INTERNATIONAL COMMITTEE ON CONTAMINATED LAND

QUESTIONNAIRE ABOUT LEGAL FRAMEWORK FOR SOIL/SITE CONTAMINATION MANAGEMENT

COUNTRY: REPUBLIC OF SERBIA
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OVERALL CONTEXT

1. Does your national policy have a specific definition of "contaminated site", "contaminated soil"? If yes, please provide the definition. Yes
   Contaminated sites are defined as localities with the confirmed presence of hazardous and noxious substances caused by human activity in concentrations that may cause a significant risk to human health and the environment.

2. Is Groundwater included in this definition? No

3. Does your policy on contaminated sites/land/soil include other definitions (i.e. brownfield, sediment)? Yes (Brownfield are sites that have been abandoned or affected by historic pollution and require intervention for their rehabilitation in order to be safely used).

4. Which sources are you considering? Industrial operations? Transport? Urban contamination? Etc. These sites involve landfills (non operational and operational) and other sites where waste is disposed of, locations of industrial facilities, locations of accidents and brownfield locations.

LEGAL FRAMEWOK

5. Does your country have legislation with respect to contaminated land management? Yes

There is no special law on soil protection in the Republic of Serbia and the administrative capacities for the enforcement of existing laws and by-laws in this area are inadequate. Soil management is accomplished by planning the sustainable use and conservation of soil quality and diversity, in accordance with environmental protection requirements and measures established by the Law on Environmental Protection, Law on Strategic Environmental Assessment, Law on Environmental Impact Assessment, Law on Integrated Pollution Prevention and Control (Official Gazette of RS, No. 135/04, 2004), and the Law on Amendments

to the Law on Environmental Protection (Official Gazette of RS, No. 36/2009, Art. 22, No. 36/2009- other law 72/2009 - other law). The Law on Environmental Protection regulates soil protection and its sustainable use. Soil protection is accomplished by systematic monitoring of soil quality, monitoring of soil degradation risk assessment indicators and implementing programmes for the remediation of the consequences of soil contamination and degradation, whether natural or human-induced. Pursuant to the Law on Amendments to the Law on Environmental Protection (Article 16), legal and natural entities responsible for degrading the environment are obliged to remediate or otherwise restore the degraded environment, by means of restoration and remediation projects. Pursuant to the Law on Environmental Protection, in 2010 the Government of the Republic of Serbia adopted a Regulation on the programme for the systematic monitoring of soil quality, soil degradation risk assessment indicators and methodology for the development of remediation programmes. The Regulation is harmonized with the recommendations given in the Proposal for a European Soil Framework Directive – COM (2006) 232.

The adoption of this Regulation has provided the tools to ensure soil protection based on prevention of degradation - through identification of soil degradation risk areas, whether such degradation is natural or human-induced. The Regulation provides the basis for identification and management of contaminated sites in the territory of the Republic of Serbia. The level of chemical contamination of soil is assessed on the basis of limit values of contaminant concentration listed in the Regulation's Annex. In order to design contaminated soil remediation projects, additional studies to assess the level of soil contamination at the identified contaminated sites are carried out. According to the Regulation, the inventory of contaminated sites is an integral part of the environmental protection information system administered by the Environmental Protection Agency. Restoration and remediation priorities are identified on the basis of the Regulation which establishes criteria for the assessment of the status of highly threatened environment, the status of threatened environment and establishes criteria for the identification of restoration and remediation priorities (Official Gazette of RS, No.22/10, 2010).

a. Whatever the situation is, please be precise if it's a specific or a common legislation, if integrated in a more general one (including prevention of emissions, soil protection, land planning, environment & health, etc.)
b. If there is no legislation, please be precise how you tackle the problem.
c. What are the main policy objectives?
d. What are the foundational principles on which the national policy is based? (e.g., polluter pays, risk-based, fit-for-use, stand-still, transparency, …).

6. What is the Chain of Liability for the management of contaminated land

The Law on Environmental Protection adopted in December 2004 with Changes and Amandments in May 2009, is the basic law which establishes the system of environmental protection in the Republic of Serbia. This Law defined that rehabilitation, *i.e.*. remediation is the process of undertaking measures in order to halt pollution and further degradation of environment up to the safe

level for future use of the location, including also the arrangement of the area, revitalization and recultivation thereof. According to Article 16 of this Law, any person who degrades the environment is obliged to perform recultivation or to rehabilitate in any possible way the degraded environment in accordance with this and special laws (polluter pays" principle). According to Article 43 of this Law, the status of endangered environment and the regime for rehabilitation and remediation in an area of importance for the Republic shall be determined by the Ministry which is responsible for the environment, and for an area of local relevance by the locai self-governance unit.

a. Polluter? Land owner? Last operator? Occupier?
b. Is there any difference between new and historic contamination?
c. Can a responsible party pass on the liability to a purchaser? (under statutory law? Contractually?)
d. Do you separate the obligation to remediate soil pollution and the liability regarding the damage caused by soil pollution and the related remediation measures?
e. Are you facing specific situations (e.g. privatization of the industrial activities, war impacted areas, …) needing special programme?

7. Are there any specifications at regional / local level? No

8. Are there specifications for site closure?

Only for waste disposal sites: Pursuant to the Law on Waste Management the Government has adopted the Regulation disposal of waste on landfills (Official Gazette of RS, No. 92/10). This regulation prescribes the terms and criteria for the manner and procedures for landfill operation and shutdown; content and way of monitoring the landfill operation as well as subsequent maintenance after landfill shutdown.

9. Is there any legal requirement to conduct investigation for potential contamination in the sale of the property?

According to the Low on Environmental Protection polluter is responsible for the environmental pollution in the event of liquidation or bankruptcy of the company. Polluter or his successor is obliged to remove the cause of pollution and the effects of direct or indirect environmental pollution.
Changes in ownership of enterprises must include environmental assessment and determination of liability for pollution of the environment, as well as covering debts of the previous owner for the pollution and/or environmental damage.

10. Does your national policy have any kind of inventories/registers? If yes, please be precise regarding which sites are registered, how the data are collected and if the databases are public.

According to the Regulation, the inventory of contaminated sites is an integral part of the environmental protection information system administered by the Environmental Protection Agency.
These sites involve landfills (non-operational and operational) and other sites where waste is disposed of, locations of industrial facilities, locations of accidents and brown field locations.

The methodology for identification of contaminated sites is based on the screening method as a simple, easy and inexpensive way to identify potentially contaminated sites without the need for extensive field research, and to perform rough risk assessment together with prioritization.
The questionnaire, which was developed with the purpose of collecting data about contaminated site, consists of general information about a site and specific information depending on the type of contamination on the site.
The database is available upon request.

11. What are the strong, weak points and the major bottlenecks with respect to the current regulations in your country?

There is no a legal obligation to complete the questionnaire and procedure for submission the answers to the Environmental Protection Agency.

TECHNICAL ISSUES RELATED TO THE LEGAL FRAMEWORK

12. Are there site investigation requirements?

According to the Regulation on the programme for the systematic monitoring of soil quality, soil degradation risk assessment indicators and methodology for the development of remediation programmes, contaminated sites are defined for conducting the remediation programmes (Articles 13-16). These articles provide the content of remediation programmes that involve contaminated locations on which remediation programmes and projects are implemented in, and define the means to implement programmes and remediation projects. Remediation values of concentrations for hazardous and dangerous materials and values that may indicate to significant contamination of ground waters are given in the Appendixes of this Regulation.

13. Are Risk Assessment & Management the main tools?

The main tool is Environmental risk assessment.

14. Are there specific technical approaches used?
    a. For Human Health (HH), Ecosystems, Groundwater (GW), Surface waters (SW), other targets (i.e. buildings, infrastructures, …please be precise).
    b. On a site by site specific approach, or by derivation of guideline values? If possible, please detail your answer. There are no detailed guidelines for environmental risk assessment with specific technical approaches and values.
    c. Do you take into consideration others sources of pollution in the risk assessment?

15. If the national policy uses guideline values, please be precise in describing the following points:
    a. Reasons for derivation of generic values
    b. Objectives / levels of implementation (investigation, risk assessment, remediation)
    c. Priority substances
    d. Protocols of derivation (including acceptable risk levels used).

16. What are the drivers for remediation?
    a. To what level is clean-up required? (i.e. acceptable risk, land use values, …) Acceptable risk
    b. Does your national policy use cost-benefits analysis for the choice of the remedial solution? Yes

17. What are the main remediation strategies or treatment techniques used in your countries (including Natural Attenuation)?

We do not have a National Remediation strategy and we are not able to answer the question on distribution of techniques (no data available).

    a. Distribution of techniques?
    b. Evolution in time?
    c. Acceptance of innovative treatment techniques?

18. Are you considering sustainability in the national approach?

In the Article 9 of the Law on Environmental Protection (Off. Gazette of RS No. 135/04, 36/09) principles providing prevention of pollution at source are laid down, including: 1) principle of prevention and precaution achieved through environmental impact assessment and use of the best obtainable and available technologies, techniques and equipment; 2) principle of application of incentive measures that means implementation of measures of conservation and sustainable management of environment capacity; 3) “polluter pays” principle - the polluter pays fee for polluting of environment when, by its actions, cause or might cause the pollution of environment.

    a. If yes, how? In particular, how the three pillars of sustainability are considered and balanced.

In accordance with the Law on Environment Protection, the National Strategy of Sustainable Use of Natural Resources is adopted.

    b. If no, explain the reasons and the future challenges.

19. How does your country bridge the CLM approach with:
    a. Land planning programmes? Yes
    a. Public health programmes (aggregation of impacts on surrounding populations) Yes

FINANCIAL ISSUES

20. What are the specific practices with respect to “Orphan sites”?

In accordance with the Law on Environment Protection public authorities within their financial means eliminating consequences of environmental pollution when the polluter in unknown.

21. Do you have an idea of the annual budget allocated to Soil Contamination Management?

Management of contaminated sites expenditures (site investigation, remediation measures, after-care measures, redevelopment) are 14.3 (Million Euro per year) for the year 2010.

a. How is it divided between public, private and others?
b. What are the main financial / funding systems in place in your country? (e.g. Financial guarantees, insurance, public – private partnerships, special foundation, industrial consortium, enforcement, …).

Public – private partnerships, special foundation.

c. Between the different steps of management (investigation, remediation, monitoring…)?

ORGANISATIONAL ISSUES

22. How are stakeholders and in particular communities involved in the approach?

Through public hearing.

23. Is there a specific approach for:
    a. Brownfields?
    d. Megasites?
    e. Widespread pollutions?
    f. Reuse of excavated soils? (e.g., in relation to their quality)

No

24. Does your national policy include any accreditation system for consultants or service providers? If yes, please provide some details.

The Law on accreditation defined the competence of body for compatibility assessment to perform investigation, or certification of persons.

25. Do you have any training / capacity building programme, any management accountability and performance measurement?

We had a training programme in the municipalities for identification of the contaminated sites/filling the questionnaire.

26. How is the necessary inter-governmental coordination for CLM organized? (e.g. with Health Protection Department, with the public site owners, with state or local public sector environmental organizations, with special interest advocacy groups..)

Very necessary

CRUCIAL DEVELOPMENTS IN THE FUTURE

Are there any additional issues to be further developed in the following months/years whatever they are (Research and Development needs, organisational issues, …)?
Develop a legal obligation to complete the questionnaire and develop a procedures for submission the answers to the Environmental Protection Agency.
Develop the Inventory of contaminated sites. Staff capacity building. Develop a technical guidelines for risk assessment.

Unofficially or officially, do you see any opportunities for collaboration in the coming months or years that may improve overall coordination among international organizations? (e.g., conferences, workshops, international (technical or policy) initiatives, growing alliances (e.g., in support of redevelopment /reuse of contaminated lands, etc.).

Conferences, workshops, technical trainings

REFERENCES

Please give most important references (documents, website, projects, and case studies) that could be relevant for explaining your national approach

1. Waste Management Strategy fortheperiod2010-2019, Official Gazette ofthc Republic of Serbia, No 29/10, 2010
2. Law on Environmental Protection, Official Gazette of the Republic of Serbia. No 135/04. 2004
3. National Environment Protection Program (in Serbian), Official Gazette of the Republic of Serbia, No 12/10,2010
4. Decree on Determining tbe Criteria for Determining the Status of Endangered Environment and Priorities for Rehabilitation and Remediation, Official Gazette of the Republic of Serbia, No 22/10,2010
5. Decree on systematic soil quality monitoring program, indicators for assessment of risk of soil degradation, and methodology for preparation of remediation programs, Official Gazette of the Republic of Serbia, No 88/10, 2010
6. Twinning Project SR08-IB-EN-01 "Strengthening [nstitutional Capacity in Hazardous Waste Management", Summary Reporl on Component 4 "Prioritization ofHot Spots
7. Božić Vladica, Doeberl Gernot, Ausserleiter Markus (2013): Methodology for identification of contaminated sites in the republic of Serbia, Proceedings of the International science conference Reporting for sustainability, Bečići, Montenegro, ISBN 978-86-7550-070-4
8. Vidojević Dragana (2012): Assessment of Sites Under Risk for Soil Contamination in Serbia, Clean Soil and Safe Water, NATO Science for peace and Security Series - C: Environmental Security, Springer, ISBN: 978-94-007-2242-2 (PB), ISBN: 978-94-007-2239-2 (HB), ISBN: 978-94-007-2240-8 (e-book),
9. Vidojevic Dragana, Baćanović Nataša, Branislava Dimić (2013): Inventory of contaminated sites in Serbia, Proceedings of the International conference Contaminated sites Bratislava 2013, Bratislava, Slovak Republic, ISBN 978-80-88833-59-8.