

Ammoniakutsläpp från en kylanläggning i livsmedelsindustrin.

970611

Mycket kortfattad

Ammoniak läckte ut från kylsystemet då en packning till en ventil fallerade. 200 anställda utrymde anläggningen i ett dygn. En 400 meter säkerhetszon sattes upp. Allmänheten uppmanades att stanna inomhus i fem timmars tid.

Inblandade ämnen och mängder

	CAS Nr.	Mängd
ammoniak	7664-41-7	ca 1 ton

Skador:

Människor:	Inga personskador.
Materiella:	Inga skador.
Miljö/ekologi:	Inga effekter rapporterade.
Infrastruktur:	Allmänheten uppmanades att stanna inomhus i fem timmars tid.

Erfarenheter redovisade (Ja/Nej): Nej

Report Profile

Identification of Report:

country: FA ident key: 1800_311_01

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

Date of Major Occurrence: Time of Major Occurrence

start: 11/06/1997 start: 13:00:00

finish: 11/06/1997 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_311_01

Accident Types:

release: Yes explosion: No

water contamination: No other: No

fire: No

description:

Release of ammonia

Substance(s) Directly Involved:

toxic: Yes explosive: No

ecotoxic: Yes other: No

flammable: No

description:

ammonia

Immediate Sources of Accident:

storage: No transfer: No

process: No other: Yes

description:

Cooling system

Suspected Causes:

plant or equipment: Yes environmental: No

human: No other: No

description:

Failure of a gasket on an electrovalve on the back pipe of ammonia.

Immediate Effects:

material loss: No

human deaths: No

human injuries: No community disruption: No

other: Yes

ecological harm: No

national heritage loss: No

description:

No casualty and no damage for the environment, just a worker feeling unwell.

Emergency Measures taken:

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

external services: Yes **restoration:** No

sheltering: Yes **other:** No

evacuation: Yes

description:

Evacuation of 200 workers for 24 hrs. People were kept sheltering at home for 5 hrs. Setting up of a 400 meters radius safety area.

Immediate Lessons Learned:

prevention: No **other:** Yes

mitigation: No

description:

People and workers must be sensibilized about the risks of ammonia.

A Occurrence Full Report

country: FA **ident key:** 1800_311_01

1 Type of Accident

remarks: - not applicable -

2 Dangerous Substances

remarks: - not applicable -

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 device

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 5102 operation: component/machinery failure/malfunction

- not applicable -

- not applicable -

- not applicable -

- not applicable -

human / organizational - not applicable -

- not applicable -

- not applicable -

- not applicable -

- not applicable -

remarks: Failure of a gasket made of a substitute of asbestos

6 Discussion about the Occurrence

- not applicable -

Type of Accident country: FA ident key: 1800_311_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_311_01

a) total establishment inventory

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

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): 9

use of substance as: - not applicable -

b) substance belongs to relevant inventory directly involved: Yes

actual quantity: 1 **potential quantity:** 9

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_311_01

situation

industry

initiating event - not applicable -

associated event - not applicable -

activity/unit

major occurrence 3105 process: treating/use for treatment (stencing, preserving, etc.)

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_311_01

1 Area concerned

affected

extent of effects installation: Yes

establishment: Yes

off-site; local: Suspected

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 - not applicable -

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 A worker felt unwell

3 Ecological Harm

pollution/contamination/damage of:

- residential area (covered by toxic cloud) Suspected

- 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 - not applicable -

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 FRF ECU FRF

material losses -1 -1 -1 -1

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

remarks Costs are unknown 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 No No No

- media interest No No No

- political interest No No No

remarks - not applicable -

7 Discussion of Consequences

- not applicable -

C Response Full Report

country: FA ident key: 1800_311_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

Growing of awareness on risks ... see Appendix Full Report C / lesson learned - prevent

measures to mitigate consequences:

Nothing to report

useful references:

Nothing to report

5 Discussion about Response

- not applicable -

Appendices for the FA / 1800_311_01 report

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

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

Appendix Full Report C / lesson learned - prevent:

Growing of awareness on risks of ammonia . Use of reliable materials.