

„Jowisz” Mine

History

The mining plant extracting a coal deposit in the years 1910–2006 in the northeastern part of the Upper Silesian Coal Basin in the Wojkowice commune. In 1997, in the central part of the original mining area, an area of approximately 4.5 km² was separated in the subsoil of which until 2000 mining was carried out by the "Wojkowice" Mine. The plant was finally closed down in 2006. The mining area of the zinc and lead ore mine "Orzeł Biały" is superimposed on the southwestern part of the "Jowisz" mine. This mine exploited the ore deposit being the part of overburden of the coal deposit.

Geology

Quaternary, Triassic and Carboniferous deposits are involved in the geological structure. The thickness of Quaternary deposits on the majority of the area is insignificant. It increases only in the valleys of streams and the Brynica river. The thickness of Quaternary and Triassic deposits varies from 70-170 m. These deposits cover the entire surface of the mining area. The terrain relief and the Brynica River are the causes of natural karst processes developing in the limestone-dolomitic complex of Triassic rocks.

Mining

In the mine area of “Jowisz” Mine hard coal and ore were exploited. This information covers only coal mining. Ore mining is described in the ZGH "Orzeł Biały" information file. In the coal mining area of the “Wojkowice” Mine, the coal deposit consists of seams 501, 504, 506 and 510 (Siodłowe layers), 610, 612, 615, 616, 620, 621.622 (Porębskie layers), 717 (Jakłowieckie layers), 805 and 816 (Gruszowskie layers) in the depth zone from approx. 70 to approx. 550 m (bottom of seam 620). Due to the considerable thickness of the Triassic sediment cover, shallow mining (in seam 510) was carried out only in the north-eastern part of the area near the border of "Grodziec" Mine mining area.

Sinkhole threat

The sinkhole threat is caused by both mining and geological causes (karst). During coal mining, linear deformations were formed on the surface (crevices, ditches, thresholds). They were reclaimed during the liquidation of “Wojkowice” Mine. At present, the threat to the surface is limited to the shallow exploitation region in the north-eastern part of the mining area (Alfons filling shaft area). On a three-point scale, they can be rated as average. Karst danger exists in the entire mining area of the “Jowisz” Mine, and in the southwestern part of the area (area south of the Brynica River) shallow exploitation in the zinc and lead ore deposit holds a potential threat to the surface.