

# Ammoniakutsläpp från en kylanläggning i livsmedelsindustrin.

970703

Extremt kortfattad.

Då ett vattenledningsrör lossades visade det sig vara en ammoniakrörledning. 250 anställda evakuerades.

## Inblandade ämnen och mängder

	CAS Nr.	Mängd
ammoniak	7664-41-7	

## Skador:

Människor:	25 personer kände av förgiftningssymptom, varav 19 fick sjukhusvård.
Materiella:	Inga skador.
Miljö/ekologi:	Inga effekter rapporterade.
Infrastruktur:	Inga effekter.

## Erfarenheter redovisade (Ja/Nej): Ja

Mycket kortfattat anges förebyggande åtgärder

## Report Profile

### Identification of Report:

country: FA ident key: 1800\_314\_01

reported under Seveso I directive as other event (non-Seveso) reports: SHORT+FULL

### Date of Major Occurrence: Time of Major Occurrence

start: 03/07/1997 start: 15:27:00

finish: 03/07/1997 finish:

### Establishment:

name:

address:

industry: 2019 food and drink

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\_314\_01

**Accident Types:**

release: Yes explosion: No

water contamination: No other: No

fire: No

**description:**

Release of ammonia during the dismantle of a cooling equipment.

**Substance(s) Directly Involved:**

toxic: Yes explosive: No

ecotoxic: No other: No

flammable: No

**description:**

ammonia

**Immediate Sources of Accident:**

storage: No transfer: No

process: No other: Yes

**description:**

Piping of a cooling system

**Suspected Causes:**

plant or equipment: No environmental: No

human: Yes other: No

**description:**

Wrong removal of a pipe supposed to be a water one and in fact was a ammonia one.

**Immediate Effects:**

material loss: No

human deaths: No

human injuries: Yes community disruption: No

other: No

ecological harm: No

national heritage loss: No

**description:**

25 people felt unwell and 19 were hospitalised.

### **Emergency Measures taken:**

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

**external services:** Yes **restoration:** No

**sheltering:** No **other:** No

**evacuation:** Yes

**description:**

Evacuation of 250 workers.

### **Immediate Lessons Learned:**

**prevention:** Yes **other:** No

**mitigation:** Yes

**description:**

Risk area must be pointed out. Right equipment must be available.

## **A Occurrence Full Report**

**country:** FA **ident key:** 1800\_314\_01

### **1 Type of Accident**

**remarks:** - not applicable -

### **2 Dangerous Substances**

**remarks:** Les quantités d'ammoniac impliquées ne sont pas connues. / The quantity of ammonia involved is not known.

### **3 Source of Accident**

**illustration:** Please specify the attached materials illustrating the location of the establishment, relevant installation(s) and relevant surrounding geographical features.

**remarks:** Cooling system

### **4 Meteorological Conditions**

**precipitation none: fog: rain: hail: snow:**

No No No No No

**wind speed (m/s):**

**direction (from):**

**stability (Pasquill):**

**ambient temperature (°C):**

**remarks:** - not applicable -

### **5 Causes of Major Occurrence**

**main causes**

**technical / physical** - not applicable -

- not applicable -

- not applicable -

- not applicable -

- not applicable -

**human / organizational** 5301 organization: management organization inadequate

5303 organization: organized procedures (none, inadequate, inappropriate, unclear)

5304 organization: training/instruction (none, inadequate, inappropriate)

5305 organization: supervision (none, inadequate, inappropriate)

5306 organization: staffing (inadequate, inappropriate)

**remarks:** - not applicable -

## 6 Discussion about the Occurrence

- not applicable -

**Type of Accident** country: FA ident key: 1800\_314\_01

**event:**

**major occurrence** 1101 release: gas/vapour/mist/etc release to air

**initiating event** - not applicable -

**associated event** - not applicable -

## Dangerous substances

country: FA ident key: 1800\_314\_01

### a) total establishment inventory

**CAS number:** 1336-21-6 **identity:**

**name from Seveso I Directive:** Ammonia

**name from Seveso II Directive:** - not applicable -

**category from Seveso II:** toxic

**other hazards (1):** flammable liquids

**other hazards (2):** - not applicable -

**maximum quantity (tonnes):** 1

**use of substance as:** - not applicable -

**b) substance belongs to relevant inventory directly involved:** Yes

**actual quantity:** 1 **potential quantity:** 1

**c) substance belongs to relevant inventory indirectly involved:** No

**actual quantity:** 0 **indir\_pot\_quant:** 0

**Source of Accident - Situation** country: FA ident key: 1800\_314\_01

## situation

**industry**

**initiating event** - not applicable -

**associated event** - not applicable -

**activity/unit**

**major occurrence** 3999 other: other

**initiating event** - not applicable -

**associated event** - not applicable -

**component**

**major occurrence** 4009 heat exchanger (boiler, refrigerator, heating coils, etc.)

**initiating event** - not applicable -

**associated event** - not applicable -

## **B Consequences Full Report**

**country:** FA **ident key:** 1800\_314\_01

### **1 Area concerned**

**affected**

**extent of effects installation:** Yes

**establishment:** Yes

**off-site; local:** No

**off-site; regional:** No

**off-site; transboundary:** No

**illustration of effects** please specify the attached materials illustrating the geographical extent

of th... see Appendix Full Report B / area concerned - illustration of

effects

**remarks** Ammonia spread inside buildings and workshops .

### **2 People**

**establishment popul. emergency personnel off-site population**

**total at risk** -1 0 0

**immediate fatalities** 19 0 0

**subsequent fatalities** 0 0 0

**hospitalizing injuries** 0 0 0

**other serious injuries** 0 0 0

**health monitoring** 0 0 0

**remarks** - not applicable -

### **3 Ecological Harm**

**pollution/contamination/damage of:**

- **residential area (covered by toxic cloud)** not applicable

- **common wild flora/fauna (death or elimination)** not applicable

- **rare or protected flora/fauna (death or elimination)** not applicable

- **water catchment areas and supplies for consumption or recreation** not applicable

- **land (with known potential for long term ecological harm or not applicable**

**preventing human access or activities)**

- **marine or fresh water habitat** not applicable

- areas of high conservation value or given special protection not applicable

remarks - not applicable -

#### **4 National Heritage Loss**

effects on:

- historical sites not applicable - historic monuments not applicable

- historic buildings not applicable - art treasures not applicable

remarks - not applicable -

#### **5 Material Loss**

establishment losses off site losses

costs (direct costs to operator) (social costs)

in ECU FRF ECU FRF

material losses -1 -1 -1 -1

response, clean up, restoration -1 -1 -1 -1

remarks Costs are not known yet

#### **6 Disruption of Community Life**

establishment/plant evacuated disabled/unoccupiable destroyed

- nearby residences/hotels No No No

- nearby factories/offices/small shops No No No

- schools, hospitals, institutions No No No

- other places of public assembly No No No

interruption of utilities etc. no / yes duration

- gas No

- electricity No

- water No

- sewage treatment works No

- telecommunications No

- main roads No

- railways No

- waterways No

- air transport No

significant public concern none local level national level

- off site populations Yes No No

- media interest Yes No No

- political interest Yes No No

remarks - not applicable -

#### **7 Discussion of Consequences**

- not applicable -

# C Response Full Report

country: FA ident key: 1800\_314\_01

## 1 Emergency Measures

**taken - on site** - not applicable - - not applicable -

- not applicable - - not applicable -

- not applicable - - not applicable -

**- off site** - not applicable - - not applicable -

- not applicable - - not applicable -

- not applicable - - not applicable -

**still - on site** - not applicable - - not applicable -

**required**

- not applicable - - not applicable -

- not applicable - - not applicable -

**- off site** - not applicable - - not applicable -

- not applicable - - not applicable -

- not applicable - - not applicable -

**continuing contamination or danger**

**-on site** not applicable

**-off site** not applicable

**remarks** - not applicable -

## 2 Seveso II Duties

**pre-accident evaluation**

**Article item not due yet not done done/submitted evaluated**

**6 notification** No No No No

**7 policy (MAPP)** No No No No

**9 safety report** No No No No

**9, 10, 11 update** No No No No

**11 internal plan** No No No No

**11 external plan** No No No No

**13 informing public** No No No No

**9, 12 siting policy** No No No No

**post-accident evaluation**

**Seveso II duty was actual were actual compared with actual**

**contingency consequences consequences, the**

**addressed? addressed? predicted extent was?**

**Article item**

**7 policy (MAPP)** not applicable not applicable not applicable

9 **current safety report** not applicable not applicable not applicable

11 **internal plan** not applicable not applicable not applicable

11 **external plan** not applicable not applicable not applicable

13 **informing public** not applicable not applicable not applicable

9, 12 **siting policy** not applicable not applicable not applicable

**evaluation of safety organisation**

**organisational element** element existed did element relate to actual circumstances of

yes / no no / partly / yes adequate?

- **written policy objectives** No

- **specified management** No

**structure**

- **specified responsibilities** No

- **specified working procedures** No

- **specified procedures for** No

**assessment/auditing of**

**management system**

- **specified procedures for** No

**review and update of**

**management policy**

- **specified general training** No

**procedures**

- **specified emergency** No

**training procedures**

**evaluation of ecological impact control**

**organisational element** element existed did element relate to actual circumstances of

yes / no no / partly / yes adequate?

- **ecological status review** No

**before incident**

- **potential ecological** No

**consequences assessment**

- **ecological impact review** No

**after incident**

- **ecological restoration** No

**procedures**

- **subsequent review of** No

**restoration success**

**remarks** - not applicable -

### **3 Official Action Taken**

**legal action**

- not applicable -

**other official action**



- not applicable -

#### **4 Lessons Learned**

**measures to prevent recurrence**

Nothing to report

**measures to mitigate consequences:**

Nothing to report

**useful references:**

Nothing to report

#### **5 Discussion about Response**

- not applicable -

### **Appendices for the FA / 1800\_314\_01 report**

**Appendix Full Report B / area concerned - illustration of effects:**

please specify the attached materials illustrating the geographical extent of the effects.