

## GENERAL INFORMATION

Country /State - Region - Province	Person(s) completing the questionnaire	Organisation	Email	Remarks
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Please fill in the questionnaire by giving short answers to the questions presented in the three spreadsheets (A, B and C). Please write your answers on the empty rows below the questions.

Please note that the questions are related only to EXCAVATED contaminated soil (except Question 1.), including treated contaminated soil.

We are only expecting one filled questionnaire per country or region/province, so please agree on completing the questionnaire with you colleagues, if more than one person from your country will be attending the meeting.

We have introduced some alternative answers and explanations to help you with your answers and to hopefully shorten the time of completing this questionnaire, so do not hesitate to use them, if they are appropriate.

When the questions are not relevant to your country or you don't have any answers, you can use the following abbreviations: NR - not relevant, NI - no idea.

Please feel also free to provide links to any websites or documents for further information.

**A- General situation**  
**Management of excavated contaminated soil**

**1. What are the approx. proportions of *in situ*, on site and off site techniques in site remediation?**

*Your answer here*

**2. What is the typical amount of annually excavated contaminated soil (tons per year)?**

Please indicate, if the figure is based on estimate or compilation of statistics.

**3. What are the most common treatment methods for excavated contaminated soil?**

**4. How much of all the excavated contaminated soil is typically reused as such and/or as treated?**

Alternative answers: < 10%, 10-30%, 30-50%, 50-70%, 70-90%, >90%, etc. Please indicate, if the figure is based on estimate or compilation of statistics.

**5. What are the main applications for reuse of excavated contaminated/treated soil?**

Alternative answers: road construction, other soil construction, noise barriers, land fill covers, etc.

## B- Policy issues

### Management of excavated contaminated soil

#### 6. List the existing policy instruments for the management of excavated contaminated soil (concerning instruments on reuse, treatment and landfilling)

Please shortly describe the instruments and/or provide links to websites or documents for further information

##### 6a. Regulations

**Soil Act:** This Act assigns special protection to certain soils due to historical, cultural or environmental value. Environmental value can include the situation where the soils are known to overlay important groundwater resources. **Wastes Act (1998):** This Act defines contaminated soils. However, this definition is based on soil criteria which are not yet set and is therefore currently impracticable. The Act states the basic principle that the polluter must remediate for remediation. If the polluter can not be found, the landowner must finance the remediation. The Act also obligates the autonomous regions to make an inventory of suspected contaminated sites. **Contaminated Sites Royal Decree:** It fulfils the provisions of the Wastes Law 10/1998 of 21 April, subject to prior consultation with the autonomous communities. The Royal Decree gives greater specification to the definition of contaminated soil in Article 3.p) of the Law and makes reference to the presence of dangerous chemical substances of human origin that Earthworm Toxicity Test), OECD 216 (Soil Micro-organisms: Nitrogen Transformation Test), OECD 217 (Soil Micro-organisms: Carbon Transformation Test), or such tests as may be regarded as equivalent for assessment purposes by the Minister of the Environment, is lower than 10 mg of contaminated soil/gram of soil.b) When the lethal or effective median concentration, L(E)C50, for aquatic organisms obtained in toxicity tests OECD 201 (**Algal Growth Inhibition Test**), OECD 202 (Daphnia Magna Immobilization Test), OECD 203 (Fish – Acute Toxicity Test), or such tests as may be regarded as equivalent for assessment purposes by the Minister of the Environment, carried out with leachates obtained using the standard DIN-38414 method, is lower than 10 ml of leachate/litre of water., 1995 – 2005). The objectives of this plan are: Prevention of further contamination, to continue the identification of polluted sites, to investigate 1,650 potentially contaminated sites, to remediate 274 priority sites, to develop clean-up technologies and to lay down specific national legislation and technical regulations. Referring to drinking water criteria in Spain are derived from the European Directive 80/778/CEE. **Assessment of Environmental Impact, 1986:** These regulations require the study of the environmental impact of a limited number of listed activities such as oil refineries, large chemical industries, highway construction, etc. and require the authorisation of the activity. A minimum list is administered at a national scale, while regional authorities administer additional activities which they may add to the list. **Hydrological Plans of Basins, 1998:** This regulation is the theoretical instrument for defining zones of protection within recharge areas of well fields. It gives priority to larger cities

##### 6b. Guidelines

There aren't specific site closure guidelines in the soil regulation. This establishes that owners of sites where potentially contaminating activities have been carried out shall submit a soil situation report whose content will be determined by the Competent Regional Authority.

##### 6c. BAT/BATNEEC criteria

There aren't specific BAT/BATNEEC guidelines in the soil regulation. This establishes that owners of sites where potentially contaminating activities have been carried out shall submit a soil situation report whose content will be determined by the Competent Regional Authority.

##### 6d. Registers/inventories/databases (e.g. concerning information on soil streams, locations of reuse sites and treatment technologies)

If there are any, please indicate if the information is made available to the public

##### 6e. "Soil banks" or other logistic instruments for managing soil streams

##### 6f. Economic instruments (e.g. taxation and incentives)

The Ministry has the option to fund a remediation and later recover the costs. Costs can be recovered either directly or by the transfer of an appropriate portion of the remediated property. Cost recovery is to take place over a 10-15 year period.

##### 6g. Other instruments

**7. Does the management of excavated contaminated/treated soil differ from the management of natural soil or the other waste streams?**

If yes, please shortly describe how they differ (e.g. different legislation, different reuse criteria, different taxation, restrictions on the use)

**8. Do you foresee any changes in the practices of soil reuse due to the new Waste Directive (2008/98/EC)?**

Answers expected only from the EU countries

## **C- Technical issues**

### **Management of excavated contaminated soil**

#### **9a. Are there guidelines and associated criteria to determine whether soil is suitable for reuse?**

If yes, please shortly describe the contents of the guidelines (e.g. assessment tiers and the type of methods) and the type of criteria (e.g. soil remediation criteria, other risk-based soil concentration values, leaching criteria, toxicity criteria). Please feel also free to provide links to websites or documents for further information

There aren't specific guidelines to determine whether a soil is suitable for reuse. Owners of sites where potentially contaminating activities have been carried out shall submit a soil situation report whose content will be determined by the Competent Regional Authority.

#### **9b. Are those mandatory or is it possible to deviate from them based on site-specific risk assessment?**

If yes, please indicate if a risk assessment methodology to be used is defined

When a corresponding risk assessment is not available, the competent bodies of autonomous communities may assume that the level of risk is unacceptable and, consequently, declare a site contaminated when any of the following circumstances holds true:1. In cases in which the protection of human health is regarded as the main priority:a) When the concentration in soil of any of the substances listed in Annex I exceeds 100 times the established generic reference level for the protection of human health in accordance with land use.b) When the concentration in soil at the site of any chemical contaminant not included in Annex V exceeds 100 times the generic reference level calculated in accordance with the criteria established in Annex VII.2. In cases in which the protection of ecosystems is regarded as the main priority:a) When the lethal or effective median concentration, L(E)C50, for soil organisms obtained in toxicity tests OECD 208 (Test of Seedling Emergence and Growth of Terrestrial Plants), OECD 207 (Acute Earthworm Toxicity Test), OECD 216 (Soil Micro-organisms: Nitrogen Transformation Test), OECD 217 (Soil Micro-organisms: Carbon Transformation Test), or such tests as may be regarded as equivalent for assessment purposes by the Minister of the Environment, is lower than 10 mg of contaminated soil/gram of soil.b) When the lethal or effective median concentration, L(E)C50, for aquatic organisms obtained in toxicity tests OECD 201 (Algal Growth Inhibition Test), OECD 202 (Daphnia Magna Immobilization Test), OECD 203 (Fish – Acute Toxicity Test), or such tests as may be regarded as equivalent for assessment purposes by the Minister of the Environment, carried out with leachates obtained using the standard DIN-38414 method, is lower than 10 ml of leachate/litre of water.

#### **10. Are there specific procedures for quality control related to reuse and/or treatment of excavated contaminated soil?**

If yes, please list the elements they concern (e.g. sampling, methods, tests and interpretation of the results)

#### **11. Are there any requirements for structures, monitoring or site conditions related to reuse applications?**

If yes, please shortly describe the requirements