Ammonia storage – public awareness

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Introduction

- The world's largest ammonia tank (anhydrous) is located in the largest industrial site in Norway, not far from populated areas.
- A major leak from this tank is evaluated to create a disaster in this community.
- Operation of the tank must therefore guarantee no major breakdown or leakage.
Ammoniakktank, Yara Porsgrunn

NH3 storage tank 60,000 m³
Discussions regarding inspections programme

- In 2006 discussions started regarding the inspection programme for the tank, which is double walled.
  - The owner wanted to continue with their ongoing inspections programme, which consisted of inspections of the outer wall and of the outer surface of the inner wall.
  - Due to long experience with corrosion mechanisms in ammonia tanks, the owner did not find it necessary to empty the tank and inspect the inner wall.
- We as authority were uncertain about this approach, some employees were worried and did not agree with the owners conclusion, and there was a growing concern amongst people living in the surrounding areas.
- After a long discussion also involving the public and the media, the company ended up with emptying the tank and opening it for inspection.
Inspection of the ammonia tank in the spring of 2008

- The inspections revealed that the inner surface of the tank was «as new»
- It was concluded that the company's inspection philosophy was ok
- Public concerns calmed down, but the tank is still there and is closely followed-up by the owner

Inside the tank – picture from the inspection
National Risk Scenario
Gas-emission from Industrial Plant

This case made us more aware of the possible risks of this storage facility.
Evaluated as a low probability scenario in Norway's national risk evaluation.