

## Giftig brandrökutveckling till följd av brand i ett lager för konstgödningsämnen.

860328 MARS 1800\_002\_004

Brand utbröt under natten i ett lager. Lagret var en betongbyggnad som innehöll konstgödningsämnen av varierande sammansättning. Brandorsaken är inte känd, men kan ha varit orenheter i konstgödningsämnena. Branden spreds till högar av ammoniumnitrat och kalciumcyanamid. Räddningstjänsten bekämpade eldhärden. Eftersom brandröken innehöll toxiska förbränningsprodukter som nitrösa gaser, klorgas, ammoniak och salpetersyra beslöts att evakuera närliggande bebyggelse. Ungefär klockan 13 kunde befolkningen återvända till sina hem. Omfattningen av evakueringen är inte angiven.

### Inblandade ämnen och mängder

	CAS Nr.	Mängd
Konstgödningsämnen 15% N, 15% P, 15% K		150 ton
Konstgödningsämnen 13% N, 13% P, 21% K		76 ton
Ammoniumnitrat (27%)		46 ton
Kalciumcyanamid	156-62-7	4 ton
<b>Förbränningsprodukter:</b>		
Kväveoxider	10024-97-2 [N <sub>2</sub> O] 10102-43-9 [NO] 10102-44-0 [NO <sub>2</sub> ]	Okänt
Salpetersyra	7697-37-2	Okänt
Klor	7782-50-5	Okänt
Ammoniak	7664-41-7	Okänt

### Skador:

Människor:	Inga personskador.
Materiella:	Anläggningen skadades. Uppgifter om kostnader saknas.
Miljö/ekologi:	Inga skador rapporterade
Infrastruktur:	Eftersom brandröken innehöll toxiska förbränningsprodukter beslöts att evakuera närliggande bebyggelse. Branden utbröt under natten, och ungefär klockan 13 kunde befolkningen återvända till sina hem. Omfattningen av evakueringen är inte angiven.

### Erfarenheter redovisade (Ja/Nej): NEJ

## Report Profile

### Identification of Report:

country: FA ident key: 1800\_002\_04

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

### Date of Major Occurrence: Time of Major Occurrence

start: 28/03/1986 start: 00:00:00

finish: 28/03/1986 finish:

### Establishment:

name:

address:

**industry:** 2008 wholesale and retail storage and distribution (incl. LPG bottling & bulk distrib., more: F1! )

Storage Activities (Storage of Agricultural Fertilizers)

**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:** 1800\_002\_04

**Accident Types:**

**release:** Yes **explosion:** No

**water contamination:** No **other:** No

**fire:** Yes

**description:**

The fire originated during the night in the sacs of fertilizing compounds ([15% N, 15% P, 15% K] and [13% N, 13% P, 21% K]). Afterwards, the fire propagated to mounds of ammonium nitrate and calcium cyanamide. The fire brigade intervened. As... see Appendix Short Report / description of accident types

**Substance(s) Directly Involved:**

**toxic:** Yes **explosive:** No

**ecotoxic:** No **other:** No

**flammable:** Yes

**description:**

- Fertilizing Compounds (15% N, 15% P, 15% K): amount involved = 150 tonnes.... see Appendix Short Report / description of substances involved

**Immediate Sources of Accident:**

**storage:** Yes **transfer:** No

**process:** No **other:** No

**description:**

The accident occurred in a storage of chemical fertilizers sited in a concrete hangar. When the accident occurred, the storage was containing: 150 tonnes of fertilizers (15% N, 15% P, 15% K) in sacs; 76 tonnes of fertilizers (13% N, 13% P, ... see Appendix Short Report / description of immediate sources

**Suspected Causes:**

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

**human:** No **other:** Yes

**description:**

CAUSE:

The causes of the fire have not been identified (it was probably due to the presence of impurities in the stored fertilizers compounds).

**Immediate Effects:**

**material loss:** Yes

**human deaths:** No

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

**other:** No

**ecological harm:** No

**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:** Yes

**description:**

INTERNAL TO THE ESTABLISHMENT:... see Appendix Short Report / description of emergency measures taken

**Immediate Lessons Learned:**

**prevention:** No **other:** Yes

**mitigation:** No

**description:**

MEASURES TO PREVENT ANY RECURRENCE OF SIMILAR ACCIDENTS:

When the Original Report was prepared, the manufacturer was proceeding to an investigation.

## A Occurrence Full Report

**country:** FA **ident key:** 1800\_002\_04

## 1 Type of Accident

**remarks:** The fire (code 1201) originated during the night in the sacs of fertilizing compounds ([15% N, 15% P, 15% K] and [13% N, 13% P, 21% K]). Afterwards, the fire propagated to mounds of ammonium nitrate and calcium cyanamide. The fire brigade in... see Appendix Full Report A / type of accident

## 2 Dangerous Substances

**remarks:** The total establishment and the potential directly involved inventories of fertilizing compounds ([13% N, 13% P, 21% K] and [15% N, 15% P, 15% K]) refer to the whole amounts stored. Only the fertilizing compounds in sacs were involved in th... see Appendix Full Report A / dangerous substances

## 3 Source of Accident

**illustration:** - not applicable -

**remarks:** The accident occurred in a storage of chemical fertilizers sited in a hangar (codes 2008 and 3202). There were stored in sacs (code 4003): 150 tonnes of fertilizers (15% N, 15% P, 15% K); 76 tonnes of fertilizers (13% N, 13% P, 21% K); 46 t... see Appendix Full Report A / source of accident - remarks

## 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** 5501 other: not identified

- not applicable -

- not applicable -

- not applicable -

- not applicable -

**remarks:** The causes of the fire have not been identified (it was

probably due to the presence of impurities in the stored fertilizing

compounds) [code 5501].

## 6 Discussion about the Occurrence

- not applicable -

**Type of Accident country:** FA **ident key:** 1800\_002\_04

**event:**

**major occurrence** 1401 other: combustion products into air

**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:** 1800\_002\_04

**a) total establishment inventory**

**CAS number: identity:** White Lime

**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):** 140

**use of substance as:** NORMAL FINISHED PRODUCT

**b) substance belongs to relevant inventory directly involved:** Yes

**actual quantity:** -1 **potential quantity:** 140

**c) substance belongs to relevant inventory indirectly involved:** No

**actual quantity:** -1 **indir\_pot\_quant:** -1

**a) total establishment inventory**

**CAS number: identity:** Nitrogen Oxide

**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:** ABNORMAL 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:** 10024-97-2 **identity:** Nitrogen Monoxide

**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:** ABNORMAL 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:** 10102-44-0 **identity:** Nitrogen Dioxide

**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:** ABNORMAL 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:** 7697-37-2 **identity:** Nitric Acid

**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:** ABNORMAL 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: Fertilizers(15% N,15% P,15% K)**

**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): 425**

**use of substance as: NORMAL FINISHED PRODUCT**

**b) substance belongs to relevant inventory directly involved: Yes**

**actual quantity: 150 potential quantity: 425**

**c) substance belongs to relevant inventory indirectly involved: No**

**actual quantity: -1 indir\_pot\_quant: -1**

**a) total establishment inventory**

**CAS number: 7782-50-5 identity: Chlorine**

**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: ABNORMAL 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: 156-62-7 identity: Calcium Cyanamide**

**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): 4**

**use of substance as:** NORMAL FINISHED PRODUCT

**b) substance belongs to relevant inventory directly involved:** Yes

**actual quantity:** 4 **potential quantity:** 4

**c) substance belongs to relevant inventory indirectly involved:** No

**actual quantity:** -1 **indir\_pot\_quant:** -1

**a) total establishment inventory**

**CAS number:** identity: Ammonium Nitrate (27%)

**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):** 846

**use of substance as:** NORMAL FINISHED PRODUCT

**b) substance belongs to relevant inventory directly involved:** Yes

**actual quantity:** 46 **potential quantity:** 846

**c) substance belongs to relevant inventory indirectly involved:** No

**actual quantity:** -1 **indir\_pot\_quant:** -1

**a) total establishment inventory**

**CAS number:** 1336-21-6 **identity:**

**name from Seveso I Directive:** Ammonia

**name from Seveso II Directive:** - not applicable -

**category from Seveso II:** toxic

**other hazards (1):** flammable liquids

**other hazards (2):** - not applicable -

**maximum quantity (tonnes):** -1

**use of substance as:** ABNORMAL 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

**Source of Accident - Situation country:** FA **ident key:** 1800\_002\_04

**situation**

**industry**

**initiating event** 2008 wholesale and retail storage and distribution (incl. LPG bottling & bulk distrib., more: F1! )

**associated event** - not applicable -

**activity/unit**



**major occurrence** 3202 storage: distribution-associated (not on-site of manufacture)

**initiating event** 3202 storage: distribution-associated (not on-site of manufacture)

**associated event** - not applicable -

**component**

**major occurrence** 4003 container; non-pressurised (hopper, tank, drum, bag, etc.)

**initiating event** 4003 container; non-pressurised (hopper, tank, drum, bag, etc.)

**associated event** - not applicable -

## B Consequences Full Report

**country:** FA **ident key:** 1800\_002\_04

**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** As the smoke produced by the fire was containing toxic combustion products (such... see Appendix Full Report B / area concerned – remarks

**2 People**

**establishment popul. emergency personnel off-site population**

**total at risk** -1 -1 -1

**immediate fatalities** 0 0 0

**subsequent fatalities** 0 0 0

**hospitalizing injuries** 0 0 0

**other serious injuries** 0 0 0

**health monitoring** 0 0 0

**remarks** No people were injured by the fire. As the smoke produced by the fire was contain... see Appendix Full Report B / people

**3 Ecological Harm**

**pollution/contamination/damage of:**

- residential area (covered by toxic cloud) not applicable

- 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 BFr ECU BFr

**material losses** -1 -1 -1 -1

**response, clean up, restoration** -1 -1 -1 -1

**remarks** The fire caused damages to the installation but no data are available about the ... see Appendix Full Report B / material loss

#### 6 Disruption of Community Life

**establishment/plant evacuated disabled/unoccupiable destroyed**

- **nearby residences/hotels** Yes No No

- **nearby factories/offices/small shops** Yes No No

- **schools, hospitals, institutions** Yes No No

- **other places of public assembly** Yes 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** As the smoke produced by the fire was containing toxic combustion products (such... see Appendix

#### 7 Discussion of Consequences

## Ecological Components involved

country: FA ident key: 1800\_002\_04

type: 6102 inland: urban development

threatened: not applicable affected: not applicable

## C Response Full Report

country: FA ident key: 1800\_002\_04

### 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**

When the Original Report was p... see Appendix Full Report C / lesson learned - prevent

**measures to mitigate consequences:**

When the Original Report was p... see Appendix Full Report C / lesson learned - mitigate

**useful references:** not given

**5 Discussion about Response**

- not applicable -

## **Appendices for the FA / 1800\_002\_04 report**

**Appendix Short Report / description of accident types:**

The fire originated during the night in the sacs of fertilizing compounds ([15% N, 15% P, 15% K] and [13% N, 13% P, 21% K]). Afterwards, the fire propagated to mounds of ammonium nitrate and calcium cyanamide. The fire brigade intervened. As the smoke produced by the fire was containing toxic combustion products (such as chlorine, nitrogen oxides, ammonia, nitric acid), it was decided to evacuate the nearby population for a while.

**Appendix Short Report / description of substances involved:**

- Fertilizing Compounds (15% N, 15% P, 15% K): amount involved = 150 tonnes.

- Fertilizing Compounds (13% N, 13% P, 21% K): amount involved = 76 tonnes.

- Ammonium Nitrate (27%): amount involved = 46 tonnes.

- Calcium Cyanamide (C.A.S. CODE: 156-62-7): amount involved = 4 tonnes.

No data are available about the amount of the combustion products of the fertilizing compounds involved in the fire.

- Nitrogen Oxides (C.A.S. CODE: 10024-97-2 [N<sub>2</sub>O], C.A.S. CODE: 10102-43-9 [NO], C.A.S. CODE: 10102-44-0 {NO<sub>2</sub>]): amount involved = not known.

- Nitric Acid (C.A.S. CODE: 7697-37-2): amount involved = not known.

- Chlorine (C.A.S. CODE: 7782-50-5, E.E.C. CODE: 017-001-00-7): amount involved = not known.

- Ammonia (C.A.S. CODE: 7664-41-7, E.E.C. CODE: 007-001-00-5): amount involved = not known.

**Appendix Short Report / description of immediate sources:**

The accident occurred in a storage of chemical fertilizers sited in a concrete hangar. When the accident occurred, the storage was containing: 150 tonnes of fertilizers (15% N, 15% P, 15% K) in sacs; 76 tonnes of fertilizers (13% N, 13% P, 21% K) in sacs; 46 tonnes of ammonium nitrate (27%) in sacs; 4 tonnes of calcium cyanamide in sacs. Also, were stored (not in sacs): 275 tonnes of fertilizers (15% N, 15% P, 15% K); 381 tonnes of fertilizers (13% N, 13% P, 21% K); 800 tonnes of ammonium

nitrate (27%); 140 tonnes of white lime.

**Appendix Short Report / description of immediate effects:**

**MATERIAL LOSS:**

The fire caused damages to the installation but no data are available about the cost of the material losses.

**COMMUNITY DISRUPTION:**

As the smoke produced by the fire was containing toxic combustion products (such as chlorine, nitrogen oxides, ammonia, nitric acid), the fire brigade decided to evacuate the nearby population for a while. At about 13:00 pm people could return to their houses.

**Appendix Short Report / description of emergency measures taken:**

**INTERNAL TO THE ESTABLISHMENT:**

The fire brigade intervened to extinguish the fire.

**EXTERNAL TO THE ESTABLISHMENT:**

As the smoke produced by the fire was containing toxic combustion products (such as chlorine, nitrogen oxides, ammonia, nitric acid), the fire brigade decided to evacuate the nearby population for a while. At about 13:00 pm people could return to their houses.

**Appendix Full Report A / type of accident:**

The fire (code 1201) originated during the night in the sacs of fertilizing compounds ([15% N, 15% P, 15% K] and [13% N, 13% P, 21% K]). Afterwards, the fire propagated to mounds of ammonium nitrate and calcium cyanamide. The fire brigade intervened. As the smoke produced by the fire was containing toxic combustion products (such as chlorine, nitrogen oxides, ammonia, nitric acid) [code 1401], it was decided to evacuate the nearby population for a while.

**Appendix Full Report A / dangerous substances:**

The total establishment and the potential directly involved inventories of fertilizing compounds ([13% N, 13% P, 21% K] and [15% N, 15% P, 15% K]) refer to the whole amounts stored. Only the fertilizing compounds in sacs were involved in the fire. No data are available about the amount of the toxic combustion products (ammonia, chlorine, nitric acid, nitrogen oxides) released by the combustion of the fertilizing compounds involved in the fire.

**Appendix Full Report A / source of accident - remarks:**

The accident occurred in a storage of chemical fertilizers sited in a hangar (codes 2008 and 3202). There were stored in sacs (code 4003): 150 tonnes of fertilizers (15% N, 15% P, 15% K); 76 tonnes of fertilizers (13% N, 13% P, 21% K); 46 tonnes of ammonium nitrate (27%); 4 tonnes of calcium cyanamide. Also, were stored (not in sacs): 275 tonnes of fertilizers (15% N, 15% P, 15% K); 381 tonnes of fertilizers (13% N, 13% P, 21% K); 800 tonnes of ammonium nitrate (27%); 140 tonnes of white lime.

**Appendix Full Report B / area concerned - remarks:**

As the smoke produced by the fire was containing toxic combustion products (such as chlorine, nitrogen oxides, ammonia, nitric acid), the fire brigade decided to evacuate the nearby population for a while. At about 13:00 pm people could return to their houses. No data are available about the number of people involved in the evacuation.

**Appendix Full Report B / people:**

No people were injured by the fire. As the smoke produced by the fire was containing toxic combustion products (such as chlorine, nitrogen oxides, ammonia, nitric acid), the fire brigade decided to evacuate the nearby population for a while. At about 13:00 pm people could return to their houses. No data are available about the number of people involved in the evacuation.

**Appendix Full Report B / ecological harm:**

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

**Appendix Full Report B / material loss:**

The fire caused damages to the installation but no data are available about the cost of the material losses.

**Appendix Full Report B / disruption of community life:**

As the smoke produced by the fire was containing toxic combustion products (such as chlorine, nitrogen oxides, ammonia,

nitric acid), the fire brigade decided to evacuate the nearby population for a while. At about 13:00 pm people could return to their houses. No data are available about the number of people involved in the evacuation.

**Appendix Full Report C / lesson learned - prevent:**

When the Original Report was prepared, the manufacturer was proceeding to an investigation.

**Appendix Full Report C / lesson learned - mitigate:**

When the Original Report was prepared, the manufacturer was proceeding to an investigation.