An explosion at a Chicago chemical plant on Friday night has left three people dead and four others injured, officials have confirmed.

The blast erupted at the AB Specialty Silicones plant in Waukegan at 9:45pm on Friday night, ‘levelling’ the large structure.

A local resident's doorbell camera captured the dramatic moment a ball of fire erupted into the night sky, causing surrounding homes to tremble as and debris to fall to the ground below.

Another terrified local remarked that it 'felt like an earthquake' had struck the Illinois town.

Officials say the cause of the explosion is still not yet known. All of those affected by the blast are employees of AB Specialty Silicone. The four injured workers were taken to local hospitals with injuries ranging from moderate to severe.

The plant was open and in operation when the blast rang out.

It is estimated that damage to buildings in the area is likely to exceed $1 million. At least five surrounding structures are thought to have been affected.