## Notifiable incident

Incident ID	<u>5294</u>
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	26/02/2018 11:57 AM (WST)
Notification date	26/02/2018 08:50 PM (WST)
NOPSEMA response date	27/02/2018 07:05 AM (WST)
Received by	
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	28/02/2018
Final report received	28/03/2018
All required data received	28/03/2018
Final category type (based on final report)	Dangerous Occurrence
Final category (based on final report)	Damage to safety-critical equipment
Brief description	OHS-DSCE-Failure to meet pressure relief valve performance standard
Location	Deck
Subtype/s	Valve failure
Summary (at notification)	Operator advised that during the start up of main power generator C, a diesel spill of approx.10 litres occurred through the fuel pump seal.
	The reason the leak occurred was that the pressure relief valve and flow path on the fuel system were isolated. This had not been identified prior to start up. This is a violation of the performance standard in relation to relief/safety valves.
	The diesel leak was cleaned up and an investigation is underway into the breach of a the specific performance standard.
	The operator in his message asked if the duty inspector could call him back on 27/02/2018 AM.

<b>Details</b> (from final report)	Operator advised that during the start up of main power generator C, a diesel spill of approx.10 litres occurred through the fuel pump seal.
	The reason the leak occurred was that the pressure relief valve and flow path on the fuel system were isolated. This had not been identified prior to start up. This is a violation of the performance standard in relation to relief/safety valves.
	The diesel leak was cleaned up and an investigation is underway into the breach of a the specific performance standard.
	The operator in his message asked if the duty inspector could call him back on 27/02/2018 AM.
	During starting up (cranking) of Main Power Generator 'C', a diesel leak was experienced. Approximately 10 litres leaked inside MPG C enclosure. Upon investigation, it was found that both the pressure safety valve and pressure relief valve relief paths for the diesel fuel system were isolated closed, and therefore unable to meet the performance standard. Leak was from a seal on the diesel fuel pump.
Immediate cause/s	Pressure safety valve and pressure relief valve relief paths for the diesel fuel system were isolated closed.
Root cause/s	HPD - MGMT SYS - Stds, policies, admin controls not used - recent change, HPD - PROCEDURES - Wrong - situation not covered, HPD - MGMT SYS - Stds, policies, admin controls NI - technical error
Root cause description	<ul> <li>The change management process applied to introduce Non-Operating Equipment Isolating authorities was open to ambiguity:</li> <li>? The process for de-isolation is not specified in IHUC Instruction</li> <li>? Personnel not aware of the change to IHUC Instruction</li> <li>? Definition of "Operations Equipment" Non-operational personnel working on operating equipment</li> </ul>
	MPG start-up procedure did not include a step to trigger if a return to service required. There is no clarity on when the Main Power Generator Package "C" - Process Line Up Checklist [B-783-A-001] is to be applied.
	All de-isolations identified on PMIC 9341 were verified as complete, however they were not returned to their normal operating condition and this was not recorded on the isolation list or communicated to the PTL or IA.
	The intent of de-isolation is to return the plant and equipment to a "ready for service" state. The priority of de-isolation is also to ensure that safety critical systems such as PSV's are online. Neither of these requirements was met.

Duty inspector recommendation	
Date	27/02/2018
Duty inspector	
Recommendation	Do not conduct Major Investigation
Reasoning	Does not meet MI threshold based on information received
Supporting considerations	

Major investigation decision	
Date	27/02/2018
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	26/03/2018
Inspector	
Risk gap	Moderate
Type of standard	Established
Initial strategy	Investigate

Recommended follow up strategy	
Recommended strategy	Investigate
Supporting considerations	The initial report stated that the pressure safety valve and pressure relief valve relief paths for the diesel fuel system were isolated closed. Approximately 10 litres leaked inside MPG C enclosure. Incident found during starting up (cranking) of Main Power Generator 'C'. Leak was from a seal on the diesel fuel pump. A diesel fire in an enclosed space (i.e. MPG enclosure) is unlikely to have the potential to escalate due to the passive and active fire protection systems, in particular the fire rated boundaries of the enclosures. There is a potential of damaged to Main Power Generator C. The enclosure is protected by water mist system and is A-0 fire rated enclosure. The main power generator is not a SCE for the CPF. The relief valves are to mitigate diesel system over-pressure as described in MAE 2.1. The PSV / RV for the diesel fuel system were isolated. The broader issue is system handover and acceptance check by Operations. The isolation valve to PSV / PRVs without car seal (open) is not explainable. Suggest that the next in PI (1724), this incident is to be followed up. (NT).

Non-major investigation decision	
Date	28/03/2018
RoN	
RoN review result	Agree with recommendation
Strategy decision	Investigate
Supporting considerations	

Associated inspection	
Inspection ID	1724