

Notifiable incident

Incident ID [5458](#)

Duty holder: Shell Australia Pty Ltd
Facility/Activity: Prelude FLNG
Facility type: Floating liquefied natural gas facility

Incident details	
Division	Occupational Health and Safety
Notification type	Incident
Incident date	20/06/2018 10:30 PM (WST)
Notification date	20/06/2018 12:06 AM (WST)
NOPSEMA response date	(WST)
Received by	
Nearest state	WA
Initial category type <i>(based on notification)</i>	Dangerous Occurrence
Initial category <i>(based on notification)</i>	Unplanned event - implement emergency response plan
3 Day report received	22/06/2018
Final report received	22/06/2018
All required data received	22/06/2018
Final category type <i>(based on final report)</i>	Dangerous Occurrence
Final category <i>(based on final report)</i>	Unplanned event - implement emergency response plan
Brief description	OHS-UPE-Indication of smoke in forward machinery space
Location	Engine room
Subtype/s	Alarm, Muster
Summary <i>(at notification)</i>	Operator advised that smoke detectors for the forward machinery space air inlet activated resulting in a GPA and ESD2. All crew mustered and the ERT were deployed. It was reported the smoke was believed to have emanated from a diesel engine which was part of an N2 spread for HP leak testing. No other source of smoke was identified and all crew stood down.
Details <i>(from final report)</i>	<p>Operator advised that smoke detectors for the forward machinery space air inlet activated resulting in a GPA and ESD2. All crew mustered and the ERT were deployed. It was reported the smoke was believed to have emanated from a diesel engine which was part of an N2 spread for HP leak testing. No other source of smoke was identified and all crew stood down.</p> <p>The GA (General Alarm) was initiated at 22:32 on 19th June 2018 due to the detection of smoke by the fire and gas system on the Turret and Module 1S1 (forward on Prelude FLNG). An ESD2 was initiated including sequenced blowdown of the facility topsides (which were preserved under nitrogen). At that time, commissioning technicians were undertaking a high-pressure leak test (HPLT) using a portable temporary diesel compressor. The emergency response team was deployed to assess the forward area and confirmed the area was safe, and confirmed the temporary diesel compressor located at Infill 2 was the source of the smoke. The HPLT temporary diesel compressor motor experienced an unconfirmed internal failure which will be further investigated.</p> <p>Facility and ASV mustered as per normal response to GA.</p>
Immediate cause/s	Commissioning technicians were undertaking a high-pressure leak test using a temporary diesel compressor. The temporary diesel compressor experienced an unconfirmed internal failure leading to the smoke release, and triggered smoke detection.
Root cause/s	Not Applicable

Root cause description	The Fire & Gas system performed as per design. Failure of temporary diesel compressor engine resulted in release of smoke, which was detected by Fire and Gas system.
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Duty inspector recommendation

Date	20/06/2018
Duty inspector	[REDACTED]
Recommendation	Do not conduct Major Investigation
Reasoning	Does not meet MI threshold based on information received
Supporting considerations	

Major investigation decision

Date	20/06/2018
Decision	Do not conduct Major Investigation
Reasoning	Does not meet MI threshold based on information received
Supporting considerations	

Non-major investigation review and recommendation

Date	26/06/2018
Inspector	[REDACTED]
Risk gap	None
Type of standard	Established
Initial strategy	Inclusion in annual stats/data analysis

Recommended follow up strategy

Recommended strategy	Inclusion in annual report stats / data analysis
Supporting considerations	Temporary diesel driven equipment in use. Unconfirmed internal failure reported, leading to the smoke release, and triggered smoke detection. Smoke detector appears to have worked as designed.

Non-major investigation decision

Date	28/06/2018
RoN	[REDACTED]
RoN review result	Agree with recommendation
Strategy decision	Inclusion in annual report stats / data analysis
Supporting considerations	

Associated inspection

Inspection ID	
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