



**Ministry of Environment
and Food of Denmark**

Environmental
Protection Agency

Temporary storage at marshalling yards and ports

Anders T. Kristensen

COUNCIL DIRECTIVE 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances

Recital (12) states:

Whereas, with due regard for the Treaty and in compliance with the relevant Community legislation, **Member States may retain or adopt appropriate measures for transport-related activities** at docks, wharves and marshalling yards, which are excluded from this Directive, in order to ensure a level of safety equivalent to that established by this Directive;

Article 2.

This Directive shall not apply to any of the following:

c) The transport of dangerous substances and directly related intermediate temporary storage by road, rail, internal waterways, sea or air, outside the establishments covered by this Directive, including loading and unloading and transport to and from another means of transport at docks, wharves or marshalling yards;

...

§ 3.

The Executive Order shall not apply to any of the following:

3) Transport, transshipment and directly related temporary storage of hazardous substances during transit outside the company's area, including transport in fixed pipelines and pumping stations, **except the following:**

a) Temporary storage of dangerous substances in buildings.

b) Areas **regularly used for the temporary storage** of dangerous substances in connection with transport, eg port areas and freight stations (marshalling yards). When calculating the amount of the substance, the amount on board a ship is not included.

c) Areas for which dangerous substances during transport are stored for more than 48 hours in connection, but more than 60 hours in connection with a railroad terminal or marshalling yards.

d) Transshipment of unpacked liquid and gaseous substances from ship to railway tanker or tanker and between rail tanker and tanker. When calculating the amount of the substance, the amount on board a ship is not included.

If the area is not used regularly (rule b), then rule c) is used

Regularly used for the temporary storage ?

No specific definition

but

Example: Marshalling yard in Fredericia

- 1) Qualifying quantity is exceeded (lower or upper tier)
- 2) The dangerous material is stored for more than 5 hours
- 3) During a month both 1) and 2) are met more than 5 % of the time

In Fredericia 1) and 2) were met nearly 50 % of the time in the evaluated months

Five sites in Denmark pt: 2 marshalling yards and 3 ports

Fredericia - Individual risk (After reducing and relocation of storage)

The authorities' assessment has **not** been completed

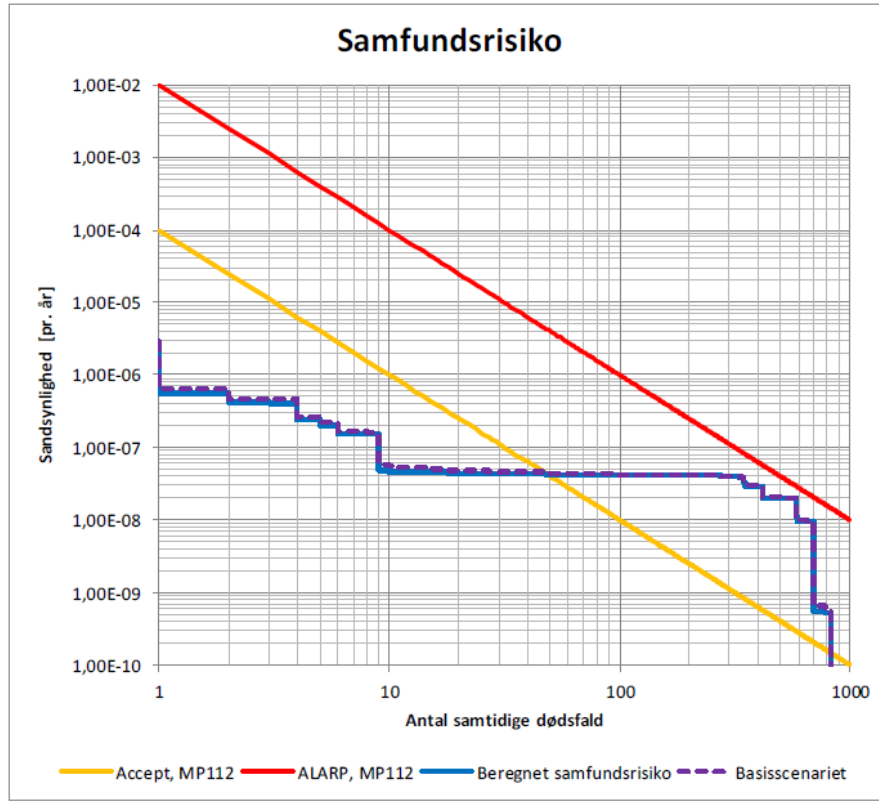


Fredericia - Societal risk (After reducing and relocation of storage)

The authorities' assessment has **not** been completed

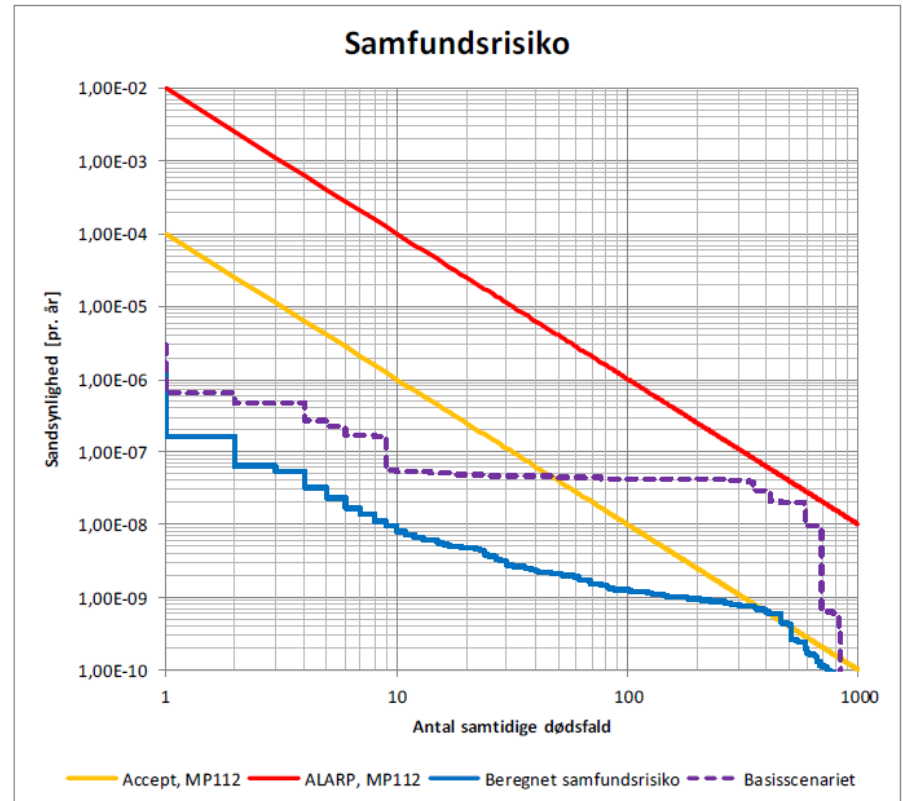
Risikovurdering juni 2018 : **Scenarier**

Ingen klor (No 70-80 t chlorine railtankers)



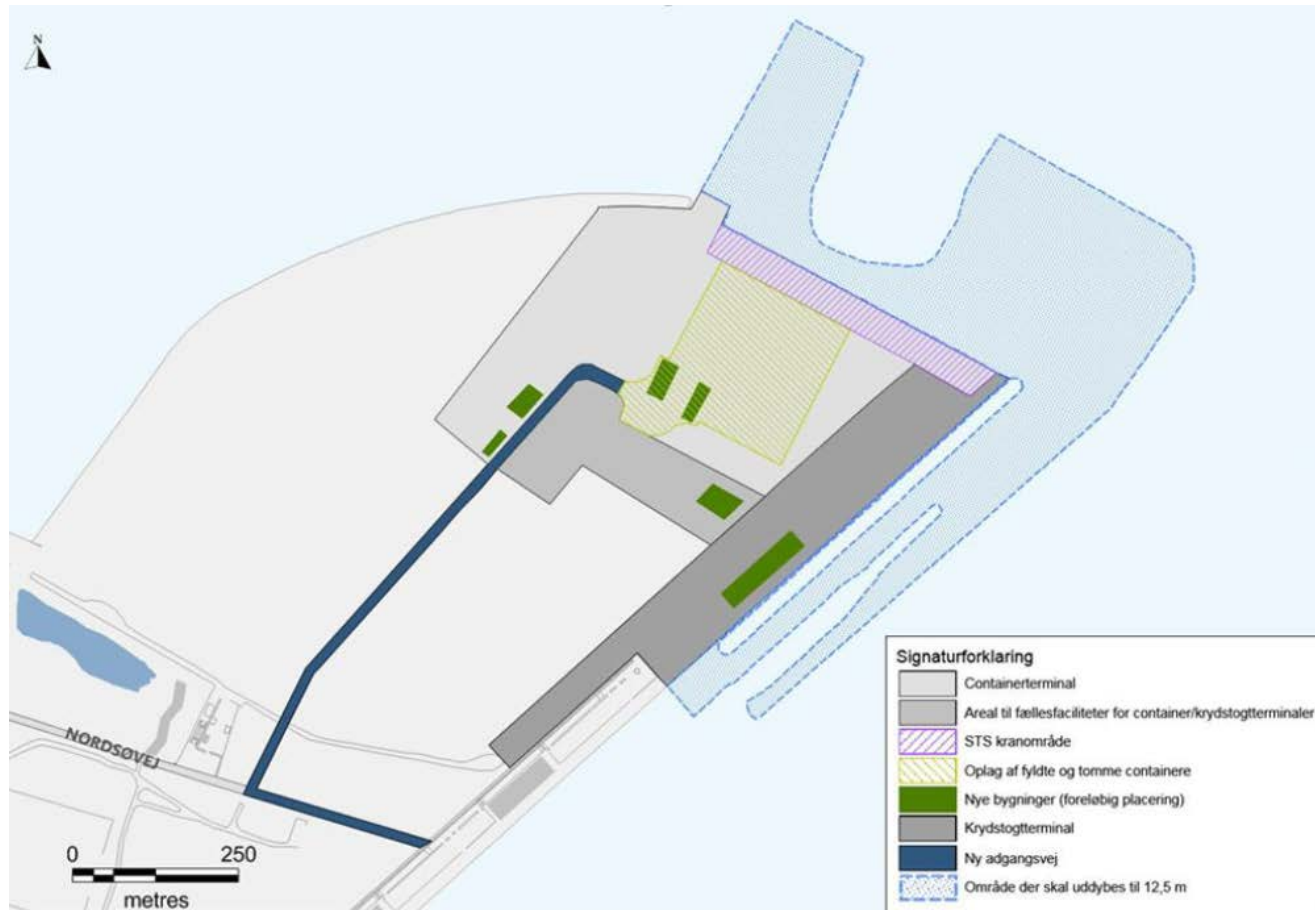
Figur V-20 Beregnet stedbunden risiko for følsomhedsscenario 2 (blå linje), dvs. ingen henstilling og transport af klorvogne, i forhold til basisscenariet (lilla stribet linje).

Ingen BLEVE med efterfølgende forbrænding (No flammable liquids)



Figur V-22 Beregnet FN-kurve for følsomhedsscenario 4 (blå linje), dvs. ingen BLEVE med forbrænding (fireball), i forhold til basisscenariet (lilla stribet linje).

New project at a port – How to handle?



LEGEND:

Containerterminal / Containerterminal

Areal til fælles faciliteter for container/krydstogtterminaler / Shared facilities for container and cruise terminals

STS kranområde / STS Crane area

Oplag af fyldte og tomme containere / Storage of full and empty containers

Nye bygninger (foreløbig placering) / New buildings (provisional location)

Krydstogtterminal / Cruise terminal

Ny adgangvej / new road

Områder der skal uddybes / Areas to be made deeper

Thank for Your attention!

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antkr@mst.dk