

Explosion och brand på en fabrik i metallindustrin.

950520 MARS 1995_03

Gasbehållaren i anslutning till masugnen brast varvid 17 000 m3 masugnsgaser, 20 000 ton vatten och 17 ton oljeblandning släpptes ut. Gasbehållaren totalförstördes. Det utsläppta vattnet förstörde en närliggande koksgasanläggning och en naturgasmätstation. Den frigjorda koksgasen och naturgasen antändes omedelbart. Varför gasbehållaren brast anges som okänt.

Inblandade ämnen och mängder

	CAS Nr.	Mängd
masugnsgaser		17 000 m3
olja		17 000 kg

Skador:

Människor:	5 personer skadades, varav en allvarligt.
Materiella:	Anläggningen skadades.
Miljö/ekologi:	Inga effekter rapporterade.
Infrastruktur:	En järnvägssträcka stängdes av. Det kontaminerade topplagret mark i området grävdes upp och togs om hand.

Erfarenheter redovisade (Ja/Nej): Ja

Mycket kortfattat anges förebyggande åtgärder.

Report Profile

Identification of Report:

country: FA ident key: 1995_003_01

reported under Seveso I directive as major accident reports: SHORT

Date of Major Occurrence: Time of Major Occurrence

start: 1995-05-20 start:

finish: 1995-05-20 finish:

Establishment:

name:

address:

industry: - not applicable -

metal refining and processing (extraction of raw iron or non-ferrous metals from secondary materials)

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:** 1995_003_01**Accident Types:****release:** No **explosion:** Yes**water contamination:** No **other:** No**fire:** Yes**description:**

The gas container of the blast furnace is used for buffering the blast furnace gas system and for assuring a constant gas pressure. Due to the rupture of the outer steel jacket and the two telescopic jackets of the gasometer appr. 17.000 m3... see Appendix Short Report / description of accident types

Substance(s) Directly Involved:**toxic:** No **explosive:** No**ecotoxic:** No **other:** No**flammable:** Yes**description:**

flammable gases (17.000 m3), flammable liquids (17.000 kg).

Immediate Sources of Accident:**storage:** No **transfer:** No**process:** Yes **other:** No**description:**

causes yet unknown; see also accident type description.

Suspected Causes:**plant or equipment:** No **environmental:** No**human:** No **other:** No**description:**

unknown

Immediate Effects:**material loss:** Yes

human deaths: No

human injuries: Yes **community disruption:** Yes

other: No

ecological harm: No

national heritage loss: No

description:

Onsite and offsite material losses; 5 injuries (1 hospitalised, 4 slightly injured).... see Appendix Short

Report / description of immediate effects

Emergency Measures taken:

on-site systems: Yes **decontamination:** Yes

external services: Yes **restoration:** No

sheltering: No **other:** No

evacuation: No

description:

the gasometer was separated from the remaining blast furnace gas system by means of two sliding diaphragms.

Immediate Lessons Learned:

prevention: Yes **other:** No

mitigation: No

description:

The sewage system was pumped free and rinsed. Pumping fluid and rinsing fluid were separated and treated

separately on site after authorisation of the LfU (Regional Environmental Agency). Water is tested another

time after treatment. Earth ... see Appendix Short Report / description of immediate lessons learned

Appendices for the FA / 1995_003_01 report

Appendix Short Report / description of accident types:

The gas container of the blast furnace is used for buffering the blast furnace gas system and for assuring a constant gas pressure. Due to the rupture of the outer steel jacket and the two telescopic jackets of the gasometer appr. 17.000 m³ of blast furnace gas, appr. 20.000 m³ of water and appr. 17.000 kg oil mixture (corrosion protection "IMUNOL") were released from the gas container of the blast furnace. The gas container was completely destroyed. The water flood destroyed a nearby natural gas reduction- and measurement station and a coke-gas delivery station, the released natural gas and the coke gas ignited immediately. The gasometer did not present any operative disturbances when the accident occurred. Volume indications and pressure control were flawless. As immediate emergency measures the gasometer was separated from the remaining blast furnace gas system by the mean of two sliding diaphragms. Thus further release of gas from the blast furnace gas system was avoided. 1 person was injured rather seriously, and 4 persons were slightly injured. They were medicated at the site by the fire brigade, the red cross and the emergency doctor. The fire brigade installed oil barriers. The railway company closed down a 15 kv overhead system. The top earth layer in the contaminated area was removed and temporarily stored under the supervision of the department of environment.

Appendix Short Report / description of immediate effects:

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Appendix Short Report / description of immediate lessons learned:

The sewage system was pumped free and rinsed. Pumping fluid and rinsing fluid were separated and treated separately on site after authorisation of the LfU (Regional Environmental Agency). Water is tested another time after treatment. Earth samples are taken analysed in the exposed area. The TöV (Technical Control Association) Saarland is charged as independent expert to investigate the accident.