personnel to report any marine debris or foreign objects so appropriate actions can be taken. Whilst not a direct action to correct this incident, it will assist to mitigate environmental effects if there is a recurrence of marine debris.
- Person responsible for action: [REDACTED]
- Status: Completed
- Action taken: Personnel reminded of reporting any marine debris they notice. Prompt reporting will allow any recovery attempts to be made providing it is safe to do so and reasonably practicable.
- Action completion date: 13/01/25

Actions

- #3
- Action type: Preventive
- Deadline: 20/01/25
- Action required: Procure telescopic poles with nets as a recovery technique if this occurs again on the provision it is safe to do so and within reach.
- Person responsible for action: [REDACTED]
- Status: Completed
- Action taken: A telescopic pole extending up to a max of 7 meters with net is now onboard available for use to catch any debris over the side of the vessel.
- Action completion date: 20/01/25

Actions

- #4
- Action type: Preventive
- Deadline: 19/02/25
- Action required: Conduct alignment session on the planned positions for cuts and if shorter length cuts are going to be required to reset the cut length and stay away from saddle locations.
- Person responsible for action: [REDACTED]
- Status: Planned
- Action taken: TBA
- Action completion date: TBA