

Unique opportunities



Activity and organizing the Emergency Mine/Smelter Rescue Service at KGHM Polska Miedź S.A.

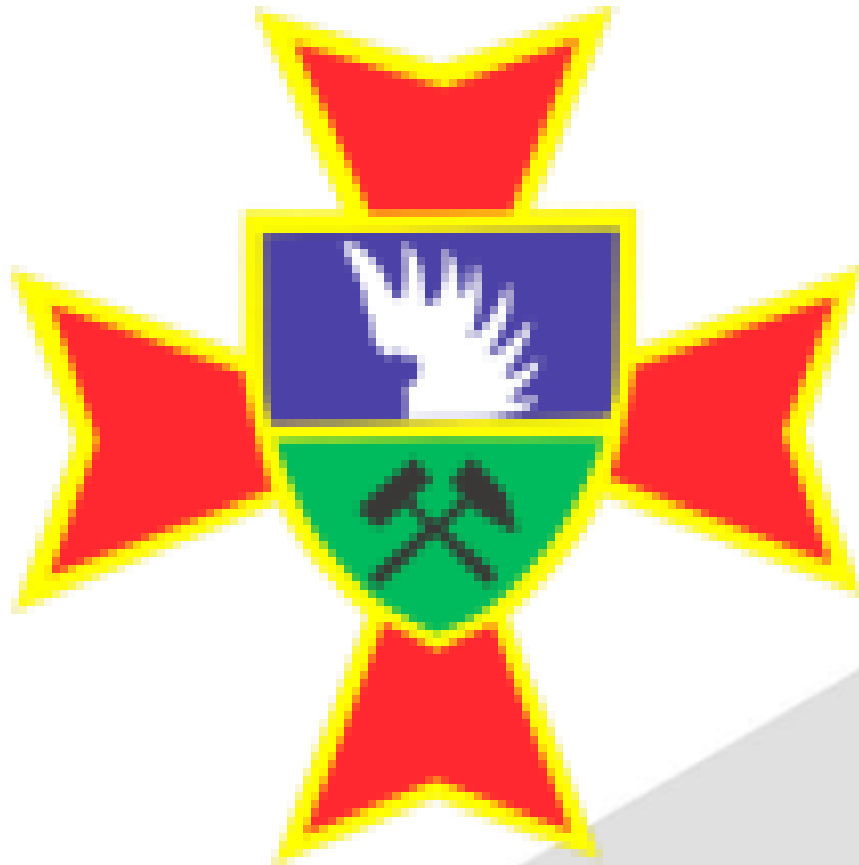


Contents

1. Emergency Mine/Smelter Rescue Service
2. Fire Service Complex
3. Mine Rescue Service
4. Examples of operations participated by the Mine Rescue Unit
 - Roof fall operation at KGHM Polska Miedź S.A.
 - Fire-fighting operation at KGHM Polska Miedź S.A.



Emergency Mine/Smelter Rescue Service



Branch at KGHM Polska Miedź S.A.

Established on 1 January 1997.

Purpose and Objectives:

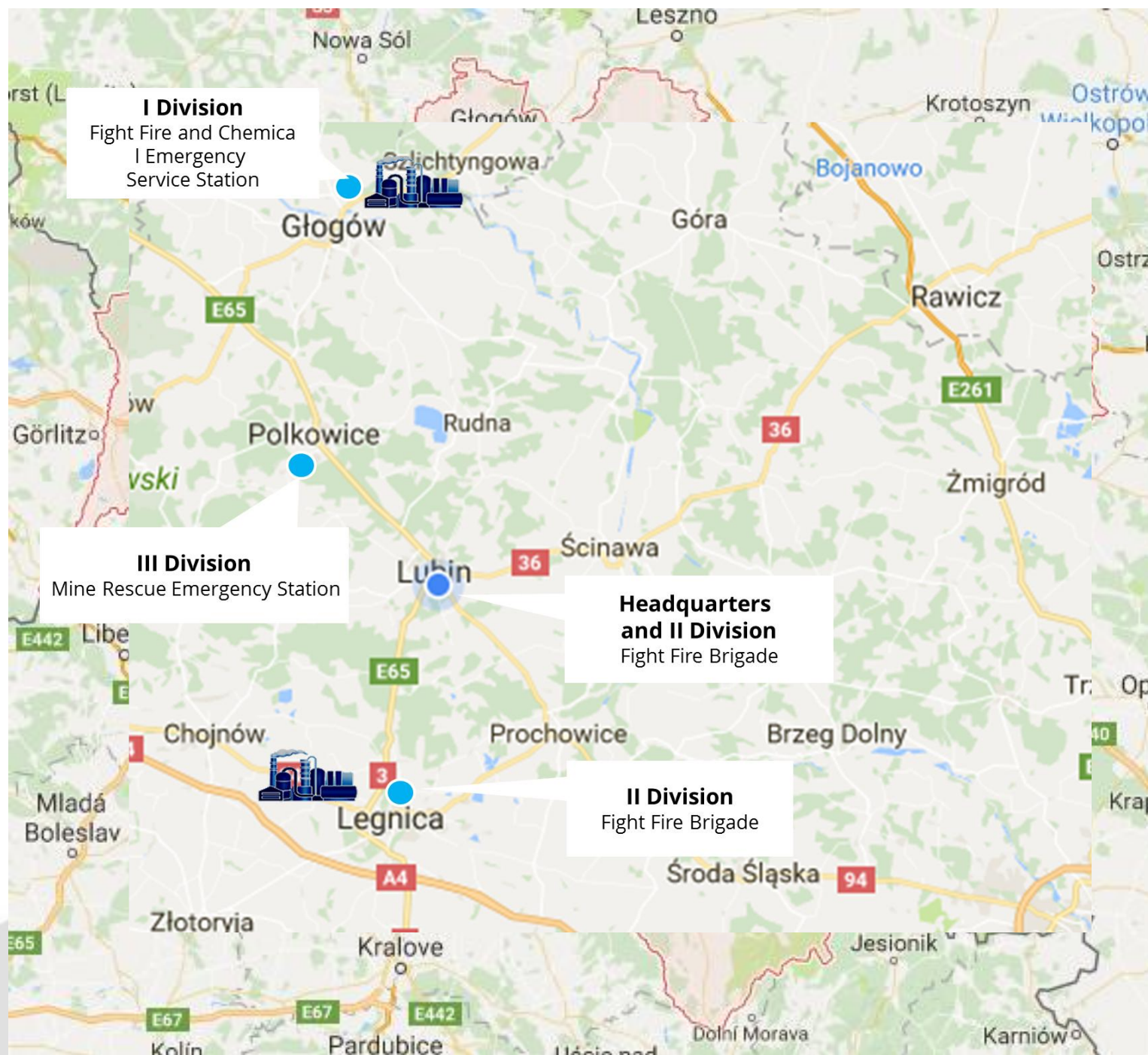
- Provision of comprehensive aid in removing the effects of rock bursts, roof falls and fires
- Ensuring safety of people and facilities within the process line

Employment: 114 people

- 81 fire-fighters
- 14 professional mine rescuers (supported by 420 volunteers)



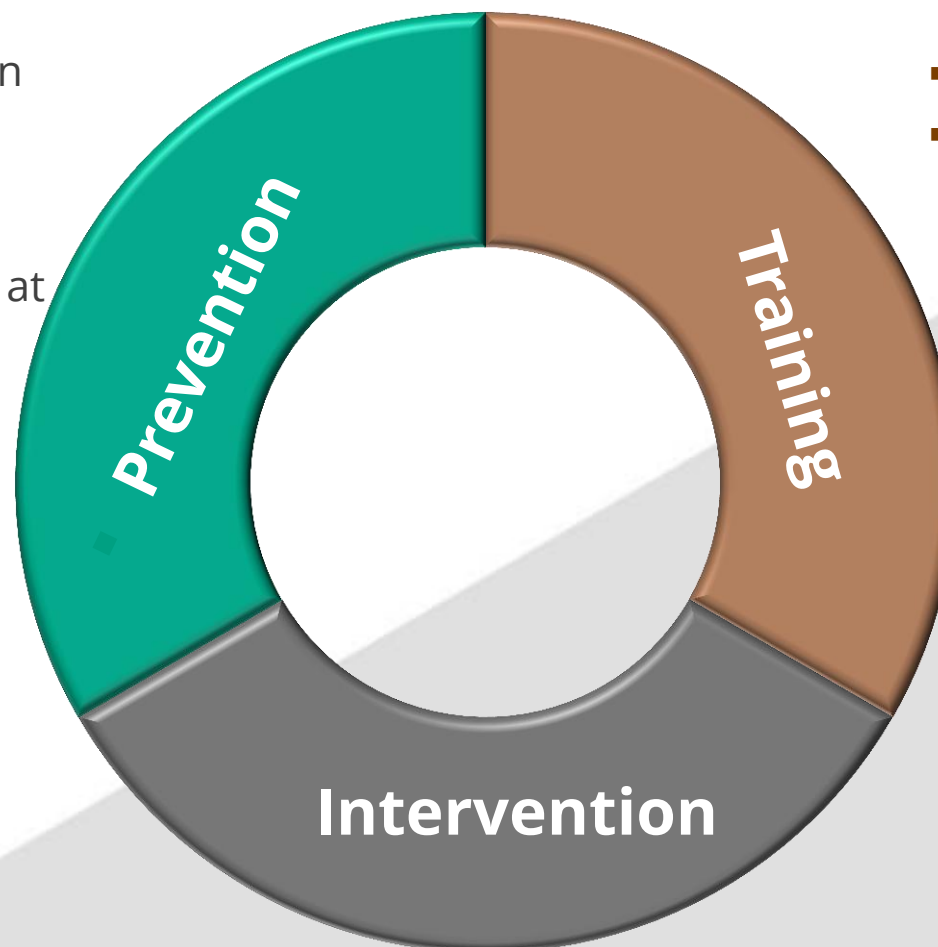
Mine and Steelworks Rescue Unit - Divisions



Responsibilities of the Emergency Mine/Smelter Rescue Service



- Identification and prevention of potential hazards and dangerous incidents
- Specialist prevention in preventive work carried out at KGHM Departments
- Technical and logistical preparation for rescue operations



- Training activities
- Experience sharing with other professional rescue units, including foreign ones in the area of KGHM global operations

- Effective rescue operations in mine, fire, chemical and environmental rescue to save human life and health
- Removal of effects and protection of property



Fire Service Complex

Division I – Fire Brigade based at ‘Głogów’ Copper Smelter



Scope of operations: fire, environmental and chemical rescue



Division II – Fire Brigade based at shafts of ‘Lubin’ Mining Plants Branch at ‘Legnica’ Copper Smelter



Scope of operations: fire and technical rescue





Mine Rescue Service

Division III – Mine Rescue Service





Organization

- **3 rescue teams** on duty **24h** a day
- The teams are composed of **rescuers** delegated from mining plants of the entrepreneur for a period of **8 days**.

Composition of rescue teams on duty:

MSRU Specialist (professional mine rescuer)	1 person
Team Leader	1 person
Patrol leader	3 people
Rescuers	12 people
Rescue equipment mechanic	1 person
Rescue doctor	1 person
Driver	1 person

Division III – Mine Rescue Service



Exercises of rescuers

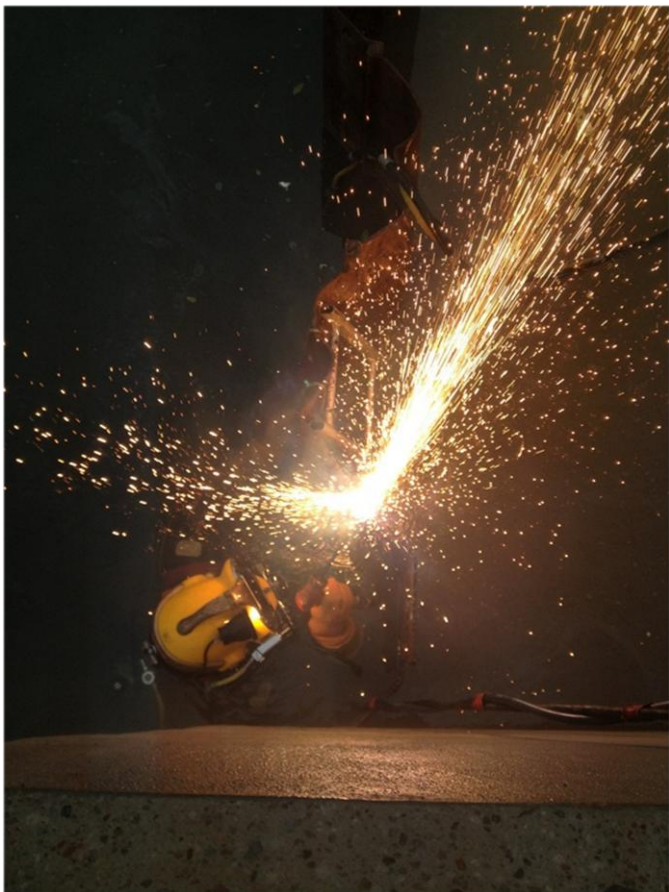


Medical care for rescue services



Division III – Mine Rescue Service

Divers' Section



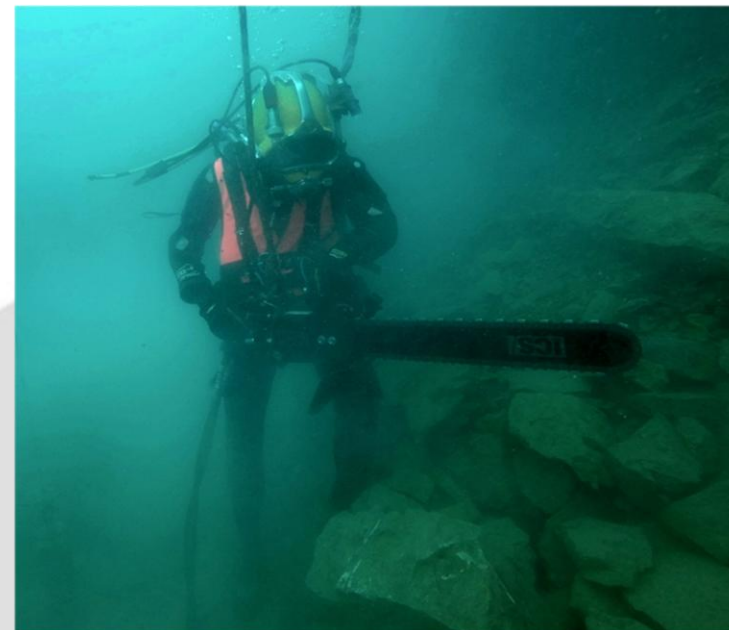
Works on the river Oder at 'Głogów' Copper Smelter



Works during removal of failure in the Ore Enrichment Plant at Branch of 'Polkowice-Sieroszowice' Mining Plants



Works during penetration of drowned vertical and high slope excavations



Exercises in a quarry

Division III – Mine Rescue Service

Rope rescue section



Training and conditioning winter camp



Training and conditioning summer camp

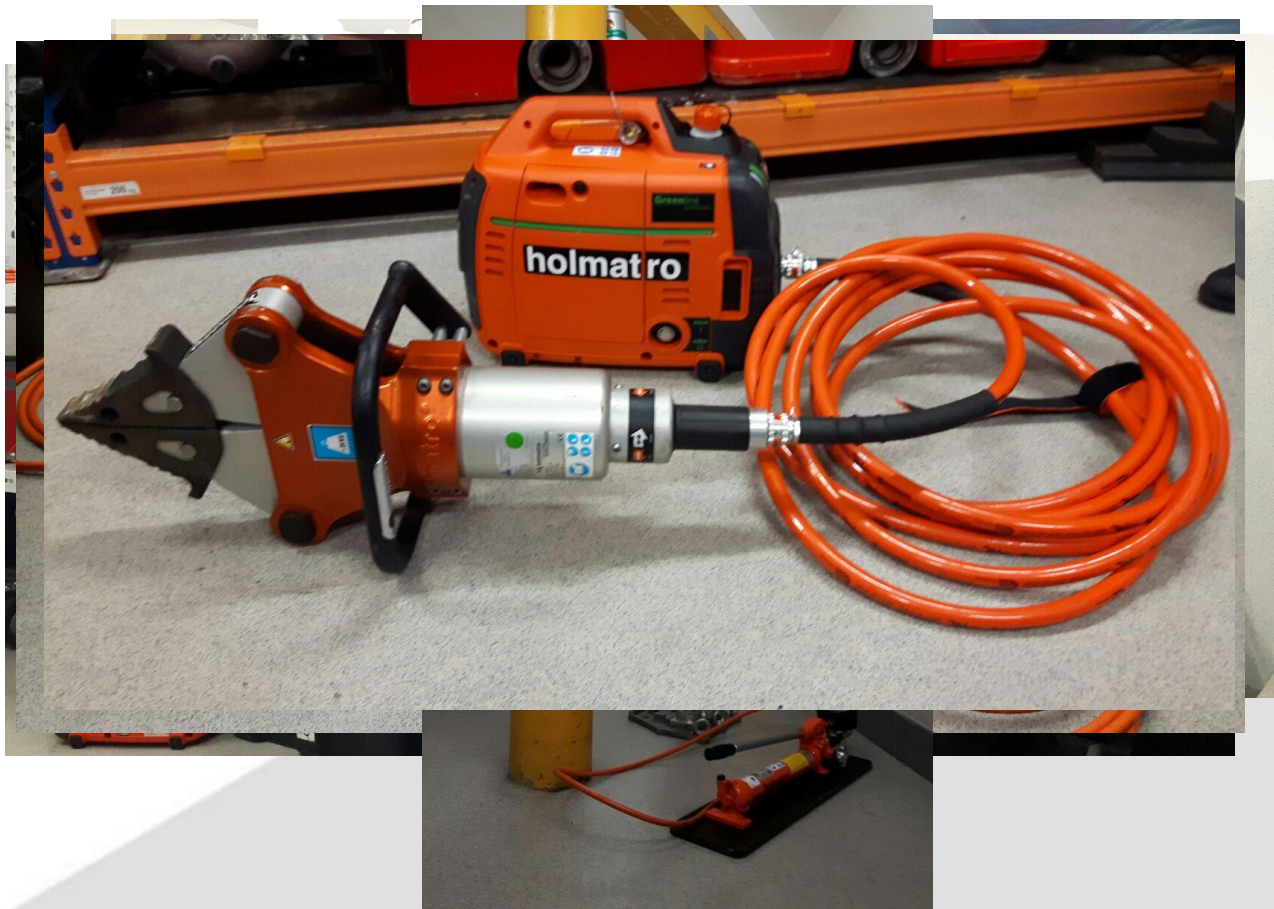


Exercises of rope rescue technicians in the seat of Mine Rescue Service



Works on 'Żelazny Most' landfill of scum layer

Specialist rescue equipment



Roof fall operation at KGHM Polska Miedź S.A. Branch in 'Lubin' Mining Plants



- During the work of shift III, rock masses fell above anchors (ca. 2.5 m), when the excavated material was loaded by the loader to the haul truck.
- As a result of fall, the haul truck and loader were buried.
- The operator of the loader was trapped in the cabin under the rubble.
- Number of rescue
- Duration of operation



Fire-fighting operation at KGHM Polska Miedź S.A. Branch in 'Lubin' Mining Plants



- The fire of LKP-0805 wheeled articulated loader went out on shift IV.
- When driving the loader, the operator noticed fumes, and then fire coming out of the engine compartment.
- Neither activation of the fire extinguishing system by the operator, nor manual use of extinguishers have put out the fire.
- Number of rescue teams
- Duration of operation



team of 'Lubin' Mining



Thank you for your attention.
