

FLYER TO THE FISHING INDUSTRY

Fatal accident to a crewman while operating a petrol engine-driven pump in a fishing vessel's fish hold



Figure 1: The petrol engine-driven salvage pump

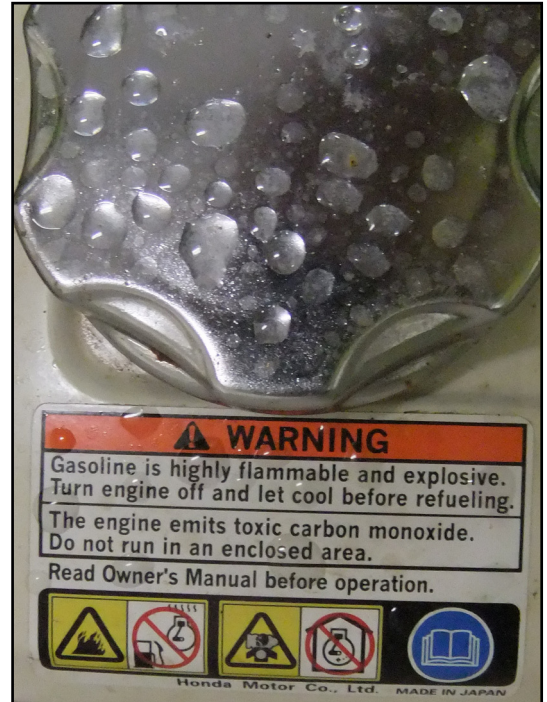


Figure 2: Warning notice on pump

Background

One crewman died and two more crewmen required evacuation to hospital by helicopter for medical treatment when they were poisoned by carbon monoxide on board a 23m fishing vessel, which was acting as a guard vessel, more than 100 nautical miles from land.

Two crewmen took a petrol engine-driven salvage pump (**Figure 1**) into the fish hold to pump oily water from the bow thruster space overboard. One of the crewmen started the engine, but the pump would not prime; he persevered for over an hour to get the pump to work, and the engine was running for most of this time.

The fish hold had no forced ventilation system and the hatches, except for a small access hatch, were closed. The pump was labelled 'The engine emits toxic carbon monoxide. Do not use in an enclosed space' (**Figure 2**).

Analysis

The petrol engine produced poisonous carbon monoxide that built up to fatal levels in the unventilated fish hold. The first crewman continued to work in the fish hold space, close to the engine for enough time for him to be overcome by the poisonous gas.

As the fishing vessel did not have a gas monitor on board, the crew were not able to check whether the fish hold was safe to enter, and they had no breathing apparatus to allow them to enter the toxic atmosphere safely. Consequently, the three remaining crewmen risked their lives in their attempt to rescue the collapsed crewman.

Safety lessons

Before using petrol or diesel-driven portable pumps, owners, skippers and crewmen working on fishing vessels should ensure that:

- The pumps are not used in enclosed spaces, such as fish holds, unless the engine exhaust is vented to fresh air outside the space.
- They fully understand the risks of carbon monoxide poisoning.
- They think about the risks involved and ensure that the potential hazards are removed or any adverse effects are reduced.
- They consider how to rescue safely a crewman who has collapsed in the toxic atmosphere of an enclosed space.

This flyer and the MAIB's investigation report are posted on our website:

www.maib.gov.uk

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