

# Notifiable incident

**Incident ID** [5540](#)

**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	
<b>Division</b>	Occupational Health and Safety
<b>Notification type</b>	Incident
<b>Incident date</b>	22/08/2018 01:37 AM (WST)
<b>Notification date</b>	22/08/2018 03:35 AM (WST)
<b>NOPSEMA response date</b>	22/08/2018 07:10 AM (WST)
<b>Received by</b>	[REDACTED]
<b>Nearest state</b>	WA
<b>Initial category type</b> <i>(based on notification)</i>	Other
<b>Initial category</b> <i>(based on notification)</i>	Information provided to NOPSEMA
<b>3 Day report received</b>	26/08/2018
<b>Final report received</b>	22/09/2018
<b>All required data received</b>	22/09/2018
<b>Final category type</b> <i>(based on final report)</i>	Dangerous Occurrence
<b>Final category</b> <i>(based on final report)</i>	Uncontrolled HC release >1 - 300 kg
<b>Brief description</b>	OHS-INFO-Gas release on facility
<b>Location</b>	
<b>Subtype/s</b>	Alarm, Emergency response, Muster
<b>Summary</b> <i>(at notification)</i>	<p>The OIM of the CPF Ichthys Explorer reported that a gas release occurred at the facility, as 2 line of Sight (LOS) gas detectors alarmed on DCS. The source of gas release is being investigated. At the time of the incident, the OIM reported that the Export Gas Compressor was being commissioned and the gas release is suspected to have been released for the compressor vent. The facility was shutdown, personnel mustered and accounted for.</p> <p>The OIM reported that the quantity, source and cause of gas release would be detailed in the 3-day report.</p> <p>Note: The notification 'detail' page is to be updated in terms of 'release amount' and 'categories' once the operator has provided this information.</p>

<b>Details</b> <i>(from final report)</i>	<p>The OIM of the CPF Ichthys Explorer reported that a gas release occurred at the facility, as 2 line of Sight (LOS) gas detectors alarmed on DCS. The source of gas release is being investigated. At the time of the incident, the OIM reported that the Export Gas Compressor was being commissioned and the gas release is suspected to have been released for the compressor vent. The facility was shutdown, personnel mustered and accounted for.</p> <p>The OIM reported that the quantity, source and cause of gas release would be detailed in the 3-day report.</p> <p>Note: The notification 'detail' page is to be updated in terms of 'release amount' and 'categories' once the operator has provided this information.</p> <p>During Gas Export Compressor (GEC) 1 fuel gas commissioning, fuel gas was vented to a safe location as per current design, however several gas detectors were activated.</p> <p>On the 22nd August 2018 at approximately 23:59 there was a deliberate venting of a section of the Gas Export Compressor (GEC) 01 fuel gas piping as a part of the commissioning activities. The Central Control Room (CCR) was contacted by radio by the Commissioning team advising that they were about to vent and were given the all clear to proceed.</p> <p>The volume vented and vent route is per design albeit that the activation of the valves was forced. The activation of the valves was controlled by the Commissioning team from the Instrument Electrical Room (IER) and valve movements were monitored locally by commissioning team members and all systems worked as expected.</p> <p>This vent line from BDV 407 is routed up three levels and discharges to atmosphere at a safe location. The venting triggered two gas detectors although not at the same time so no executive action occurred.</p> <p>These alarms were acknowledged approximately 2 min after the event by the CCR, however they were not investigated in the field and the Commissioning team were not made aware of this event, and continued on to the next step in the commissioning process. The next step involved confirming the "fail to ignite" logic.</p> <p>This step required following a normal start sequence with the ignitors inhibited. During this sequence, when valve XV 417 reached its 100% open position, all three inlet duct gas detectors and all three ventilation gas detectors went into an unhealthy state simultaneously which caused GEC01 unit to trip. These were false gas detections that are suspected to be caused by a ground fault on the XV417 proximity switch, which is still being investigated and tested.</p> <p>The GEC 01 unit trip signal opened SDV 415 and BDV 407 simultaneously, however due to differential in valve response times, for a period of approximately 1.5 seconds both of the valves were open. This resulted in an estimated release of 9kg of fuel gas to vent to atmosphere at the top deck level via BDV 407 and the vent line. The first gas detector that is adjacent to the vent line at the top deck level triggered at 01:36:32, and a second gas detector on the next level below the vent (Level 3) triggered simultaneously and triggered an ESD1. Gas was subsequently detected at four additional detectors, two of which were at main deck level, two deck levels below the vent outlet at 01:36:51, indicating the gas cloud had expanded downwards and eastwards across the process module. The facility went to muster and all personnel were accounted for.</p> <p>All safety systems worked per design.</p>
<b>Immediate cause/s</b>	Being investigated.
<b>Root cause/s</b>	ED - DESIGN - Design specs - specs NI
<b>Root cause description</b>	Overlap of BDV opening before SDV had closed
<b>Release type</b>	Hydrocarbon gas

<b>Duty inspector recommendation</b>	
<b>Date</b>	22/08/2018
<b>Duty inspector</b>	[REDACTED]
<b>Recommendation</b>	Do not conduct Major Investigation
<b>Reasoning</b>	Does not meet MI threshold based on information received
<b>Supporting considerations</b>	

Major investigation decision	
Date	27/08/2018
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	27/08/2018
Inspector	██████████
Risk gap	Moderate
Type of standard	Established
Initial strategy	Investigate

Recommended follow up strategy	
Recommended strategy	Investigate
Supporting considerations	This is the first reported process HC release incident associated with the CPF. The HC was released from fuel gas vent stated in both verbal and in the 3D report. There is no process / pressure envelope being breached stated in the verbal communication. INPEX has mobilised investigation team to the CPF last Friday. The facility gas detectors activated, followed by ESD and GPA. The CPF and ASV were mustered orderly. Investigation is ongoing. I recommend that the notification to be followed up in PI 1776 and we will be on the facility on 11 Sept 2018. ██████████

Non-major investigation decision	
Date	27/08/2018
RoN	██████████
RoN review result	Agree with recommendation
Strategy decision	Investigate
Supporting considerations	

Associated inspection	
Inspection ID	1776