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## **SOIL POLLUTION**

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**The aim of this questionnaire is to find out, through case studies, the way in which each member (or future member state) is dealing with the problem of soil pollution in order to identify a possible common pattern of difficulties and to specify what could be the contribution and limits of EU legislation, namely the relevancy of the Directive Proposal of 22 September 2006 setting out a framework for soil protection and amending Directive 2004/35/EC.**

**I. Information on polluted soils :**

**1. Do you have a national inventory (or inventories) of polluted or contaminated soils?**

Yes, Hungary has a national inventory, a comprehensive, countrywide assessment of lasting environmental damages, pollution sources; this consists of the elaboration and further development of a geographical information system called KÁRINFO integrating information on the contaminated areas, on the pollution sources endangering, contaminating, and damaging the groundwater and the geological media. KÁRINFO is part of the Register System of Groundwater and Geological Media (FAVI). In course of the countrywide assessment the exploration of pollution sources under both state- and non-state responsibility are carried out. KÁRINFO of course is only the final appearance form of the results. These results are based on the collection and processing of data utilisable in the Programme, available from various organisations (ministries, central or regional authorities, institutes, etc.). Such data sets are e.g. the ones from the earlier assessment of the contamination's endangering the nature conservation areas, from the assessment of pollution sources in the Balaton catchment area and in the Duna-Tisza Region or from the content of the so called Atlas of Abstraction Areas. Historical research has also a great significance.

Maintenance and continuous updating of the National Remediation Priority List (NKPL). NKPL provides a ranking for the assessed and registered contaminated areas, and serves as a basis for scheduling the remediation projects.

Development and operation of the monitoring systems of environmental damages under state responsibility, and their connection to similar monitoring systems, e.g. to the Information & Monitoring System for Groundwater Quality and Soil Protection (TIM).

To these are connected the sensitivity maps of the relevant areas and settlements elaborated according to Annex 2/1 of the Government Decree No. 219/2004. (VII. 21.). The set of sensitivity maps and the list of settlements can be observed on the homepage of the Ministry of Environment ([www.kvvm.hu](http://www.kvvm.hu)). The maps of scale 1:100 000 in Arc-View format displaying the sensitivity of the areas and settlements can be found on CD at the environmental inspectorates or may be claimed at "VITUKI" public company.

1. Who is in charge of it: local, central authorities, professional bodies?

Governmental Decree No. 219/2004 (VII. 21.) On The Protection Of Groundwater Article 34 deals with the Environmental Registration System For Groundwater and The Geological Medium (FAVI). To ensure the completion of the official functions and the tasks related to the management, regulation, registration, planning, implementation, control, statistics, public information and data supply tasks under this Decree, the relevant ministers shall provide for the accessibility and harmonised operation of registration systems. The Minister, in co-operation with the ministers involved, shall be responsible for international data reporting concerning the status of groundwater and groundwater bodies and the quality of the geological medium. The Minister shall - via the central and regional institutions under his direction - operate the Environmental registration system for groundwater and the geological medium with the aim of collecting, processing and registering the data and information on risk, pressure, pollution, damage, remediation and impacts connected with groundwater and the geological medium (FAVI). The Operational Centre of FAVI is located in the Ministry, while its regional centres can be found at the Inspectorates. Twelve environmental inspectorates are issuing the licenses and obligations relating to the large number of remedial projects in the country. The remediation projects are running in many sub-programmes, under the direction of various responsible organisations. Many consultants and R + D institutions are participating in the projects. It is important that problems of similar significance shall be evaluated everywhere in the same way. It is also important that the investigations of the geological medium and groundwater shall be everywhere performed with standardised methods and the various results shall be evaluated against the same criteria. For this aim many investigations and analytical methods shall be strictly standardised. Some more important, decision-influencing investigations (especially the chemical and biological analyses of the soil and water), can only be performed by authorised, accredited institutions, having the appropriate instrumentation and trained personnel. Unification is realised through technical and legal regulations. Likewise, e.g. the plans of the engineering measures/interventions that may become necessary, or the closing documentation on the successfulness of the measures shall be submitted to the Inspectorate with uniform content and structure, as required by the relevant regulations. The unification can only be implemented centrally, under a uniform control, therefore the Ministry of Environmental Protection and Water has been put in charge of the regulations aiming at unification.

2. What are the criteria: soil composition, prior or present use, ownership, depollution in progress, planned use...?

The development of the Environmental Registration System for Groundwater and the Geological Medium (FAVI) is in progress. FAVI contains among others information on the status of groundwater, data on their state-requirements, on the hazardous or polluting activities and on the connected environmental measures as well. To enable the proper operation of FAVI information

on activities posing a risk or pressure on groundwater should be submitted to the competent environmental inspectorate using various data-sheets.

Everything discussed so far is serving the individual projects, i.e. the reduction of the contamination risk in the endangered areas, the reduction or elimination of contamination in the polluted areas, as required by the Government Decree quoted at the beginning of the present overview. All the tasks discussed above are aiming at enabling the identification of endangered and contaminated areas, at establishing the level of danger and damage, at supporting the decisions on the measures, and subsequently – depending on the position of the site on the priority list – at enabling the successful completion of the decided measures.

Thus the main stages of the individual remediation projects are:

Fact-finding: Diagnostic fact-finding exploratory phase > evaluation > detailed fact-finding, revision and supplementation of monitoring > evaluation > quantitative risk assessment.

Engineering interventions: Elimination/prevention/reduction of damages > evaluation > repeated elimination of damages (if the first elimination was not successful) > evaluation (termination of intervention if successful).

Post-monitoring: further observations (if, according to the results, the engineering intervention was not sufficiently successful, then it shall be carried out again).

It is worth to consider at this point, that these three stages together may last many years and they may cost several millions of HUF. The sites affected by the individual projects may either be in state ownership, or owned by companies or private persons. The implementation of every project funded from state funds shall be tendered according to the Act XL of 1995 on Public Procurements.

### 3. Who has the access to it? Is it a data base?

Beyond supplying data for administrative and identification purposes, FAVI's functions include the collection, registration and processing of data and information on groundwater and the geological medium as well as data supply, in particular, data and information related to:

- a)* operators and their activities, generating the risk, load, pollution and damage (i.e. disposals or discharges);
- b)* risk, load, pollution, damage and remediation;
- c)* status;
- d)* requirements established for status; and
- e)* environmental measures connected to the protection of environmental elements under consideration.

The data registered in FAVI originate from:

- a)* monitoring data from monitoring systems operated by the Inspectorates, and those provided by data suppliers;
- b)* data reporting regulated under this Decree;
- c)* data obtained as a result of official measures, and the activities of the Ministry and its institutions carried out pursuant to the provisions under specific other legislation;
- d)* data obtained from other organs.

Transfer of the data required for the FAVI operation from the other operating countrywide data supplying or information systems, where they were collected, shall be ensured in the framework of relevant agreements, if necessary.

The Inspectorate shall record, evaluate and supply the data in the framework of FAVI. Detailed rules on the mode of data reporting are regulated by the Ministerial Decree 18/2007(V.10) KvVM r. (especially data reporting forms, and guidance for using thereof). FAVI data, either public and in the public interest, is classified under Act LXV of 1995 on state and official secrets. Data not labelled with special identifiers may be used for statistical purposes.

There is no possibility to access via Internet. Without any legal interest everybody can ask for any information of the data base which must be given by the Inspectorate.

4. What is your view on this source of information? What changes, amendments would you like to be made?

There is a need of free access by Internet which could be created only then if the dates would be anonymised. That is the main problem of the system.

2. Are there any particular administrative or legal requirements to provide information?

1. In which cases (sale, change of activity, etc.)?

No requirements to the person who ask information, but the Act LXIII of 1992 on the protection of personal data and data of public interest does not allow to give any personal data.

2. To whom (public authority, private buyer, etc.)?

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3. What, if any, are the legal sanctions in case of non observation of the requirement to inform? (specific sanctions such as: closure of the site, cancellation of sale, mandatory rehabilitation of the soil or general sanctions pertaining to common liability regulation)

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4. What is the proportion of claims pertaining to the lack of information? (Please give examples).

No special legislation, no practise yet.

## II. National legislation on soil pollution and enforcement

### A. Does specific legislation exist on the subject of polluted soils?

1. What kind of legislation: civil, public or criminal law?

Before the elaboration of the National Environmental Remediation Programme (OKKP-1996) there were already some signs showing that the hidden or uncontrolled abandoned pollution sources might cause damages. The handling of nationally significant environmental pollutions started as a particular individual task at the beginning of the 1990s (f. e. environmental state assessment of soviet military sites and the cleaning of contaminated sites, the settling of environmental damage left behind after the privatisation of companies) One of these was the sudden and unexpected contamination of the drinking water from the Vác-South abstraction area in the 80s. Lengthy investigations were required to demonstrate, that the pollution was caused by the hazardous substances originating from the nearby (improper) waste disposal site of Chinoin Works, infiltrating under the terrain surface in the background area of the bank-filtered abstraction site, and seeping into the wells. The well field had to be disconnected from the communal drinking water network. In one of the well fields of Szekszárd town a few wells also had to be disconnected, because of a contamination of unidentified origin of their water. Special attention was drawn to this type of dangers by the recognition of what a large number of contaminated areas were left behind by the leaving Soviet troops in the surroundings of practically each site they used.

The Short- and Long Term Governmental Action Plan of 1991 can be considered as the starting point of OKKP, in which the tasks of survey, exploration and elimination of the accumulated environmental contaminations appeared already. One of the objectives of the Plan was the elimination of environmental pollution of the evacuated Soviet barracks and drill grounds. Mainly due to the lack of financial resources, until 1995 the implementation of this task has

started only, under the professional management of the Institute of Environmental Management, the background institution of the Ministry of Environment. This was also the period of the preparation/elaboration of OKKP.

The National Environmental Program and as a part of it the National Environmental Remediation Program (OKKP) dealing with the remediation of permanent environmental damages and contaminated sites left behind was elaborated based on the Act LIII of 1995 On the General rules of Environmental Protection.

Aims of the OKKP are to explore the contaminations left behind and accumulating in the geological medium (soil) and groundwater in the foregoing centuries, to gain information on the scale of threat, contamination and damage to groundwater and geological medium; to reduce the risk of contamination in endangered areas, as well as to facilitate the reduction or elimination of contamination in polluted areas. In the framework of the OKKP the survey of pollution sources and polluted sites, as well as their countrywide inventory – not depending on liability conditions – is carried out on the basis of which the National Remediation Priority List forming the foundation of individual remediation tasks is compiled and the sub-programs are prepared. The elimination of environmental damages left behind and belonging to state responsibility is carried out in the framework of the sub-programs co-ordinated by the ministers in charge. Along with the Countrywide Inventory and with the financial support of the OKKP the elaboration of the sub-programs, the assessment of the remedial tasks belonging to the responsibility of the ministries and the elaboration of the time and financing schedules started in 1997. These preparatory documents supported the decision-making processes of the ministries' remedial tasks. Most of the ministries assessed the remedial tasks in the areas under their management and several of them could successfully start the implementation of individual remediation projects based on these assessments.

There is listed the most important legal regulations referring to groundwater. A short summary of the most significant regulations can be found below.

Act LIII of 1995 on the general rules of environmental protection:

This Act contains the fundamental rules of the protection of waters, among them those of groundwater. It prescribes the general rules of the protection of environmental elements including those of groundwater's. The Act prescribes the general rules of the protection of environmental elements, groundwater included. It defines a. o. the fundamental elements of protection (precaution, prevention, remediation, responsibility, co-operation, collecting and providing information, and publicity). It declares the general requirement of the consistent protection of the environmental components on one hand, and contains the basic rules of water protection on the other.

As far as groundwater is concerned, consistent protection refers to the consideration of the interactions with surface waters on one hand and entails the harmonisation of the protection both of groundwater and the geological medium (topsoil included).

The Act declares that when using the environment “waters shall remain as a factor of the landscape; the conditions necessary for the survival of the aquatic and riparian flora and fauna as well as the quantity and quality conditions ensuring the potential use of water shall not deteriorate.”

Compared with the general level of quality protection [specified mainly by the Government Decree No. 219/2004. (VII. 21.) Korm.] drinking water resources and those serving the utilisation of mineral and medicinal waters should be specially protected. (Special rules concerning such resources are defined by the Government Decree No. 123/1997. (VII. 18.) Korm.

The Act prescribes that in the framework of state responsibilities for environmental protection among others the quantity and quality objectives (target state) for the environmental elements should be defined.

The quantity objective (target value) for groundwater comprises the following tasks of outstanding importance:

- hampering the decrease of groundwater level (pressure head), ensuring and promoting its regeneration, the recovery of the water household in the endangered regions,
- developing the equilibrium of abstraction and recharge so that the level of near-surface water (shallow groundwater and open karstic waters) does not fall below the long term quasi-natural average due to anthropogenic activity, except in the immediate vicinity of the abstractions,
- no unfavourable change of water quality because of the new hydraulic conditions resulting from the abstraction of water should ensue.

The Act prescribes the establishment of environmental requirements to the control of discharges and the quality protection of recipients. These may be among others the various limit values.

The Act differentiates several kinds of licensing processes as they follow:

- environmental permit based on environmental impact assessment,
- unified permit to the use of the environment,
- environmental operation permit based on environmental audit.

The Government Decree No. 219/2004. (VII. 21.) Korm. on the protection of groundwater aims at the determination of tasks, rights and obligations associated with the ensuring and maintaining of the good status, and the progressive reduction and prevention of pollution of groundwater; a sustainable water use based on the long-term protection of available groundwater resources and the remediation of the geological medium. The Decree applies – with the exception of substances and activities falling under the scope of a separate piece of legislation on nuclear power – to the groundwater, the geological medium and to the activities affecting their status and pollutants.

To the deposition of hazardous, non-hazardous, as well as of inert wastes decrees falling under the authorisation of the Act XLIII. of 2000 on Waste Management applies. Requirements included in those decrees should be applied by consideration of the Gov. Decree No. 219/2004. (VII. 21.) Korm. The same applies for the construction of inflammable fluid deposits or the disposal of other dangerous substances if the activity falls under the scope of a piece of legislation in force. In case of activities without similar regulation specifications and directions in standards, guidance and different kinds of reference books should be taken into consideration when planning a facility so that no admissible pressure on the geological medium or groundwater is caused by the activity. One fundamental principle stated in the Decree is that the status of groundwater bodies should meet the objectives of good qualitative and quantitative status by the deadline referred to in the Act on the General Rules of Environmental Protection. To meet these objectives compliance with the following criteria should be ensured, so that no deterioration of status take place; all significant and sustained adverse trends in groundwater status be reversed; criteria for good quantitative and qualitative status of groundwater bodies except in the case of water bodies at risk – be fulfilled and the status of water bodies at risk progressively improve. Groundwater and geological medium permanently damaged should be registered and controlled, and their status be improved by remediation. The status of groundwater is determined by the poorer out of the quantitative and qualitative status.

A groundwater body is in good quantitative status, if the long-term (min. 10 years) annual abstraction rate does not exceed the available groundwater resource; and the abstraction does not

cause sustained decrease in groundwater level or groundwater pressure level in any part of the water body; furthermore environmental objectives for the associated surface waters specified in a separate piece of legislation are achieved. Further criteria are that alterations to flow direction may not result in a sustained deterioration of status and that no terrestrial ecosystem directly dependent on groundwater is damaged. Good quantitative status should ensure that environmental objectives defined for the physical and chemical status of groundwater can be achieved without hindrance.

A groundwater body is in good chemical status, if changes in its quality characteristics do not result in a significant and sustained deterioration of qualitative status and/or a significant change of natural physical and chemical status and/or a deviation from the qualitative limit values established in a piece of legislation or in the river basin management plan. Alterations of the qualitative status of groundwaters may not result in a significant deterioration of ecological or chemical status of associated surface waters, and/or in the damage of terrestrial ecosystems directly dependent on groundwater as a consequence of poor water quality.

Certain changes to the aforementioned objectives may be introduced for water bodies at risk exclusively as specified in a separate piece of legislation (Gov. Decree No. 221/2004. (VII. 21.) Korm. on the rules of river basin management). In order to achieve environmental objectives groundwater bodies have to be designated, registered, their status should be monitored and the impacts affecting them evaluated on a regular basis under consideration of the pressures from point and diffuse pollution sources.

The abstraction limit value ("Mi") which means the total annual volume of water (in m<sup>3</sup>/year) that may be withdrawn with the highest permitted range of water level decrease should be determined for the different parts of the water body ensuring that abstractions do not endanger natural quality of groundwater, do not cause any deterioration in the qualitative status, including changes associated with infiltration from surface water and do not result in failure to achieve the objectives established for surface waters and terrestrial ecosystems directly dependent on groundwater.

Based on the report prepared for the European Commission and the river basin management plans measures should be taken to reverse significant and sustained adverse trends in groundwater bodies where indicative parameters of the status have reached the pre-established starting point of reversal. Measures should be taken to enhance the status of water bodies at risk and to prevent potential deterioration, or to enhance the status of groundwater, if deterioration exists, in areas of high sensitivity.

Starting point mentioned above means the average value of concentration for the upper 50 metres of the groundwater body reaching 75% of the pollution limit value (B) in respect of nitrate and pesticides (s. a. Annex 1/a.). (Changes in groundwater temperature should be considered as trend reversal points in case they endanger good status.) If the verified background concentration (Ab) exceeds 50% 43 of the pollution limit value (B) the Environmental Inspectorate identifies the necessary measures in a specific procedure.

For water bodies at risk the inspectorate should – based on the river basin management plan and the review of the activities posing a risk on the achievement and maintaining of the good status – modifies or withdraws licences, it may ordain an environmental impact assessment, initiates the completion or modification of monitoring and if necessary modifies the environmental objectives determined in their earlier decisions or initiates the modification of the relevant prescriptions. According to the Decree Hungary's territory is classified as areas of high sensitivity, sensitive and less sensitive areas (s. a. Annex 1/c) on the basis of the sensitivity of the groundwater status and the protection of the water quality taking into consideration the recharge of groundwater, hydraulic conductivity of the geological medium, further the areas under special protection as shown on the 1:100 000 scale map available at "VITUKI" public company.

(Administrative areas of settlements are categorised on the basis of the same map: settlements fall into the higher sensitivity category if it covers at least 10% of their territory.) The list of settlements so classified can be found in the Annex of the Ministerial Decree No. 27/2004. (XII. 25.) KvVM on classification of settlements located in sensitive areas in terms of groundwater status. The environmental inspectorate may apply special sensitivity classification for a defined area based on local investigations carried out by the user of the environment.

In order to promote the use of the sensitivity maps the Ministry for Environment and Water published the booklet “Commentary to the maps showing sensitive areas in terms of groundwater status according to Annex 2 of the Government Decree No. 219/2004. (VII. 21.) Korm. on the protection of groundwater” in 2005.

In order to ensure the good status of groundwater the activities defined by the Decree should be carried out only by implementing preventive environmental measures with applying the best available technology and the most efficient solution specified in a separate piece of legislation, under controlled conditions, the establishment and operation of a monitoring network and data supply included. The activity must not threaten the achievement of the environmental objectives even in the long term.

In sensitive areas the aforementioned activities may be performed only if certain requirements are met, no restrictions are stated for the less sensitive areas. The quantitative groundwater protection may be increased by artificial recharge of groundwater, by the use of a closed system in the case of the utilisation of geothermal energy or by the re-injection of abstracted water into the same aquifer, or in another one used for the same purpose. The latter applies also to re-injection of row water extracted in the course of mining, civil engineering and maintenance works. It has to be ensured that there are no any substances in the re-injected water different from those in abstracted water, and that it causes no negative changes in water quality.

In order to ensure good qualitative status of groundwater activities connected with the use or disposal of pollutants, and substances transforming into pollutants as a result of their degradation, may only be carried out with technical protection and with the preservation of the status of groundwater and the geological medium in a state superior to the pollution limit value (B) as far as it is possible. The activity should not result in the qualitative status of groundwater and geological medium being poorer than the pollution limit value (B) or the verified background concentration (Ab), further the specific pollution limit value (E) established for a particular site in the case of activities carried out by the time of coming into force of the Act on environmental protection, or the remediation target limit value (D) related to remedial actions. Definitions of the limit values are listed in Annex 1/a.

Discharge or disposal of certain substances as a part of the activity is subject to a permit. Hazardous substances classified as K1 and K2 on the basis of the relevant EU legislation are listed in the Annex of the Decree (Annex 1/b).

The direct discharge of such substances into groundwater, their introduction into artificial lakes, originating from the excavation of the geological medium and consequently resulting in the exploration of groundwater, especially in the case of introduction into residual lakes derived from mining activity and lakes used for recreational purposes, and their disposal in deep working mines (except for some certain cases) is prohibited.

In areas of high sensitivity in terms of groundwater status indirect discharge, including discharge into intermittent watercourses is also prohibited. In case of discharges of cleaned municipal waste water into intermittent water courses, the inspectorate may give release from restrictions for certain substances according to a separate piece of legislation. While authorising the activity the inspectorate may order the monitoring to control compliance with the requirements.

The disposal of pollutants by deep injection or by any kind of deep squeezing is generally prohibited, except the discharge into geologic formations that are permanently inadequate for

other purposes and are considered to be confined in terms of pollution transport in the following cases: the re-injection of waters not containing K1 pollutants, originating from activities carried out in the scope of mining activities, including investigations, exploration and exploitation, the injection of waters of natural content to promote hydrocarbon production or injection of natural gas or liquefied natural gas for the purpose of storage provided that they do not result in the deterioration of groundwater quality.

The Decree specifies regulations on the authorisation of water abstractions, the disposal and introduction of pollutants, the notification of activities subject to a permit, as well as data reporting and inquiry.

The Decree describes the liability for remediation, the phases included in the remediation process (site investigation, technical intervention, monitoring), necessary measures in connection with permanent environmental damage and the Environmental Registration System for Groundwater and the Geological Medium (FAVI). The data sheets, as well as the guidance for their use and the annexes of FAVI are published by the minister of environment in the Ministerial Instruction 8001/2001. (Környezetvédelmi Értesítő 2002/2) currently in force, which will be replaced by a ministerial decree in the near future.

Among the legal consequences rules on imposing the groundwater pollution fine are specified in the Decree as well.

Implementation of remedial tasks, not depending on liability conditions, falls within the framework of the National Environmental Remediation Program (OKKP), the aims of which are a. o. the countrywide assessment and registration of pollution sources and contaminated sites in the FAVI-KÁRINFO system and the reduction of pollution to an admissible level by the use of authority measures. According to the Decree persons liable for remedial actions are those who have carried out, or are carrying out the polluting activity, or have assumed the liability for environmental damage by acquisition of the proprietary rights over the polluted site or in any other way. In case of pollution under state responsibility the competent state organ is obliged to take remedial measures.

Criminal law regulates the following crimes in connection with environment:

Act IV of 1978 on the Criminal Code Title IV Crimes Against Public Health Damaging of the Environment

*Section 280.*

(1) Any person responsible for any pollution of the earth, the air, the water, the biota (flora and fauna) and their constituents, resulting:

*a)* in their endangerment;

*b)* in damage to such an extent that its natural or previous state can only be restored by intervention;

*c)* in damage to such an extent that its natural or previous state cannot be restored at all;

is guilty of a felony punishable by imprisonment for up to three years in the case of Paragraph *a)*, for up to five years in the case of Paragraph *b)*, and between two to eight years in the case of Paragraph *c)*.

(2) Any person who imports or exports any substance that damages the ozone layer, or any product that contains such substances in a quantity in excess of what is required for personal use, or distributes such substances, is guilty of a felony punishable by imprisonment for up to three years.

(3) The person who damages the environment through negligence shall be punishable for misdemeanor in the cases of Paragraph *a)* of Subsection (1) and of Subsection (2) by imprisonment for up to one year, community service work, or a fine; in the case of Paragraph *b)*

of Subsection (1) by imprisonment for up to two years, community service work, or a fine; and in the case of Paragraph *c*) of Subsection (1) by imprisonment for up to three years.

(4) In connection with Paragraph *a*) of Subsection (1) and with the first and second phases of Subsection (3) the perpetrator shall not be punishable, and in the case of Paragraph *b*) of Subsection (1) his punishment may be reduced without limitation if he voluntarily terminates or cleans up the environmental damage before the judgment in the first instance is delivered.

(5) For the purposes of this Section ‘pollution’ shall mean loading of the earth, the air, the water, the biota (flora and fauna) and their constituents to an extent exceeding the emission standard laid down by law or by decree of the competent authority.

## Damaging the Natural Environment

### *Section 281.*

(1) Any person who unlawfully obtains, possesses, distributes, imports, exports, transports through the territory of the country, engages in the trafficking of or damages or destroys:

*a*) any species of a living organism under special protection;

*b*) any species of protected living organisms, provided that the aggregate value of these species expressed in monetary terms reaches the threshold amount determined by specific other legislation for the species of a living organism under special protection;

*c*) any species listed in Annexes A and B to the European Council Regulation on the protection of species of wild fauna and flora by regulating trade therein;

is guilty of a felony punishable by imprisonment for up to three years.

(2) Any person who unlawfully and significantly alters:

*a*) any special bird protection area or special nature preservation area designated as such by the regulation on conservation areas of importance on the European Community scale, or proposed for such designation, or any conservation areas of special importance, or proposed for such designation, or

*b*) any protected

1. natural habitat,

2. cave,

3. habitat of living organisms shall be punishable in accordance with Subsection (1).

(3) The punishment shall be imprisonment for up to five years, if:

*a*) the damage done to nature as set forth in Paragraphs *a*) and *b*) of Subsection (1) results in the destruction of the species of living organisms under special protection or the species of protected living organisms to an extent where the aggregate value of such destroyed species of living organisms under special protection or the species of protected living organisms expressed in monetary terms reaches the highest amount determined by specific other legislation for the species of a living organism under special protection, times two, or if the environmental damage referred to in Paragraph *c*) results in the destruction of the specimen of living organisms which are not placed under any degree of protection in Hungary;

*b*) the damage done to the natural areas set out in Subsection (2) results in the irreversible damaging or destruction of any special bird protection area or special nature preservation area designated as such by the regulation on conservation areas of importance on the European Community scale, or proposed for such designation, or any conservation areas of special importance, or proposed for such designation, or any protected natural habitat, cave, or the protected habitat of living organisms.

(4) The person who damages the natural environment as defined in Subsection (3) through negligence shall be punishable for a misdemeanor by imprisonment for up to two years, community service work, or a fine.

(5) For the purposes of this Section ‘species of living organisms’ shall mean:

- a) species of a living organism in any form or stage of development;
- b) hybrids of living organisms propagated artificially or otherwise;
- c) derivatives of a living organism, including dead specimens and any parts and derivatives thereof, and any goods or products made from any of the above, or containing any ingredient that originates from any of the above.

## Violation of Waste Management Regulations

### *Section 281/A.*

- (1) Any person who:
  - a) engages in the disposal of waste at a site that has not been authorized by the competent authority for this purposes;
  - b) engages in waste management without authorization, or by exceeding the scope of the authorization, or engages in any other unlawful activity involving waste, is guilty of a felony punishable by imprisonment for up to three years.
- (2) The punishment shall be for a felony imprisonment of up to five years if the crime described in Subsection (1) is committed involving waste that is deemed hazardous under the Act on Waste Management.
- (3) The person who commits the crime through negligence shall be punishable for misdemeanor by imprisonment for up to one year, community service work, or a fine in the case of Subsection (1), or by imprisonment for up to two years, community service work, or a fine in the case of Subsection (2).
- (4) For the purposes of this Section:
  - a) 'waste' shall mean any substance that is deemed waste under the Act on Waste Management, and that may be hazardous to human life, bodily integrity or health, or the earth, the air, the water, and their constituents, and the species of living organisms;
  - b) 'waste management' shall mean the collection, gathering, transportation of waste, including if exported from or imported into the country, or transported through the country in transit, and the pre-processing, storage, recovery and disposal of waste.

- 2. Have the provisions of *directive 2004/35/CE on compensation for damage to soil* (contamination) been implemented in your national law and how?

According to Article 102 Subparagraph 1 and 2 of the Act LIII of 1995 on the general rules of the environmental protection, liability for environmental damage or for any risk to the environment shall fall joint and severally - pending proof to the contrary - upon the person who is registered as the owner or possessor (user) of the property after environmental damage or threat to the environment has occurred on which the activity resulting in damage to the environment or posing imminent threat to the environment was carried out. The owner shall be exempted from joint and several liability if able to name the actual user of the real property and if able to provide proof beyond any reasonable doubt that liability does not lie with him.

The exemption of the owner from liability for environmental damages raises difficulties when the owner evokes that his/her real estate was an abandoned property.

Pursuant to Articles 102/A and 102/B, the relevant public authorities can exercise their power immediately against both the operator and the owner.

- B. Is there any specialized personnel to check the degree of respect of the regulations on polluted soil?

Yes , there are 3-5 clerks of each Environmental Inspectorates (e.g. 60 specialists in the country) who have to control any activities.

- C. Does the soil pollution fall under any other legal disposition, or other specific sector of environment regulation? (for example: water regulations, waste, industrial facilities, town planning, etc.)

Yes. In one hand the using of agricultural fields is supervised by land-registry offices (e.g. 50 clerks in the country), on the other hand activities which could endanger soil and groundwater are controlled by the Environmental Inspectorates.

- D. Generally speaking, do you feel that rules on soil pollution are effectively applied and efficient?

Yes, if the pollution is connected to an industrial or other legal activity, but no, if the pollution is totally illegal and hidden.

- E. And if not, please explain what are the main reasons in your view? (too complex, few and far between, unknown, unsuited, lack of means, etc.)

The administration is too weak to follow illegal activities.

- F. How would you evaluate your country's legislation on the subject?

I think it is in a good level with such a short tradition..

### III. Soil pollution and liability

- A. What is the proportion of soil pollution claims on environmental law suits pertaining to environmental issues?

No practise yet.

- B. What are the types of liability: subjective liability - polluter pays, establishment fault, or objective liability - mere ownership or occupancy?

- C. Who can be held responsible: the state, user, owner?

According to Article 102 Subparagraph 1 and 2 of the Act LIII of 1995 on the general rules of the environmental protection, liability for environmental damage or for any risk to the environment shall fall joint and severally - pending proof to the contrary - upon the person who is registered as the owner or possessor (user) of the property after environmental damage or threat to the environment has occurred on which the activity resulting in damage to the environment or posing imminent threat to the environment was carried out. The owner shall be exempted from joint and several liability if able to name the actual user of the real property and if able to provide proof beyond any reasonable doubt that liability does not lie with him.

- D. Please give practical examples (if any) and specify the situation regarding contaminated sites where the owner or the user disappeared.

There are some pending problems with companies, which are in liquidation, and there are no more sources to remediation.

It is a relevant requirement to prove the protection of environment in voluntary dissolution procedures. Before the cancellation of a company from the registration the court of registration requires a declaration of the person in charge of voluntary dissolution about environmental damages. Companies have to leave assets for the costs of environmental restoration.

It was a significant problem what the liquidator should do if the company's assets don't cover the expenses of the restitution. The Hungarian Supreme Court explained that the liquidator does not

have to assure it on his own costs, but he has to take all necessary measures to help remedial actions also if the state budget pays for it.

In another type of cases the environmental authority realised the need of activity in liquidation-procedure and tried to file excuse against the arrangement of the liquidator. According to the judgement of the Hungarian Supreme Court the environmental authority can't be a client in insolvency procedure, even during this process has to oblige the company to any restoring measure by administrative decision.

I'd like to mention a judgement, where the Hungarian Supreme Court interpreted the following categories: pollution, damage, risk. It was declared that the transgression of limit values can endanger the environment, which might damage the environment, when protectional measures are neglected. So the excession of limit values must be considered as risk of environment.

An agreement for restoration was closed in a heavy chemical pollution case, which was confirmed by the ministry. The Hungarian Supreme Court said the ministry can't withdraw the approval if they do they will be responsible for the damage.

Sewage-mud was stored by a canalization-company on their premises for decades. Until 1990 the owner of the land was the state, later a shipping company. The Hungarian Supreme Court had to decide who must cover the costs of the restoration. The canalization-company, its owner - the local government, or the state, or the shipping company? The Hungarian Supreme Court declared that according to The Environmental Act the owner and the user have joint liability for the damage, but the owner has a juridical interest to be set free from joint liability, so the owner can claim the canalization-company for establishing its own liability. The Hungarian Supreme Court pointed out that the relation between the polluter-user and the owner isn't administrative, but civil law relationship, where the parties can argue in the civil law field without infringing the administrative jurisdiction of the environmental authority.

The Directive 2004/35 doesn't regulate civil law liability, it's a part of public law, tries to establish effective actions for national authorities. The activity of the hungarian authority became stronger in the '90s, this is proved by the higher number of court cases, too. Cases in administrative field deal with remedying of environmental damages, which were accumulated by state companies in the earlier decades. For example galvanic mud, soil contaminated by heavy metal give work to administration and justice.

E. Do you meet difficulties in reconciling special soil regulation and other regulations such as property laws, private contractual provisions?

No examples yet.

F. Are there penalties? Are they inflicted? If not, why?

No examples yet.

#### IV. Care and rehabilitation of polluted soils

A. Is there mandatory care or obligation to rehabilitate polluted soils (civil or public obligation)?

Yes.

B. By whom? (the state, owner, user, etc.)

Act LIII of 1995 on the General Rules of Environmental Protection  
*Section 101.*

(1) Polluters of the environment shall bear liability for the impact of their activities upon the environment according to criminal and civil law, regulatory and administrative provisions, and in the manner governed in this Act and in other legal provisions.

(2) Polluters of the environment shall:

*a)* refrain from engaging in any activity posing imminent threat or causing damage to the environment, and shall cease such activity where applicable;

*b)* notify the environmental authority without delay concerning any threat to the environment or environmental damage, and shall supply the information requested by the environmental authority and as specified in specific other legislation;

*c)* where environmental damage has occurred, take all practicable steps to mitigate the adverse impact, and to limit or to prevent further environmental damage, such as in particular, to control, contain, remove or otherwise manage the relevant contaminants causing the environmental damage and/or any other damage factors in order to limit or to prevent further environmental damage and adverse effects on human health or further environmental damage and impairment of services;

*d)* where environmental damage has occurred, take measures to restore the baseline condition, or a similar level as specified in specific other legislation, or to restore, rehabilitate or replace the damaged natural resources and/or impaired services;

*e)* accept responsibility for the environmental damage they have caused, and to cover the costs of prevention and rehabilitation.

(3) In the event of failure to comply with the requirements set out in Paragraphs *a)* and *e)* of Subsection (2), the environmental authority, or the authority that has granted the relevant authorization at the request of the environmental authority, or the court shall - depending on the degree of threat to the environment or the level of environmental damage - limit the activity posing imminent threat to the environment or causing damage to the environment, or shall suspend or prohibit the activity in question pending compliance with the conditions it has established.

(4) Where performance of the preventive and remedial measures concerns any area that is owned, or is in the possession or use of others, the owner or user of the real estate property in question shall comply with having these preventive and remedial measures carried out. The owner or user of the property in question shall be entitled to financial compensation.

(5) Polluters of the environment shall be required to provide an environmental security and may be required - under the conditions set out in specific other legislation - to obtain environmental liability insurance for the financing of clean-up operations for any unforeseeable environmental damage that may result from their activities. Polluters of the environment may set aside provisions for environmental protection purposes as specified in the relevant government decree for any environmental liabilities they may have or are certain to have in the future.

(6) The Government shall define the activities referred to in Subsection (5), and shall decree the form and measure of the security and the conditions for its appropriation, the rules for accounting and keeping records of such security, as well as the regulations for environmental liability insurance coverage.

#### *Section 102.*

(1) Liability for environmental damage or for any risk to the environment shall fall joint and severally - pending proof to the contrary - upon the person who is registered as the owner or possessor (user) of the property after environmental damage or threat to the environment has occurred on which the activity resulting in damage to the environment or posing imminent threat to the environment was carried out.

(2) The owner shall be exempted from joint and several liability if able to name the actual user of the real property and if able to provide proof beyond any reasonable doubt that liability does not lie with him.

(3) The provisions of Subsections (1) and (2) shall be appropriately applied to the owners and the possessors (users) of non-stationary (mobile) contaminating sources.

(4) If several polluters of the environment jointly form a business association to unite the similar or complementary activities that they had formerly performed, such economic operator shall, in respect of environmental protection obligations, be regarded as the successor in title of the founders, and its liability shall be joint and several with the founders.

(5) Those members (shareholders) and executive officers who have supported a resolution (measure), in respect of which they knew, or should have known given reasonable care that such resolution (measure) if carried out will cause environmental damage, shall bear unlimited and joint and several liability in the event of the termination of the business association for the company's ensuing liability for remediation and compensation for damages, which the company did not satisfy. Those members (shareholders) and executive officers who did not take part in the process of adopting the resolution (measure) or voted against it, or protested against the measure shall be exempt from liability.

(6) Any executive officer of the business association who is subject to the liability referred to in Subsection (5), may not serve as an executive officer of a business association whose activities are subject to an environmental license, a single environmental permit, or an authorization prescribed by the Act on Waste Management.

#### *Administrative Liability*

##### *Section 102/A.*

(1) Polluters of the environment shall be exempt from administrative liability if able to verify that the threat to the environment or the environmental damage:

*a)* was caused by an act of armed conflict, war, civil war, armed hostilities, insurrection, or natural disaster;

*b)* is the direct result of the enforcement of a final and compulsory resolution of an authority or court.

(2) Polluters of the environment shall take the measures specified in specific other legislation with a view to prevent environmental damage and, where environmental damage has occurred and remedial measures are required:

*a)* to undertake primary remediation to restore the baseline condition of the environment, or to restore, rehabilitate or replace the damaged natural resources and/or impaired services;

*b)* to undertake complementary remediation where primary remediation failed:

*ba)* to provide a replacement for the damaged natural resources and/or impaired services, or to provide an equivalent alternative to those resources or services;

*bb)* if the replacement referred to in Subparagraph *ba)* failed to produce results, the damaged natural resources and/or impaired services shall be replaced by an equivalent alternative to those resources or services, whose cost is equivalent to the estimated monetary value of the lost natural resources and/or services.

(3) Polluters of the environment shall undertake compensatory remediation until the completion of remedial measures, to compensate for the interim loss of natural resources and services pending recovery of the damaged natural resources and/or impaired services.

(4) The environmental authority may order polluters of the environment to supply information concerning any imminent threat of environmental damage or any suspicion of such threat, and of any damage to the environment that has occurred. The environmental authority, if it finds the information supplied unsatisfactory, may require the person in question to provide supplementary information.

(5) In the cases specified in Subsection (2) of this Section and in Paragraphs *c)-d)* of Subsection (2) of Section 101, the environmental authority, in accordance with the provisions of specific other legislation:

*a)* shall order polluters of the environment to undertake the preventive and remedial measures laid down in this Act and in other legislation in connection with environmental damages;

b) may itself undertake the preventive remedial measures in connection with environmental damages, or may hire others to do so.

(6) Where remedial measures are required for several instances of environmental damages, or several instances of damaged natural resources and/or impaired services, and remediation cannot be carried out at the same time, the environmental authority shall be entitled to decide which instance of environmental damage is to be remedied first. The environmental authority shall adopt its decision in consideration of the type and the gravity of damages, the size of the area they cover, the possibility of natural recovery, and their risks to human health.

(7) Where polluters of the environment are exempted under Subsection (1), they are nonetheless required to undertake the measures with a view to prevent the threat to the environment or the environmental damage, or to mitigate the adverse impact, as well as the measures specified in Subsection (2).

(8) Where an employee or a cooperative member is causing any threat to the environment or environmental damage in their official capacity under employment or membership, liability shall fall upon the relevant employer or cooperative.

(9) In connection with any threat to the environment or environmental damage caused by an agent, liability of the agent and his principal shall be joint and several.

*Section 102/B.*

(1) Where damage to the environment has been established by final decision, the environmental authority shall adopt a resolution ordering remedial measures with a prohibition of transfer and encumbrance concerning those properties of the person required to undertake the said remedial measures, which are deemed sufficient to cover the estimated costs of the remedial measures.

(2) Based on the resolution referred to in Subsection (1), the environmental authority shall contact the real estate supervisory authority to register the prohibition of transfer and encumbrance in the real state register, and to remove it from the register when the person in question had in fact carried out the remedial measures required.

(3) If any part of the costs of preventive and/or remedial measures in connection with environmental damage had been financed from the central budget in the stead of the polluter of the environment, the environmental authority shall file a lien on the real estate properties owned by the polluter of the environment to the benefit of the Hungarian State up to the amount financed, and - with a view to provide security - shall order prohibition of transfer and encumbrance registered on the properties in question, with the exception of the properties on which prohibition of transfer and encumbrance had already been registered under Subsection (1). If the properties owned by the polluter in question fail to cover the sum financed from the central budget, the environmental authority shall file a lien on the movable assets of the polluter affected.

(4) The lien filed on behalf of the Hungarian State shall be cancelled by order of the treasury if the polluter of the environment reimburses the amount financed by the central budget to the appropriate chapter set aside for environmental clean-up operations.

(5) The environmental authority may demand polluters of the environment to repay the costs of measures within five years from the date of conclusion of these measures or from the identification of the polluter of the environment, whichever occurs later.

*Section 102/C.*

(1) With regards to any threat to the environment and environmental damage that concerns any other Member State of the European Union, cooperation must be ensured with the Member State affected concerning the necessary preventive and remedial measures, and also with a view to the adequate supply of information.

(2) Where environmental damage could affect another country, the Minister shall provide sufficient information to the country affected with respect to the environmental damage in question.

(3) The Minister shall report to the European Commission, and to the Member States concerned, including a proposal for preventive and remedial measures - also covering the costs of prevention and rehabilitation - the discovery of any environmental damage by the competent environmental authorities on their areas of competence that did not originate within the territory of the country.

#### *Liability for Damages*

##### *Section 103.*

(1) Damage caused to other parties by virtue of activities or negligence entailing the utilization or loading of the environment shall qualify as damage caused by an activity endangering the environment, and the provisions of the Civil Code on activities entailing increased danger shall be applied (Civil Code, Sections 345-346).

(2) If the injured party does not wish to enforce its claim for damages as specified in Subsection (1) against the party causing the damage - on the basis of a statement pertaining to this made by the injured party within the period of limitation - the Minister may enforce said claim to the credit of the environmental protection fund special appropriations chapter.

##### *Section 104.*

If the person or the entity performing an unlawful activity changes, the rules of the liability of the legal successor shall be applied to the person or entity performing the activity, unless the parties have agreed otherwise in a contract.

##### *Section 105.*

In the event the user of the environment is terminated without a legal successor during voluntary or involuntary liquidation, the transformation of a state enterprise into an economic association or during the utilization and sale of state assets, the costs of cleaning up environmental damage and the compensation for environmental damage sustained as a result of the activity shall be shown in the statement of assets on the basis of an assessment of the state of the environment.

#### *Environmental Fine*

##### *Section 106.*

(1) Those persons who violate the provisions of legal regulations or official decisions that are aimed at the protection of the environment or who exceed the standards established therein shall pay an environmental fine in conformity with the level, severity and recurrence of the environmental pollution and environmental damage they caused.

(2) The environmental fine shall be paid over and above the environment-utilization contribution and the environmental load charges. The environmental fine shall be construed as a public debt collectible as taxes.

##### *Section 107.*

The fine does not exempt the recipient from criminal liability, misdemeanor liability or liability for damages; nor does it exempt the recipient from the obligation to restrict, suspend or ban the activities and develop adequate protection and restore the natural or previous environment.

- C. What are the criteria of rehabilitation!: prevention of harm to environment and health, restoration of soil to its previous state, preparation of soil for future use, or taking into account its environmental potential?

Criteria are more technical issues. There are special limit values for remediation ("D" value). The main aim is to reduce the environmental risk to the level of using the site.

- D. Who implements it and who controls it?

The clerks of the twelve Environmental Inspectorates (e.g. 60 specialists in the country) who have to control any activities.

## **CONCLUSION**

Please explain your opinion regarding measures which seem appropriate to you in the matter, specifying what you are expecting from the European legislation?

Please explain, if you wish, your opinion regarding the framework directive proposal as well as perspectives of a protection orientated more broadly towards on the soil functions.

Hungary voted for the directive. I think because of the significance of the topic it is seen essential to have a similar European system of remediation. Hungary has estimated 30-40 000 potential polluter in the country. The data base contains 15 000 formulars, 4-5 000 have lower risk, 1 000 need to be analyzed properly. The National Development Programm planned 40-44 billion Ft (170 million Euro) remediation costs for the period 2007-2013.