



Evacuation of the Town of Debelec, Region Veliko Tarnovo

Town of Debelec



Debelc is a town in North Bulgaria. It is a part of the Municipality Veliko Tarnovo, region Veliko Tarnovo and is situated near the towns Veliko Tarnovo, Kilifarevo and Dryanovo.

Debelec is located 6 km south from Veliko Tarnovo and 225 km east from Sofia. Near to Debelec passes the main road Rouse – Stara Zagora and the railroad Rouse – Podkova.



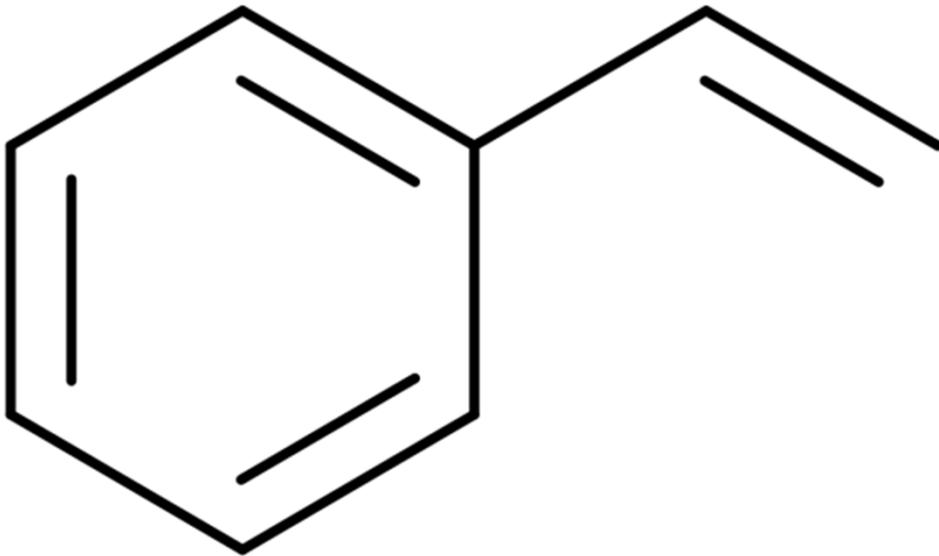


The Accident

On the 11th of July 2011 at 00:48h the call center 112 Rouse received a message regarding an accident with dangerous substances (Styrene) on the main road 1-5 close to Debelec, near the turnout to the passageway „Hainboas“. There was a road accident with a „Renault“ tank trunk with a Turkish driving license has come out of the road and has rolled over. Due to that the tank has unpressurized and about five tons of the dangerous substance styrene has been spilled out. As a result a gas cloud accured and moved to Debelec. Because of the air currents, a part of the chemical gased the town, and scattered along the river Yantra.



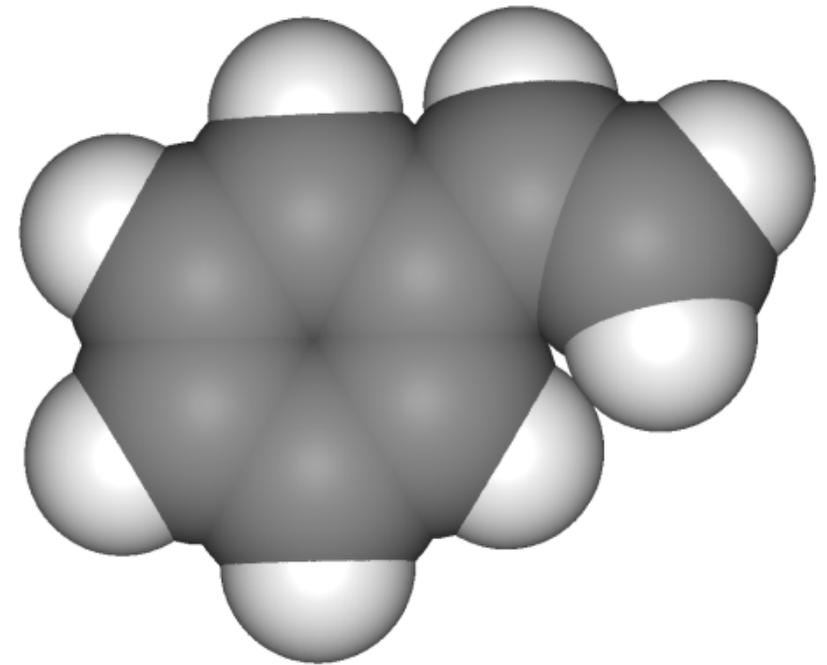
Styrene



Styrene (chemical formula C_8H_8 – phenylethylene, vinylbenzene, styrene), is a volatile colorless liquid, which is used for the production of polymers. It is an unsaturated hydrocarbon with an open carbon chain, in which the molecules between the carbon atoms are double or triple bonded. The styrene is practically insoluble in water but is well dissolved in organic solvents. Sources of air pollution are mainly petrochemical plants and those for the production of plastics and resins.

Styrene

Styrene penetrates into the body by inhalation and to a small extent through the skin. It spreads rapidly in the body and accumulates mainly in the adipose tissue. It causes inflammation of the eyes, digestive tract disorders and depression. Professional respiratory tract irritation has been observed in professional exposure to Styrene. The effects on the central nervous system are fatigue, headache, dizziness.



Measures

Immediately teams from the Fire Station in Veliko Tarnovo, a group of “Rescue activity” and the leadership of the Directory Regional Fire Safety and Civil Protection V. Tarnovo immediately arrived at the place of the accident. National Operational Center to Directory General Fire Safety and Civil Protection, Regional Directory of the Interior Ministry V. Tarnovo, Environmental Protection Inspection have also been informed. A Security Staff has been formed under the direction of the District Governor Doc. Dr. Pencho Penchev. The deputy direction of Directory General Fire Safety and Civil Protection - Commissioner Stefko Burdzhiev also arrived immediately. A state of emergency was declared with a starting time of 03.00h on the 11th of July 2011 in the town of Debelec with an order from the mayer of Municipality V. Tarnovo, and the municipal plan for the Protection of Industrial Accidents, Biological and Bacterial Pollution has been introduced.



After taking into account the exceedance of the emission limit values in the atmosphere, the following solutions have been taken:

- Launch the tank with a foaming solution;
- Periodically measure harmful emissions and monitor the direction of the wind;
- To evacuate the citizens of the town of Debelets;
- Restrict access to the place of the incident within a radius of 150 - 200 meters;
- Create an organization to collect additional forces and resources, as well as attract specialized equipment for straightening, withdrawing and evacuating the tank;
- The Environmental Protection Inspection Director creates an organization for water and soil sampling from the affected area





Evacuation of the citizens

The citizens of Debeleç were informed about conducting the evacuation by the mass media, the synergetic system was activated and volunteers were organized to support evacuation efforts. About 8 evacuation buses were used for the evacuation – from the Town of Veliko Tarnovo, emergency vehicles and private cars were arranged, too. The closure of road traffic is organized by the authorities of Regional Directory of the Interior Ministry V. Tarnovo for the purpose of prevention pollution of passing cars.



Evacuation of the citizens



By 05:00h 350 residents from the houses near the Belitsa River have been evacuated, and the gradual evacuation of the entire town continues. 51 children were evacuated from a children's home in Debelec, 20 of them are babies and are housed in a branch of the home in Veliko Tarnovo.

A total of 2,500 people were evacuated to the village of Prisovo and the town of Veliko Tarnovo by 7:00 h.



Activities For The Termination of The Leaks

The accident was remedied by 3 fire-fighting vehicles, 1 emergency-rescue vehicle, 1 chemical protection vehicle with 17 employees at the Fire Station Tarnovo, 10 cars with 42 employees of the Regional Development Agency - Veliko Tarnovo.





Heavy-duty crane of the National Railway Infrastructure Company (NRIC), with the help of constant cooling, the failing tanker is up and running back on the roadway. The Styron substance has been fouled into a tugboat trailer. The freight train was accompanied by a special parking lot near the town of Veliko Tarnovo and handed over to the customs authorities.

Results From The Accident

- A part of the soil is Contaminated at the site of the accident;
- Destroyed is part of the fish in the Yantra River;
- BGN 28000 is the cost, incurred for the liquidation of the accident;
- The normal rhythm of life is restored after 24 hours.



Thank you for your attention

