

Natural gas pipeline rupture

EPSC Learning Sheet February 2025



What Happened:

During the dig out of an 80 bar natural gas pipeline for repair, a corrugated steel plate was driven into the pipeline, which then ruptured (Oppau Germany 2014). The released gas exploded and a huge jet fire in a populated area resulted in two fatalities and damages to surroundings.



Aspects:

- Heat radiation damaged buildings and cars in a 200 m radius
- Perform a hazard and risk assessment before starting ground work. Use specific permit to work forms, for approval.
- Know the exact position of underground pipelines before starting ground work. Do not trust maps. Validate the precise location in the field.
- Use of non-aggressive techniques for excavation, like working with hand tools or vacuum cleaners.
- Minimize personnel at the digging location.

**Avoid damages to pipelines when doing
groundwork**