Mindre propanutsläpp vid ett stöldförsök på en depå.

881021 MARS 1988_04

Efter normal arbetstid sökte ett antal personer stjäla LPG från en obevakad lastbrygga. Då de skulle tappa propan släpptes en mindre mängd propan uppskattad till 17 liter. När gasläckan upptäcktes undersöktes hela installationen för att identifiera läckan. Gasen skingrades utan att antändas. Det framgår inte om tjuvarna ifråga fångades.

Inblandade ämnen och mängder

 $\begin{array}{ccc} \textbf{CAS Nr.} & \textbf{M\"{a}ngd} \\ \textbf{propan} & 74\text{-}98\text{-}6 & 10~\text{kg} \end{array}$

Skador:

Människor: Inga. Materiella: Inga.

Miljö/ekologi: Inga effekter rapporterade.

Infrastruktur: Inga.

Erfarenheter redovisade (Ja/Nej): Ja

Mycket kortfattat anges förebyggande åtgärder.

Report Profile

Identification of Report:

country: FA ident key: 1988_004_01

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

Date of Major Occurrence: Time of Major Occurrence

start: 1988-10-21 start:

finish: finish:

Establishment:

name:

address:

industry: 2008 wholesale and retail storage and distribution (incl. LPG bottling & bulk

distrib., more: F1!)

Flammable Gases Storage (Loading/Unloading Facilities for Trucks)

Seveso II status: not applicable: Yes art. 6 (notification): ${\it No}$

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: 1988_004_01
Accident Types:
release: Yes explosion: No
water contamination: No other: No
fire: No
description:
ACCIDENT CASE HISTORY DESCRIPTION: see Appendix Short Report / description of accident types
Substance(s) Directly Involved:
toxic: No explosive: Yes
ecotoxic: No other: No
flammable: Yes
description:
- Propane (C.A.S. CODE: 74-98-6): amount involved = about 10 kg (the exact amount of liquid propane released
during the accident has not been estimated but, in any case, it shoul has been less than 17 litres).
Immediate Sources of Accident:
storage: Yes transfer: Yes
process: No other: No
description:
The accident occurred in a storage area for flammable gases. The component involved was a hand valve on the
loading line of an unattended propane trucks loading facility not in operation.
Suspected Causes:
plant or equipment: No environmental: Yes
human: Yes 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: No community disruption: No

other: Yes

ecological harm: No

national heritage loss: No

description:

OTHER:

No material losses occurred except the escaped liquid propane (negligible amount).

Emergency Measures taken:

on-site systems: Yes decontamination: No

external services: Yes 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:

MEASURES TO PREVENT ANY RECURRENCE OF SIMILAR ACCIDENTS:... see Appendix Short Report / description of

immediate lessons learned

A Occurrence Full Report

country: FA ident key: 1988_004_01

1 Type of Accident

remarks: After the normal working time, unauthorized persons attempted to steal LPG

in an unattended propane truck loading facility. A blind flange was removed

and a hand valve opened on the loading line, resulting in a leakage of

several litres of ... see Appendix Full Report A / type of accident

2 Dangerous Substances

remarks: The total establishment and the potential directly involved inventories of

propane refer to the amount released during the accident. The exact amount

of liquid propane released during the accident has not been estimated but,

in any case, it... see Appendix Full Report A / dangerous substances

3 Source of Accident

illustration: - not applicable -

remarks: The accident occurred in a storage area (code 2008) for flammable gases. The

components involved was a hand valve on the loading line (code 4010) of an

unattended propane trucks loading facility not in operation (code 3304).

4 Meteorological Conditions

precipitation none: fog: rain: hail: snow:

```
No No No No No
wind speed (m/s):
direction (from):
stability (Pasquill):
ambient temperature (\inftyC):
remarks: - not applicable -
5 Causes of Major Occurrence
main causes
technical / physical 5206 environment: establishment safeguarding/security deficiency
- not applicable -
- not applicable -
- not applicable -
- not applicable -
human / organizational 5404 person: malicious intervention
- not applicable -
- not applicable -
- not applicable -
- not applicable -
remarks: As the safeguard of the installation when it was not in operation was inadequate (code
5206) after the normal working time, unauthorized persons (code 5404) attempted to steal
LPG in an unattended propane truck loading facility resulting in... see Appendix Full
Report A / causes of major occurrence
6 Discussion about the Occurrence
- not applicable -
Type of Accident country: FA ident key: 1988_004_01
event:
major occurrence 1102 release: fluid release to ground
initiating event 1102 release: fluid release to ground
associated event - not applicable -
event:
major occurrence 1101 release: gas/vapour/mist/etc release to air
initiating event 1101 release: gas/vapour/mist/etc release to air
associated event - not applicable -
Dangerous substances
country: FA ident key: 1988_004_01
a) total establishment inventory
CAS number: 74-98-6 identity: Propane
name from Seveso I Directive: - not applicable -
name from Seveso II Directive: - not applicable -
```

```
category from Seveso II: - not applicable -
other hazards (1): - not applicable -
other hazards (2): - not applicable -
maximum quantity (tonnes): 0,01
use of substance as: NORMAL FINISHED PRODUCT
b) substance belongs to relevant inventory directly involved: Yes
actual quantity: 0,01 potential quantity: 0,01
c) substance belongs to relevant inventory indirectly involved: No
actual quantity: -1 indir_pot_quant: -1
Source of Accident - Situation country: FA ident key: 1988_004_01
situation
industry
inititating event 2008 wholesale and retail storage and distribution (incl. LPG bottling & bulk
distrib., more: F1!)
associated event - not applicable -
activity/unit
major occurrence 3304 transfer: loading/unloading activities (transfer interfaces)
inititating event 3304 transfer: loading/unloading activities (transfer interfaces)
associated event - not applicable -
component
major occurrence 4010 valves/controls/monitoring devices/drain cocks
inititating event 4010 valves/controls/monitoring devices/drain cocks
associated event - not applicable -
B Consequences Full Report
```

country: FA **ident key:** 1988_004_01

1 Area concerned

affected

extent of effects installation: Yes

establishment: No

off-site; local: No

off-site; regional: No

off-site; transboundary: No

illustration of effects - not applicable -

remarks In the Original Report there is no evidence of significant effects outside the i... see Appendix

Full Report B / area concerned - remarks

2 People

establishment popul. emergency personnel off-site population

immediate fatalities subsequent fatalities hospitalizing injuries other serious injuries health monitoring remarks No people were injured during the accident. 3 Ecological Harm pollution/contamination/damage of: - residential area (covered by toxic cloud) Suspected - common wild flora/fauna (death or elimination) Suspected - rare or protected flora/fauna (death or elimination) Suspected - water catchment areas and supplies for consumption or recreation Suspected - land (with known potential for long term ecological harm or Suspected preventing human access or activities) - marine or fresh water habitat Suspected - areas of high conservation value or given special protection Suspected remarks In the Original Report there is no evidence of significant ecological harms.... see Appendix Full Report B / ecological harm 4 National Heritage Loss effects on: - historical sites not applicable - historic monuments not applicable - historic buildings not applicable - art treasures not applicable remarks No data available. **5 Material Loss** establishment losses off site losses costs (direct costs to operator) (social costs) in ECU ECU material losses response, clean up, restoration remarks No material losses occurred except the escaped liquid propane (negligible amount... see Appendix Full Report B / material loss 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 $\ensuremath{\mathrm{No}}$ No $\ensuremath{\mathrm{No}}$

- other places of public assembly No No No

interruption of utilities etc. no / yes duration

total at risk

```
- 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 Yes No No
- media interest No No No
- political interest No No No
remarks In the Original Report there is no evidence of significant effects outside the i... see Appendix
7 Discussion of Consequences
C Response Full Report
country: FA ident key: 1988_004_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
9 current safety report not applicable not applicable not applicable
11 internal plan not applicable not applicable
11 external plan not applicable not applicable
13 informing public not applicable not applicable
9, 12 siting policy 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
- 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
After the accident, the follow see Appendix Full Report C / lesson learned - prevent
measures to mitigate consequences:
- not applicable -
useful references:
- not applicable -
5 Discussion about Response
- not applicable -
Appendices for the FA / 1988 004 01 report

Appendix Short Report / description of accident types:

ACCIDENT CASE HISTORY DESCRIPTION:

After the normal working time, unauthorized persons attempted to steal LPG in an unattended propane truck loading facility. A blind flange was removed and a hand valve opened on the loading line, resulting in a leakage of several litres of liquid propane (the exact amount of liquid propane released during the accident has not been estimated but, in any case, it shoud has been less than 17 litres). When the gas leakage was detected, the whole installation was checked to identify the possible leakage sources and the gas concentration was measured within the installation. The gas cloud dispersed safely without igniting. The loading line was emptied.

Appendix Short Report / description of suspected causes:

INITIATING EVENT AND CONSEQUENCES:

An attempt to steal liquid propane from an unattended trucks loading facility was carried out, resulting in the release of several litres of LPG.

CAUSES:

The safeguard of the installation was inadequate when it was not in operation .

Appendix Short Report / description of emergency measures taken:

INTERNAL TO THE ESTABLISHMENT:

When the gas leakage was detected, the whole installation was checked to identify the possible leakage sources and the gas concentration was measured within the installation. The loading line was emptied. The loading facilities were inspected by a competent inspector.

Appendix Short Report / description of immediate lessons learned:

MEASURES TO PREVENT ANY RECURRENCE OF SIMILAR ACCIDENTS:

After the accident, the following measures were established:

- 1- a stable mechanical locking device for the hand valve to be installed;
- 2- temporarily, an electronic safeguard system to be installed;
- 3- a permanent safeguarding system on a 24 hours basis to be introduced covering the whole installation.

Appendix Full Report A / type of accident:

After the normal working time, unauthorized persons attempted to steal LPG in an unattended propane truck loading facility. A blind flange was removed and a hand valve opened on the loading line, resulting in a leakage of several litres of liquid propane (codes 1101 and 1102). The gas cloud dispersed safely without igniting.

Appendix Full Report A / dangerous substances:

The total establishment and the potential directly involved inventories of propane refer to the amount released during the accident. The exact amount of liquid propane released during the accident has not been estimated but, in any case, it should have been less than 17 litres.

Appendix Full Report A / causes of major occurrence:

As the safeguard of the installation when it was not in operation was inadequate (code 5206) after the normal working time, unauthorized persons (code 5404) attempted to steal LPG in an unattended propane truck loading facility resulting in the release of several litres of liquid propane.

Appendix Full Report B / area concerned - remarks:

In the Original Report there is no evidence of significant effects outside the installation.

Appendix Full Report B / ecological harm:

In the Original Report there is no evidence of significant ecological harms.

Appendix Full Report B / material loss:

No material losses occurred except the escaped liquid propane (negligible amount).

Appendix Full Report B / disruption of community life:

In the Original Report there is no evidence of significant effects outside the installation.

Appendix Full Report C / lesson learned - prevent:

After the accident, the following measures were established:

- 1- a stable mechanical locking device for the hand valve to be installed;
- 2- temporarily, an electronic safeguard system to be installed;
- 3- a permanent safeguarding system on a 24 hours basis to be introduced covering the whole installation.