

Notifiable incident

Incident ID [5394](#)

Duty holder: INPEX Operations Australia Pty Ltd
Facility/Activity: CPF Ichthys Explorer
Facility type: Other platform with accommodation facilities when drilling/workover facilities are not in commission

Incident details	
Division	Occupational Health and Safety
Notification type	Incident
Incident date	07/05/2018 01:47 PM (WST)
Notification date	07/05/2018 03:43 PM (WST)
NOPSEMA response date	07/05/2018 04:18 PM (WST)
Received by	[REDACTED]
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	10/05/2018
Final report received	06/06/2018
All required data received	06/06/2018
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 gas on lower level deck
Location	Accommodation and amenities
Subtype/s	Alarm, Muster
Summary <i>(at notification)</i>	<p>Operator advised that a gas detector was activated on the lower deck level. This initiated a GA and Muster. The ERT was deployed and determined it was a false alarm.</p> <p>[REDACTED] tried on two occasions to call the operator back to gather more information but could not get through.</p>

Details <i>(from final report)</i>	<p>Operator advised that a gas detector was activated on the lower deck level. This initiated a GA and Muster. The ERT was deployed and determined it was a false alarm.</p> <p>██████ tried on two occasions to call the operator back to gather more information but could not get through.</p> <p>General platform alarm initiated due to single faulty gas detector providing false high reading on lower deck. False reading from detector combined with overridden detector, in adjacent zone, degraded the voter from two out of six, to one out of one. This resulted in the general platform alarm initiating in accordance with Fire & Gas logic.</p> <p>Investigation was conducted by the Startup Integrated Control Safety System (ICSS) Engineer, in accordance with the INPEX Event Reporting and Investigation Procedure.</p> <p>The standard voting logic for the process area groups utilises the concept of adjacent detection. This allows the voting areas adjacent to a group to provide an input to a voting block to ensure full detection of coverage whilst reducing the potential for a spurious event. The adjacent zone input is considered a normal input by the area voting logic.</p> <p>The logic design originally only allowed for N-1 devices within the voting group to be placed in Maintenance Override Switch (MOS), but this limitation was overridden as a result of the disabling of all the Line of Sight gas detectors. In this situation, the voter was disabled. During the ESD testing, all active MOS were removed as part of the process and manually re-instated, however this one was missed.</p> <p>In this situation, all the zone detectors were invalid, however the adjacent area input was still valid. As a consequence, any single gas detector, in an adjacent area that gave a spurious high reading would trigger the GPA and associated actions. The current project actions to remove the N-1 limitation for fire and gas voting blocks exposes the adjacent input as a potential trigger for similar events. The review of the design has confirmed that there should be no potential for a single device to cause executive action.</p>
Immediate cause/s	<p>Single faulty gas detector caused false alarm - failed safe as designed. Point Gas Detector B831DGC213 sent a false reading of 11%LEL which is single low gas detected. Voting with adjacent fire and gas group initiated executive actions as per facility cause and effects. There was nobody working on this detector and after event testing shows no gas present. Detector still reading 11%LEL.</p>
Root cause/s	<p>ED - DESIGN - Design specs - design not to specs</p>
Root cause description	<p>Implemented voting logic was not as per the specification.</p>

Duty inspector recommendation

Date	<p>08/05/2018</p>
Duty inspector	<p>██████</p>
Recommendation	<p>Do not conduct Major Investigation</p>
Reasoning	<p>Does not meet MI threshold based on information received</p>
Supporting considerations	

Major investigation decision

Date	<p>08/05/2018</p>
Decision	<p>Do not conduct Major Investigation</p>
Reasoning	<p>Does not meet MI threshold based on information received</p>
Supporting considerations	

Non-major investigation review and recommendation

Date	<p>09/05/2018</p>
Inspector	<p>██████</p>
Risk gap	<p>None</p>
Type of standard	<p>Established</p>
Initial strategy	<p>Inclusion in annual stats/data analysis</p>

Recommended follow up strategy

Recommended strategy	Inclusion in annual report stats / data analysis
Supporting considerations	<p>Confirmed with INPEX focal point - [REDACTED] and feedback provided on 9/5/2018. A false reading in a gas detector on the lower deck initiated a GPA and muster. The cause of the detector fault is currently being investigated. The facility is still at IHUC phase and there is no HC on the facility. Notification was provided due to facilities mustered as required.</p> <p>The facilities (including personnel on ASV) previously mustered due to false alarm in this case it was most likely due to faulty gas detector. [REDACTED]</p>

Non-major investigation decision

Date	09/05/2018
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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