Notifiable incident

Incident ID	5680
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	18/10/2018 11:50 AM (WST)
Notification date	27/10/2018 07:03 PM (WST)
NOPSEMA response date	13/11/2018 03:33 PM (WST)
Received by	[redacted]
Nearest state	WA
Initial category type *(based on notification)*	Dangerous Occurrence
Initial category *(based on notification)*	Could have caused death or serious injury
3 Day report received	27/10/2018
Final report received	17/11/2018
All required data received	17/11/2018
Final category type *(based on final report)*	Dangerous Occurrence
Final category *(based on final report)*	Could have caused death or serious injury
Brief description	OHS-DODSI-Pipe found pressurised in breach of process mechanical isolations certificate
Location	
Subtype/s	Pipehandling, Stored energy
Summary *(at notification)*	Planned removal of blinds from process pipework. Work had not commenced. Line found pressurised with nitrogen after isolation was completed and issued. As part of permit endorsement check the Area Authority (AA) identified that the line to be worked on had been re-pressurised with nitrogen and was not as per the conditions of the process mechanical isolation certificate (PMIC). Note: Delay in reporting due to internal company review of event details, exposures and subsequent classification.

Details *(from final report)*	Planned removal of blinds from process pipework. Work had not commenced. Line found pressurised with nitrogen after isolation was completed and issued. As part of permit endorsement check the Area Authority (AA) identified that the line to be worked on had been re-pressurised with nitrogen and was not as per the conditions of the process mechanical isolation certificate (PMIC). Note: Delay in reporting due to internal company review of event details, exposures and subsequent classification. Investigation Summary At the time of the event, Gas Export Compressor (GEC) 3 was not in service with outstanding scopes of work being managed within the CPF Start-up team. In order to facilitate ongoing work scopes and leak testing GEC 3 had been isolated under proven PMIC's: The GEC 3 recycle line had previously been utilised to allow the free flow of gas into the Gas Export Pipeline (GEP). The introduction of hydrocarbons meant that although the free flow activity had ceased there was a high level of hydrocarbons still detected within this line during testing. The presence of this hydrocarbon was most likely caused by residual liquid within the pipework. To manage the re-occurring hydrocarbon levels the recycle line was pressurised with Nitrogen and piston purging conducted. The piston purging in this circumstance involved the introduction of Nitrogen in stages to a pressure of 8.4 Mpag and then de-pressurisation to a safe vent location. The sequence of purging of the recycle line shows that this activity had occurred over a period of time. Prior to the date of the incident the purging of the recycle line had been completed using a Sanction to Test Certificates under endorsed Process Mechanical Isolation Certificate (PMIC). A Cold Work Permit (CWP) and Own Isolation Certificate were also issued for the Nitrogen purges of the GEC 3 recycle line. In addition a Prepare for Maintenance and Return to Service Procedure was developed and used for the Nitrogen Purge activities. On the 17th October a crew change occurred for the Operations technicians that resulted in a new technician being on shift from Nightshift of the 17/10/18. Although a summary of the status of the line and previous activities was provided in handovers, there is no evidence identified that the process involving the use of a Sanction to Test Certificate, Own Isolation or the Prepare for Maintenance & Return to Service Procedure was adopted by the oncoming Technician. On the 18th October 2018 a work crew was tasked with the removal of blinds from the CPF Gas Export Compressor #3 (GEC 3) recycle line. The work was to be conducted under a proven Process Mechanical Isolation Certificate (PMIC) and Hot Work Category 2 permit. The PMIC and permit conditions showed the recycle line isolation condition to be de-pressurised. During completion of the Permit pre-endorsement checks at the worksite, the Area Authority (AA) identified that the status of the recycle line was not in accordance with PMIC and permit conditions. The AA observed a Nitrogen line attached to the system and a pressure gauge on the recycle line showed a pressure of 8.4 Mpag. The Area Authority immediately suspended all work activities and notified line management. It was identified during the investigation that a decision to re-pressurise the recycle line had been made on the previous nightshift when the work scope was unable to be carried out. The change of status was advised during handover, however there was no formal recording of the changed state on permit or isolation paperwork. Actions: Communicate that the practice of making changes to isolations for re-pressurisation or changing the status of valves after the PMIC is signed off is to be stopped immediately. Communicate that any equipment that has been subject to the introduction of hydrocarbons requires a return to service and prepare for maintenance procedure to be developed prior to work or isolation commencing. Identify, confirm and communicate the correct process control for managing situations where the conditions of the PMIC are temporarily changed for maintenance or operational purposes. Update or develop management system documentation (e.g. ISSOW Manual) as appropriate. Discuss the findings of the investigation and reinforce the requirements to follow the required processes and procedures with all involved persons. Review current handover processes between Operations and Start-up personnel to ensure cross and shared learnings. Ensure that all necessary stakeholders (including field personnel. e.g. Area Authorities) are included in critical shift handover information processes. Clarify the use of the J5 process in handovers. Develop Return to Service / Prepare for Maintenance Procedures for the Gas Export Compressors. Share the lessons learned and corrective actions from this investigation with the FPSO and ILNG.
Immediate cause/s	Line pressurised with nitrogen after isolation was completed and issued.
Root cause/s	HPD - MGMT SYS - Stds, policies, admin controls NI - confusing or incomplete, HPD - MGMT SYS - Stds, policies, admin controls not used - recent change

Root cause description	Management system - SPAC Need Improvement The ISSOW Manual does not provide specific provision or clarity to manage this type of activity without the application of a new PMIC. The Sanction for test in its current form is not specifically intended to manage this type of activity and would require modification within the ISSOW Manual to ensure clarity of scope for future application. Management system – SPAC not used No formal management system control was applied to ensure that the changed state of the recycle line was recorded and communicated.

Duty inspector recommendation	
Date	13/11/2018
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	13/11/2018
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	19/11/2018
Inspector	[redacted]
Risk gap	Moderate
Type of standard	Established
Initial strategy	Investigate

Recommended follow up strategy	
Recommended strategy	Investigate
Supporting considerations	INPEX stated that the notification was made after internal assessment / investigation that has treated this as a potential "HPI" and therefore the need for notification but was late in this determination. Inspectors informed INPEX that the incident has to be notified within the time line and as soon as decision was made when INPEX has to undertake an investigation. The work has not commenced, the Area Authority identified that the line to be worked on had been re-pressurised with N2 (by a start up team). The system was isolated under process mechanical isolation certificate. The need for AA's verification prior to work commencement is the established system of work under PMIC. The job was suspended and the situation was reported to production team leader. There was no risk exposure to the work team. INPEX has commenced internal investigation. I recommend that this incident to be followed in the next planned inspection in Jan 2019. [redacted]

Non-major investigation decision	
Date	19/11/2018
RoN	[redacted]
RoN review result	Agree with recommendation
Strategy decision	Investigate
Supporting considerations	

Associated inspection	
Inspection ID	1777