## **SUMMARY**

In conjunction with discharging of coal from the bulk carrier DECLAN DUFF, a casual labourer died from oxygen deficiency when he entered an unventilated spiral ladder leading down to one of the cargo holds. Information that the spiral ladders were enclosed, and that this entailed a risk, had been sent by the vessel to the port in preparation of the discharging. The information that the spiral ladder was enclosed and that the vertical ladder had to be used had not been passed on to all the dockworkers involved. It has not been possible to establish when and by whom the entry hatch to the spiral ladder was opened.

The investigation also shows that the dockworker's introductory training had not included the element Large bulk – discharging coal and coke, and he had not previously discharging coal. He also lacked certain training and full machine operator qualifications. The hatch foreman of the shift in question did not have cargo manager training, and the resource planning manager did not have full information regarding the training and experience of the deceased dockworker. There have also been several indications of procedural drifts at the port.

The reason why the dockworker went down a hatch to the cargo hold where there was a lack of oxygen was likely a combination of being unaware of the risks, due to lack of training and experience in discharging coal, and not being given the information regarding the spiral ladder being enclosed and the risks that this entailed. The fact that the entry hatches to cargo hold 7 are in reverse order has likely contributed to the choice of the hatch in question.

Underlying factors included a lack of sufficiently structured methods for provision of safety-critical information and robust systems for discovering and rectifying procedural drifts.

## Safety recommendations

Given the extensive action programme that the Port of Oxelösund is planning to implement, and which SHK deems to be adequate in order to eliminate the identified faults, SHK is not issuing any specific safety recommendations to the Port of Oxelösund. However, SHK assumes that the findings of this report will be taken into consideration in the work with the action programme.

## The Work Environment Authority is recommended to:

• review and, if necessary, develop its inspection procedures for dock work in terms of how the ports work to prevent and discover risky procedural drifts. Refer to section 2.7. (RS 2019:01 R1)