Notifiable incident

Incident ID	**5721**
Duty holder:	INPEX Operations Australia Pty Ltd
Facility/Activity:	Ichthys Venturer
Facility type:	Floating production storage and offloading facility

Incident details	
Division	Occupational Health and Safety
Notification type	Incident
Incident date	06/12/2018 01:33 PM (WST)
Notification date	06/12/2018 04:03 PM (WST)
NOPSEMA response date	06/12/2018 04:45 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	09/12/2018
Final report received	05/01/2019
All required data received	05/01/2019
Final category type *(based on final report)*	Dangerous Occurrence
Final category *(based on final report)*	Damage to safety-critical equipment
Brief description	OHS - DSCE - Failed swagelok fitting led to HP Hydraulic fluid loss at EDG
Location	
Subtype/s	Near miss / high potential
Summary *(at notification)*	- Two operations technicians were conducting planned performance standards testing on Emergency Diesel Generator (EDG) A on the forward machinery space level 0; - when the technician started the EDG from the hydraulic start button at the local control panel; - a Swagelok fitting (compression tube fitting) failed releasing hydraulic fluid under pressure at 21MPA; - Hydraulic fluid dispersed into the room and the technicians were approximately 5-6 metres from release point; - no individuals were injured during the event; - the remedial action taken by the technicians was to press the stop button at the local control panel and evacuated the room; - the hydraulic spill was contained within the space, the area isolated and investigation commenced; - EDG-B still fully operational and provides 100% redundancy.

Details *(from final report)*	- Two operations technicians were conducting planned performance standards testing on Emergency Diesel Generator (EDG) A on the forward machinery space level 0; - when the technician started the EDG from the hydraulic start button at the local control panel; - a Swagelok fitting (compression tube fitting) failed releasing hydraulic fluid under pressure at 21MPA; - Hydraulic fluid dispersed into the room and the technicians were approximately 5-6 metres from release point; - no individuals were injured during the event; - the remedial action taken by the technicians was to press the stop button at the local control panel and evacuated the room; - the hydraulic spill was contained within the space, the area isolated and investigation commenced; - EDG-B still fully operational and provides 100% redundancy. Two Operations Technicians were undertaking planned Performance Standard testing on Emergency Diesel Generator A (EDG A) in FWD Machinery Space, Level 0, as per approved Operating Procedure. When the technicians started the EDG A from the hydraulic start button via the Local Control Panel (LCP), a compression tubing fitting (Gyrolok) failed releasing hydraulic fluid under pressure (21mPA) which dispersed into the room. The technicians were approx. 5-6 meters away from the release point. Tubing fittings found to be installed incorrectly in the EDG 'A' Package. In Korea post Factory Acceptance Test (FAT) and pressure test a Right First Time (RFT) sample inspection of EDG 'B' found 10/10 fittings had passed compliance requirements, the EDG Packages were rated a low residual risk, therefore were not tested further. Tube fitting failures on the FWG Packages were identified in Korea and all FWG hydraulic packages were retubed. It was not known or identified that the same sub-vendor had also supplied the EDG hydraulic start package on behalf of different vendor packages.
Immediate cause/s	A compression tubing fitting failed releasing hydraulic fluid under pressure (21mPA) which dispersed into the room.
Root cause/s	ED - EQUIPMENT / PARTS DEFECT - QC
Root cause description	Tubing fittings found to be installed incorrectly in the EDG 'A' Package

Duty inspector recommendation	
Date	06/12/2018
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	10/12/2018
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	10/12/2018
Inspector	[redacted]
Risk gap	Moderate
Type of standard	Established
Initial strategy	Investigate

Recommended follow up strategy	
Recommended strategy	Investigate
Supporting considerations	Consequences - pressure injection injury to one person. Likelihood - increase from remote to possible. Risk gap - moderate. Established standard - as per SOV, and industry agreed practices for Swagelok installation.

Non-major investigation decision	
Date	10/12/2018
RoN	[redacted]
RoN review result	Agree with recommendation
Strategy decision	Investigate
Supporting considerations	

Associated inspection	
Inspection ID	1846