



Fire suppression systems-ODIN cave and the hutch

A overview for the review committee

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Agenda



- 1 Technical overview
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 - 3 Commissioning
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System overview

=ESS.INFR.FM01; Fire Safety System

Sprinkler system

=ESS.INFR.FM01.FM12.FM02

The **sprinkler system in the cave** is installed as a double-interlock pre-action system with both electric and pneumatic activation. Both interlocks must be triggered before water is released to the sprinklers.

The **sprinkler system in the hutch** is designed as a wet system.



System overview

=ESS.INFR.FM01; Fire Safety System

Sprinkler system in the cave

Interlock 1:

Electric activation is controlled by a releasing panel that receives a signal from the fire detection system inside the cave in the event of a fire. The magnetic valve is blocking the water supply to valve.

Interlock 2:

The system is filled with compressed air, controlling the valve. Pneumatic activation occurs when the compressed air is released through an activated sprinkler, allowing the valve to open.



System overview

=ESS.INFR.FM01; Fire Safety System

Fire alarm system

=ESS.INFR.FM01.FM04.P01

=ESS.INFR.FM01.FM06.P01

Fire detection system in **the cave** is design and installed as aspiration system which actively draw air through a network of pipes, continuously sampling the air.

Hutch is equipped with the fire detectors.



Quality & Compliance

=ESS.INFR.FM01; Fire Safety System



Quality and Compliance

- ESS-0002381 – Fire strategy report – including deviation list
- ESS-5659428 – Technical specification Sprinkler piping, Caves & Hutches
- BBR 21 – Fire protection
- SS-EN 12845:2004+A2:2009 Fixed firefighting systems
 - Automatic sprinkler systems - Design, installation and maintenance and Swedish supplementary - SBF 120:7
- SBF 120 - Automatic sprinkler systems
- SBF 110:8 – Fire alarm
- SS-EN 12845 – Automatic sprinkler systems
- 3rd party inspection – regular according to SBF 120:7

Maintenance

- ESS-3831398 OMI_Fire alarm
- ESS-5857741 Maintenance plan Sprinkler



Summary

An overview of the status

	Cave		Hutch	
	Sprinkler	Fire alarm	Sprinkler	Fire alarm
NIT	-	-	-	-
NCR	-	-	-	-
SAT	ESS-5951729	ESS-5919185	ESS-5951729	ESS-5919185

Integrated system testing is scheduled for week 51, followed by documentation, then the systems will be incorporated into the building system.



Finish presentation