Kolmonoxidutsläpp från en fabrik i metallindustrin.

920502 MARS 1992 04

Ett mindre läckage av kolmoxid uppstod vid inspektionsventilerna på en smidesfläkt. Koncentrationen översteg gränsvärdet 30 ppm. Packningar byttes och detektionssystemet för CO byttes ut.

Inblandade ämnen och mängder

kolmonoxid CAS Nr. Mängd 5 kg

Skador:

Människor: Inga. Materiella: Inga.

Miljö/ekologi: Inga effekter rapporterade.

Infrastruktur: Inga.

Erfarenheter redovisade (Ja/Nej): Ja

Kortfattat anges förebyggande åtgärder.

Report Profile

Identification of Report:

country: FA ident key: 1992 004 01

reported under Seveso I directive as major accident reports: SHORT

Date of Major Occurrence: Time of Major Occurrence

start: 1992-05-02 start: 09:00:00

finish: finish:

Establishment:

name:

address:

industry: - not applicable -

Ceramic, cement, metal (steel production and smelting from cast iron or steel)

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:

Additional Comments:
a) - not applicable -
b) - not applicable -
c) - not applicable -
d) - not applicable -
e) - not applicable -
Short Report
country: FA ident key: 1992_004_01
Accident Types:
release: Yes explosion: No
water contamination: No other: No
fire: No
description:
$SAFETY\ SYSTEMS\ OR\ OPERATORS\ INTERVENTION:\ see\ Appendix\ Short\ Report\ /\ description\ of\ accident\ types$
Substance(s) Directly Involved:
toxic: Yes explosive: No
ecotoxic: No other: No
flammable: Yes
description:
- Flammable gas (CO), 5 kg
Immediate Sources of Accident:
storage: No transfer: No
process: No other: No
description:
- not applicable -
Suspected Causes:
plant or equipment: Yes environmental: No
human: No other: No
description:
INITIATING EVENT AND CONSEQUENCES: see Appendix Short Report / description of suspected causes
Immediate Effects:
material loss: No
human deaths: No
human injuries: Yes community disruption: No
other: No
ecological harm: No
national heritage loss: No

rep_cont_fax:

description:

- 9 persons injured by release,

Emergency Measures taken:

on-site systems: No decontamination: No

external services: No restoration: No

sheltering: No other: No

evacuation: No

description:

INTERNAL TO THE ESTABLISHMENT:... see Appendix Short Report / description of emergency measures taken

Immediate Lessons Learned:

prevention: Yes other: No

mitigation: No

description:

- Installation of a complementary CO - Warning and disconnecting device;... see Appendix Short Report /

description of immediate lessons learned

Appendices for the FA / 1992_004_01 report

Appendix Short Report / description of accident types:

SAFETY SYSTEMS OR OPERATORS INTERVENTION:

The blower house is equipped with a CO control device that when the threshold limit of 30 ppm is exceeded switches the alarm signal from "Green" to "Red".

- The converter was taken out of operation and the blower disconnected: mounting of new packings.
- The tightness was controlled with a CO detection apparatus when the converter was taken into service again, at the first charge of the new packings.

Appendix Short Report / description of suspected causes:

INITIATING EVENT AND CONSEQUENCES:

Partial leakage (moss rubber) on the inspection valves - $0.72\,m\,x$ 0.62m - of the

blower. The consequence was gas leakage (CO) to above the threshold limit/30 ppm.

Appendix Short Report / description of emergency measures taken:

INTERNAL TO THE ESTABLISHMENT:

For preventing such incidents as the one of 21.01.1992, it was decided to install

an extended CO-warning system and a disconnection device. The realisation of these

measures has to be done not later than 09.06.1992. It was established that:

- after start up of the plant during the first charge the packing has to be

checked by a CO-detection device to examine the tightness and enter the result in

the protocol;

- after opening of an inspection valve it is fundamental to set in a new packing

(renewed indication);

- for the maintenance, only persons confident with the plant are to be employed.

Appendix Short Report / description of immediate lessons learned:

- Installation of a complementary CO - Warning and disconnecting device;

Disconnection criteria:

- < 30 ppm, warning in starting conditions
- -> 200 ppm, warning in starting conditions, the reason has to be found and eliminated
- > 1000 ppm, the blower to be switched off the charge to be interrupted.