

News Release



Update: Fire at the North Harbor in Ludwigshafen

On Monday, October 17, 2016, there was an explosion and subsequent fires at the North Harbor in Ludwigshafen. "We mourn two colleagues from the fire department and the seaman who died in the fire. Our deepest sympathy is with their families and friends. Many people were injured, some of them severely. Our thoughts are with them and their families and friends. We hope that they are on the way to recovery," said Dr. Kurt Bock, Chairman of the Board of Executive Directors of BASF at a press conference in Ludwigshafen, Germany.

The following information is currently known about the accident:

Victims: Two employees of the BASF fire department and an employee of a tanker which was anchored in the harbor died in the accident. Eight people were seriously injured, 22 others were slightly injured. One of the seriously injured has been released from the hospital.

Course of events: The course of events is still being investigated by the public prosecutor's office of Frankenthal. The incident site is still locked. A few days prior to the accident, a specialized pipeline construction company began to conduct assembly works on a deflated and secured ethylene pipeline route. The aim of the assembly works was to exchange several parts of the pipeline as a preventive maintenance measure. On October 17, a fire started at 11:30 a.m. near the assembly works. Forces of the BASF fire department, emergency service and environment protection arrived a few minutes later at the incident area and immediately started emergency operations. During the initiation of emergency operations an

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explosion, most likely at the ethylene pipeline, occurred. The explosion led to subsequent fires at various points along the pipeline trench, damaging further product and supply pipelines. Additional emergency forces immediately began rescue measures as well as extinguishing and cooling measures. "The emergency forces operated in an extreme situation. Their effort cannot be expressed in words," said Margret Suckale, Member of the Board and Site Director of Ludwigshafen.

The fire brigade performed controlled burning of the leaking products in accordance with the fire-fighting concept for compressed gases. The pipelines that burned included those used for ethylene, propylene, a butylene product mix (raffinate), pyrolysis gasoline and ethylhexanol. As of October 17, 9.30 p.m., the emergency forces extinguished the fire.

Environmental impact: Following the start of the fire, comprehensive air measurements were conducted at the site gate and in areas surrounding the site in Ludwigshafen and Mannheim. The measurements showed no elevated levels of hazardous substances, as confirmed by the environmental ministry of Rheinland-Pfalz and the city of Ludwigshafen. Additional measurements conducted by the cities of Speyer, Worms and Frankenthal showed no elevated levels. Elevated levels measured locally were restricted to the immediate area of the incident. BASF has published the results of the air measurements as well as an overview map [online](#). Water samples also showed no elevated levels of hazardous substances. A contamination of the ground at the incident site is likely.

Status of the investigation: On October 26, the District Attorney of Frankenthal/Palatinate and the Police Headquarters of Rheinpfalz announced the following information on the progress of the investigation:

"In the course of intensive investigations directly at the scene of the incident, it has been established that there was a cut made in a pipeline. This was apparently done with a cutting disc. Maintenance work using an angle grinder was in progress on an adjacent pipeline.

The cut pipeline was not part of this work. This pipeline contained flammable raffinate.” (Excerpt of the press release from District Attorney of Frankenthal/Palatinate and the Police Headquarters of Rheinpfalz, translated by BASF).

According to the current, preliminary evaluation, this could be the chain of causes: The cut pipeline contained a butylene mixture. BASF assumes that this butylene mixture leaked out and ignited due to the sparks produced by the angle grinder. This could have led to the fire, which caused the described explosion. BASF will continue to support the relevant authorities during the investigation into the cause of the accident.

Safety at the Ludwigshafen site: Safety is the first priority on the Ludwigshafen site as well as globally at BASF. Environmental protection, health and safety are important components of the corporate values and objectives. BASF acts responsibly and always gives priority to safety when operating existing plants or planning and constructing new plants. During the past 10 years, more investments have been made yearly in the Ludwigshafen site than depreciated. As a result the company has been able to renew more than one-third of the fixed assets on-site, thus making it safer and sustainable. Additionally a total of 10 billion euro has been invested in maintenance and repair, increasing annually.

The plants on-site are in reliable condition. This is confirmed by inspections conducted by various relevant authorities as well as internal audits. Every year, more than 300 on-site appointments with supervisory authorities take place in Ludwigshafen; 160 of these are announced or unannounced inspections. Landeshafen North and the damaged pipelines were inspected in September 2012 as planned. The inspections resulted in no technical or organizational deficiencies.

Economic effects and next steps: Due to the fire, the raw material supply of the steamcrackers was halted; also other Verbund plants, especially in the ethylene and propylene value chains, were idled or production reduced. Some of the plants were able to continue producing using existing raw material inventory. Meanwhile several

plants, like the steamcrackers, started production. In the coming weeks the remaining plants will be gradually restarted. BASF is evaluating various measures to minimize the impact on customer deliveries. BASF immediately informed the affected customers and is in close contact with them to keep them informed about the current availability of products.

Situation of the Logistic: The North Harbor is currently not operational. The riverside harbor, the harbor on Friesenheim Island and the tank farms are functional. Fluids can be handled at the harbor on Friesenheim Island. At the river harbor fluids and solids can be handled. Due to safety measures the access at gate 15 is not possible. Access via gate 15 will likely be possible for trucks in the upcoming week (calendar week 44). However the registration for trucks will be handled via the parking space of the sewage plant of BASF for the next few days. During this transition period trucks will have access to the site via several gates. Thereafter the complete handling process will be possible at gate 15. The intermodal transport terminal is still closed. The facility is not damaged and preparations are being done to reopen it in the upcoming week (calendar week 44). The railway system was also not damaged by the incident. The train service on-site is available.