Notifiable incident

Incident ID	**5108**
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	17/10/2017 10:00 AM (WST)
Notification date	19/10/2017 12:58 PM (WST)
NOPSEMA response date	19/10/2017 01:48 PM (WST)
Received by	[redacted]
Nearest state	WA
Initial category type *(based on notification)*	Dangerous Occurrence
Initial category *(based on notification)*	Damage to safety-critical equipment
3 Day report received	20/10/2017
Final report received	16/11/2017
All required data received	16/11/2017
Final category type *(based on final report)*	Dangerous Occurrence
Final category *(based on final report)*	Damage to safety-critical equipment
Brief description	OHS-DSCE-INERGEN system performance standard issue
Location	Accommodation and amenities
Subtype/s	Facility integrity
Summary *(at notification)*	Operator advised that ongoing tests on inergen system has identified that distribution valve for battery room (small space containing telcom batteries) is not operating and as such the medium cannot be distributed to this room. The ERT have been advised that if there is a fire in this room other means such as a CO2 extinguisher will need to be used as an alternative to inergen. Further testing of system is ongoing and other valves have been identified as not working however, this is not believed to prevent the delivering of the medium to these spaces as they have multiple distribution valves. However this was questioned by Cronin and the operator advised that his technical safety department was looking into the matter and the initial report would contain more information on this if deemed an issue.

Details *(from final report)*	Operator advised that ongoing tests on inergen system has identified that distribution valve for battery room (small space containing telcom batteries) is not operating and as such the medium cannot be distributed to this room. The ERT have been advised that if there is a fire in this room other means such as a CO2 extinguisher will need to be used as an alternative to inergen. Further testing of system is ongoing and other valves have been identified as not working however, this is not believed to prevent the delivering of the medium to these spaces as they have multiple distribution valves. However this was questioned by Cronin and the operator advised that his technical safety department was looking into the matter and the initial report would contain more information on this if deemed an issue. The initial report states:- During testing of the CPF central inergen system, the inergen distribution valve to the level 6 battery room failed to open. There is only one valve that provides inergen to battery room. This has resulted in a non-compliance with the performance standard. The failed valve was removed for inspection to determine the cause of the failure. Initial assessment identified some trapped pressure within the valve that may have impacted operation. It was not identified if the trapped vapour was ambient air, Inergen or Nitrogen. The cause of why trapped pressure is unique to this one valve has not been identified. Inspection of the valve did not yield any obvious determination of the root cause, however the vendor has confirmed that the drying of lubricant within the valves has been known to cause deteriorated performance The root cause is most likely a combination of the dried grease and the trapped pressure. It is intended that an additional valve that has been identified as failed, be removed and sent to the vendor to investigate once replacement valves are made available. The results of this RCA investigation will provide indication of whether this could be reflective of a recurring issue and the determination of any additional design, maintenance or testing requirements. All Inergen valves have been cycled to ensure operation as per design. Centralised Inergen systems have been tested for remote activation from the Fire and Gas Operating panel (FGOP), Local Control Panel (LCP) and F&G event executive action.
Immediate cause/s	The faulty valve will need to be removed and inspected to determine the failure mode.
Root cause/s	ED - DESIGN - Design specs - problem not anticipated
Root cause description	Lubricating grease in the valve dried out (suspected). Trapped pressure causing the valve to jam (not operate correctly) during a test

Duty inspector recommendation	
Date	19/10/2017
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	19/10/2017
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	19/10/2017
Inspector	[redacted]
Risk gap	Moderate
Type of standard	Established
Initial strategy	Investigate

Recommended follow up strategy	
Recommended strategy	Investigate
Supporting considerations	CPF inergen system released in column 4 being triggered while technicians working on gas detectors (removal of dust cap) was reported in the past. In this case, this is a separate inergen system protecting the battery room. The AFP is deemed not functional (Damaged to SCE). Other means of fire suppression identified. Potential escalation is damaged to UPS (for the telecom system), if there is a fire and cannot be put out quickly. The fault was not identified by chance, being that inergen systems "review and function testing" for all inergen system on CPF was triggered by the initial event (column 4) stated by INPEX (; 3:30pm 19/10/2017). Next Inspection for CPF is planned for Nov 2017 (PI 1673). It is proposed that this incident to be followed up

Non-major investigation decision	
Date	09/11/2017
RoN	
RoN review result	Agree with recommendation
Strategy decision	Investigate
Supporting considerations	Agreed.

Associated inspection	
Inspection ID	1673