INTERNAL USE ONLY

Notifiable incident

Incident ID	6106
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	23/08/2019 08:39 AM (WST)
Notification date	23/08/2019 12:23 PM (WST)
NOPSEMA response date	23/08/2019 12:45 PM (WST)
Received by	[redacted]
Nearest state	WA
Initial category type *(based on notification)*	Dangerous Occurrence
Initial category *(based on notification)*	Unplanned event - implement emergency response plan
3 Day report received	25/08/2019
Final report received	25/08/2019
All required data received	25/08/2019
Final category type *(based on final report)*	Dangerous Occurrence
Final category *(based on final report)*	Unplanned event - implement emergency response plan
Brief description	OHS - UPE - Spurious alarm resulting in Muster.
Location	Deck
Subtype/s	Alarm, Emergency response, Muster
Summary *(at notification)*	Indication from a manual call point (MCP) resulted in a General alarm leading to a full muster. MCP is located on main deck amidships close to LPG storage. Check CCTV and fire and gas panel no other indication 08.42 Mobilised technicians to the area 08.52 Full Muster confirmed 08.55 Technicians reported back that the area was all clear. 08.58 Fire Teams Stood down 9.02 MCP inhibited as it appears to be faulty 9.03 Muster stood down - back to normal ops Investigation on going 3 day report to follow

Details *(from final report)*	Indication from a manual call point(MCP) resulted in a General alarm leading to a full muster MCP is located on main deck amidships close to LPG storage. Check CCTV and fire and gas panel no other indication 08.42 Mobilised technicians to the area 08.52 Full Muster confirmed 08.55 Technicians reported back that the area was all clear. 08.58 Fire Teams Stood down 9.02 MCP inhibited as it appears to be faulty 9.03 Muster stood down - back to normal ops Investigation on going 3 day report to follow **As Supplied by Duty Holder** Brief description of incident There was an unplanned activation of a manual activation call (MAC) point on main deck near the butane pumps. The activation initiated the general alarm and resulted in a full muster of the facility. Work or activity being undertaken at time of incident Normal operations with an LNGC in residence for cargo operations. Note: in accordance with the relevant procedures, cargo operations were maintained, the vessel was advised of situation and to await further instructions from Prelude. Based on the event the LNGC did not muster. What are the internal investigation arrangements? A technical investigation into why the MAC point activated has been completed. Was an emergency response initiated? Yes How effective was the emergency response? Muster was successfully completed. Post confirmation that there were no signs of escalation on CCTV or via F&G system 2 x technicians were deployed to confirm area at MACP location was clear. All POB were accounted for in 13 minutes. Fire teams were ready to deploy in 9 minutes.
Immediate cause/s	Investigation has identified that MACP was initiated due to failed resistor within circuitry inside the MACP housing.
Root cause/s	ED - TOLERABLE FAILURE
Root cause description	Root cause analysis Has the investigation been completed? Yes What were the root causes? Root cause 1 Failure of a resistor within MACP housing Full report Describe investigation in detail, including who conducted the investigation and in accordance with what standard/procedure with reference to attachments listed in the 'attachments table' (following) as applicable A loop monitoring resistor was at fault inside the MAC point. This resulted in an open circuit which caused the general alarm to activate and therefore initiating a muster. The MAC points are a normally closed switch that are designed to fail safe. Actions to prevent recurrence of same or similar incident Action: Replace the faulty MAC point MITL Completed Action: Develop inspection / remedial plan for similar devices on the facility MITL October 2019

Duty inspector recommendation	
Date	23/08/2019
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	23/08/2019
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	26/08/2019
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	Reported as a potential false alarm - 3 day report confirmed failed resistor within circuitry inside the MACP housing causing a false alarm. No risk gap.

Non-major investigation decision	
Date	28/08/2019
RoN	[redacted]
RoN review result	Agree with recommendation
Strategy decision	Inclusion in annual report stats / data analysis
Supporting considerations	

Associated inspection	
Inspection ID	