

Ammoniakutsläpp från kylsystemet på ett bryggeri

960208

En läcka uppstod i en pump i kylsystemet och mellan 400 och 700 kg ammoniak (kylmediet) läckte ut. Räddningstjänsten tillkallades och ammoniakångorna besprutades med vatten. Personal evakuerades från riskområdena och allmänheten varnades över radio och med högtalarsystem. En närliggande tunnelbanestation spärrades av och trafik omdirigerades. Haltmätningar utfördes på bryggeriområdet, vid tunnelbanestationen och i bryggeriers närhet.

Inblandade ämnen och mängder

	CAS Nr.	Mängd
ammoniak	7664-41-7	400-700 kg

Skador:

Människor:	Två anställda och en person från räddningstjänsten skadades av ammoniakångorna och fördes till sjukhus.
Materiella:	Endast förlusten av ammoniak.
Miljö/ekologi:	Inga effekter rapporterade.
Infrastruktur:	Trafik omdirigerades och allmänheten varnades över radio och högtalarsystem. En närliggande tunnelbanestation spärrades av.

Erfarenheter redovisade (Ja/Nej): Ja

Kortfattat anges förebyggande åtgärder

Report Profile

Identification of Report:

country: FA ident key: 1800_076_01

reported under Seveso I directive as major accident reports: SHORT

Date of Major Occurrence: Time of Major Occurrence

start: 08/02/1996 start: 08:10:00

finish: 08/02/1996 finish: 09:10:00

Establishment:

name:

address:

industry: 2019 food and drink

brewery

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_076_01

Accident Types:

release: Yes **explosion:** No

water contamination: No **other:** No

fire: No

description:

400 - 700 kg of ammonia were released from the refrigeration system of the brewery.

Substance(s) Directly Involved:

toxic: Yes **explosive:** Yes

ecotoxic: No **other:** No

flammable: No

description:

ammonia.

Immediate Sources of Accident:

storage: Yes **transfer:** No

process: No **other:** No

description:

release of ammonia from refrigeration system.

Suspected Causes:

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

human: No **other:** No

description:

leakage in an ammonia pump (equipment failure).

Immediate Effects:

material loss: Yes

human deaths: No

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

other: No

ecological harm: No

national heritage loss: No

description:

2 workers and one fire-fighter were injured and hospitalised for observation, significant material loss on-site and off-site.

Emergency Measures taken:

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

external services: Yes **restoration:** No

sheltering: Yes **other:** No

evacuation: Yes

description:

The affected part of the plant was shut down and closed, workers in the section concerned were preventively evacuated. The released ammonia was precipitated through a water curtain. The traffic was deviated, a nearby underground station was... see Appendix Short Report / description of emergency measures taken

Immediate Lessons Learned:

prevention: Yes **other:** No

mitigation: No

description:

Substitution of all pumps of the same model in the factory. Installation of remote control barriers after the separators. Reduction of the possible amounts that can be released.

Appendices for the FA / 1800_076_01 report

Appendix Short Report / description of emergency measures taken:

The affected part of the plant was shut down and closed, workers in the section concerned were preventively evacuated. The released ammonia was precipitated through a water curtain. The traffic was deviated, a nearby underground station was closed and the population was warned through radio broadcasts and megaphone messages. Measurements of ammonia concentrations in the environment gave the following results: Entrance of the underground station 12 ppm, within the establishment near the building concerned 30 ppm, on the neighbouring road less than 5 ppm.