

HJ

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

HJ 1175-2021

**National Ecological Status Survey and Evaluation Technical
Specifications-Project-scale Ecological Impact Assessment**

全国生态状况调查评估技术规范——项目尺度生态影响评估

(English Translation)

Issued on: January 1, 1970

Implemented on: January 1, 1970

Issued by: Ministry of Ecology and Environment

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1 Scope of application

This standard specifies the general principles, technical process, project scale scope, preliminary investigation and analysis, ecological impact assessment Evaluation index system, technical methods of investigation and evaluation, conclusions and recommendations, etc.

This standard is applicable to all kinds of legally prohibited development zones.

Ecological impact assessment in the exhibition area, serving the comprehensive supervision and management of ecological protection.

2 Normative references

This standard refers to the following documents or clauses thereof. For dated references, only the dated version applies to this standard.

For undated references, the latest edition (including all amendments) applies to this standard.

HJ 2.1 General outline of technical guidelines for environmental impact assessment of construction projects
HJ 19 Environmental Impact Assessment Technical Guidelines
Ecological Impact
HJ 1173 National Ecological Status Survey and Evaluation Technical

Specifications--Ecosystem Service Function Evaluation LY/T 1721 Specification for the Evaluation of Forest Ecosystem Services SL 773 Guidelines for the Measurement of Soil Loss in Production and Construction Projects General outline of technical guidelines for ecological and environmental damage identification and assessment (Huanbanzhengfa [2016] No. 67) Guidelines for Delineation of Ecological Protection Red Lines (Huanban Ecology [2017] No. 48)

3 Terms and Definitions

The following terms and definitions apply to this standard.

ecosystem service

The benefits that humans obtain from ecosystems mainly include windbreak and sand fixation, soil conservation, water conservation, biodiversity maintenance, etc.

Serve.

ecological impact assessment Investigation, monitoring and analysis activities to assess the various impacts that a particular process or measure may have on an ecosystem or its composition.

ecological sensitive targets National parks, nature reserves, ecological protection red lines, habitats of protected species and endemic species, drinking water sources and other ecological protection Target.

water conservation

Through its structure and processes, ecosystems intercept stagnant precipitation, enhance soil infiltration, conserve soil moisture and replenish groundwater, and regulate rivers the function of increasing the amount of available water resources.

soil conservation

Ecosystems protect soil through their structure and processes, reduce the erosive capacity of rain, reduce soil loss, and prevent sedimentation.

can.

wind break and sand fixation Ecosystem functions by increasing soil wind resistance and reducing wind erosion and sand damage.

biodiversity conservation the role of ecosystems in maintaining genetic, species, and ecosystem diversity.

project dimension

Before and after the construction of some urban development, resource development and other projects, it will cause certain damage to the natural ecology and cause the imbalance

of ecological development.

or smaller space.

4.1 Principles

The project-scale ecological impact assessment should follow the principles of normative, operable, advanced, and economic and technical feasibility.

4.2.1 Objectives

This standard uses remote sensing technology, GIS technology and the ecological assessment method is adopted to assess the ecological impact of the project on the assessment area.

4.2.2 Scope

4.2.2.1

Time range. Determined according to the time before and after the implementation of the project.

4.2.2.2

Spatial scope. determined according to the possible ecological impact scope caused by the construction project.

The ecological impact assessment of different industries should be combined with the characteristics of the industry and the ecological characteristics of the region, and the evaluation scope should be determined according to the situation in the specific evaluation.

around. Generally speaking, for general projects, the scope of ecological impact assessment should not be less than the main project, ancillary projects, direct disturbance areas (such as borrow and spoil yard and other temporary engineering areas) and the surrounding area of 500 m. If the main project, auxiliary project, direct interference area and other surrounding 500~ There are ecologically sensitive targets within 1 000 m, which should be all included in the assessment scope from the perspective of ecosystem integrity.

5 Technical process

Project-scale ecological impact assessment Through the collection of data, the scope of the project scale is clarified, and the general situation of the project and after completion is understood, combined with ecological Preliminary investigation of the status and construction of the project, and construction of ecological impact assessment indicators, including. ecological space occupation, loss of ecosystem services, Ecological risk assessment. The specific project-scale ecological impact assessment technical process is shown in Figure 1.

6 Clarify the scope of the project scale

Clarify the scale and scope of the ecological impact of certain urban development, resource development and other projects that need to be assessed.

7.1 Preliminary investigation on ecological status

Using methods such as data collection, on-site investigation, sample method, remote sensing and geographic information system analysis to investigate and analyze construction projects and weekly the status quo of the natural ecology of the border; the background survey of biodiversity within the assessment scope, such as vegetation ecology and animal ecology; the assessment scope and surrounding areas are important the type, quantity, temporal and spatial distribution dynamics of ecological protection areas, etc.; to ecological issues, etc.

7.2 Preliminary investigation of engineering and construction

Using methods such as on-the-spot investigation and data collection to investigate and analyze the type and nature of the project, Design situation, clarify whether the project construction conforms to the local regional planning, whether it exceeds the scope of approval, and whether there are major construction changes.

Analyze the construction and operation of pollution prevention and control facilities supporting the main project, the design and implementation of ecological protection measures, etc.

The relevant requirements of the General Outline of the Technical Guidelines for Environmental Damage Appraisal and Assessment shall be implemented.

8 Ecological Impact Assessment Indicator System

According to the content of the project-scale ecological impact assessment, three parts of ecological space occupation, ecosystem service loss and ecological risk are constructed.

See Table 1 for details.

9.1 Ecosystem Type Transfer

Build an ecosystem type transition matrix to analyze the transformation of ecosystem types, including the amount and rate of transformation, especially to clarify the transformation of high ecological service function land type to low ecological service function land type, so as to analyze the change of ecosystem structure. For specific methods, see Appendix A.