LEGAL AND ADMINISTRATIVE FRAMEWORK for major hazard prevention

Parkhotel, 11. – 13. 2. 2009
EU directives and convention

• **SEVESO I**

• **SEVESO II**

• Council Decision of 23 March 1998 concerning the conclusion of the **Convention on the Transboundary Effects of Industrial Accidents** (UNECE)
Major Accident Prevention Act

- **Act No 353/1999 Coll.**, concerning prevention of major accidents caused by selected dangerous chemical substances or chemical preparations
- **Act No 59/2006 Coll.**, concerning prevention of major accidents caused by selected dangerous chemical substances or chemical preparations
Act No 59/2006 Coll.: Subject of regulation

• **system for preventing major accidents** for establishment and facilities with selected dangerous chemical substances or chemical preparations (Table I - named selected and Table II - groups pursuant to selected danger properties: T+, T, O, E, R10, F, F+, N, R14, R29)

• **the aim is to reduce the probability and the consequence of major accidents** to the human health and life, livestock, the environment and property in buildings and facilities and their surroundings
Act No 59/2006 Coll.

This Act regulates:

• the obligations of legal persons and natural persons who own or use, or intend to use an establishment or an installation

• the execution of the state administration in the sector of prevention of major accidents caused by selected dangerous chemical substances or chemical preparations
Act 59/2006: Relevant glossary

- an establishment
- an installation
- an operator
- a dangerous substance
- a major accident
- a hazard
- a risk
Act 59/2006: General provisions

- Classification into Group A or B
- Assessment of the risk of MA
- Safety program
- Safety report
- Insurance
- Information
- Emergency planning
- Inspection
# Act 59/2006: Table I – Selected dangerous substances

<table>
<thead>
<tr>
<th>Item</th>
<th>Dangerous substances</th>
<th>Column 1 (tons)</th>
<th>Column 2 (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Amonium nitrate</td>
<td>5 000</td>
<td>10 000</td>
</tr>
<tr>
<td>2.</td>
<td>Potassium nitrate</td>
<td>5 000</td>
<td>10 000</td>
</tr>
<tr>
<td>3.</td>
<td>Arsenic pentoxide</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4.</td>
<td>Bromine</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>5.</td>
<td>Chlorine</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>6.</td>
<td>..</td>
<td>..</td>
<td>..</td>
</tr>
</tbody>
</table>
## Act 59/2006: Table II – Groups of dangerous substances

<table>
<thead>
<tr>
<th>Item</th>
<th>Dangerous substances</th>
<th>Column 1 (tons)</th>
<th>Column 2 (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Highly toxic</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>2.</td>
<td>Toxic</td>
<td>50</td>
<td>200</td>
</tr>
<tr>
<td>3.</td>
<td>Oxidizing</td>
<td>50</td>
<td>200</td>
</tr>
<tr>
<td>4.</td>
<td>Explosive</td>
<td>50</td>
<td>200</td>
</tr>
<tr>
<td>5.</td>
<td>Flammable</td>
<td>5 000</td>
<td>50 000</td>
</tr>
<tr>
<td>6.</td>
<td>............</td>
<td>........</td>
<td>........</td>
</tr>
</tbody>
</table>
Act 59/2006: Propose the classification in group A

- the amount of dangerous substances located in the establishment or installation is the same as or greater than the amount given in annex No 1 to this act in part 1 column 1 of table I or II and is also less than the amount given in annex No 1 in part 1 column 2 of table I or II, or

- in the event that this amount of dangerous substances is not reached, sum of the relative amounts of dangerous substances ascertained pursuant to annex No 1 to this act in part 1 table I and table II pursuant to the equation and under the condition given in annex No 1 to this act in part 2 is equal to or greater than 1
Act 59/2006: Propose the classification in group B

- the amount of dangerous substances located in the establishment or installation is the same as or greater than the amount given in annex No 1 to this act in part 1 column 2 of table I or II, or

- if this amount of dangerous substances is not reached, sum of the relative amounts of dangerous substances ascertained pursuant to annex No 1 to this act in part 1 table I and table II pursuant to the equation and under the condition given in annex No 1 to this act in part 2 is equal to or greater than 1
Act 59/2006: Safety documents

**Group A**
- safety program for prevention of major accident
  + physical protection plan

**Group B**
- safety report + physical protection plan + internal emergency plan + information for external emergency plan (for designation of emergency planning zone)
Legal regulation 1/2

- **Order of the Government No 254/2006 Coll.**, control of hazardous (dangerous) substances

- **Decree No 103/2006 Coll.**, which designates fundamentals for designating an accident planning zone and the scope and method of preparing an external emergency plan

- **Decree No 250/2006 Coll.**, which designates details concerning the scope of safety measures of physical protection of establishments or installations classified in group A or B.
• **Decree No 255/2006 Coll.**, which designates the scope and method of the processing of a major accident report and final report of the incidence and consequences of a major accident

• **Decree No 256/2006 Coll.**, concerning details of the system for the prevention of major accidents
Designate the methods:

• for preparing an analysis and evaluation of risk of a major accident
• for preparing and structure of the safety program
• for the processing and structure of the safety report
• for the processing the report on the evaluation of the safety report
Guidelines 1/7

1. Evaluation of an establishment or installation in which a selected dangerous chemical substance or chemical preparation is located:
   • qualification of persons, establishments or installations (in compliance with law)
   • classification of establishment or installation into relevant group A or B (based on list of all dangerous substances)

The database of Seveso II substances, their classification and labeling is procurable on the web: [http://mahbsrv.jrc.it](http://mahbsrv.jrc.it) of EC Joint Research Centre – Major Accident Hazards Bureau (MAHB)
2. Proposal for classification of an establishment or installation into group A or B:

- comparison of the inventory of dangerous chemicals with the amount given in annex No 1 of Act 59/2006 Coll.
- non-classification protocol
- proposal for classification
3. Analysis and evaluation of risk of major accident:
   • hazard identification
   • consequence analysis
   • event probability and failure frequency analysis
   • risk estimation
   • preventative measures and mitigation
4. Estimation of the influence of a human factor on an establishment or installation connected with relevant sources of risk:

- human reliability analysis
- human error analysis
- identification of the critical workplaces
- proposal of the preventive measures
Guidelines 5/7

5. Principles, aims and policy of a major accident prevention, Description of a safety management system:

• fundamentals for prevention major accidents
• structure and system for ensuring protection
• major accident prevention policy - written public declaration
• safety management system – set of the organizing and controlling internal rules
6. Safety report:

- basic information about an establishment or installation,
- descriptive, informative and data parts of safety report
- risk analysis and risk assessment of major accident
- description of safety management system
- description of preventive safety measures owing to reduce probability and consequences (risk) of MA
- concluding summary
Guidelines 7/7

7. Report on the evaluation of the safety report:
   - revision of safety report after five years
   - list of changes performed in the establishment or installation
   - summarized influence of performed changes on safety
   - justification for uselessness to perform updating of the safety report
Bodies of the State Administration

- Ministry of the Environment
- Ministry of the Interior
- Czech Mining Authority
- Czech Environmental Inspection
- Regional Authorities
- bodies of state professional supervision over labour safety
- authorities in the field of fire prevention
- regional public health services
Interested subjects (stakeholders) in field of major accident prevention

- industry (including management and labour)
- public authorities
- communities / public
- labor organisations
- research / academic institutions
- international organisations
- non-governmental organisations
Conclusions

In order to fulfil the aims of major hazards prevention - chemical risk reduction and accident prevention, effective emergency preparedness and response, it is necessary that all interested subjects communicate and actively cooperate.
Thank you for your attention!