### "Siemianowice" Mine

### HISTORY

The name "Siemianowice" was given to the mining plant, which was established after the end of World War II in the mining areas of several mines of various private owners operating in this area before 1945. The beginnings of exploitation in this area date back to 1855. In terms of the size of the mining property Siemianowice mine became one of the largest entities in Upper Silesia conducting coal mining. In the eastern part of the area they were German mines Fanny, Chasse, Hohenlohe. In the southern part they were: Poland, Jutrzenka, and luck of Luisa (OG Szopienice I). In fact, the boundaries of the mining areas assigned to the mine (area of 31.5 km<sup>2</sup>) went beyond the city of Siemianowice Śląskie and included areas belonging to the cities of Chorzów and Katowice (Wełnowiec, Dąbrówka, and Szopienice districts). In the post-war period, the mine's mining property included the following mining areas:

- Siemianowice I Mining Area (northern and central part of the mine properties),
- Szopienice II Mining Area,
- Pole Rezerwowe (reserve field) Mining Area.

The plant's liquidation began in the early 90's and it lasted until 1999.

# GEOLOGY

In the geological structure Quaternary, Triassic and Carboniferous deposits are involved. The Carboniferous strata falls on W and NW with the angle 4-7° degrees. The main faults include:

- Czeladzki fault throwing Carboniferous and Triassic layers 50-100m to the south
- Bańgowski fault throwing layers in an easterly direction by about 20-60 m and a plane slope of about 70°.
- System of faults running next to the Śmiłowski I, II, Wanda shafts located in the southern part of the area. A large fault with a throw amplitude of 6-100 m of on E is accompanied by faults parallel to the main dislocation, dividing the deposit into small blocks.

# MINING

In the mining area of the "Siemianowice" mine, the following seams were exploited: 414/2, 419/1, 419/2 (Rudzkie layers), 501, 504, 506, 510 (Siodłowe layers) and 615, 620 (Porębskie layers) with thickness from 0.6 to 8.5m (510).

# SINKHOLE THREAT

Shallow hard coal mining from the end of the 19th and the beginning of the 20th century was concentrated in the southern and southeastern part of the mining area of the former "Siemianowice" mine in the Katowice (Szopienice, Dąbrówka, and Wełnowiec districts) and in Siemianowice (Bytków district). In these areas, the exploitation of 501, 504, 506 and 510 seams were intensively exploited on the outcrops of the Siodłowe layers. The greatest threat exists in the shallow exploitation of 510 seam where the thickness of the extracted coal

reached 8.5m. In addition, there are numerous shafts and winders at the site of the former mine with an unknown decommissioning method, as well as unclamped galleries headings that pose a threat to the surface.