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HJ

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

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**Technical Guideline for Verification of Risk Control and Soil
Remediation of Contaminated Site**

污染地块风险管控与土壤修复效果评估技术导则

(English Translation)

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Foreword

Protecting the ecology according to the Environmental Protection Law of the People's Republic of China and the Law of the People's Republic of China on Soil Pollution Control Environment, safeguard human health, strengthen environmental supervision and management of polluted land, standardize risk management and soil remediation effects of contaminated land Assess the work and develop this standard.

This standard and the following standards belong to the environmental protection standards for contaminated land series.

Technical Guidelines for Site Environmental Investigation (HJ 25.1-2014);

Technical Guidelines for Site Environmental Monitoring (HJ 25.2-2014);

Technical Guidelines for Risk Assessment of Contaminated Sites (HJ 25.3-2014);

Technical Guidelines for Soil Remediation in Contaminated Sites (HJ 25.4-2014).

This standard stipulates the contents, procedures, methods and techniques for risk management and soil remediation evaluation of construction land contaminated land.

Technical requirements.

Appendix A to Appendix D of this standard are informative annexes.

This standard is the first release.

This standard is formulated by the Department of Soil Ecology and Environment,

Department of Regulations and Standards of the Ministry of Ecology and Environment.

This standard is mainly drafted by. Beijing Environmental Protection Research Institute, China Academy of Environmental Sciences, solid waste and Chemical Management Technology Center, Environmental Planning Institute, Shenyang Environmental Science Research Institute, Southern University of Science and Technology Engineering Technology Innovation Center (Beijing).

This standard is approved by the Ministry of Ecology and Environment on December 29, 2018.

This standard has been implemented since December 29, 2018.

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

1 Technical guidelines for risk management and soil remediation evaluation of contaminated land

1 Scope of application

This standard stipulates the contents, procedures, methods and techniques for risk management and soil remediation evaluation of construction land contaminated land.

Technical requirements.

This standard is applicable to the assessment of risk management and soil remediation effects of construction land. Groundwater remediation effect assessment Technical guidelines will be announced separately.

This standard does not apply to the assessment of the effects of treatment and restoration of radioactive materials and pathogenic biological contaminated plots.

2 Normative references

The contents of this standard refer to the terms in the following documents. For undated references, the valid version applies to this standard.

GB 36600 Soil Environmental Quality Construction Land Control Risk Control Standard (Trial) GB/T 14848 Groundwater Quality Standard HJ 25.1 Technical Guidelines for Site Environmental Investigation HJ 25.2 Site Environmental Monitoring Technical Guidelines HJ 25.3 Technical Guidelines for Risk Assessment of Contaminated Sites HJ 682 contaminated site terminology

3 Terms and definitions

The following terms and definitions apply to this standard.

Target pollutant target contaminant If the quantity or concentration in the plot environment

has reached an actual or potential adverse impact on human health and the environment, Conduct risk management and repair of pollutants.

Repair target remediation target Target pollutants determined by plot environmental surveys and risk assessments do not pose a direct or potential hazard to human health and the environment.

A pollution repair end point that is harmful or does not have environmental risks.

Assessment criteria

To assess whether the plot meets environmental or health safety standards or guidelines, the assessment criteria referred to in this standard include target pollutants.

The concentration reaches the target value of repair, the secondary pollutants do not generate risks, and the engineering performance indicators meet the specified requirements.

Risk management and soil remediation

2 Comprehensive evaluation of land risk management and soil remediation through data review and site survey, site sampling and laboratory testing Whether the required requirements or the risk of the plot have reached an acceptable level.

4.1 Basic principles

Risk management and pollution assessment of contaminated land should assess whether the soil has reached the repair target and whether the risk control is achieved Scientific and systematic assessment of the requirements, whether the land risk has reached an acceptable level, etc.

It is recommended to provide a scientific basis for the management of contaminated land.

4.2 Work content

The work of risk management and soil remediation evaluation of contaminated land includes. updating the conceptual model of the plot and sampling the site and laboratory testing, risk management and repair effectiveness evaluation, proposed late environmental monitoring recommendations, preparation of effect evaluation report.

4.3.1 Updating the plot concept model

The concept model of the plot should be updated in real time according to the risk management and repair progress and the mastery information.

The basis for the effectiveness evaluation layout scheme is provided.

4.3.2 Spot sampling and laboratory testing

The layout scheme includes the object and range of the effect evaluation, the sampling node, the sampling period and frequency, the number and location of the distribution points, Detect indicators and other content, and explain the basis for the above content determination. In principle, the risk management and repair implementation plan should be prepared.

The preliminary layout plan for the evaluation of the segment preparation effect, and before the development of the site risk management and repair effect evaluation, according to the update the post conceptual model is refined and updated.

According to the layout plan, develop sampling plans, determine test indicators and laboratory analysis methods, and conduct on-site sampling and experimentation.

Room testing, clear on-site and laboratory quality assurance and quality control requirements.

4.3.3 Risk management and soil remediation evaluation

According to the test results, assess whether the soil remediation meets the repair target or acceptable level, and assess whether the risk control is achieved.

Required requirements.

For soil remediation effects, one-by-one comparison and statistical analysis can be used to evaluate the results.

According to the situation, put forward the post environmental supervision recommendations and prepare the repair effect evaluation report. If the repair effect is not achieved, it should be supplemented.

Charge repair.

For risk management and control effects, if the engineering performance indicators and pollutant indicators meet the evaluation criteria, then the risk management is judged.

If the expected results are achieved, the operation and maintenance can be continued; if the engineering performance indicators or pollutant indicators do not meet the evaluation criteria, then If it is judged that the risk management and control has not achieved the expected results, the risk management and control measures must be optimized or adjusted.

4.3.4 Proposing late environmental supervision recommendations

According to the implementation situation and effect evaluation conclusions of the risk management and repair project, the environmental supervision recommendations were put