GENERAL INFORMATION

Country /State - Region - Province	Person(s) completing the questionnaire	Organisation	Email	Remarks
Italy	Laura D'Aprile (Contaminated Sites), Rosanna Laraia (Waste)	ISPRA	laura.daprile@isprambiente.it, rosanna.laraia@isparmbiente.it	

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?
The approx.proportions are the following: in situ on site = 20-30%, off-site: 70-80 %
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.
N.I.
3. What are the most common treatment methods for excavated contaminated soil?
The most of the excavated contaminated soil is landfilled. Treatment technologie frequently applied are: soil washing, In Situ Chemical Oxidation, Bioremediation (Biopiles, Phytoremediation), Solidificatio/Stabilization
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.
No more than 30% of the soil is reused (aprrox. Estimation)
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.
Road Construction and Landfill Covers

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

Contaminated Sites and Waste Regulation both enforced by Legislative Decree n. 152 of 2006 and s.m.i. (Legislative Decree n. 4 of 2008), Law 2/2009, Law 13/2009

6b. Guidelines

Some information in BAT guidelines for physico-chemical treatment of solid waste (2007), limited to ex-situ contaminated soil treatment plants. Some of the elements contained in BAT guidelines are derived from BREF of the EC on solid waste treatment plants.

6c. BAT/BATNEEC criteria

The BAT guidelines give useful information on contaminated soil treatment technologies (e.g: solidification/stabilisation, thermal treatment).

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

The BAT guidelines for solid waste treatmenta are public available (published on June 2007)

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

Some date could be derived from the annual registers of waste developed according to the present regulation on waste management. The registers are built depending on the information contained in MUD (Unique Declaration Model), that contains the information on waste production and management by CER codes (European Waste Catalogue codes).

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

N.A.

6g. Other instuments

N.A.

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)

Yes, different legislation applies (see section C)

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

Some provisions of the 2008/98/EC Directive regarding soil re-use were trasposed into italian regulation very recently (Law 2/2009, February 2009) therefore no sufficient data are available to evaluate potential changes in practices.

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

In Italy no specific national technical guidelines for the managemnet of excavated soil have been published. The excavated contaminated soil is generally managed under waste regulation. For excavated non contaminated soil the following scenarios can be considered:1) in situ re-use: out of the application of waste regulation 2) ex situ re-use: application of waste regulation. Suitability for re-use is assessed through different criteria depending on waste or not-waste classification. If the material are classified as waste, the material is characterized following UNI 10802 and leaching test according to waste regulation are performed, furthermore other chemical and/or geotechnical invetsigations can be required to assess the environmental suitability of re-use in specific conditions. If the ,materials are not classified as waste, for the chacterization the methods required under contaminated sites regulation can be applied and leaching tests provided by UNI 10802 (granular waste) can be performed if more than 60-80% of the material is over the 2 cm size.

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

Site Specific risk assessment is not used to evaluate re-use of materials, but it can be applied for the evaluation of landfill acceptability (according to ISPRA guidelines).

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)

See also 9.a. for reuse. As far as contaminated soil treatment is concerned the type of quality control measures depends on the treatment technology applied (e.g.; leaching test are used if soil washing is applied for soil treatment, biological and ecotoxicological analysis can be required if bioremediation is applied, etc.)

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

If yes, please shortly describe the requirements

Specific requirements are made on a case-by-case basis