## "Paryż" Mine.

# <u>History</u>

The "Paryż" mining area was located within the boundaries of the cities of Dąbrowa Górnicza, Będzin and partly Sosnowiec and had an area of 27.00 km<sup>2</sup>. The "Paryż" mine was put into liquidation on 01.09.1993. Coal mining was completed on June 30, 1995, and the final liquidation of underground workings was ended on December 31, 1996. The beginnings of coal mining in the "Paryż" mine date back to 1783, when opencast mining began on the outcrops of seam 510 in the area of the former "Reden" mine. In the second half of the nineteenth century, exploitation of the marginal group's seams began in the area of their outcrops, the deposit was made available by the dips. Small mines were operating formerly in this area: "Flora", "Mars", "Antoni", "Albert", "Jan" and "Victoria".

## Geology

In the geological structure Quaternary, Triassic and Carboniferous deposits are involved. Carboniferous sediments occur within the range of a large tectonic structure which is the Bytom Basin. These sediments were dislocated and folded in Variscan orogenesis. The "Będzin" fault, which is a main dislocation of the course of NWW-SEE, was rejuvenated after the Triassic strata were embedded. In the southern part of the mining area, the Carboniferous layers dips at an angle of 5° to 20° towards NE; in the northern part, the dip angles are very high: 25 to 50°, and the layers are generally sloping southwards. There are two directions of tectonic dislocations in the area of the former mine: meridinal and latitudinal. The most important faults with meridian or similar course include:

- "Nordmanowski Wschodni" fault with a drop of 90 m to 160 m on E near the western border of the area,
- "Sosnowiecki" fault with 60 m drop on E,
- "Koszelewski" fault with a drop of around 50 m on W; after crossing with the "Będzin" fault its discharge increases rapidly to 210 m 230 m,
- "Paryski Zachodni" and "Paryski Wschodni" faults they run through the central part of the area creating a tectonic trench; these faults are scissor-shaped, their drops are respectively: from 0 m on W to 65 m on E and from 0 m on E to 140 m on W,
- "Cieszkowski" fault crosses the Carboniferous layers in the eastern part of the mining area; it drops layers about 100 m in E direction,
- "Redenowski" Fault runs from the border with the former "Porąbka-Klimontów" Mine to the "Skośny" fault; its drop is from 50 m to 130 m toward SSW,
- "Janowski" fault with a very variable discharge from 0 to 140 m on E

The most important faults of latitudinal or similar course include:

- "Będziński" fault running near the southern border of the area, heading NW-SE, dropping layers on SW; the drop height in Carboniferous deposits is 80-180 m; this fault was also noted in the Triassic formations, in which the height of its drop is 50-100m; this dislocation is the boundary of the Triassic deposits that have eroded in the fault's hanging wing,
- "Gzichowski" fault, dropping Carboniferous layers from 0 to 20 m on S: it seperates from the "Nordmanowski" fault in the central part of the area,
- "Józefowski" fault runs in the southern part of the area; its drop is small, 15-20 m to N,
- "Antoni" fault crosses the Carboniferous strata in the northwestern part of the mining area. This fault intersects with the "Koszelewski Zachodni" fault and its drop in this region is from 0 to 20 m; as it approaches the western border of the area, its discharge increases to 80 m.

## <u>Mining</u>

In the mining area of "Paryż" 349 and 358 seams were exploited (Orzeskie layers); 401, 404/1, 405/1, 405/3 and 409 (Rudzkie layers); 501, 504 and 510 (Siodłowe layers) and 816, 819 and 833 (Gruszowskie layers) in the depth zone from 0 to approx. 500 m. The thickness of the seams and extracted coal varied from approx. 0.7 m to 20 m (510 seam).

#### Sinkhole threat

Exists on the surface in the areas where the coal was extracted in the depth raging from 0 to 100 m. Such exploitation was carried out in seams: 349, 358, 401, 405/1, 405/3, 409, 501, 510, 816, 819 i 833. The greatest threat exists in the areas of shallow exploitation of the 510 seam due to the significant thickness of the extracted layer.