

# Ammoniakutsläpp från en kylanläggning i livsmedelsindustri.

940711

Extremt kortfattad.

Ammoniak användes som köldmedium i en kylanläggning och kom att läcka ut. Närliggande byggnader evakuerades.

## Inblandade ämnen och mängder

	CAS Nr.	Mängd
ammoniak	1336-21-6	max 13 ton

## Skador:

Människor:	Inga rapporterade.
Materiella:	Inga rapporterade.
Miljö/ekologi:	Inga effekter rapporterade.
Infrastruktur:	Inga effekter rapporterade.

Erfarenheter redovisade (Ja/Nej): Nej

## Report Profile

### Identification of Report:

country: FA ident key: 1800\_089\_01

reported under Seveso I directive as major accident reports: SHORT+FULL

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

start: 11/07/1994 start: 10:00:00

finish: 11/07/1994 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\_089\_01

### Accident Types:

release: Yes explosion: No

water contamination: No other: No

fire: No

#### description:

Release of ammonia due to failure of refrigeration installation. Disturbance to the activities of neighbouring industrial establishments.

### 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: Yes other: No

#### description:

refrigeration installation

### Suspected Causes:

plant or equipment: No environmental: No

human: No other: Yes

#### description:

unknown (probably equipment failure)

### Immediate Effects:

material loss: No

human deaths: No

human injuries: No community disruption: No

other: Yes

ecological harm: No

national heritage loss: No

#### description:

Disturbance to the activities of neighbouring establishments

**Emergency Measures taken:**

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

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

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

**evacuation:** Yes

**description:**

Evacuation of the employees of neighbouring establishments

**Immediate Lessons Learned:**

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

**mitigation:** No

**description:**

no information is given

# A Occurrence Full Report

**country:** FA **ident key:** 1800\_089\_01

## 1 Type of Accident

**remarks:** - not applicable -

## 2 Dangerous Substances

**remarks:** Ammonia is used as refrigerating agent

## 3 Source of Accident

**illustration:** No attached materials

**remarks:** refrigeration installation (safety valve)

## 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** 5105 operation: instrument/control/monitoring-device failure

- not applicable -

- not applicable -

- not applicable -

- not applicable -

**human / organizational** - not applicable -

- not applicable -

- not applicable -

- not applicable -

- not applicable -

remarks: - not applicable -

## 6 Discussion about the Occurrence

- not applicable -

**Type of Accident** country: FA ident key: 1800\_089\_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\_089\_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): 13

use of substance as: - not applicable -

b) substance belongs to relevant inventory directly involved: Yes

actual quantity: 13 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\_089\_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\_089\_01

### 1 Area concerned

affected

extent of effects installation: Yes

establishment: Yes

off-site; local: Yes

off-site; regional: No

off-site; transboundary: No

illustration of effects no attached materials

remarks The toxic cloud affected the industrial zone

### 2 People

establishment popul. emergency personnel off-site population

total at risk -1 -1 -1

immediate fatalities 0 0 0

subsequent fatalities 0 0 0

hospitalizing injuries 0 0 0

other serious injuries 0 0 0

health monitoring 0 0 0

remarks There has been no victim

### 3 Ecological Harm

pollution/contamination/damage of:

- residential area (covered by toxic cloud) Yes

- common wild flora/fauna (death or elimination) No

- rare or protected flora/fauna (death or elimination) No

- water catchment areas and supplies for consumption or recreation No

- land (with known potential for long term ecological harm or No

preventing human access or activities)

- marine or fresh water habitat No

- areas of high conservation value or given special protection No

remarks The toxic cloud moved over the industrial zone

### 4 National Heritage Loss

effects on:

- historical sites None - historic monuments None

- historic buildings None - art treasures None

remarks - not applicable -

## 5 Material Loss

establishment losses off site losses

costs (direct costs to operator) (social costs)

in ECU FFR ECU FFR

material losses -1 -1 -1 -1

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

remarks - not applicable -

## 6 Disruption of Community Life

establishment/plant evacuated disabled/unoccupiable destroyed

- nearby residences/hotels No No No

- nearby factories/offices/small shops Yes 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 No No No

- media interest No Yes No

- political interest No No No

remarks - not applicable -

## 7 Discussion of Consequences

- not applicable -

## Ecological Components involved

country: FA ident key: 1800\_089\_01

type: - not applicable -

threatened: not applicable affected: No

## C Response Full Report

country: FA ident key: 1800\_089\_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**

no information is given

**measures to mitigate consequences:**

no information is given

**useful references:**

no information is given

**5 Discussion about Response**

- not applicable -