



**environmental affairs**

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA



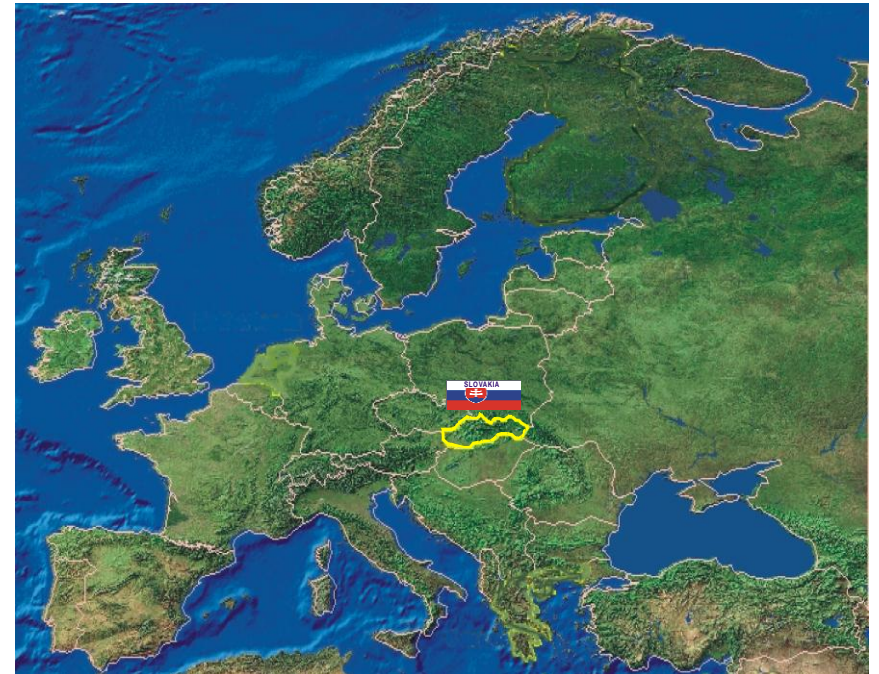
# Contaminated site remediation, Legal, Technical, Finance and Social issues

## Management of contaminated sites in Slovakia

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# Contaminated sites in Slovakia

September 1<sup>st</sup> 2007

## Environmental Burdens = old contamination

(contains – contaminated soil, rock and groundwater which can coast high human health risk and environmental risk, **except environmental damage**)

~~Directive~~

New Act. on Certain Measures in Relation to Environmental burdens adopted on January 1<sup>st</sup> 2012

## Environmental Damages = new contamination

(contains – **damage** on soil, water and **protected species and habitats**)

the Directive  
2004/34/CE

Act. on prevention and remedying of the environmental damage adopted on September 1<sup>st</sup> 2007

# 4 steps of Management of contaminated sites in Slovakia

## 1. Identification and registration of contaminated sites

- **Systematic identification of contaminated sites** in the Slovak Republic (2006 – 2008),
- **Regional Studies of Environmental Impacts of the contaminated sites** in Selected Regions (2010).

## 2. Legal framework for solution of the issues of contaminated sites (investigation and remediation)

- Adoption of amendment of the **Act No. 569/2007 Coll. on geological works** (Geological Act) – defines new terms related to contaminated sites (November 1<sup>st</sup>, 2009) and fulfils condition for using EU funds for investigation (through OPE)

# 4 steps of Management of contaminated sites in Slovakia

## 3. Priority action programme for management of contaminated sites

- **State remediation program of contaminated sites (2010 – 2015)**, approved by Slovak Government on March 3<sup>rd</sup>, 2010.

## 4. Legal framework for establishment the determining of the obliged person

- Adoption of the **Act No. 409/2011 Coll.** on certain measures in relation to contaminated sites (January 1<sup>st</sup>, 2012) – establishes the determination of obliged person (mainly private sector) and fulfils condition for using EU funds for remediation (through OPE)

# Identification and classification of an Contaminated sites (environmental burdens = old contamination)

## The identification of EB includes:

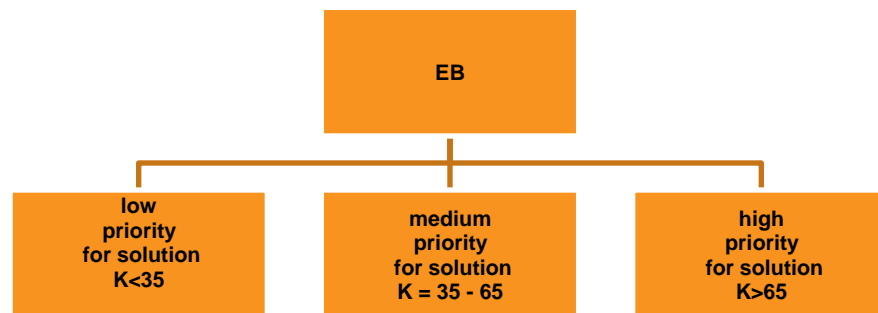
- its classification,
- the completion of a record card for EB.

## The classification of EB is:

- an evaluation of the risk represented by EB (value K),
- the consequent urgency of geological works.

Information System  
of Contaminated sites

(<http://charon.sazp.sk/envirozataze>)  
freely accessible to the public



# Information System of Contaminated sites (environmental burdens = old contamination)

- **Register of environmental burdens 1892 sites**
  - **REG A** - probable environmental burdens (906 sites, including **30 mining sites**)
  - **REG B** - environmental burdens (259 sites, including **13 mining sites**)
  - **REG C** - remediated and recultivated sites (727 sites, including **23 mining sites**)
- **Register of professional competence**
- **Register of geological licenses issued to sole traders**
- **Register of geological licenses issued to legal entities**
- **Atlas of Remediation Methods for Contaminated Sites**

# Distribution of contaminated sites in ISCS

Contaminated sites can be divided according to the activities which caused contamination into 6 groups:



**Former mining sites**  
(66 sites)



**Abandoned landfills**  
(945 sites)



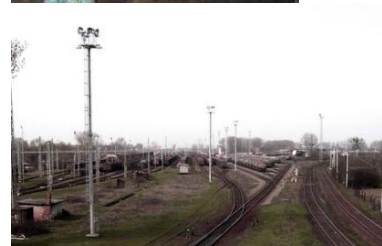
**Military bases**  
(51 sites)



**Former industry sites**  
(366 sites)



**Abandoned storages  
of pesticides residues  
and grange**  
(120 sites)



**Transport**  
(Railway yards,  
Airports, Harbors)  
(344 sites)

**Main pollutants are:** hydrocarbons, chlorinated hydrocarbons, heavy metals, cyanides, pesticides, PCB

# Projects focused on solving the issue of contaminated sites

## Ongoing project

*Geological survey of Environmental burdens at priority sites*

- ◆ *Project duration: 2013 – 2014 (18 months)*
- ◆ *Budget allocation: 8 639 553 €*
- ◆ *Budget source: Operational program “Environment”*

## Project in preparation

*Remediation of Environmental burdens at priority sites*

- ◆ *Project duration: 2014 – 2015 (24 months)*
- ◆ *Budget allocation: 48 000 000 €*
- ◆ *Budget source: Operational program “Environment”*



# Ongoing project :

## Geological survey of Environmental burdens at priority sites

**The State Remediation Program of  
Contaminated sites  
(2010 – 2015)**

**Contains the list of high priority sites  
(54 sites)  
where geological works have to be urgently  
carried out**

**(contamination of ground water and soil  
can cause high human health risk and  
environmental risk)**

**Project contains  
54 priority sites**

# Ongoing project :

## Geological survey of Environmental burdens at priority sites

- ◆ Contaminated sites can be divided according to the activities which caused contamination into 6 groups:



Former mining sites  
(8 sites)



Former industry sites  
(10 sites)



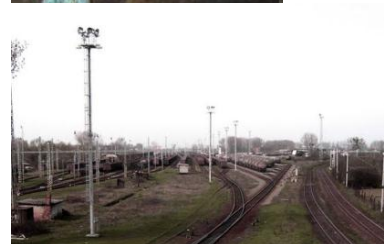
Abandoned landfills  
(11 sites)



Abandoned storages  
of pesticides residues  
(5 sites)



Military bases  
(12 sites)



Railway yards  
(8 sites)

**Main pollutants are:** hydrocarbons, chlorinated hydrocarbons, heavy metals, cyanides, pesticides, PCB

# Project in preparation

## Remediation of Environmental burdens at priority sites

### 1. Act. on Certain Measures in Relation to Environmental burdens

- the Method for Determining the liable Person (“polluter pay” principle)

### 2. Operational Program “Environment” - the Method for Determining the eligible site

both conditions have to be fulfilled:

1. It is not possible to determine the **Liable person** - the Government determines Liable person based on the proposal of the MoE SR
2. The owner of real estate is **Slovak Republic or local Municipality**

**Project contains 19 priority sites**  
**for 6 sites – the competent Ministry is Ministry of Defense**  
**and**  
**for 13 sites - the competent Ministry is Ministry of Environment**

# Project in preparation

## Remediation of Environmental burdens at priority sites

- ◆ Contaminated sites can be divided according to the activities which caused contamination into 6 groups:



Former mining sites  
(1 sites)



Former industry sites  
(0 sites)



Abandoned landfills  
(4 sites)



Abandoned storages  
of acidic liquid  
petroleum products  
(2 sites)



Military bases  
(8 sites)



Railway yards  
(4 sites)

**Main pollutants are:** hydrocarbons, chlorinated hydrocarbons, heavy metals, cyanides, pesticides, PCB, storages of acidic liquid petroleum products

# Thank you for your attention !



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