



**STATE MINING AUTHORITY
SLOVAK REPUBLIC**

**PRACTICAL
EXPERIENCES
WITH THE MINE
WATER OUTBURSTS
FROM ABANDONED
MINES IN
SLOVAKIA
ACQUIRED BY THE
STATE MINING
AUTHORITY**



**STATE MINING AUTHORITY
SLOVAK REPUBLIC**

**STATE MINING
ADMINISTRATION**

**MINISTRY OF
ECONOMY OF THE
SLOVAK REPUBLIC**

**STATE MINING
AUTHORITY**

**DISTRICT MINING
AUTHORITIES (5)**



BANSKÁ ŠTIAVNICA

MINING TOWN OF THE WORLD HERITAGE



**The first Mining Technical University
in a world was established in 1763**



**STATE MINING AUTHORITY
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**WE TACKLE TWO
PRINCIPAL ISSUES**

**ABANDONED
MINES**

**OLD MINING
WORKS**



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- In 1990 year was adopted government's programme for stifle of the ore mining
- Closure of Cu, Zn, Pb, Hg, Fe, Sb, U, Mg mines – **ABANDONED MINES**
- 1990-2009 were 81,02 mill. € spent from the state budget for technical works and social compensations



**STATE MINING AUTHORITY
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**RUDNE BANE state company
has realized this programme**

1. Project documentation

2. Work Management

3. Technical applications

- Liquidation of shafts, drifts**
- Remove of steel support Etc.**
- Remove of negative effects of abandoned mines**



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OLD MINING WORKS

- **The first known mining on Slovak territory started in 4th century B.C. and in 12th century started real mining development**
- **Original mining works keeper or his legal successor not exists or he is unknown**
- **More than 16 000 of old underground mining works are registered nowadays**



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ABANDONED MINES

&

OLD MINING WORKS

ARE REAL OR

POTENTIAL

ENVIRONMENTAL

LOADS (heavy metals,

acid mine drainage,

subsidence, pollutants)



STATE MINING AUTHORITY

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LEGISLATIVE

FRAMEWORK OF

OLD MINING WORKS

ACCORDING TO ARTICLE

35 OF THE MINING ACT

No. 44/1988 Coll.

THE MINISTRY OF

ENVIRONMENT OF THE

SLOVAK REPUBLIC

WAS UP TO 31th MAY 2007

obliged to secure or liquidate

the old mining works



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Securing or liquidation of old mining works and their consequences which represent a threat to public interests shall be taken care of to the extent necessary by Ministry of Environment of the Slovak Republic. The Ministry of Environment of the Slovak Republic shall also settle damage to property, if any caused upon the securing or liquidation of old mining works.



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**Securing or liquidation of
old mining works and
their consequences was
done by means of state or
private companies funded
from state budget and
Environmental fund to
which mining companies
pay a royalties for
mineral extraction**



STATE MINING AUTHORITY

SLOVAK REPUBLIC

LEGISLATIVE

FRAMEWORK OF

OLD MINING WORKS

ACCORDING TO ARTICLE

35 OF THE MINING ACT

No. 44/1988 Coll.

**THE MINISTRY OF
ECONOMY OF THE
SLOVAK REPUBLIC**

IS SINCE 1th JUNE 2007

**obliged to secure or liquidate
the old mining works**



STATE MINING AUTHORITY

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**Securing or
liquidation of old
mining works and
their consequences
is done by means of
Rudne bane state
company funded
from state budget**



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**LEGISLATIVE FRAMEWORK OLD
MINING WORKS (OMW)**

- **MINING ACT No. 44/1988 Coll.**
- **ACT No. 51/1988 Coll. on mining activity – mining licence for *OMW***
- **GEOLOGICAL ACT No. 569/2007 Coll. article 36 *Ministry of Environment is obliged for securing of ascertaining of OMW***
- **Regulation No. 9/1989 Coll. on registration of *OMW* - *Ministry of Environment of the Slovak Republic keeps their register. It may designate another organisation reporting to it to keep the register.***
- **Regulation No. 89/1988 Coll. *stipulates contents and details of plan for securing and liquidation of OMW***



**Hornonitrianske bane
Priedvidza,
joint stock company**

**Main Mining
Rescue Station**



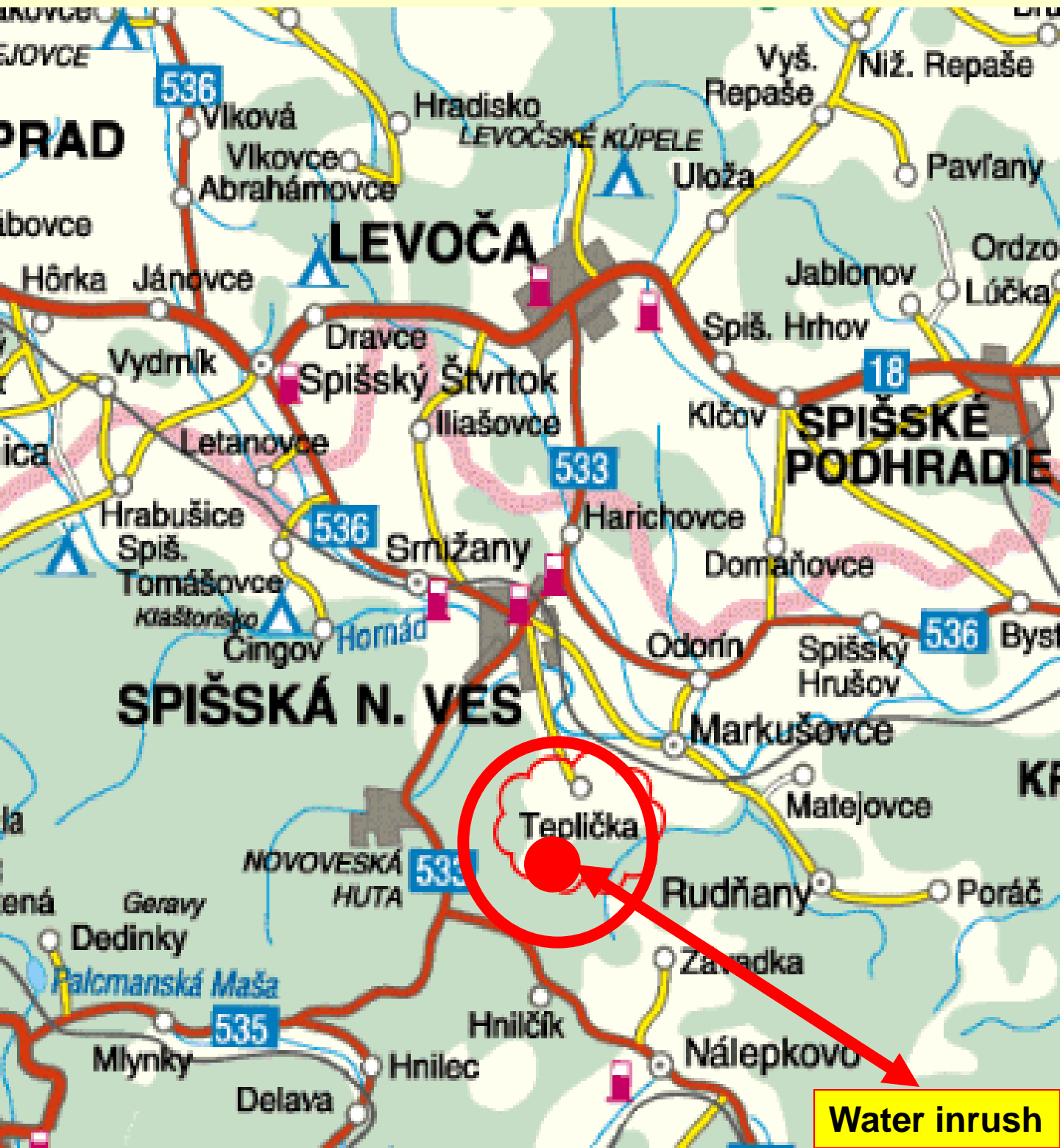


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BASIC GEOLOGY

- **Spišsko-gemerské rudohorie belongs to Internal West Carpathians region**
- **It is built up of Early Paleozoic volcanic-sedimentary formations on which the Late Paleozoic is resting autochthonous position, also overlain by the Mesozoic. Lower and Upper Permian sequences are preserved.**
- **The most spreaded are metamorphed sedimentary and volcanogenic rocks**
- **Overall region is a rich for ore mineralisation of different genesis and different age namely As, Fe, Sb, Pb, Cu, Zn, Hg a Cr.**



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**THANK YOU FOR
YOUR
ATTENTION**

ZDAR BOH !

SREČNO !