

Brand i ett lager på en pappers- och massafabrik.

891220 MARS 1989_19

En brand i den avfallshög där man lagrade eukalyptur bark spred sig snabbt till ett lagerområde där det fanns 210 ton av olika material. Orsaken till branden är inte identifierad. Av rädsla för att brande skulle sprida sig kallade företaget snabbt på extern hjälp. Brande bekämpades av företagets interna brandkår, av brandbekämpningsstyrkor från grannbolag under en brandbekämpningssamverkan, av räddningstjänsten samt av militär. Även flygplan användes i släckningsarbetet. Branden orsakade marin förorening över flera km stort område.

Inblandade ämnen och mängder

	CAS Nr.	Mängd
Eukalyptusbark		okänt
andra material		210 ton

Skador:

Människor:	Inga.
Materiella:	Anläggningen skadades allvarligt.
Miljö/ekologi:	Branden orsakade marin förorening över flera km stort område.
Infrastruktur:	Inga.

Erfarenheter redovisade (Ja/Nej): Nej

Report Profile

Identification of Report:

country: FA ident key: 1989_019_01

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

Date of Major Occurrence: Time of Major Occurrence

start: 1989-12-20 start:

finish: finish:

Establishment:

name:

address:

industry: - not applicable -

Wood, Pulp & Paper

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:** 1989_019_01

Accident Types:

release: No **explosion:** No

water contamination: Yes **other:** No

fire: Yes

description:

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

Substance(s) Directly Involved:

toxic: No **explosive:** No

ecotoxic: Yes **other:** No

flammable: Yes

description:

- Eucalyptus's bark: amount involved = not known.... see Appendix Short Report / description of substances

involved

Immediate Sources of Accident:

storage: Yes **transfer:** No

process: Yes **other:** No

description:

The accident occurred in a storage area of a wood, pulp and paper industry and involved various materials

stored in a free placement.

Suspected Causes:

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

human: No **other:** Yes

description:

CAUSES:... see Appendix Short Report / description of suspected causes

Immediate Effects:

material loss: Yes

human deaths: No

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

other: No

ecological harm: Yes

national heritage loss: No

description:

MATERIAL LOSS:... see Appendix Short Report / description of immediate effects

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: No **other:** No

mitigation: No

description:

- not applicable -

A Occurrence Full Report

country: FA **ident key:** 1989_019_01

1 Type of Accident

remarks: A fire in the area for waste disposal of eucalyptus's bark propagated

rapidly towards a storage area containing about 210,000 tonnes of different

materials (code 1201). The fire caused a severe marine pollution (code

1405). From the Origina... see Appendix Full Report A / type of accident

2 Dangerous Substances

remarks: No data are available about the type of the materials in the storage area.

No data are available about the amount of the eucalyptus's bark and of the

blast furnace slags involved in the accident.

3 Source of Accident

illustration: - not applicable -

remarks: - not applicable -

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 5303 organization: organized procedures (none, inadequate, inappropriate, unclear)

5401 person: operator error

- not applicable -

- not applicable -

- not applicable -

remarks: The causes have not been fully identified (code 5501). Probably, following a not better specified process failure in waste handling, the operators stored by mistake (codes 5303 and 5401) the eucalyptus's bark in the same area of the blast f... see Appendix Full Report A / causes of major occurrence

6 Discussion about the Occurrence

- not applicable -

Type of Accident country: FA ident key: 1989_019_01

event:

major occurrence 1405 other: firewater runoff into water

initiating event - not applicable -

associated event - not applicable -

event:

major occurrence 1201 fire: conflagration (a general engulfment fire)

initiating event 1201 fire: conflagration (a general engulfment fire)

associated event - not applicable -

Dangerous substances

country: FA ident key: 1989_019_01

a) total establishment inventory

CAS number: identity: Various Materials

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): 210

use of substance as: NORMAL FINISHED PRODUCT

b) substance belongs to relevant inventory directly involved: Yes

actual quantity: 210 potential quantity: 210

c) substance belongs to relevant inventory indirectly involved: No

actual quantity: -1 indir_pot_quant: -1

a) total establishment inventory

CAS number: identity: Eucalyptus's Bark

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): -1

use of substance as: NORMAL FINISHED PRODUCT

b) substance belongs to relevant inventory directly involved: Yes

actual quantity: -1 potential quantity: -1

c) substance belongs to relevant inventory indirectly involved: No

actual quantity: -1 indir_pot_quant: -1

a) total establishment inventory

CAS number: identity: Blast Furnace Slags

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): -1

use of substance as: NORMAL FINISHED PRODUCT

b) substance belongs to relevant inventory directly involved: Yes

actual quantity: -1 potential quantity: -1

c) substance belongs to relevant inventory indirectly involved: No

actual quantity: -1 indir_pot_quant: -1

B Consequences Full Report

country: FA ident key: 1989_019_01

1 Area concerned

affected

extent of effects installation: Yes

establishment: Yes

off-site; local: Yes

off-site; regional: No

off-site; transboundary: No

illustration of effects - not applicable -

remarks The fire caused severe damages both within the establishment and to surrounding ... 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)** not applicable

- **rare or protected flora/fauna (death or elimination)** not applicable

- **water catchment areas and supplies for consumption or recreation** not applicable

- **land (with known potential for long term ecological harm or not applicable**

preventing human access or activities)

- **marine or fresh water habitat** not applicable

- **areas of high conservation value or given special protection** not applicable

remarks The fire caused a severe marine pollution to a distance of several km away.... 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 The fire caused severe damages both within the establishment and to surrounding ... 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** 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** No No Yes

- **media interest** No No No

- **political interest** No No No

remarks The Major Emergency Plan was activated.

7 Discussion of Consequences

Ecological Components involved

country: FA **ident key:** 1989_019_01

type: 6403 offshore: sea/seabed

threatened: not applicable **affected:** not applicable

C Response Full Report

country: FA **ident key:** 1989_019_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 / 1989_019_01 report

Appendix Short Report / description of accident types:

ACCIDENT CASE HISTORY DESCRIPTION:

A fire in the area for waste disposal of eucalyptus's bark propagated rapidly towards a storage area containing about 210,000 tonnes of different materials. Afraid of a further propagation, the company called on for external assistance in fire fighting and the big fire was fought by the company's fire brigade, an external team from a "Mutual Help Pact" from surrounding companies, the local fire brigade and military and safety forces with the assistance of fire fighting hydroplanes. The fire caused severe damages both within the establishment and to surrounding properties as well as severe marine pollution to a distance of several km away.

Appendix Short Report / description of substances involved:

- Eucalyptus's bark: amount involved = not known.
- Other Different Materials: amount involved = 210,000 Kg.

Appendix Short Report / description of suspected causes:

CAUSES:

The causes have not been fully identified. Probably, following a not better specified process failure in waste handling, the operators stored by mistake the eucalyptus's bark in the same area of the blast furnace slags. The mixture of these materials, together with the characteristics of the storage area (not better specified in the Original Report), caused an overheating and then their ignition.

Appendix Short Report / description of immediate effects:

MATERIAL LOSS:

The fire caused severe damages both within the establishment and to surrounding properties but no data are available about the cost of the material losses.

ECOLOGICAL HARM:

The fire caused a severe marine pollution to a distance of several km away.

Appendix Short Report / description of emergency measures taken:

INTERNAL TO THE ESTABLISHMENT:

Afraid of a further propagation, the company called on for external assistance in fire fighting and the big fire was fought by the company's fire brigade, an external team from a "Mutual Help Pact" from surrounding companies, the local fire brigade and military and safety forces with the assistance of fire fighting hydroplanes.

EXTERNAL TO THE ESTABLISHMENT:

The Major Emergency Plan was activated.

Appendix Full Report A / type of accident:

A fire in the area for waste disposal of eucalyptus's bark propagated rapidly towards a storage area containing about 210,000 tonnes of different materials (code 1201). The fire caused a severe marine pollution (code 1405). From the Original Report it is not fully clear what caused the marine pollution. It is assumed to be run-off of fire fighting water.

Appendix Full Report A / causes of major occurrence:

The causes have not been fully identified (code 5501). Probably, following a not better specified process failure in waste handling, the operators stored by mistake (codes 5303 and 5401) the eucalyptus's bark in the same area of the blast furnace slags. The mixture of these materials, together with the characteristics of the storage area (not better specified in the Original Report), caused an overheating and then their ignition.

Appendix Full Report B / area concerned - remarks:

The fire caused severe damages both within the establishment and to surrounding properties as well as a severe marine pollution to a distance of several km away.

Appendix Full Report B / ecological harm:

The fire caused a severe marine pollution to a distance of several km away.

Appendix Full Report B / material loss:

The fire caused severe damages both within the establishment and to surrounding properties but no data are available about the cost of these material damages.