INTERNAL USE ONLY

Notifiable incident

Notification ID	<u>NTF11832</u>
Duty holder	Woodside Energy Ltd
Facility/Activity	Vincent
Nearest state	WA
Incident	OHS-DSCE-Faulty O2 Sensor in Pump Room

Basic information provided at time of notification	
Notification type	Incident
Incident date	04/10/2022 10:00 AM (AWST)
Notification date	25/10/2022 11:20 AM (AWST)
NOPSEMA response date	(AWST)
Received by	

Summary of information provided	
Brief descriptive title	OHS-DSCE-Faulty O2 Sensor in Pump Room
Incident location	
Subtype/s	
Summary (provided at notification)	3-day report received in submission mailbox 3 weeks after the incident occurred

Request permission to disturb the site	
Permission given	Not Applicable
Permission given by	
Permission given on	

Initial spill and release amounts	
Gas (kg)	
Liquid (L)	
Release type	
More information	

Details of person providing information to NOPSEMA	
Full name	
Job title	

Initial notification category	
Initial category type (based on notification)	Dangerous Occurrence
Initial category (based on notification)	OHS - damage to safety-critical equipment

Running sheet	
There are no running sheet entries for this notification	

Decision	
Escalate to level 1	Yes
Inspector	
Escalated on	01/11/2022 07:35

Final notification category	
Final category type (based on final report)	Dangerous Occurrence
Final category (based on final report)	OHS - damage to safety-critical equipment

Immediate causes	
Details	O2 failure discovered during 1M testing. The work order did not identify the O2 detector as SCE hence the issue was not reported as a failure of performance standard FO1. Issues with beacons identified during EEHA inspection rounds.

Initial report	
Due date	07/10/2022
Received date	04/10/2022
Reviewed date	08/11/2022
Reviewed by	

Additional details	Brief description of incident:
provided by duty holder	The fixed oxygen sensor in the pump room is currently not operational,
	resulting in non-continuous monitoring of oxygen levels in the pump room.
	bottom of the pump room have been identified as not currently operational.
	Work or activity being undertaken at time of incident
	Undertaking Woodside internal vessel disconnection exercise.
	What are the Internal Investigation Arrangements:
	Internal investigation in accordance with Woodside "Health Safety and Environment Event Reporting,
	Investigating and Learning Procedure"
	Action taken to make the work-site safe
	Action taken: Operational Risk Assessment conducted to manage risk.
	Remote 02 monitoring set up using Draeger X Zone gas detectors at the bottom of pump room.
	All personnel are required to carry portable gas monitoring equipment when entering the Pump
	Room.
	No planned activities within the Pump Room involve breaking containment.
	Routine visual watchkeeping (non-continuous measurement) when personnel performing inspections
	in this controlled area whereby radio in/out
	Oil mist detection fitted to the 3 x cargo oil pumps.
	Ventilation fans are currently in continuous use whereby gas detection
	equipment (IR point gas detection) is fitted to the inlets and exhausts.
	Details of any disturbance of the work site inspection, testing and radit miding.
	Was an emergency response initiated? No
	Was anyone killed or injured? No
	Immediate action taken/intended, if any, to prevent recurrence of incident.
	Action: Remote 02 monitoring set up using Draeger X Zone gas detectors at the
	bottom of pump room.
	Responsible party
	Actual or Intended Actual
	Action Fault finding of issues with beacons commenced. Notification raised to
	procure and replace beacons.
	Completion date 23-Oct-2022
	Actual or Intended Actual

Final report	
Due date	03/11/2022
Received date	04/11/2022
Reviewed date	08/11/2022
Reviewed by	

Additional details	Full Report
provided by duty holder	Describe investigation in detail, including who conducted the investigation and in accordance with
	what standard/procedure
	Investigation completed by and and in accordance with Woodside "Health Safety and
	Environment Event
	Reporting, Investigating and Learning Procedure".
	In the course of monthly testing the oxygen sensor was identified as having failed. The sensor failure
	resulted in
	non-continuous monitoring of oxygen levels in the pump room. A Draeger X Zone gas detector was set
	up at the bottom
	plates of the pump room to provide continuous monitoring of the atmosphere. This is monitored
	continuously by the control
	room through the CCTV. No spares onboard, work order has been created to procure and replace
	sensor.
	In the course of conducting hazardous area inspections, technicians identified alarm beacons in the
	maintained to the relevant standards. Further inspection was carried out and it was identified that
	these beacons are directly
	triggered from the panel. These beacons are part of the original ships monitoring system and
	have not been included
	in any previous risk studies for the pump room therefore there was no testing or maintenance
	program on this equipment.
	However, oil mist detectors, ventilation gas detectors, accommodation smoke detectors and MAC
	points will trigger general
	alarm. When PAGA is triggered, visual and audible beacons installed during the shipyard conversion
	will be activated.
	Actions to prevent recurrence of same or similar incident
	Action Replace O2 sensor in panel - WO 2100352902
	Completion data 16 Dec 2022
	Actual or Intended Intended
	Action Replace gas siren/beacon in pump room - WO 2100352196
	Responsible party
	Completion date 31-Jan-2023
	Actual or Intended Intended
	Action Review whether ship's alarms and beacons are controls that should be
	included in demonstrating that the risks in the pump room are managed to
	ALARP and modify procedures accordingly.
	Responsible party
	Completion date 01-Mar-2023
	Actual or Intended Intended

Final spill and release amounts		
Gas (kg)	0.00	
Liquid (L)	0.00	
Release type		
More information		

Root causes	
Code	
Description	Has the investigation been completed? Yes
	Root cause analysis
	Root Causes Analysis Factor: EQ5-0 Equipment Tolerable Failure
	Comments O2 sensor failed and due to be changed out.
	Root Causes Analysis Factor: HP3-1 Management System - SPAC Needs Improvement
	Comments Original ships alarms from the panel were not properly considered in
	the cargo pump room alarm demonstration report

All data received	
Date	04/11/2022