Klorutsläpp från en anläggning för hantering av specialavfall.

930518 MARS 1993_10

En flyttbar tank som normalt innehöll natriumhypoklorit hade fyllts med en icke identifierad syrablandning och fått stå i 9 månader. Den varningsetikett som fanns på tanken hade regnat bort. När den skulle användas igen fylldes den på med natriumhypoklorit utan att innehållet kontrollerades. Klorgas bildades vid påfyllningen och ungefär 10 m3 steg upp ur tanken. Fabrikens gaslarm gick efter 30 sekunder. Sju anställda blev överrumplade av gasmolnet och fick föras till sjukhus.

Inblandade ämnen och mängder

	CAS Nr.	Mängd
klor	7782-50-5	10 m3
natriumhypoklorit	7681-52-9	

Skador:

Människor:	7 anställda fördes till sjukhus.
Materiella:	Inga.
Miljö/ekologi:	Inga effekter rapporterade.
Infrastruktur:	Inga.

Erfarenheter redovisade (Ja/Nej): Nej

Report Profile

Identification of Report:

country: FA ident key: 1993_010_01

reported under Seveso I directive as major accident reports: SHORT

Date of Major Occurrence: Time of Major Occurrence

start: 1993-05-18 start: 14:00:00

finish: finish:

Establishment:

name:

address:

industry: - not applicable -

Plant for disposal of special rubbish

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: 1993_010_01

Accident Types:

release: Yes explosion: No

water contamination: No other: No

fire: No

description:

A 5 m3 mobile tank, normally filled only with sodium hypochlorite (NaOCI), which during summer had

exceptionally been filled with diluted acid, labelled and after use was parked externally for 9 months, was

to be filled again with NaOCl. B... see Appendix Short Report / description of accident types

Substance(s) Directly Involved:

toxic: Yes explosive: No

ecotoxic: No other: No

flammable: No

description:

Chlorine 10 cubic metres

Immediate Sources of Accident:

storage: No transfer: No

process: Yes other: No

description:

- not applicable -

Suspected Causes:

plant or equipment: No environmental: No

human: Yes other: No

description:

Organisational 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:

- 7 persons of the establishment were hospitalized

- material damage outside the establishment

Emergency Measures taken:

on-site systems: No decontamination: No

external services: No restoration: No

sheltering: No other: No

evacuation: No

description:

- not applicable -

Immediate Lessons Learned:

prevention: Yes other: No

mitigation: No

description:

The filling procedures have to be actuated only when the vessels are adequately and permanently labelled as

bleach solution vessel, and the residue content has been identified by measuring the pH and with potassium

iodure/starch.

Appendices for the FA / 1993_010_01 report

Appendix Short Report / description of accident types:

A 5 m3 mobile tank, normally filled only with sodium hypochlorite (NaOCI), which during summer had exceptionally been filled with diluted acid, labelled and after use was parked externally for 9 months, was to be filled again with NaOCI. Because of the meteorological influence the lable fell off. At the beginning of the filling procedure

the tank contained still a rest of not identified diluted acid. It reacted with the filled

in NaO3 to Chlorine gas of which about 10 m3 were released from the tank sited externally to the environment.

The chlorine gas expanded on the onsite road and in the onsite surroundings of the transfert zone. The release reached also a building with a staying room for personnel.

About 30 seconds after the chlorine gas release the alarm was given by loud speaker system to evacuate the company building. The chlorine gas reached 7 persons some

of them were external contractors workers personnel which hadn't left the staying room immediately and were hospitalized. The inflow of NaCOI was stopped immediately

and the open nozzle of the tank covered in order to avoid the unhindered chlorine escaping.