

**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

HJ 964-2018

**Technical guidelines for environmental impact assessment -
soil environment**

环境影响评价技术导则 土壤环境（试行）

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Foreword

To implement the "Environmental Impact Assessment Law of the People's Republic of China", standardize and guide soil environmental impact assessment work, and prevent or to slow down soil environmental degradation and protect the soil environment, and develop this standard.

This standard specifies the general principles, working procedures, contents, methods and requirements for soil environmental impact assessment.

This standard was first published.

Appendix A of this standard is a normative appendix, and Appendix B to Appendix G are informative appendices.

This standard was formulated by the Ministry of Ecology and Environment.

This standard is mainly drafted by. Environmental Engineering Evaluation Center of the Ministry of Environmental Protection, Nanjing Institute of Soil Science, Chinese Academy of Sciences, University of Science and Technology, Nanjing Institute of Environmental Sciences, Ministry of Environmental Protection, Beijing Zhonghong Bohong Environmental Resources Technology Co., Ltd., Beijing Zhongdi Yuke Environmental Technology Co., Ltd., China Coal Science and Technology Group Beijing Huayu Engineering Co., Ltd.

This standard is approved by the Ministry of Ecology and Environment on September 13, 2018.

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This standard is explained by the Ministry of Ecology and Environment.

Environmental Impact Assessment Technical Guidelines Soil Environment

1 Scope of application

This standard specifies the general principles, working procedures, contents, methods and requirements for soil environmental impact assessment.

This standard applies to chemical, metallurgical, mining, agriculture, forestry, water conservancy and other construction project soils that may affect the soil environment.

Environmental impact assessment.

This standard does not apply to soil environmental impact assessment of nuclear and radiation construction projects.

2 Normative references

This standard refers to the following documents or their terms. For undated references, the latest edition applies to this standard.

GB 15618 Soil Environmental Quality Agricultural Land Risk Control Standards (Trial) GB 36600 Soil Environmental Quality Construction Land Management Risk Control Standard (Trial) GB/T 21010 Classification of land use status HJ 2.1 General Outline of Technical Guidelines for Environmental Impact Assessment of Construction Projects HJ 2.2 Technical Guidelines for Environmental Impact Assessment Atmospheric Environment HJ 2.3 Environmental Impact Assessment Technical Guidelines Surface Water Environment HJ 19 Environmental Impact Assessment Technical Guidelines Ecological Impact HJ 25.1 Technical Guidelines for Site Environmental Investigation HJ 25.2 Technical Guidelines for Site Environmental Monitoring HJ 169 Technical Guidelines for Environmental Risk Assessment of Construction Projects HJ 610 Environmental Impact Assessment Technical Guidelines Groundwater Environment HJ/T 166 Technical Specifications for Soil Environmental Monitoring

3 Terms and definitions

The following terms and definitions apply to this standard.

Soil environment

Refers to the land surface composed of minerals, organic matter, water, air, biological organisms, etc., which are affected by natural or human factors.

Loose complexes, including soil layers capable of growing plants on the surface of the land and loose layers that can be affected by pollutants.

Ecological impact on soil environment it refers to the process or state of changes in the ecological function caused by changes in soil environmental characteristics due to human factors.

Contaminative impact on soil environment it refers to the fact that certain substances enter the soil environment due to human factors, causing changes in the physical, chemical and biological properties of the soil.

A process or condition that causes soil quality to deteriorate.

Sensitive target of soil environment Refers to sensitive areas or objects that may be affected by human activities and related to the soil environment.

4.1 General principles

The soil environmental impact assessment should be applied to the soil after the construction project construction period, operation period and service period (which can be selected according to the project conditions).

Analyze, predict, and evaluate the impacts of environmental physicochemical properties, and propose measures and countermeasures to prevent or mitigate adverse effects.

Provide scientific basis for soil environmental protection of construction projects.

4.2 Evaluation of basic tasks

4.2.1

According to the relevant requirements of HJ 2.1 construction project pollution impact and ecological impact, according to the construction project may produce soil environment the impact of the soil environmental impact type is divided into ecological impact type and pollution impact type, wherein the guideline refers to the soil environmental ecological impact Salinization, acidification, alkalization, etc. of the soil environment.

4.2.2

According to industry characteristics, process characteristics or scale, etc., the construction project categories are divided into I, II, III, and IV categories.

Record A, where Class IV construction projects may not carry out soil environmental impact assessment; construction projects that are sensitive targets themselves may only be needed as needed Investigate the current state of the soil environment.

4.2.3

Soil environmental impact assessment should be carried out according to the evaluation work level divided by this standard, and identify the soil environmental impact category of the construction project.

Type, impact route, impact source and impact factor, determine the level of soil environmental impact assessment work; conduct soil environment status survey, finish Monitoring and evaluation of the status quo of the soil environment; predicting and evaluating the possible impacts of the construction project on the soil environment, and proposing corresponding prevention and control measures Give countermeasures.

4.2.4

Construction projects involving two or more sites or areas shall carry out evaluation work in accordance with 4.2.3.

4.2.5

For the two types of impacts involving soil environmental ecological impact type and pollution impact type, the evaluation work shall be carried out separately according to 4.2.3.

4.3 Working procedures

Soil environmental impact assessment can be divided into preparation stage, current status investigation and evaluation stage, prediction analysis and evaluation stage and conclusion stage. The soil environmental impact assessment work procedure is shown in Figure 1.

4.4.1 Preparation phase

Collect and analyze data on laws, regulations, policies, standards, and plans related to the national and local soil environment; understand construction projects Overview of the process, combined with engineering analysis, identify the types of impacts that construction projects may have on the soil environment, and analysis may result in soil environmental impact.

The main route of the ring; carry out on-site survey work, identify sensitive targets of soil environment; determine the grade, scope and content of the evaluation.