Litet utsläpp av klorbensen i vattendrag från en kemikaliefabrik.

861112 MARS 1986_01

Ett utsläpp om mellan 1 och 2 liter klorbensen från en kemikaliefabrik nådde floden Main via kylvattensledningar. Mätningar genomförda av statlig miljömyndighet konstaterade att koncentrationerna låg under der mätbara.

Inblandade ämnen och mängder

	CAS Nr.	Mängd
klorbensen	108-90-7	2 kg

Skador:

Människor:	Inga.
Materiella:	Inga.
Miljö/ekologi:	Mellan 1 och 2 liter klorbensen släpptes ut i närliggande flod. Enligt uppgifter från miljömyndigheter i huvudstaden var mängderna för små för att vara mätbara.
Infrastruktur:	Inga.

Erfarenheter redovisade (Ja/Nej): Nej

Report Profile

Identification of Report:

country: FA **ident key:** 1986_001_01

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

Date of Major Occurrence: Time of Major Occurrence

start: 1986-11-12 **start:**

finish: finish:

Establishment:

name:

address:

industry: 2001 general chemicals manufacture

Organic Chemical

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:** 1986_001_01

Accident Types:

release: Yes **explosion:** No

water contamination: Yes **other:** No

fire: No

description:

ACCIDENT CASE HISTORY DESCRIPTION:... see Appendix Short Report / description of accident types

Substance(s) Directly Involved:

toxic: Yes **explosive:** Yes

ecotoxic: No **other:** No

flammable: Yes

description:

- Chlorobenzene (C.A.S. CODE: 108-90-7): amount involved =2 kg.

Immediate Sources of Accident:

storage: No **transfer:** No

process: Yes **other:** No

description:

The accident occurred during normal operation of the cooling water system of an organic chemical industry.

Suspected Causes:

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

human: No **other:** Yes

description:

CAUSES:

When the Original Report was prepared the causes of the accident were still under investigation.

Immediate Effects:

material loss: No

human deaths: No

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

other: No

ecological harm: Yes

national heritage loss: No

description:

ECOLOGICAL HARM:... see Appendix Short Report / description of immediate effects

Emergency Measures taken:

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

external services: No **restoration:** No

sheltering: No **other:** No

evacuation: No

description:

No emergency measures were necessary, neither on-site nor off-site.

Immediate Lessons Learned:

prevention: No **other:** No

mitigation: No

description:

A Occurrence Full Report

country: FA **ident key:** 1986_001_01

1 Type of Accident

remarks: A release of about 1^2 litres of chlorobenzene (code 1103) occurred from the Hoechst Works of Hoechst AG and entered, via a cooling water drain, the Main river flowing close to the factory. According to information supplied by the Federal H... see Appendix Full Report A / type of accident

2 Dangerous Substances

remarks: The total establishment and the potential directly involved inventories of chlorobenzene refer to the amount released during the accident (1^2 litres). From the Original Report it is not fully clear if chlorobenzene is a starting material o... see Appendix Full Report A / dangerous substances

3 Source of Accident

illustration: - not applicable -

remarks: The accident occurred during normal operation of the cooling water system (code 3104) of an organic chemical industry (code 2001). No information are available about the component involved in the release.

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 5501 other: not identified

- not applicable -

- not applicable -

- not applicable -

- not applicable -

human / organizational - not applicable -

- not applicable -

- not applicable -

- not applicable -

- not applicable -

remarks: When the Original Report was prepared the causes of the accident were still under investigation (code 5501).

6 Discussion about the Occurrence

- not applicable -

Type of Accident **country:** FA **ident key:** 1986_001_01

event:

major occurrence 1103 release: fluid release to water

initiating event 1103 release: fluid release to water

associated event - not applicable -

Dangerous substances

country: FA **ident key:** 1986_001_01

a) total establishment inventory

CAS number: 108-90-7 **identity:** Chlorobenzene

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): 0,002

use of substance as: NORMAL FINISHED PRODUCT

b) substance belongs to relevant inventory directly involved: Yes

actual quantity: 0,002 **potential quantity:** 0,002

c) substance belongs to relevant inventory indirectly involved: No

actual quantity: -1 **indir_pot_quant:** -1

Source of Accident - Situation **country:** FA **ident key:** 1986_001_01

situation

industry

inititating event 2001 general chemicals manufacture

associated event - not applicable -

activity/unit

major occurrence 3104 process: physical operations (mixing, melting crystallizing, etc.)

inititating event 3104 process: physical operations (mixing, melting crystallizing, etc.)

associated event - not applicable -

component

major occurrence - not applicable -

inititating event - not applicable -

associated event - not applicable -

B Consequences Full Report

country: FA **ident key:** 1986_001_01

1 Area concerned

affected

extent of effects installation: No

establishment: No

off-site; local: Yes

off-site; regional: No

off-site; transboundary: No

illustration of effects - not applicable -

remarks The Main and Rhine rivers were polluted with chlorobenzene but, according to inf... see Appendix

Full Report B / area concerned - remarks

2 People

establishment popul. emergency personnel off-site population

total at risk

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 The Main and Rhine rivers were polluted with chlorobenzene but, according to inf... 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 during the accident.

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 Yes No No

- media interest No No No

- political interest No No No

remarks The Main and Rhine rivers were polluted with chlorobenzene but, according to inf... see Appendix

7 Discussion of Consequences

- not applicable -

Ecological Components involved

country: FA **ident key:** 1986_001_01

type: 6203 freshwater: stream/tributary

threatened: not applicable **affected:** Yes

C Response Full Report

country: FA **ident key:** 1986_001_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

- not applicable -

measures to mitigate consequences:

- not applicable -

useful references:

- not applicable -

5 Discussion about Response

- not applicable -

Appendices for the FA / 1986_001_01 report

Appendix Short Report / description of accident types:

ACCIDENT CASE HISTORY DESCRIPTION:

On November 12, 1986, a release of about 1^2 litres of chlorobenzene occurred from the Hoechst Works of Hoechst AG and entered, via a coolin water drain, the Main river flowing close to tha factory. According to information supplied by the Federal Health Offices's Institute for Water, Soil and Air Hygiene of Berlin, the concentrations to be expected from the discharge into the water of the rivers (Main and Rhine) were far below the detection limit and the level of ecotoxicological relevance due to the very small quantity of chlorobenzene released. The occurrence was graded as trifling.

Appendix Short Report / description of immediate effects:

ECOLOGICAL HARM:

The Main and Rhine rivers were polluted with chlorobenzene but, according to information supplied by the Federal Health Offices's Institute for Water, Soil and Air Hygiene of Berlin, the concentrations to be expected from the discharge into the water of the rivers were far below the detection limit and the level of ecotoxicological relevance due to the very small quantity of chlorobenzene released.

Appendix Full Report A / type of accident:

A release of about 1^2 litres of chlorobenzene (code 1103) occurred from the Hoechst Works of Hoechst AG and entered, via a cooling water drain, the Main river flowing close to the factory. According to information supplied by the Federal Health Offices's Institute for Water, Soil and Air Hygiene of Berlin, the concentrations to be expected from the discharge into the water of the rivers (Main and Rhine) were far below the detection limit and the level of ecotoxicological relevance.

Appendix Full Report A / dangerous substances:

The total establishment and the potential directly involved inventories of chlorobenzene refer to the amount released during the accident (1^2 litres). From the Original Report it is not fully clear if chlorobenzene is a starting material or a finished product.

Appendix Full Report B / area concerned - remarks:

The Main and Rhine rivers were polluted with chlorobenzene but, according to information supplied by the Federal Health Offices's Institute for Water, Soil and Air Hygiene of Berlin, the concentrations to be expected from the discharge into the water of the rivers were far below the detection limit and the level of ecotoxicological relevance due to the very small quantity of chlorobenzene released.

Appendix Full Report B / ecological harm:

The Main and Rhine rivers were polluted with chlorobenzene but, according to information supplied by the Federal Health Offices's Institute for Water, Soil and Air Hygiene of Berlin, the concentrations to be expected from the discharge into the water of the rivers were far below the detection limit and the level of ecotoxicological relevance due to the very small quantity of chlorobenzene released.

Appendix Full Report B / disruption of community life:

The Main and Rhine rivers were polluted with chlorobenzene but, according to information supplied by the Federal Health Offices's Institute for Water, Soil and Air Hygiene of Berlin, the concentrations to be expected from the discharge into the water of the rivers were far below the detection limit and the level of ecotoxicological relevance due to the very small quantity of chlorobenzene released.