

Currenta Incident in Leverkusen-Bürrig, Germany

Explosion on 27th July 2021



Currenta Incident

- Explosion occurred on 27th July in the Waste Management
 Centre in Leverkusen
- Followed by a Fire
- 7 Fatalities
- 31 Injured



Timetable of Incident

- 9:37 Emergency call to the works fire brigade
- 9:46 Fire brigade arrives on site
- 9:47 Emergency medical services take care of injured
- 9:49 Sirens in Leverkusen
- 9:51 Warning via app is launched



- 10:00 Highways closed by the police
- 11:02 Information Hotline is launched
- 12:15 Fire brigade reports: "Fire out"

HESSEN

Before the explosion



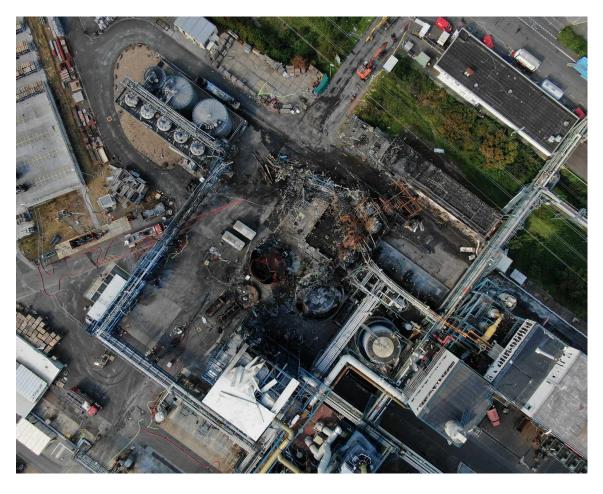
HESSEN

After....





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Initial measures after the event

- Searching for missing people
- Protection of storage tanks, pipework and road tankers (cooling)
- Sampling and measurement for airborne contamination in the area:
 - No hazardous pollutant levels were detected



What happened?

- An explosion occured in one of the waste storage tanks
- Main components of the tank contents:
 - O,O'-Dimethyl Dithiophosphate (CAS-No. 756-80-9)
 - Dimethyl thiophosphonate (CAS-No. 5930-72-3)
 - O,O,O,O-tetramethyl thiodiphosphate (CAS-No. 5930-73-4)
 - Tetramethyl thioperoxydiphosphate (CAS-No. 5930-71-2)
- Investigation is still ongoing



Suggested Cause for the Explosion

(Source: First interim report for the safety assessment)

- Storage of the substance above the self-heating temperature
- Chemical self-heating
- Rising temperature
- Rising pressure
- Activation of the safety systems for pressure relief (insufficient)
- Bursting of the vessel
- Chemical explosion
- Fire
- https://www.currenta-info-buerrig.de/wp-content/uploads/2021/08/20210830_PI_Explosion-im-Currenta-Entsorgungszentrum-%E2%80%93-Erstes-Zwischengutachten-entha%CC%88lt-Hinweise-zur-Ursache.pdf



Root cause analysis is ongoing

- The investigation involves:
 - The operating company: Currenta
 - The State Prosecutor investigating possible culpable homicide
 - The Environmental Authority investigating (a) possible breaches of the operating permit, (b) the causes under the Major Accident Ordinance (Seveso-III-Directive)
 - External experts working on behalf of the organisations above



Currenta is working hard to restore trust within the workforce and the community

- Biomonitoring of the staff
- Cleaning of the neighbouring area: e.g. streets, playgrounds
- Very detailed and transparent information to the public
 - Involving senior management
 - Providing facts and explaining their meaning
 - Also providing information from conflicting views (Greenpeace)
 - Using graphics, videos and photos to provide clear information
 - https://www.currenta-info-buerrig.de/

HESSEN

Cleaning of the neighbouring area: e.g. streets, playgrounds











Questions?