Ammoniakutsläpp från kylanläggningen i en ishall.

960819 **Mycket kortfattad**

Rapporten konstaterar att ammoniak släpptes ut då en kompressor fallerat. Olyckan inträffade i en ishall varför ammoniak med största sannolikhet använts som kylmedium för anläggningen. Anläggningen stängdes av räddningstjänsten som använde vattengardiner för att begränsa ammoniakens spridning.

Inblandade ämnen och mängder

	CAS Nr.	Mängd
ammoniak	7664-41-7	ca 250-500 kg

Skador:

Människor:	Femton personer på området skadades av utsläppet; utanför området drabbades ytterligare 21 personer. Varken arten eller omfattningen av skadorna nämns.
Materiella:	Inga skador.
Miljö/ekologi:	Miljöskador har noterats men inga effekter rapporterade.
Infrastruktur:	Viss evakuering företogs.

Erfarenheter redovisade (Ja/Nej): Ja

Kortfattat anges förebyggande åtgärder

Report Profile

Identification of Report:

country: FA **ident key:** 1800_062_01

reported under Seveso I **directive as** major accident **reports:** SHORT

Date of Major Occurrence: Time of Major Occurrence

start: 19/08/1996 **start:**

finish: 19/08/1996 **finish:**

Establishment:

name:

address:

industry: 2022 fairgrounds/amusements

Seveso II status: not applicable: Yes **art. 6 (notification):** No

art. 7 (MAPP): No

art. 9 (safety report): No

Date of Report:

short: full:

Authority Reporting:

name:

address:

Authority Contact:

rep_cont_name:

rep_cont_phone:

rep_cont_fax:

Additional Comments:

a) - not applicable -

b) - not applicable -

c) - not applicable -

d) - not applicable -

e) - not applicable -

Short Report

country: FA **ident key:** 1800_062_01

Accident Types:

release: Yes **explosion:** No

water contamination: No **other:** No

fire: No

description:

Release of ammonia in an ice-skating installation

Substance(s) Directly Involved:

toxic: Yes **explosive:** No

ecotoxic: No **other:** No

flammable: No

description:

Release of approx. 250 to 500 kg (kilograms) ammonia

Immediate Sources of Accident:

storage: No **transfer:** No

process: Yes **other:** No

description:

failure of ammonia compressor

Suspected Causes:

plant or equipment: Yes **environmental:** No

human: Yes **other:** No

description:

Damages of the ammonia compressor (lack of maintenance ?)

Immediate Effects:

material loss: Yes

human deaths: No

human injuries: Yes **community disruption:** No

other: No

ecological harm: Yes

national heritage loss: No

description:

On-site consequences: a total of 15 injured persons and material losses. Off-site consequences: a total of 36

injured persons and environmental damages.

Emergency Measures taken:

on-site systems: Yes **decontamination:** No

external services: Yes **restoration:** No

sheltering: Yes **other:** No

evacuation: Yes

description:

The plant was shut-down by the fire brigade. The ammonia cloud (gas) was abated with water-curtains

(water-sprays) and sanitary relief was organised on-site. Employees of the city administration and the police

organised the evacuation of th... see Appendix Short Report / description of emergency measures taken

Immediate Lessons Learned:

prevention: Yes **other:** No

mitigation: No

description:

The following measures had to be taken: 1) Control of the functionality and the display of the electronic

level indicators and the automatic overflow (maximum level) limiting devices at the separators (equipment

improvement). 2) Survey (mea... see Appendix Short Report / description of immediate lessons learned

Appendices for the FA / 1800_062_01 report

Appendix Short Report / description of emergency measures taken:

The plant was shut-down by the fire brigade. The ammonia cloud (gas) was abated with water-curtains (water-sprays) and sanitary relief was organised on-site. Employees of the city administration and the police organised the evacuation of the visitors. The police closed a large area, organised traffic regulation measures and provided to inform the public (information to the public). The fire-fighting service measured the concentration of toxic substances in the atmosphere.

Appendix Short Report / description of immediate lessons learned:

The following measures had to be taken: 1) Control of the functionality and the display of the electronic level indicators and the automatic overflow (maximum level) limiting devices at the separators (equipment improvement). 2) Survey (measurement) of cylinder head lids on the defected (failed) compressor, because due to the high pressures damages (degradation) can not be excluded (instrumentation and control improvement). 3) Check up (control) of the water cooling system of the cylinder heads (instrumentation and control improvement). 4) check (control) of the block-valves and the control-valves with regard to tightness and functionality and in particular between the two separators and between the separators and the ice-skating area (instrumentation and control improvement). 5) Emergency shut-down switches have to be foreseen outside of (externally to) the danger zone (area). The emergency shut-down interruptors (switches) have to be clearly marked (indicated, labelled) and will have to be regularly checked for functioning (shutdown equipment required).