

En oljetanker kolliderade med lastbryggan och orsakade ett utsläpp och brand i hamnen.

930212 MARS 1993_20

Olyckan inträffade i ett hamnområde kl 08:47 på morgonen. Då ett tankfartyg skulle parkera vid bryggan för lossning kolliderade fartyget med bryggan. En rörledning för nafta bröts av och brännbar vätska strömmade ut i hamnen. Det är troligt att även andra rörledningar gick av. Vätskorna antändes av en gnista som uppstod vid friktionen mellan metall och metall i kollisionen. Delar av bryggan förstördes allvarligt. Två andra fartyg i hamnen som var sysselsatta med lastning/lossning kunde avbryta och lämnade hamnområdet omedelbart utan problem. Ventiler som kontrollerade tillflödet till de brustna ledningarna stängdes. Branden bekämpades och var under kontroll kl 10:00, och helt släckt kl 17:00. Allmänheten och media informerades. Ett program för att begränsa föroreningen av vattnet och kustområdet sattes igång.

Inblandade ämnen och mängder

	CAS Nr.	Mängd
råolja		okänt
nafta	8030-30-6	okänt

Skador:

Människor:	Inga.
Materiella:	Omfattande skador i hamnområdet.
Miljö/ekologi:	Flytande barriärer lades ut för att skydda stränder och ansträngningar gjordes för att adsorbera oljan. Arbetet med att begränsa utsläppet fortsatte i flera dagar. Till följd av detta bedöms föroreningen som mindre allvarlig.
Infrastruktur:	Inga.

Erfarenheter redovisade (Ja/Nej):

Kortfattat anges förebyggande åtgärder.

Report Profile

Identification of Report:

country: FA ident key: 1993_020_01

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

Date of Major Occurrence: Time of Major Occurrence

start: 1993-02-12 start: 08:47:00

finish: finish:

Establishment:

name:

address:

industry: - not applicable -

Loading/Unloading Ships Activities (Jetty)

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_020_01

Accident Types:

release: Yes 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: Yes

ecotoxic: Yes other: No

flammable: Yes

description:

- Crude Oil: amount involved = not known.... see Appendix Short Report / description of substances involved

Immediate Sources of Accident:

storage: No transfer: Yes

process: No other: No

description:

The accident occurred in a loading/unloading installation (jetty) for ships during the "parking" of "Robert Maersk" tank ship. The components involved were the naphtha and the crude oil pipelines that were ruptured by the "Robert Maersk" ta... see Appendix Short Report / description of immediate sources

Suspected Causes:

plant or equipment: No environmental: Yes

human: Yes other: No

description:

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

Immediate Effects:

material loss: Yes

human deaths: No

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

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:** Yes

external services: Yes **restoration:** No

sheltering: Yes **other:** No

evacuation: Yes

description:

INSIDE 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:** 1993_020_01

1 Type of Accident

remarks: The "Robert Maersk" tank ship, during 'parking' manoeuvre, crashed into the jetty for the loading/unloading activities. The crash happened near the palisade close to the platform and caused the rupture of the naphtha pipeline and surely of ... see Appendix Full Report A / type of accident

2 Dangerous Substances

remarks: No data are available about the amount of naphtha and crude oil 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 - not applicable -

- not applicable -

- not applicable -

- not applicable -

- not applicable -

human / organizational 5401 person: operator error

- not applicable -

- not applicable -

- not applicable -

- not applicable -

remarks: The cause of the crash of the "Robert Maersk" tank ship with the jetty was a human error

during the parking manoeuvre (code 5401). The flammable liquid (naphta and crude oil)

released onto the sea was then ignited by a spark between the pip... see Appendix Full

Report A / causes of major occurrence

6 Discussion about the Occurrence

- not applicable -

Type of Accident country: FA ident key: 1993_020_01

event:

major occurrence 1202 fire: pool fire (burning pool of liquid, contained or uncontained)

initiating event - not applicable -

associated event - not applicable -

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: 1993_020_01

a) total establishment inventory

CAS number: identity: Naphta

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: Crude Oil

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: STARTING MATERIAL

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: 1993_020_01

1 Area concerned

affected

extent of effects installation: Yes

establishment: Yes

off-site; local: Yes

off-site; regional: not applicable

off-site; transboundary: not applicable

illustration of effects - not applicable -

remarks Operations to fight and to prevent sea contamination were carried out: barriers ... 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 When the fire was under control, operations to fight and to prevent sea contamin... 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 accident caused large material damages, among which the collapse of 275 metr... 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 Yes No

- **media interest** No No No

- **political interest** No No No

remarks The accident had impact on public.

7 Discussion of Consequences

Ecological Components involved

country: FA **ident key:** 1993_020_01

type: 6403 offshore: sea/seabed

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

C Response Full Report

country: FA **ident key:** 1993_020_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 / 1993_020_01 report

Appendix Short Report / description of accident types:

ACCIDENT CASE HISTORY DESCRIPTION:

The "Robert Maersk" tank ship (transporting 22,000 tonnes of gasoline), coming from REPSOL PETROLEO Refinery in La Coruna, during 'parking' manoeuvre crashed into the jetty for the loading/unloading activities. The crash happened near the palisade close to the platform and caused the rupture of the naphtha pipeline (the first in position) and surely of some others, among those of the crude oil, causing the release of flammable liquid onto the sea. The flammable liquid (naphtha and crude oil) released was then ignited resulting in a huge fire that caused the collapse of 275 m of the protection. When the impact occurred, "Capitan Putilin" ship was discharging naphtha and "Gaz Coral" ship was loading butadiene but both were able to leave the anchorage by means of their engines.

Appendix Short Report / description of substances involved:

- Crude Oil: amount involved = not known.

- Naphta (C.A.S. CODE: 8030-30-6): amount involved = not known.

Appendix Short Report / description of immediate sources:

The accident occurred in a loading/unloading installation (jetty) for ships during the "parking" of "Robert Maersk" tank ship. The components involved were the naphtha

and the crude oil pipelines that were ruptured by the "Robert Maersk" tank ship.

Appendix Short Report / description of suspected causes:

CAUSES:

The cause of the crash of the "Robert Maersk" tank ship with the jetty was a human error during the parking manoeuvre. The flammable liquid (naphtha and crude oil) released onto the sea was then ignited by a spark between the pipelines due to the friction created by the impact or by a short-circuit in the electrical system (the sub-station sited on the platform N° 35 fell down in the water).

Appendix Short Report / description of immediate effects:

MATERIAL LOSS:

The accident caused large material damages, among which the collapse of 275 metres of the harbour protection and the electrical substation of platform N° 35 that fell into the water. No data are available about the cost of the material losses.

ECOLOGICAL HARM:

When the fire was under control, operations to fight and to prevent sea contamination were carried out. Barriers to protect beaches were laid out and adsorbents were used to adsorb the oil. The pollution abatement was continued during the following days. Due to these mitigative measures, the sea contamination was not particularly critical.

COMMUNITY DISRUPTION:

The accident had impact on public.

Appendix Short Report / description of emergency measures taken:

INSIDE THE ESTABLISHMENT:

When the accident occurred, the first prevention measure was to evacuate the other ships outside the zone of danger. "Capitan Putilin" ship (that was discharging naphtha) and "Gaz Coral" ship (that was loading butadiene) were able to leave the anchorage by means of their engines. The fuel feeding valves were closed and the fire fighting systems were activated (the fire was under control at 10:00 and extinguished at 17:00).

EXTERNAL TO THE ESTABLISHMENT:

At the same time the External Emergency Plan of the Industrial Poligon of Tarragona was activated and a Centre of Integrated Operative Coordination (CECOPI) was created in order to take decisions on the protection methods and to inform the population and media. When the fire was under control, operations to fight and to prevent sea contamination were carried out. Barriers to protect beaches were laid out and adsorbents were used to adsorb the oil. The pollution abatement was continued during the following days.

Appendix Full Report A / type of accident:

The "Robert Maersk" tank ship, during 'parking' manoeuvre, crashed into the jetty for the loading/unloading activities. The crash happened near the palisade close to the platform and caused the rupture of the naphtha pipeline and surely of some others, among those of the crude oil, causing the release of flammable liquid onto the sea (code 1103). The flammable liquid (naphtha and crude oil) released was then ignited resulting in a huge fire (code 1202) and in sea contamination (code 1103).

Appendix Full Report A / causes of major occurrence:

The cause of the crash of the "Robert Maersk" tank ship with the jetty was a human error during the parking manoeuvre (code 5401). The flammable liquid (naphtha and crude oil) released onto the sea was then ignited by a spark between the pipelines due to the friction created by the impact or by a short-circuit in the same electrical system (the sub-station sited on the platform N° 35 fell down in the water).

Appendix Full Report B / area concerned - remarks:

Operations to fight and to prevent sea contamination were carried out: barriers to protect beaches were laid out and adsorbents were used to adsorb the oil. The pollution abatement was continued during the following days. Due to these mitigative measures, the sea contamination was not particularly critical.

Appendix Full Report B / ecological harm:

When the fire was under control, operations to fight and to prevent sea contamination were carried out. Barriers to protect beaches were laid out and adsorbents were used to adsorb the oil. The pollution abatement was continued during the following days. Due to these mitigative measures, the sea contamination was not particularly critical.

Appendix Full Report B / material loss:

The accident caused large material damages, among which the collapse of 275 metres of the harbour protection and the electrical substation of platform N° 35 that fell into the water. No data are available about the cost of the material losses.