

# Notifiable incident

**Incident ID** [6339](#)

**Duty holder:** Shell Australia Pty Ltd  
**Facility/Activity:** Prelude FLNG  
**Facility type:** Floating liquefied natural gas facility

Incident details	
<b>Division</b>	Occupational Health and Safety
<b>Notification type</b>	Incident
<b>Incident date</b>	12/01/2020 05:00 PM (WST)
<b>Notification date</b>	12/01/2020 07:42 PM (WST)
<b>NOPSEMA response date</b>	12/01/2020 08:15 PM (WST)
<b>Received by</b>	[REDACTED]
<b>Nearest state</b>	WA
<b>Initial category type</b> <i>(based on notification)</i>	Dangerous Occurrence
<b>Initial category</b> <i>(based on notification)</i>	Fire or explosion
<b>3 Day report received</b>	15/01/2020
<b>Final report received</b>	15/01/2020
<b>All required data received</b>	23/01/2020
<b>Final category type</b> <i>(based on final report)</i>	Dangerous Occurrence
<b>Final category</b> <i>(based on final report)</i>	Fire or explosion
<b>Brief description</b>	OHS-FIREX-Small fire in laundry
<b>Location</b>	Accommodation and amenities
<b>Subtype/s</b>	Fire
<b>Summary</b> <i>(at notification)</i>	<p>Operator advised that during normal laundry operations, an operator smelt smoke and summoned his supervisor. The supervisor could see a small flame and smoke coming from the back of the machine. He used a portable extinguisher and injected it into the back of the machine which smothered the flame.</p> <p>No fixed fire detection in the space was activated.</p> <p>An electrician later identified a thermal overload switch failure as the issue.</p> <p>The other 5 machines in the dirty laundry as well as 3 more in the clean laundry were inspected and found to be okay to operate.</p>

<p><b>Details</b> (from final report)</p>	<p>Operator advised that during normal laundry operations, an operator smelt smoke and summoned his supervisor. The supervisor could see a small flame and smoke coming from the back of the machine. He used a portable extinguisher and injected it into the back of the machine which smothered the flame.</p> <p>No fixed fire detection in the space was activated.</p> <p>An electrician later identified a thermal overload switch failure as the issue.</p> <p>The other 5 machines in the dirty laundry as well as 3 more in the clean laundry were inspected and found to be okay to operate.</p> <p><b>** As Supplied by Duty Holder**</b></p> <p>Brief description of incident - While undertaking laundry duties, the worker assigned to monitor the area observed an unusual smell coming from an operating clothes dryer (dryer #1). The worker quickly isolated all six clothes dryers, notified their supervisor and a fire extinguisher was quickly used to quench a small electrical burn observed coming from the back of the clothes dryer.</p> <p>Work or activity being undertaken at time of incident - Normal operations in the laundry</p> <p>What are the internal investigation arrangements? Shell are conducting a causal reasoning investigation into the incident.</p> <p>Action taken to make the work-site safe - Dryer was electrically isolated</p> <p>What were the immediate causes of the incident? Thermostatic cut off switch failure resulting in electrical burning</p> <p>Has the investigation been completed? Yes</p> <p>Root cause analysis:  Root cause 1 - Overheating of the thermostatic cut off switch resulting in electrical burning of the insulated crimp lug shrouds.  Root cause 2 - Poor crimp lug connection resulting in a high resistance joint on the thermostatic cut off switch</p> <p>Full Report - A casual reasoning investigation led by Maintenance Instrumentation Team lead (MITL), with the Responsible Person Electrical (RPE) and HSSE Advisor on the investigation team. Investigation (including inspection of the equipment) found that the electrical burn was caused by a poor crimp lug connection resulting in a high resistance joint on the thermostatic cut off switch which overheated resulting in the melting of the insulated crimp lug shrouds.  Furthermore, there was no evidence of any maintenance routine to check for high resistive joints on the dryers.</p> <p>Actions to prevent recurrence of same or similar incident:  Action - Electrical inspections conducted on all dryers to confirm safe for use and can be de-isolated post incident. Note: Any issues identified to remain isolated until repairs undertaken and confirmed safe for use. Responsible - Prelude MITL. Completion Date - Completed  Action - Three monthly electrical inspection maintenance work orders of all laundry dryers to be included in SAP/ Inspection to include thermal imaging of electrical connection to check for evidence heat degradation of electrical connections. Responsible - Prelude MITL. Completion Date - 25 January 2020</p>
<p><b>Immediate cause/s</b></p>	<p>TBC</p>
<p><b>Root cause/s</b></p>	
<p><b>Root cause description</b></p>	<p>Root cause 1 - Overheating of the thermostatic cut off switch resulting in electrical burning of the insulated crimp lug shrouds.  Root cause 2 - Poor crimp lug connection resulting in a high resistance joint on the thermostatic cut off switch</p>

Duty inspector recommendation	
Date	13/01/2020
Duty inspector	
Recommendation	Do not conduct Major Investigation
Reasoning	Does not meet MI threshold based on information received
Supporting considerations	

Major investigation decision	
Date	13/01/2020
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	13/01/2020
Inspector	
Risk gap	Substantial
Type of standard	Established
Initial strategy	Investigate within 45 days

Recommended follow up strategy	
Recommended strategy	Investigate ASAP
Supporting considerations	Serious consequences have been realised in industry as a result of laundry fires. The operator has stated that the other machines have been checked and remain in service. It appears that no interim measures to reduce the risk of a fire in the laundry have been introduced as a result of this dangerous occurrence - at least until the root cause is identified and rectified. Investigate ASAP to determine whether there is an immediate threat.

Non-major investigation decision	
Date	13/01/2020
RoN	
RoN review result	Agree with recommendation
Strategy decision	Investigate ASAP
Supporting considerations	

Associated inspection	
Inspection ID	<a href="#">2149</a>