CZECH REPUBLIC PROFILE
with focus on the inventory of contaminated sites

Pavla Kacabova
Ministry of the Environment of the Czech Republic
Environmental Damages Department

Kacabova_pavla@env.cz
PRESENTATION CONTENT

- IPPC
- Environmental damages from the past
  - structure of national inventory and database
- Soil protection
- Legal issues
IPPC LEGISLATION

- Act. No. 76/2002 Coll., on IPPC, as amended
- Decree of MoE No. 554/2002 Coll., on application form and extent and means of filling-out thereof
- Government order on the manner and extent of ensuring the system for exchange of information on the best available techniques
IPPC ADMINISTRATION BODIES

Ministry of the Environment
Ministry of Industry and Trade
Ministry of Agriculture
Ministry of Health
Regions
Inspectorate
Regional Hygiene Officer
CURRENT STATE OF GETTING INTO COMPLIANCE WITH ACT ON IPPC

☞ Touched by the Act on IPPC:
  1320 installations
☞ Till the beginning of October 2003:
  247 applications

☞ IPPC Agency
  • established in April 2002
  • www.ceu.cz/IPPC
ENVIRONMENTAL DAMAGES FROM THE PAST

- Privatization process
- Activity of the former Soviet army
- Law on Waters - § 42, paragraph 4
SEQUENCE OF STEPS IN THE REMEDIATION PROCESS

Environment Audit
Consent of the CR Government
Environment Liability Agreement
Risk Analysis
Remedial Order
Clean-Up Activities
Termination of E. Liability Agreement
## REVIEW OF THE STATE OF REMEDIATION PROCESS IN THE FRAMEWORK OF PRIVATIZATION

<table>
<thead>
<tr>
<th>ITEM</th>
<th>NUMBER OF EVENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Audits</td>
<td>6 500</td>
</tr>
<tr>
<td>Environmental Liability</td>
<td>268</td>
</tr>
<tr>
<td>Agreements</td>
<td></td>
</tr>
<tr>
<td>Closed Remediation Projects</td>
<td>47</td>
</tr>
<tr>
<td>On-going Remediation Projects</td>
<td>150</td>
</tr>
</tbody>
</table>

Period 1991 – 2002: 15.5 bil. CZK/ 0.52 bil. EURO
EXTENT OF SITES CONTAMINATION

73 sites used by the Soviet Army
60 sites: significant e. damages
Year 2 003: decontamination at 5 sites

The highest risk contamination – 15 ha Hradcany airfield
EXPENDITURES FOR REMEDIATION OF DAMAGES CAUSED BY THE FORMER SOVIET ARMY

<table>
<thead>
<tr>
<th>Period</th>
<th>CZK (mil.)</th>
<th>EURO (mil.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991 - 2002</td>
<td>1 128.1</td>
<td>3.1</td>
</tr>
<tr>
<td>2003</td>
<td>62.7</td>
<td>2.1</td>
</tr>
<tr>
<td>2004 - 2010</td>
<td>167.3</td>
<td>5.6</td>
</tr>
<tr>
<td><strong>Total sum</strong></td>
<td><strong>1 358.1</strong></td>
<td><strong>46.3</strong></td>
</tr>
</tbody>
</table>
WATER ACT - § 42, par. 4
(2003 – 50 mil. CZK/1.67 mil EURO)

- Long-term remedial measures + accidents
- Long-term remedial measures
  - remediation (supervision incl.): 3 sites
  - post- monitoring: 1 site
  - risk analysis: 8 sites
  - in the beginning of solution: 4 sites
  - refusal of using § 42: 3 sites
PRIORITY LIST ON ENVIRONMENTAL DAMAGES
(831 sites)

- Proved or probable endangering of drinking water source for public supply (0.35)
- Proved or probable endangering of drinking water source for individual supply (0.25)
- Risk of contamination - chemical type of contaminants (0.2)
- Extent of contamination (0.15)
- Site environmental setting (0.05)

# Priority List of Environmental Damages

<table>
<thead>
<tr>
<th>Lokalita</th>
<th>Nabývatel</th>
<th>Výkon (kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zbraslav</td>
<td>KOVO</td>
<td>10,10</td>
</tr>
<tr>
<td>Ružínov pod Radhoštím</td>
<td>TEREOSIL (TECLA System)</td>
<td>6,85</td>
</tr>
<tr>
<td>Letín</td>
<td>Sigma Lutín</td>
<td>6,80</td>
</tr>
<tr>
<td>Jeníkovice, Nový Jičín</td>
<td>Durobor</td>
<td>6,71</td>
</tr>
<tr>
<td>Rudolfovice - Senetín</td>
<td>ALAChIM a.s. (DIAMO s.p.)</td>
<td>5,74</td>
</tr>
<tr>
<td>Sedlčany</td>
<td>Feller + Pega UH</td>
<td>5,40</td>
</tr>
<tr>
<td>Dolní Blatnice</td>
<td>chodob</td>
<td>5,40</td>
</tr>
<tr>
<td>Mimoň</td>
<td>BAP</td>
<td>5,20</td>
</tr>
<tr>
<td>Nové Hrachov, skládko DÚ6</td>
<td>(převodník DÚT Pelhřimov)</td>
<td>5,20</td>
</tr>
</tbody>
</table>

- 1 file in EXCEL
- 14 regions incl. Prague
SPECIFICATION DATA

Owner

Stage of remediation
(monitoring, remediation, post-monitoring, no action)

Specification of financial sources
(NPF, other, none)

Type of contaminants
REGISTER OF THE PAST ENVIRONMENTAL DAMAGES

Database (ORACLE) and GIS data (ESRI)

Database:

- General data
- Site characterizing data
- Site contamination data
- Site specific risks
  - 3 100 sites
  - more than 2 500 items for each site

http://sez.vuv.cz/
Koksovna Ján Sverma se nachází v přístupové oblasti, v okolí koksovny jsou další zdroje kontaminace, které může ovlivnit jmenovitě říční území Nová Ves, jsou rovněž k HČZ (Moravské chemické závody) a státní koksovny. V blízkosti lokality se nachází přímo, či nepravidelně v oblasti dosahu dopravního zdroje vody vzdálené říční území Nová Ves, představují něco, které je kumulativní a synergická působení.

Analýzy koksovny se nachází v prostoru umístěné, vytočené eplus vlivem čepání podzemní vody v jmenovitě území Nová Ves. Potenciálně se předpokládá přítomnost kontaminantů v podzemní vodě z prostoru Moravských chemických závodů, a.s., Trenky, benzínu a dalšího.

Koksovna a Moravská Ostrava jsou součástí státního území v oblasti Ostrava – město, které se nachází na severozápadní části centrální části města Ostravy, v katastru městského obvodu Mariánské Hory.
SESEZ - 2004 vision: web map server
SESEZ - 2004 vision: web map server
CZECH GEOLOGICAL SURVEY - GEOARCHIVES
Geological Data Source

- Borehole database
- D. of geological mapping
- D. of regional hydrogeological exploration
- D. of undermined areas
- D. of old mine working

http://www.geofund.cz
DATABASES OF SITES OF SPECIAL PROTECTION

 mỏi Geodatabase of important geological localities in CR
  • more than 1 200 records
  • Czech Geological Survey

 mỏi Database of lands in specially protected areas
  • Agency for Nature Conservation and Landscape Protection
SOIL PROTECTION

MoE legislation

  • only the term "agricultural land fund"

☞ MoE Decree No. 13/1994 Coll., on dealing with some details of protection of agricultural land fund

☞ MoE Decree No. 382/2001 Coll., on conditions for using treated sludge on agricultural land
SOIL PROTECTION

non-MoE legislation

Min. of Agriculture: Act No. 156/1998 Coll., on fertilizers + relevant decrees

Other (e.g.)

• Act. No. 50/1976 Coll., on land planning and on building regulations
SOIL QUALITY MONITORING SYSTEM

Basal monitoring
- since 1992
- 200 observation areas - a rectangle with dimensions of 40 x 25 m, i.e. 1000 m²
- basic sampling period: 6 years (selected parameters at interval of one year)

Register of contaminated areas
- pursuant to Act No. 156/1998 Coll., on fertilizers
- basic sampling period: 3 years
SPECIAL PROJECTS ON SOIL PROTECTION

- Action Plan for Health and the Environment in CR - soil quality monitoring in urban areas (Min. of Health)

SPECIAL PROGRAMMES ON SOIL PROTECTION

MoE

- Landscape Programme
- River System Restauration Programme

State Environmental Fund

- Programme of Care for the Natural Environment
REGULATION ON LIABILITY AND SANCTIONS OF SOIL POLLUTION

1. Public laws (regulatory laws regime)
   • Act No. 334/1992 Coll., on protection of the agricultural land fund
     • env. pollution and damage to the environment /§ 181a – § 181b/
     • ilegal disposal of hazardous waste /181e/
2. Private law
     - general liability
     - specific liability
       - any person is liable for damage caused to another person while operating a business
       - any person is liable for damage caused by the nature of hazardous operation
LAND USE PLANNING AND CONTAMINATED LAND

☞ Act. No. 50/1976 Coll., on land planning and on building regulations
  • planning documentation
  • planning permission
  • building permit
  • final inspection decision

mainly from EIA point of view and possibility of further use of site
CONTROL OF TRANSFER OF CONTAMINATED LANDS

*Only in case of land transfer from state to new owner (act on privatization)*

*Generally: possibility of including special statement into an agreement between a former owner of contaminated land (property) and new owner in the regime of the Civil Code or the Commercial Code*
Thank you for your attention.