Notifiable incident

Incident ID	5165
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	01/12/2017 08:50 AM (WST)
Notification date	01/12/2017 02:06 PM (WST)
NOPSEMA response date	01/12/2017 02:10 PM (WST)
Received by	[redacted]
Nearest state	WA
Initial category type *(based on notification)*	Accident
Initial category *(based on notification)*	Incapacitation >= 3 days LTI
3 Day report received	04/12/2017
Final report received	31/12/2017
All required data received	31/12/2017
Final category type *(based on final report)*	Accident
Final category *(based on final report)*	Incapacitation >= 3 days LTI
Brief description	OHS-LTI-Worker sustained fracture to finger
Location	
Subtype/s	Injury
Summary *(at notification)*	Operator advised that during a lifting operation to transfer a 4000 litre tote tank on the after deck of the FPSO, as the load was being lowered, it moved in a way that the worker did not appreciate and he got his right index finger between the tank and the FPSO structure. He was sent to see the Doctor on the Jascon 25 and diagnosed a fracture and recommended he be transferred to Broome for further medical care. The IP left the FPSO on a scheduled flight and the operator confirmed that this is likely to be classified as an LTI.
Details *(from final report)*	Operator advised that during a lifting operation to transfer a 4000 litre tote tank on the after deck of the FPSO, as the load was being lowered, it moved in a way that the worker did not appreciate and he got his right index finger between the tank and the FPSO structure. He was sent to see the Doctor on the Jascon 25 and diagnosed a fracture and recommended he be transferred to Broome for further medical care. The IP left the FPSO on a scheduled flight and the operator confirmed that this is likely to be classified as an LTI. Whilst assisting with lifting of a 4000 litre ISO container onto a bunded area located on the aft deck, the load moved in the opposite direction to which was expected. The IP's left index finger (1st pointer) became caught between a frame of ISO container and the FPSO structure. This resulted in a crush injury to the left index finger. IP was treated by the doctor on board the Jascon25. IP transported to Broome hospital on scheduled helicopter from FPSO for further assessment and treatment. Lost time injury >3 days On 01 December 2017 the IP was lifting / repositioning of a full 4000L isotainer from the Aft (Poop) Deck laydown area to the fixed decontamination bund. Upon lowering the isotainer to the landing zone (bund) the container made contact with an adjacent light and junction box. Assessment by lifting team noted isotainer not positioned satisfactorily / squarely on tote tank bund. Isotainer was being

lifted for repositioning when it unexpectedly moved toward the IP (approximately 1.2m); IP's hands were in contact with the isotainer and left hand became caught between isotainer frame and fire water pipe, resulting in crush injury to left index finger.
IP was escorted to Jason25 medic and received initial medical treatment from medic on duty. Careflight doctor was consulted and IP was transferred by scheduled helicopter from the FPSO to Broome for further medical assessment and treatment at Broome Hospital. X-ray upon arrival confirmed the IP's left index finger was fractured and would require surgical repair.
On arriving in Perth on 02 December, the IP was transferred to Joondalup Private Hospital, assessed by a hand Surgeon and scheduled for surgery that afternoon where 3 pins were inserted to the IP's injured left index finger under general anaesthetic. The IP remained in hospital for further 2 days for recovery and was issued a Certificate of Work Capacity by the treating hand specialist Surgeon, stating that the IP has no capacity for work until January 12th 2018, when the injury will be reviewed by the Surgeon and alternative duties may be considered.
Interviews with the work party confirmed that this lift was discussed at the Daily Toolbox Talk with INPEX Deck Crew Leading hand and work party and agreed by all to proceed, however this was completed without inspection of laydown area. Although the work party stated that the lift was reassessed at the landing zone prior to commencement of task, the investigation team found that they did not adequately identify hazards/assess risks associated with landing zone; vertical lift path was not clear (fixed light posing as potential obstruction) and additional potential obstructions were present adjacent to the lift path (junction box, light fittings, Inergen banks, fire water piping, scaffold ladder-way and gas cages).
It was identified that the work party was not aware that tote tank handling on the Aft Poop deck was required to be completed by use of forklift only, as stated within INPEX FPSO Cargo Deck Mechanical Handling Report S870-AM-REP-10014; specifically section 5.11; "7T electric powered forklift to be used for handling 4m3 oil and Mercury decontamination drains tote tanks and lube oil tote tanks on Poop Deck.". SPAC not adequately communicated to work party and therefore not considered during preparation for task.
Further investigation found that whilst the work party were aware that all lifts must be completed in accordance with the INPEX Lifting Operations Management Procedure (0000-AG-PRC-60046) and Lifting Operations Management Specification (0000-A0-SPC-60005), communication and enforcement of requirements stated therein had not been effective and as such, not complied with during completion of this task. Such requirements include;
- INPEX Lifting Operations Management Procedure (0000-AG-PRC-60046 , section 3.1: "personnel shall not touch the load or accessories with any part of their body as the load is being lifted or before the load is properly set down and any potential stored energy has been released. The exception is where it has been previously approved as a result of performing a specific risk assessment to manage the risks." and;
- Lifting Operations Management Specification (0000-A0-SPC-60005), Section 3.1: "Dogman shall focus on the lift and communications with the crane operator and shall not handle the load while it is suspended."
It was identified that Simple Lift Plan 'S-871-XX-001 / 002 / 003 / 031' dictates use of push-poles and taglines 'as required'; Taglines were confirmed as used for this lift and whilst INPEX provided Push-Pull Poles were available, they were not deemed as required by the work party and therefore not utilised. Whilst the use of push-poles would not have prevented this incident, completing the lift 'hands free' would have likely reduced potential for injury / potential injury severity. Investigation team recommends that the Simple Lift Plan template be revised to promote use of push-poles and reflect pre-requisite for 'hands free' lift operations completed under 'Simple Lift' plan (in alignment with section 3.1 of INPEX Lifting Operations Management Procedure (0000-AG-PRC-60046).
The Investigation team identified that deficiencies in the pre-planning / preparation for this task and inadequate risk assessment / perception of risk resulted in insufficient hazard control. Adequate considersation, understanding and enforcement of requirements stated within noted SPAC would have likely affected methodology for completion of this lift and greatly reduced likelihood of this incident occurring.

Work Direction – Preparation – Walk-thru Needs Improvement
This lift was discussed at Daily Toolbox Talk with INPEX Deck Crew Leading hand and work party and agreed by all that it was okay, however this was completed without inspection of laydown area. Although the work party stated that the lift was reassessed at the landing zone prior to commencement of task, the investigation team found that they did not adequately identify hazards/assess risks associated with landing zone; vertical lift path was not clear (walkway posing as potential obstruction) and additional potential obstructions were present adjacent to the lift path (junction box, light fittings, Inergen banks, fire water piping, scaffold ladder-way, Aft Deck bulkhead wall and gas cages).

Management System – SPAC Not Used – Communication NI
Work party stated they were not aware of the following requirements;

	- INPEX Lifting Operations Management Procedure 0000-AG-PRC-60046, Section 3.1; “personnel shall not touch the load or accessories with any part of their body as the load is being lifted or before the load is properly set down and any potential stored energy has been released. The exception is where it has been previously approved as a result of performing a specific risk assessment to manage the risks.” - INPEX FPSO Cargo Deck Mechanical Handling Report S870-AM-REP-10014, Section 5.11; “7T electric powered forklift to be used for handling 4m3 oil and Mercury decontamination drains tote tanks and lube oil tote tanks on Poop Deck.” SPAC not adequately communicated to work party and therefore not considered during preparation for task. Management System – Standards, Policies or Administrative Controls (SPAC) Not Used– Enforcement NI Requirements stated within Lifting Operations Management Specification (0000-A0-SPC-60005) not enforced by supervision, including but not limited to; Section 3.1: “Dogman shall focus on the lift and communications with the crane operator and shall not handle the load while it is suspended.”
Immediate cause/s	When landing the ISO container it became caught on an adjacent junction box. Whilst attempting to reposition the ISO container, it unexpectedly moved toward the IP and IP’s left index finger (1st pointer) became caught between the ISO container frame and the FPSO structure.
Root cause/s	HPD - WORK DIRECTION - Preparation - walk-through NI, HPD - MGMT SYS - Stds, policies, admin controls not used - SPAC comm NI, HPD - MGMT SYS - Stds, policies, admin controls not used - enforcement NI
Root cause description	Work Direction – Preparation – Walk-thru Needs Improvement This lift was discussed at Daily Toolbox Talk with INPEX Deck Crew Leading hand and work party and agreed by all that it was okay, however this was completed without inspection of laydown area. Although the work party stated that the lift was reassessed at the landing zone prior to commencement of task, the investigation team found that they did not adequately identify hazards/assess risks associated with landing zone; vertical lift path was not clear (walkway posing as potential obstruction) and additional potential obstructions were present adjacent to the lift path (junction box, light fittings, Inergen banks, fire water piping, scaffold ladder-way, Aft Deck bulkhead wall and gas cages). Management System – SPAC Not Used – Communication NI Work party stated they were not aware of the following requirements; - INPEX Lifting Operations Management Procedure 0000-AG-PRC-60046, Section 3.1; “personnel shall not touch the load or accessories with any part of their body as the load is being lifted or before the load is properly set down and any potential stored energy has been released. The exception is where it has been previously approved as a result of performing a specific risk assessment to manage the risks.” - INPEX FPSO Cargo Deck Mechanical Handling Report S870-AM-REP-10014, Section 5.11; “7T electric powered forklift to be used for handling 4m3 oil and Mercury decontamination drains tote tanks and lube oil tote tanks on Poop Deck.” SPAC not adequately communicated to work party and therefore not considered during preparation for task. Management System – Standards, Policies or Administrative Controls (SPAC) Not Used– Enforcement NI Requirements stated within Lifting Operations Management Specification (0000-A0-SPC-60005) not enforced by supervision, including but not limited to; Section 3.1: “Dogman shall focus on the lift and communications with the crane operator and shall not handle the load while it is suspended.”

Duty inspector recommendation	
Date	01/12/2017
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	01/12/2017
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	01/12/2017
Inspector	[redacted]
Risk gap	Moderate
Type of standard	Established
Initial strategy	Investigate

Recommended follow up strategy	
Recommended strategy	Investigate
Supporting considerations	The IP sustained fractured finger caught between moving object and structure. This is likely to be an LTI case. Suggesting inspection scope in the next planned inspection covers "Lifting operations / swing load" and investigate the LTI incident in parallel.[redacted]

Non-major investigation decision	
Date	04/12/2017
RoN	[redacted]
RoN review result	Agree with recommendation
Strategy decision	Investigate
Supporting considerations	

Associated inspection	
Inspection ID	1695