

SYNOPSIS



The 50 year old grab hopper dredger, *Abigail H*, had been working in the Port of Heysham, clearing debris from the cooling water inlets of the local power station. During the evening of 1 November and in the early hours of the following morning, the vessel developed a leak which allowed water to flood into the engine room.

Four crewmen were asleep on board and were not aware that there was a problem until the flooding caused the vessel to become unstable and roll violently to port, throwing three of the crew from their bunks. The roll was stopped when the mast and dredging machine came into contact with the adjacent quay. It is unlikely that the mooring lines would have restrained *Abigail H* if it had rolled away from the quay, and the crew were extremely fortunate to escape without injury.

The current owners had put a great deal of effort into maintaining the condition of *Abigail H* and the most recent survey had found the vessel to be in a satisfactory condition. During the investigation, a leak was found near the aft end of the engine room, close to bilge suction pipework underneath the stern gland. Although it was not possible to inspect the hull plating, analysis of the bilge systems indicates that it is most likely that the leak was caused by hull plating becoming perforated in this area.

The regulations that applied to *Abigail H* did not require it to be fitted with a bilge alarm in the engine room, because it was permanently manned while the main engine was running.

Although duty personnel at the Port of Heysham activated plans to minimise the risk of pollution, the port's emergency procedures were limited by lack of planning and rehearsal. Other compartments in *Abigail H* progressively flooded over the next few days, and she sank before salvage could be arranged. The vessel was successfully salvaged on 25 November 2008 and it was estimated that approximately 100 litres of a mixture of lubricating and diesel oil were released into the harbour during the whole period.

Recommendations have been made to the MCA to introduce a requirement for all vessels greater than 24m length but less than 500 gross tons to be fitted with bilge alarms; and for owners of vessels less than 500 gross tons to formally assess the risks to crew sleeping on board overnight and check that emergency alarms are capable of alerting those asleep on board. *Abigail H*'s owners have been recommended to introduce routine procedures to check the condition of engine room pipework and hull plating. In view of the actions already taken by the Port of Heysham, no further recommendations have been made.