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

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**Technical specification for environmental protection
applications development management
(English Translation)**

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Foreword

To implement the Environmental Protection Law of the People's Republic of China, standardize the management process of environmental protection application software development, and promote this process is developed in the process of environmental informationization.

This standard specifies the development process of environmental protection application software and the technical management requirements of the development process.

Appendix A, Appendix B, Appendix C, Appendix D, Appendix E, Appendix F, Appendix G, Appendix H, Appendix I of this standard,

Appendix J, Appendix K, Appendix L, Appendix M, Appendix N, Appendix O, and Appendix P are informative annexes.

This standard was first published.

This standard was formulated by the Science and Technology Standards Department of the Ministry of Environmental Protection.

This standard was drafted. Institute of Remote Sensing Applications, Chinese Academy of Sciences, Zhongke Yutu Tianxia Technology Co., Ltd., Beijing Division Fan University.

This standard was approved by the Ministry of Environmental Protection on September 1, 2011.

This standard has been implemented since December 1, 2011.

This standard is explained by the Ministry of Environmental Protection.

Environmental protection application software development management technical specification

1 Scope of application

This standard specifies the important work processes and basic management requirements to be followed in the process of environmental protection application software development and management.

And basic technical requirements.

This standard applies to environmental protection application software for demand development and management, summary design, detailed design, software implementation, Basic software development management activities such as software testing, software commissioning and acceptance, service and maintenance, user training and review.

The main users of this standard are environmental protection application software managers and developers.

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/T 16705-1996 environmental pollution category code GB/T 16706-1996 Environmental pollution source category code HJ/T 212 pollution source online automatic monitoring (monitoring) system data transmission standard HJ/T 352-2007 Environmental Pollution Automatic Monitoring Information Transmission and Exchange Technical Specification HJ/T 416-2007 Environmental Information Terminology HJ/T 417-2007 Environmental

Information Classification and Code HJ/T 418 Environmental Information System
Integration Technical Specification HJ/T 419 Environmental Database Design and
Operation Management Specification GB/T 8566-2007 information technology software life
cycle process GB/T 8567-2006 computer software documentation specification GB/T
11457-2006 Information Technology Software Engineering Terminology GB/T 15532
computer software unit test GB 17859-1999 Computer Information System Security
Protection Level Division Guidelines GB/T 20282-2006 Information Security Technology
Information System Security Engineering Management Requirements CH/T 1005-2000
Basic Geographic Information Digital Product Data File Naming Rules CH/T 1007-2001
Basic Geographic Information Digital Product Metadata

3 Terms and definitions

GB/T 8566-2007, GB/T 11457-2006, HJ/T 416-2007 and HJ/T 419 as defined in the following terms and the definition applies to this standard.

3.1

environmental protection application software environmental protection applications
software Collect, aggregate, organize, process, store, classify, retrieve, calculate, compare,
judge, and rank environmental information Operation such as sequence and output,
providing information management and sharing, decision support, auxiliary execution, and
effect for environmental management and research work Software for feedback and other
services.

3.2 Development process

A set of related activities performed for a given purpose during software development.

3.3 Non-functional requirement

Requirements other than functional requirements in user requirements, such as reliability,
efficiency, ease of use, etc.

3.4 Software product software product

A set of computer programs, procedures, and possibly related documents and data.

4 Environmental protection application software development process

According to the software life cycle process definition specified in GB 8566-2007, it is
required to implement environmental protection application software development.
process.

The environmental protection application software development process can be divided into the following nine processes.

- Environmental protection application software requirements development and management process;
- Environmental protection application software summary design process;
- Detailed design process for environmental protection application software;
- Environmental protection application software implementation process;
- Environmental protection application software testing process;
- Trial operation and acceptance process of environmental protection application software;
- Environmental protection application software service and maintenance process;
- Environmental protection application software user training process;
- Environmental protection application software review process.

Entry criteria that are not specifically stated in each process are reviewed documents.

5 Environmental protection application software requirements development and management process

5.1 Entry criteria

The Software Development Plan (implemented in accordance with GB/T 8567-2006) has passed the review. The requirements developer has been identified.

5.2 Requirements Development and Management Process

The requirements development and management process should include pre-investigation preparation, requirements research, requirements analysis, writing user requirements specifications, User needs review, user needs confirmation, software requirements analysis, writing software requirements specification, software requirements review, Important activities such as demand change control, the main work flow is shown in Figure 1.

requesting research

demand analysis

User needs review

User demand confirmation User Requirements "User Needs Survey Form" User Requirements Manual Software requirement definition Software Requirements Review "Software Requirements Specification" Contract technical annex Whether the review