

Thirtieth session

Geneva, 23-27 January 2017

Item 4 (b) of the provisional agenda

Implementation of the European Agreement  
concerning the International Carriage of  
Dangerous Goods by Inland Waterways  
(ADN):

special authorizations, derogations and  
equivalents

Informal document **INF.27**



## Type C tank barge “Don Quichot”



*F. Kersbergen*  
*Manager Statutory Affairs*



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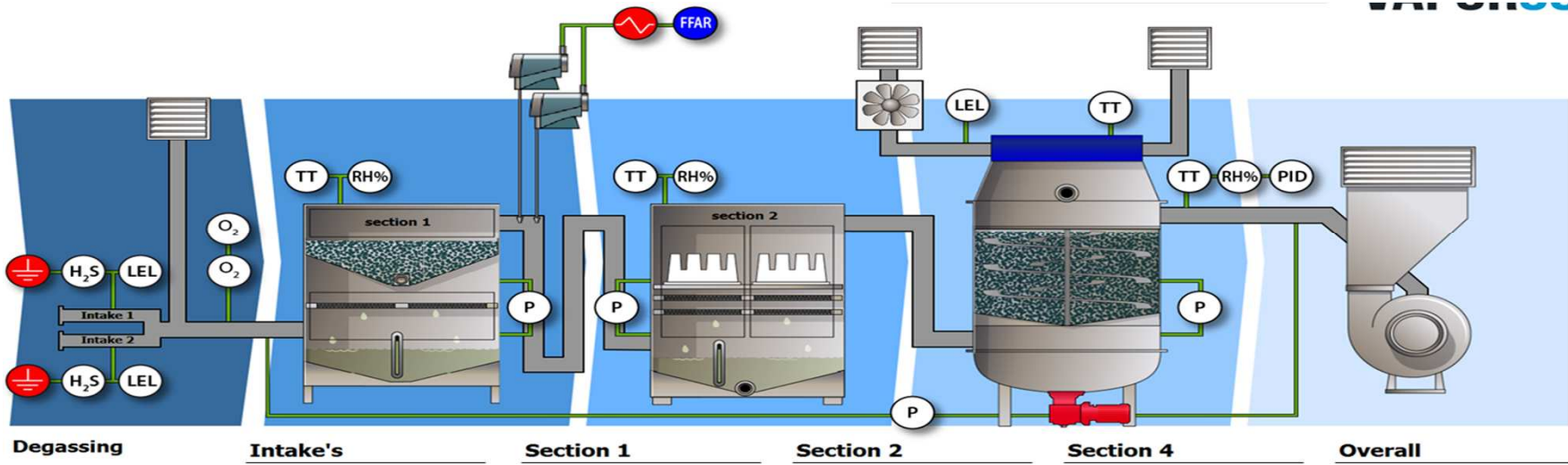
- ▶ Introduction “Don Quichot” (*INF 12: Addendum to ECE/TRANS/WP.15/AC.2/2017/15*)
  
- ▶ Derogations (*ECE/TRANS/WP.15/AC.2/2017/15*):
  - 1.2.1 Flush deck
  
  - 9.3.2.17.2 Entrance to spaces and openings
  
  - 9.3.2.17.6 & 9.3.2.28 Alarms, signals and activation of safety devices



## Introduction “Don Quichot”



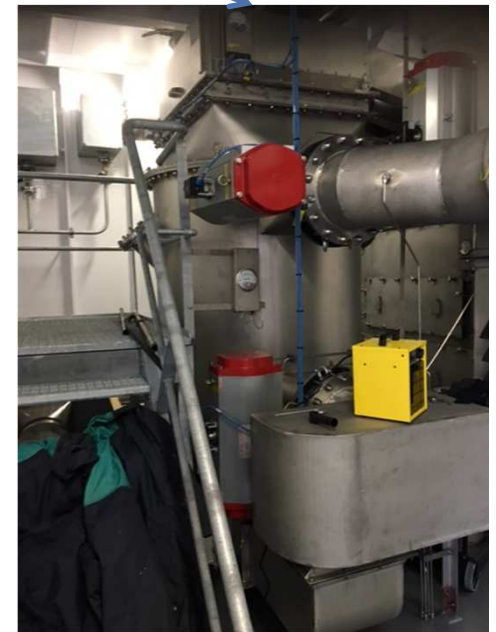
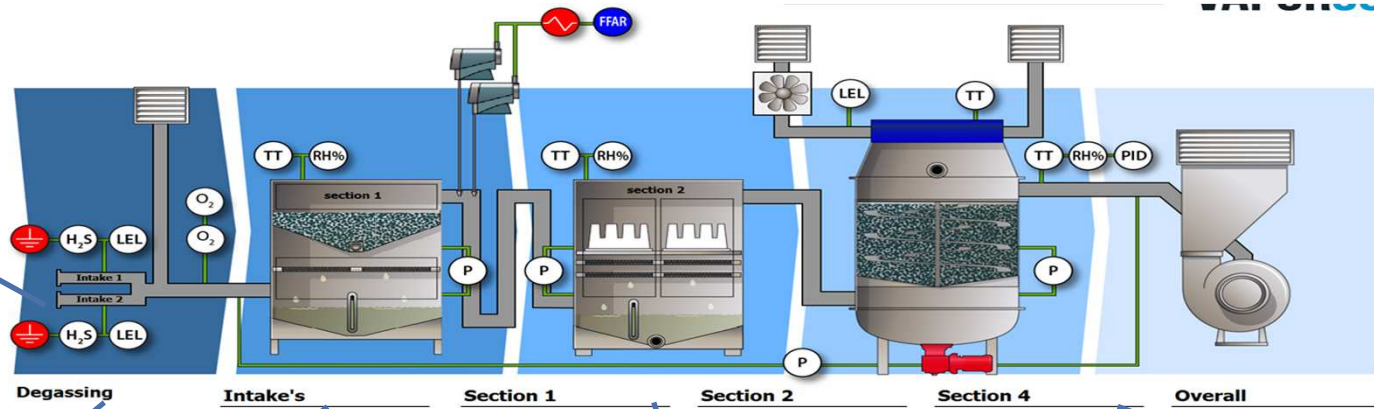
# Introduction “Don Quichot” | Degas technology



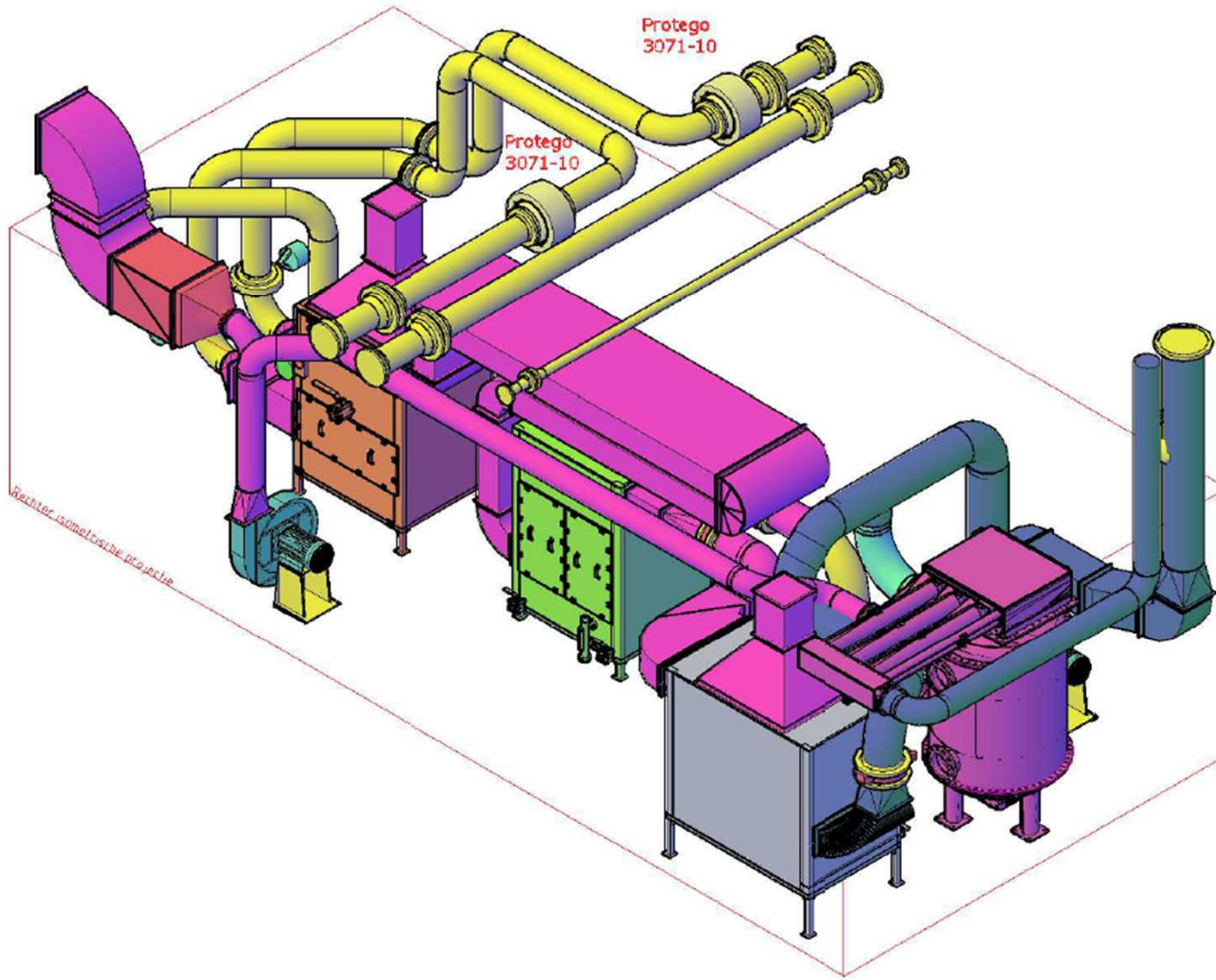
## •Safety features per section

<ul style="list-style-type: none"> <li>• Grounding</li> <li>• H<sub>2</sub>S</li> <li>• LEL+O<sub>2</sub></li> <li>• Flow</li> <li>• Pressure</li> <li>• Temperature</li> </ul>	<ul style="list-style-type: none"> <li>• Flow</li> <li>• Pressure</li> <li>• Temperature</li> <li>• Humidity</li> <li>• Firedousing (2)</li> </ul>	<ul style="list-style-type: none"> <li>• Flow</li> <li>• Pressure</li> <li>• Temperature</li> </ul>	<ul style="list-style-type: none"> <li>• LEL</li> <li>• Flow</li> <li>• Pressure</li> <li>• Temperature</li> <li>• Humidity</li> </ul>	<ul style="list-style-type: none"> <li>• PID</li> <li>• LEL</li> <li>• Pressure</li> <li>• Temperature</li> </ul>
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# Introduction “Don Quichot” | Degas technology



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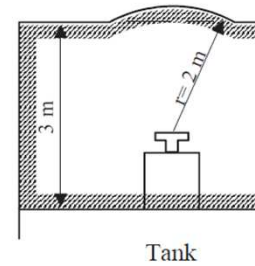
## Derogations



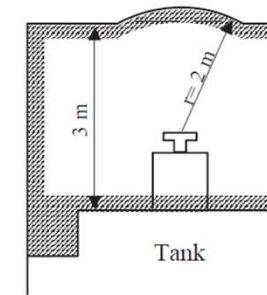
# Derogations | 1.2.1 Flush deck

- ▶ 9.3.2.11.2 (a) In the cargo area (except cofferdams) the vessel shall be designed as a flush-deck, double-hull vessel, with double-hull spaces and double bottoms, but without a trunk.

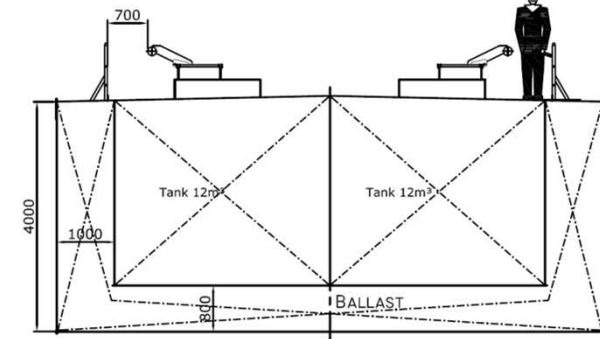
Tank vessels with deck formed by the top of tanks



Tank vessels with trunk-deck



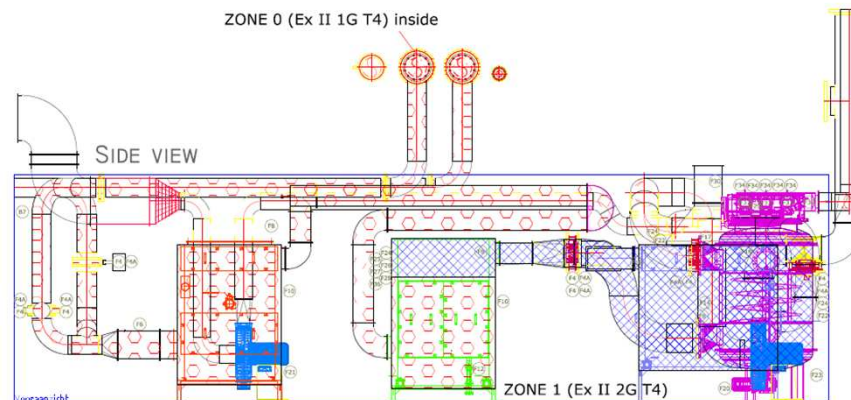
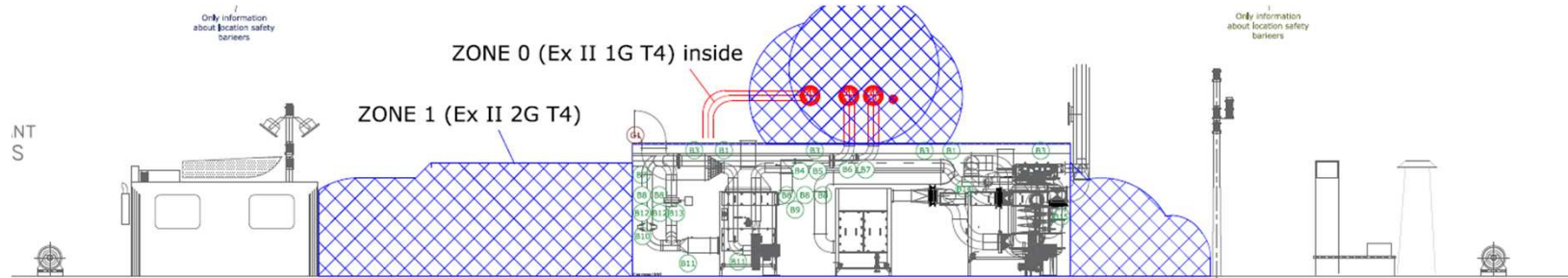
SECTION IWO PRODUCT TANKS



# Derogations | 1.2.1 Flush deck

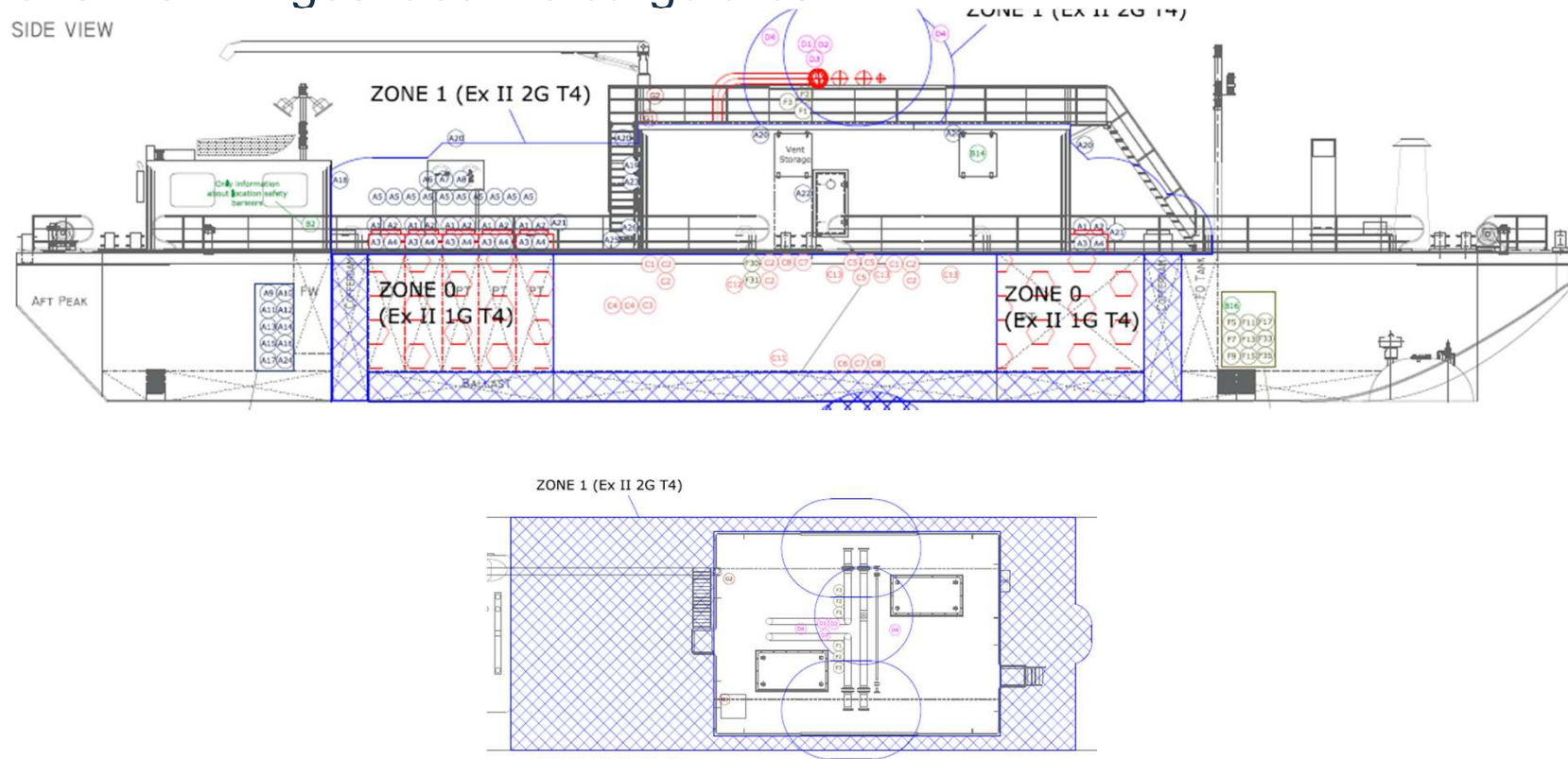
## ► Mitigating measures

- Extended hazardous areas according Bureau Veritas rules



# Derogations | 9.3.2.17.2 Entrance to spaces

- ▶ 9.3.2.17.2 Entrances to spaces and openings of superstructures shall not face the cargo area. Doors opening outward and not located in a recess the depth of which is at least equal to the width of the doors shall have their hinges face the cargo area.



# Derogations | 9.3.2.17.2 Entrance to spaces

## ► Mitigating measures

- At the door a gas detection system is installed. This system is accompanied by an optical signal which signals whether the gas detection system functions well.



# Derogations | 9.3.2.17.6 & 9.3.2.28 Alarms, signals and activation of safety devices

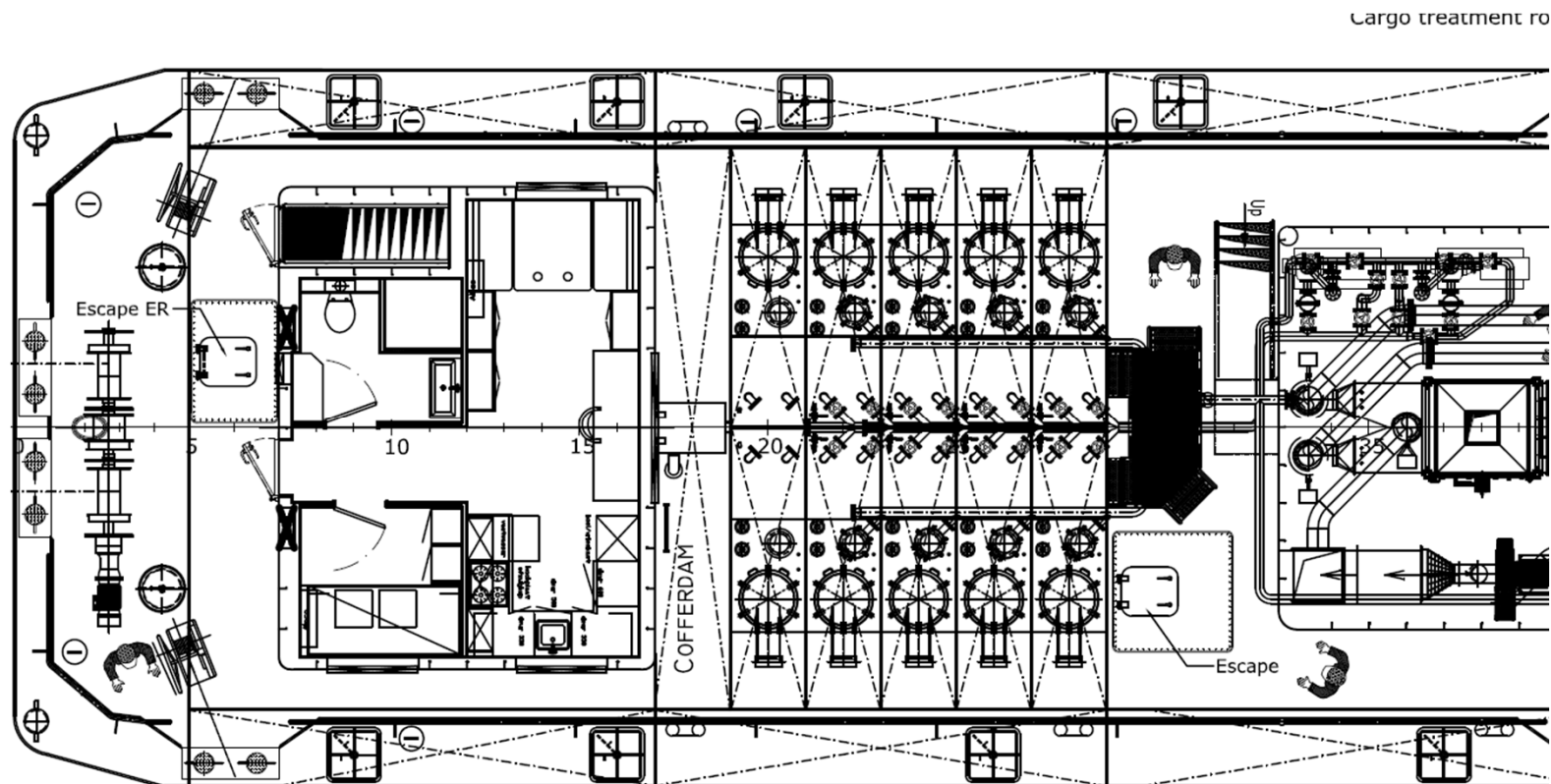
- ▶ 9.3.2.17.6 (partly) The audible and visual alarms are installed in the *wheelhouse* and in the cargo pump-room and, when the alarm is actuated, the loading and unloading system is shut down. Failure of the gas detection system shall be immediately signalled in the wheelhouse and on deck by means of audible and visual alarms;
- ▶ 9.3.2.28 (partly) The system shall be capable of being put into operation from the *wheelhouse* and from the deck. Its capacity shall be such that when all the spray nozzles are in operation, the outflow is not less than 50 litres per square metre of deck area and per hour.



# Derogations | 9.3.2.17.6 & 9.3.2.28 Alarms, signals and activation of safety devices

## ► Mitigating measures

- All relevant alarms and signals, and switches to turn on safety devices, are located in the service spaces on board of the barge.





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