SAFETY ALERT 02
Laundry Operations

What happened?
Three recent incidents indicate the need to operate and maintain laundry equipment in accordance with good housekeeping practices and manufacturers instructions.

What went wrong?
- Ignition of lint that had accumulated within a laundry dryer
- Ignition of laundry within a laundry dryer
- Suspicion of the ignition of plastic material found in residue within the dryer following the incident

Key Lessons
NOPSA consulted Fire and Emergency Services Authority of Western Australia (FESA) Fire Investigators who provided advice based on experience of investigating laundry fires within Western Australia. The following issues include matters raised by FESA and some matters associated with the incidents that led to the development of this alert.

Issue 1: Lint accumulation not removed in accordance with manufacturers instructions.
Problem 1: A back pressure can be created within the dryer that causes lint to enter the internal section of the dryer where it can contact the heater element and lead to combustion.
Solution 1: Regularly clean lint filters in accordance with manufacturers instructions.

Issue 2: Lint build up on air escape outlet of dryer
Problem 2: Concentration of combustible material in the region of the air outlet.
Solution 2: Vacuum or sweep around dryer paying special attention to air outlets during cleaning schedules to remove any build up of combustible material.

Issue 3: Laundry taken out of the dryer prior to completion of the cooling cycle.
Problem 3: Laundry removed before the completion of the cooling cycle has the potential to self heat and combust.
Solution 3: Do not remove clothes from a dryer until the programmed cooling cycle is completed.
Issue 4: Interrupting the dryer cycle.
Problem 4: Interrupting the dryer cycle can promote the conditions that lead to self heating and combustion of laundry.
Solution 4: Ensure that complete programmed cycles are completed in accordance with appliance manufacturer's instructions.

Issue 5: Incompletely cleaned laundry being placed in the dryer with the appliance overloaded.
Problem 5: Organic oil residues (predominantly found on tea towels) have been found to have combusted when laundry is packed tightly and self heating has led to ignition of the oils.
Solution 5: Ensure items that may have contained organic oils are properly cleaned before loading into a dryer. Follow the loading instructions of the manufacturer and operate the appliance in accordance with the programmed cycle.

Issue 6: Items other than laundry placed in dryers.
Problem 6: Items other than laundry that are subjected to dryer conditions can lead to combustion within the dryer.
Solution 6: Sort laundry to ensure that no items with the potential for combustion have been left in the pockets of clothes or other places where such items can be concealed.

Recommendation
NOPSA recommends that the advice provided in this safety alert is implemented into the safety management systems of laundering operations in offshore facilities

Contact
For further information email alerts@nopsa.gov.au and quote Alert 02.