

IMCA Safety Flashes summarise key safety matters and incidents, allowing lessons to be more easily learnt for the benefit of all. The effectiveness of the IMCA Safety Flash system depends on Members sharing information and so avoiding repeat incidents. Please consider adding safetyreports@imca-int.com to your internal distribution list for safety alerts or manually submitting information on incidents you consider may be relevant. All information is anonymised or sanitised, as appropriate.

1 Damaged Electrical Cable

What happened

During a washdown of a vessel's cargo hold a crew member noticed arcing from around two electrical cables near the cargo hold light. Upon closer investigation he noticed a piece of tie wire connected to the cables was glowing red. The crew member immediately stopped hosing down and turned the water supply off and notified the ship's electrician.

Applicable
Life Saving
Rule(s)



Energy
Isolation



Damaged cable



Cargo hold

What were the causes

The outer insulation of the cabling was damaged. The cable insulation had deteriorated due to age and weathering, exposing the live wire. The location of the cable was such that it was not easily accessed for detailed visual inspection.

Actions

- Visual inspection of all electrical cables for early signs of aging and weathering, particularly in difficult to see areas.

IMCA notes that neglected exposed mains cabling is a surprisingly common high potential issue, in an area – electrical safety - that ought to be a good deal more tightly controlled.

Consider the following:

- [Near-miss: Exposed live electrical cable \(2013\)](#)
- [Electrician received electric shock from a bare cable \(2018\)](#)
- [Smouldering coiled extension cable \(2019\)](#)
- [Electrical shock from containerised portable office \(2020\)](#)
- [Shipyard worker receives electrical shock \(2021\)](#)
- Short video: [Electrical hazards](#)

2 UK HSE: Poorly maintained electrical installation caused fatality

The UK Health and Safety Executive prosecuted a warehouse management solutions company after an employee was fatally electrocuted while servicing electrical equipment.

What happened

A worker was carrying out pre-planned maintenance on an air compressor when he was electrocuted. He was not found for more than an hour following the incident. His injuries were fatal.

What went wrong?

Investigation found that:

- Control measures in place to prevent contact with electricity during maintenance activities were neither suitable nor sufficient;
- The electrical systems had not been tested or visually inspected since installation, and an incorrect isolating switch had not been identified.

The HSE inspector noted that “Poorly maintained electrical installations and faulty electrical appliances can kill or severely injure people; and cause damage to property. This was a wholly avoidable incident, caused by the **failure of the company to implement safe systems of work and identify the risks**. Had the company identified the correct isolation point for the compressor and **ensured that employees were sufficiently trained and supervised in the lock off procedures expected of them then this fatal incident would not have occurred.**” (IMCA emphasis).

Press release [here](#).

IMCA notes that appropriate control of electrical equipment is something worth looking closely at, particularly in two areas:

- Where personnel using the equipment may not be engineers or electrical professionals (for example, the galley, the mess, the gym or other spaces not used for work);
- Where access to electrical equipment or wiring is very difficult or is in spaces rarely visited by personnel.

Members may wish to refer to:

- Short video: [Electrical hazards](#)
- [Catering crew unfamiliar with firefighting systems and emergency stops](#)
- [Two incidents with electrical installations with potential for a fire](#)

Applicable
Life Saving
Rule(s)



Bypassing
Safety
Controls



Energy
Isolation



3 Near Miss – Damaged Rig Hose

What happened

A vessel was engaged in routine operations receiving contaminated oil-based mud from a rig. Upon disconnecting the rig hose and vessel side coupling it was discovered that the inner rubber lining of the rig hose had peeled out and got caught at the junction of the connection.

Applicable
Life Saving
Rule(s)



Line of Fire

It was determined that should the blockage have prevented the flow of oil-based mud it could have resulted in a significant environmental incident as a result of hose failure due to back pressure.



Inner Rubber Lining of Rig Hose



Rig hose

What was the cause?

Rig side hose inner lining parted from sheath and got caught between connections.

Actions

- Ensure that hoses are in good condition, properly certified, and in compliance with required standards, before use;
- Conduct a visual check on hoses before use;
- Remember that anyone can enact **stop work authority** if they see something unsafe.

Members may wish to refer to:

- [Low pressure mud hose parted](#)
- [MSF: water based mud spill on deck](#)
- [Sewage spilled onto the quayside](#)
- [Near miss: unplanned release of 2" blasting hose outlet from air receiver coupling clamp](#)

4 Wrong key for the CO₂ room

What happened

During a weekly inspection it was revealed that the key for the CO₂ fixed firefighting system compartment, which was stored in a break glass box adjacent to the entrance, did not fit the padlock – it was the wrong key. This could have led to unavailability of access to the CO₂ fire-fighting activation panel in the event of an emergency.

Causes

- Lack of awareness and non-compliance with both regulatory and company requirements.
- Lack of emergency preparedness

What was the action?

A new padlock and key were installed, with the key in the break glass box alongside.



Members might care to have a thorough check

of all very rarely used keys, switches, buttons et cetera, particularly those that would be used in an emergency.

Consider, what one small rarely used thing, if missing, could cause the most serious potential harm to crew and equipment in an emergency?

Members may wish to refer to

- [Fixed CO₂ fire extinguishing systems - US Coast Guard alert](#)
- [Awareness: CO₂ flooding system activation points](#)
- [Deliberate failure to follow instructions: unsafe/quarantined tools brought back into use](#)
- [Two incidents relating to the condition of personal protective equipment](#)
- [Poor condition of on-board equipment](#)
- [Unsafe actions and conditions - inhibited alarm buttons](#)
- [Hazard hunt: fire dampers and fixed firefighting systems](#)

5 Condition of fire-fighting installation and equipment

What happened

A member highlights two instances of fire-fighting equipment not being in an appropriate condition.

Blocked sprinklers and nozzles

It was observed that the nozzles of the fire main piping system in the paint and chemical storage facilities were blocked by cans of paints and chemicals.

There had been no adequate visual inspection of the paint locker with respect to the fire fighting sprinklers, and as a consequence, the nozzles and sprinklers were obstructed.

Members may wish to conduct a specific hazard-hunt or inspection of fire-fighting equipment inspection, particularly sprinklers and nozzles, and particularly in poorly lit or less-often visited spaces on the vessel.

CO2 release station in poor condition

During an inspection it was observed that components of the CO2 release station were corroded, and the CO2 release station instructions were faded and not clearly legible.

Members may wish to check equipment such as this, that may be rarely or irregularly inspected, to ensure it is in workable and usable condition.

Members may wish to refer to:

- Two incidents relating to the condition of personal protective equipment
- Poor condition of on-board equipment
- Unsafe actions and conditions - inhibited alarm buttons
- Hazard hunt: fire dampers and fixed firefighting systems

Applicable
Life Saving
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Bypassing
Safety
Controls



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