
**Soil quality — Guidance on the
establishment and maintenance of
monitoring programmes**

*Qualité du sol — Lignes directrices pour l'établissement et l'entretien
de programmes de surveillance*



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ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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Introduction

Monitoring is the process of repetitive observation, for defined purposes, of one or more components of the environment according to pre-arranged schedules in space and time using comparable methods for environmental sensing and data collection (see reference [1] in the Bibliography). Monitoring schemes are used all over the world for a large number of purposes. Soil monitoring, particularly, is a long-term undertaking. The quality and the utility of the information from the monitoring is to a large degree determined by the choice of monitoring sites and by their maintenance over the years, and by appropriate quality control at all stages of the process.

Monitoring associated with industrial (contaminated) sites can involve many specific considerations, including legal requirements. The guidance in this International Standard is not designed or intended to cover such situations.

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Soil quality — Guidance on the establishment and maintenance of monitoring programmes

1 Scope

This International Standard gives general guidance on the selection of procedures for the establishment and maintenance of programmes for long-term monitoring of soil quality. It takes into account the large number of objectives for soil-monitoring programmes.

This International Standard is intended to help provide a basis for dialogue between parties which might be involved in a monitoring scheme. Examples of soil-monitoring programmes from several countries are provided in Annex A.

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

2.1

accumulation

increase of the concentration of a substance in soil due to substance input being larger than substance output

NOTE Adapted from ISO 11074-1:1996

2.2

anthropogenic influence

changes in soil properties caused by human activities

[ISO 11074-1:1996]

2.3

background concentration

natural pedogeochemical content

geogeneous or pedogeneous average concentration of a substance in an examined soil

[ISO 11074-1:1996]

2.4

diffuse source input

non-point source input

input of a substance emitted from moving sources, from sources with a large area or from many sources

NOTE 1 The sources can be cars, application of substances through agricultural practices, emissions from town or region, deposition of sediment through flooding of a river.

NOTE 2 Diffuse source input usually leads to sites that are relatively uniformly contaminated. At some sites, the input conditions may nevertheless cause a higher local input near the source or where atmospheric deposition/rain is increased.

[ISO 11074-1:1996]