

## ISO 14001:2004

### 环境管理体系——要求及使用指南

## Environmental management systems - Requirements with guidance for use

(本中文翻译稿仅供参考及学习)

### 目录

### Contents

前言	Foreword
引言	Introduction
1 范围 (略)	1 Scope
2 引用标准 (略)	2 Normative references
3 术语和定义 (略)	3 Terms and definitions
4 环境管理体系要求	4 Environmental management system requirements
4.1 总要求	4.1 General requirements
4.2 环境方针	4.2 Environmental policy
4.3 规划(策划)	4.3 Planning
4.3.1 环境因素	
4.3.2 法律与其它要求	
4.3.3 目标、指标与管理方案	4.4 Implementation and operation
4.4 实施与运作	
4.4.1 资源、角色、职责与权限	
4.4.2 能力、培训与意识	
4.4.3 信息沟通	
4.4.4 文件	
4.4.5 文件控制	
4.4.6 运行控制	
4.4.7 应急准备与响应	4.5 Checking

**4.5 检查****4.5.1 监测与测量****4.5.2 守法评价****4.5.3 不符合，纠正措施和预防措施****4.5.4 记录控制****4.5.5 内部审核****4.6 管理评审**

附录A(提示的附录) 本标准使用指南

附录B(提示的附录) ISO 14001:2004与  
ISO 9001:2000的联系

文献目录

**前言(略)****引言(略)****1 范围(略)****2 引用标准(略)****3 术语和定义(略)****4. 环境管理体系要求****4.1 总要求**

组织应按本标准的要求建立环境管理体系，形成文件，加以实施和保持，并持续改进。组织应确定如何满足这些要求。

组织应确定环境管理体系的范围并形成文件。

**4.2 环境方针**

最高管理者应制定组织的环境方针，并确保在其确定的环境管理体系范围内：

**4.6 Management review**Annex A (informative) Guidance on the use of this  
International StandardAnnex B (Informative) Correspondence between ISO  
14001:2004 and ISO 9001:2000

Bibliography

**Foreword****Introduction****1 Scope****2 Normative references****3 Terms and definitions****4 Environmental management system****4.1 General requirements**

The organization shall establish, document, implement, maintain and continually improve an environmental management system in accordance with the requirements of this International Standard and determine how it will fulfil these requirements.

The organization shall define and document the scope of its environmental management system.

**4.2 Environmental policy**

Top management shall define the organization's environmental policy and ensure that, within the defined

- a) 适合于组织的种类、规模，并与其活动、产品和服务的环境影响相适应；
- b) 包括对持续改进和污染预防的承诺；
- c) 包括对遵守适用法律要求和组织应遵守的其它与环境因素相关的要求的承诺；
- d) 提供建立和评审环境目标和指标的框架；
- e) 形成文件，付诸实施并予以保持；
- f) 传达到全体为组织工作或代表组织的人员；
- g) 可为公众所获取。
- scope of its environmental management system, it
- a) is appropriate to the nature, scale and environmental impacts of its activities, products and services,
- b) includes a commitment to continual improvement and prevention of pollution,
- c) includes a commitment to comply with applicable legal requirements and with other requirements to which the organization subscribes which relate to its environmental aspects,
- d) provides the framework for setting and reviewing environmental objectives and targets,
- e) is documented, implemented and maintained,
- f) is communicated to all persons working for or on behalf of the organization, and
- g) is available to the public.

### 4.3 规划(策划)

### 4.3 Planning

#### 4.3.1 环境因素

#### 4.3.1 Environmental aspects

组织应建立、实施并保持程序，用来：

The organization shall establish, implement and maintain a procedure(s)

a) 确定其环境管理体系范围内的活动、产品和服务中能够控制和能够施加影响的环境因素，此时还应考虑到已纳入计划的或新的开发、新的或修改的活动、产品和服务；

a) to identify the environmental aspects of its activities, products and services within the defined scope of the environmental management system that it can control and those that it can influence taking into account planned or new developments, or new or modified activities, products and services, and

b) 判定那些对环境具有重大影响，或可能具有重大影响的因素(即重要环境因素)。

b) to determine those aspects that have or can have significant impact(s) on the environment (i.e. significant environmental aspects).

组织应将这方面的信息形成文件并及时更新。

The organization shall document this information and keep it up to date.

组织应确保在建立、实施和保持其环境管理体系时，对重要环境因素加以考虑。

The organization shall ensure that the significant environmental aspects are taken into account in establishing, implementing and maintaining its environmental management system.

#### 4.3.2 法律与其它要求

#### 4.3.2 Legal and other requirements

组织应建立、实施并保持一套程序：

a) 用来确定适用于其环境因素的法律，  
以及其它应遵守的要求；并

The organization shall establish, implement and maintain a procedure(s)

b) 确定如何将这些要求应用于其环境因素。

a) to identify and have access to the applicable legal requirements and other requirements to which the organization subscribes related to its environmental aspects, and  
b) to determine how these requirements apply to its environmental aspects.

组织应确保在建立、实施和保持其环境管理体系时，对这些适用的法律要求及其他组织应遵守的要求加以考虑。

The organization shall ensure that these applicable legal requirements and other requirements to which the organization subscribes are taken into account in establishing, implementing and maintaining its environmental management system.

#### 4.3.3 目标、指标和方案

#### 4.3.3 Objectives, targets and programme(s)

组织应针对其内部相关职能和层次，建立、实施并保持环境目标和指标。环境目标和指标应形成文件。

The organization shall establish, implement and maintain documented environmental objectives and targets, at relevant functions and levels within the organization.

目标和指标应是可测量的、可实现的，符合环境方针，并包括对污染预防、遵守适用的法律要求及其它组织应遵守的要求和持续改进的承诺。

The objectives and targets shall be measurable where practicable, and consistent with the environmental policy, including the commitments to prevention of pollution, to compliance with applicable legal requirements and with other requirements to which the organization subscribes, and to continual improvement.

组织在建立与评审目标和指标时，应考虑法律要求与组织应遵守的其它要求、它自身的重要环境因素，还应考虑可选技术方案、财务、运行和经营要求，以及各相关方的观点。

When establishing and reviewing its objectives and targets, an organization shall take into account the legal requirements and other requirements to which the organization subscribes, and its significant environmental aspects. It shall also consider its technological options, its financial, operational and business requirements, and the views of interested parties.

组织应制订、实施并保持一个或多个旨在实现目标和指标的方案，其中应包括：

The organization shall establish, implement and maintain a programme(s) for achieving its objectives and targets. Programme(s) shall include

a) 规定组织的有关职能和层次实现目标和指标的职责；

a) designation of responsibility for achieving objectives and targets at relevant functions and levels of the

b) 实现目标和指标的方法和时间表。

organization, and

- b) the means and time-frame by which they are to be achieved.

## 4.4 实施与运行

## 4.4 Implementation and operation

### 4.4.1 资源、作用、职责与权限

### 4.4.1 Resources, roles, responsibility and authority

管理层应确保为建立、实施、保持和改进环境管理体系所必须的资源提供。资源包括人力资源和专项技能、组织的基础设施、技术以及财力资源。

Management shall ensure the availability of resources essential to establish, implement, maintain and improve the environmental management system. Resources include human resources and specialized skills, organizational infrastructure, technology and financial resources.

作用、职责及权限应予以明确规定，形成文件，并得到沟通，以促进有效的环境管理。

Roles, responsibilities and authorities shall be defined, documented and communicated in order to facilitate effective environmental management.

组织的最高管理者应指定专门的管理者代表，无论他(们)是否还负有其它方面的责任，应明确规定其作用、职责和权限，以便：

The organization's top management shall appoint a specific management representative(s) who, irrespective of other responsibilities, shall have defined roles, responsibilities and authority for

- a) 确保按照本国际标准的要求建立、实施与保持环境管理体系；
- b) 向最高管理者汇报环境管理体系的运行情况以供评审，包括改进的建议。

- a) ensuring that an environmental management system is established, implemented and maintained in accordance with the requirements of this International Standard,
- b) reporting to top management on the performance of the environmental management system for review, including recommendations for improvement.

### 4.4.2 能力、培训和意识

### 4.4.2 Competence, training and awareness

组织应确保其工作具有潜在重大环境影响的为其作业或代表其作业的所有人员，具备适当的教育、培训或经验，并保持相关记录。

The organization shall ensure that any person(s) performing tasks for it or on its behalf that have the potential to cause a significant environmental impact(s) identified by the organization is (are) competent on the basis of appropriate education, training or experience, and shall retain associated records.

组织应确定与环境因素及环境管理体系相关的培训需要，提供培训或采取其他措施以满足这些需求，并保持相关的记录。

The organization shall identify training needs associated with its environmental aspects and its environmental management system. It shall provide

组织应建立、实施并保持一套程序，使其为其工作或代表其工作的人员意识到：

- a) 符合环境方针与程序和符合环境管理体系要求的重要性；
- b) 重要环境因素，他们工作活动中实际的或潜在的重大环境影响，以及个人工作的改进所带来的环境绩效；
- c) 他们在实现环境管理体系要求方面的作用与职责；
- d) 偏离规定的程序的潜在后果。

training or take other action to meet these needs, and shall retain associated records.

The organization shall establish, implement and maintain a procedure(s) to make persons working for it or on its behalf aware of

- a) the importance of conformity with the environmental policy and procedures and with the requirements of the environmental management system,
- b) the significant environmental aspects and related actual or potential impacts associated with their work, and the environmental benefits of improved personal performance,
- c) their roles and responsibilities in achieving conformity with the requirements of the environmental management system, and
- d) the potential consequences of departure from specified procedures.

#### 4.4.3 信息交流

组织应建立、实施并保持一套程序，用于有关其环境因素和环境管理体系的

- a) 组织内各层次和职能间的内部信息交流；
- b) 与外部相关方联络的接收、文件形成和答复。

组织应决定是否就其重要环境因素进行外部沟通，并将其决定形成文件。如果决定进行沟通，组织应建立并实施外部信息交流的方法。

#### 4.4.3 Communication

With regard to its environmental aspects and environmental management system, the organization shall establish, implement and maintain a procedure(s) for

- a) internal communication among the various levels and functions of the organization,
- b) receiving, documenting and responding to relevant communication from external interested parties.

The organization shall decide whether to communicate externally about its significant environmental aspects, and shall document its decision. If the decision is to communicate, the organization shall establish and implement a method(s) for this external communication.

#### 4.4.4 文件

环境管理体系文件应包括：

- a) 环境方针、目标和指标；
- b) 环境管理体系范围的描述；
- c) 对管理体系主要要素及其相互作用

#### 4.4.4 Documentation

The environmental management system documentation shall include

- a) the environmental policy, objectives and targets,
- b) description of the scope of the environmental

的描述，及相关文件的引用；

- d) 本国际标准所要求的文件，包括记录；
- e) 组织所确定的、为确保与其重要环境因素有关的过程的有效策划、运行和控制所必需的文件，包括记录。

#### 4.4.5 文件控制

环境管理体系及本国际标准所要求的文件应予以控制。记录是一种特殊类型的文件，应依据4.5.4 的要求予以控制。

组织应建立、实施并保持一套程序，用于：

- a) 文件发布前得到批准，以确保文件是充分与适宜的；
- b) 必要时对文件进行评审与更新，并再次批准；
- c) 确保文件的更改和现行修订状态得到识别；
- d) 确保在使用处可获得适用文件的有关版本；
- e) 确保文件保持清晰，易于识别；
- f) 确保由组织确定的、对其环境管理体系的策划和运行所必需的外来文件得到识别，并控制其分发；
- g) 防止作废文件的非预期使用，若因任何原因而保留作废文件时，对这些文件进行适当的标识。

#### 4.4.6 运行控制

management system,

- c) description of the main elements of the environmental management system and their interaction, and reference to related documents,
- d) documents, including records, required by this International Standard, and
- e) documents, including records, determined by the organization to be necessary to ensure the effective planning, operation and control of processes that relate to its significant environmental aspects.

#### 4.4.5 Control of documents

Documents required by the environmental management system and by this International Standard shall be controlled. Records are a special type of document and shall be controlled in accordance with the requirements given in 4.5.4.

The organization shall establish, implement and maintain a procedure(s) to

- a) approve documents for adequacy prior to issue,
- b) review and update as necessary and re-approve documents,
- c) ensure that changes and the current revision status of documents are identified,
- d) ensure that relevant versions of applicable documents are available at points of use,
- e) ensure that documents remain legible and readily identifiable,
- f) ensure that documents of external origin determined by the organization to be necessary for the planning and operation of the environmental management system are identified and their distribution controlled, and
- g) prevent the unintended use of obsolete documents and apply suitable identification to them if they are retained for any purpose.

#### 4.4.6 Operation control

组织应确定和计划与所标识的重要环境因素有关的运行，这些运行应与环境方针、目标和指标一致，以确保它们在程序规定的条件下进行。程序的建立应符合下述要求：

- a) 对于缺乏程序指导可能导致偏离环境方针、目标和指标的运行，应建立、实施并保持一套以文件支持的程序；
- b) 在程序中对这些运行的标准予以规定；
- c) 对于组织所使用的产品和服务中已标识的重要环境因素，应建立、实施和保持一套程序，并将适用的程序和要求通报供方包括承包方。

The organization shall identify and plan those operations, that are associated with the identified significant environmental aspects consistent with its environmental policy, objectives and targets, in order to ensure that they are carried out under specified conditions, by

- a) establishing, implementing and maintaining a documented procedure(s) to control situations where their absence could lead to deviation from the environmental policy, objectives and targets, and
- b) stipulating the operating criteria in the procedure(s), and
- c) establishing, implementing and maintaining procedures related to the identified significant environmental aspects of goods and services used by the organization and communicating applicable procedures and requirements to suppliers, including contractors.

#### 4.4.7 应急准备和响应

组织应建立、实施并保持一套程序，以确定潜在的紧急情况和潜在事故可能对环境造成的影响以及应如何对其做出响应。

组织应对实际紧急情况和事故做出反应并预防或减少对环境的相关负面影响。

组织应定期评审，必要时，特别是在事故或紧急情况发生后，应修订其应急准备和响应程序。

可行时，组织还应定期试验上述程序。

#### 4.4.7 Emergency preparedness and response

The organization shall establish, implement and maintain a procedure(s) to identify potential emergency situations and potential accidents that can have an impact(s) on the environment and how it will respond to them.

The organization shall respond to actual emergency situation and accidents and prevent or mitigate associated adverse environmental impacts.

The organization shall periodically review and, where necessary, revise its emergency preparedness and response procedures, in particular, after the occurrence of accidents or emergency situations.

The organization shall also periodically test such procedures where practicable.

### 4.5 检查

#### 4.5.1 监视与测量

### 4.5 Checking

#### 4.5.1 Monitoring and measurement

组织应建立、实施并保持一套程序，对可能具有重大环境影响的运行的关键特性进行例行监视和测量。这些程序应包括对绩效、有关的运行控制、组织环境目标和指标符合情况的信息文件。

组织应确保使用经校准或检定后的监视与测量设备，并妥善维护，有关记录应予以保持。

#### 4.5.2 守法评价

4.5.2.1 组织应根据遵守法律的承诺，建立、实施和保持一套以文件支持的程序，以定期评价对有关法律要求的遵循情况。

组织应保存定期评价结果的记录。

4.5.2.2 组织应评价其适用的其他要求的遵循情况。组织可参考4.5.2.1的要求，将该评价工作与法律遵循情况的评价合并，也可建立单独的程序。

组织应保存定期评价结果的记录。

#### 4.5.3 不符合，纠正措施和预防措施

组织应建立、实施并保持一套程序，用来处理实际的和潜在的不符合，并采取纠正措施和预防措施。此程序应规定以下方面要求：

a) 识别和纠正不符合，并采取减少伴随的环境影响；

b) 调查不符合，确定其产生的原因并采取避免再次发生；

The organization shall establish, implement and maintain a procedure(s) to monitor and measure, on a regular basis, the key characteristics of its operations that can have a significant environmental impact. The procedure(s) shall include the documenting of information to monitor performance, applicable operational controls and conformity with the organization's environmental objectives and targets.

The organization shall ensure that calibrated or verified monitoring and measurement equipment is used and maintained and shall retain associated records.

#### 4.5.2 Evaluation of compliance

4.5.2.1 Consistent with its commitment to compliance, the organization shall establish, implement and maintain a procedure(s) for periodically evaluating compliance with applicable legal requirements.

The organization shall keep records of the results of the periodic evaluations.

4.5.2.2 The organization shall evaluate compliance with other requirements to which it subscribes. The organization may wish to combine this evaluation with the evaluation of legal compliance referred to in 4.5.2.1 or to establish a separate procedure(s).

The organization shall keep records of the results of the periodic evaluations.

#### 4.5.3 Nonconformity, corrective action and preventive action

The organization shall establish, implement and maintain a procedure(s) for dealing with actual and potential nonconformity (ies) and for taking corrective action and preventive action. The procedure(s) shall define requirements for

a) identifying and correcting nonconformity(ies) and taking action(s) to mitigate their environmental impacts,

b) investigating nonconformity(ies), determining their

c) 评价预防不符合发生的措施的需求，并采取适当措施避免不符合发生；

d) 记录所采取纠正措施和预防措施的结果；

e) 评审所采取纠正措施和预防措施的有效性。

所采取的措施应与减少这些问题和环境影响程度相适应。

组织应确保对环境管理体系文进行所需的修订。

#### 4.5.4 记录控制

组织应建立并保持所必需的记录，以证明其符合环境管理体系及本国际标准的要求，并记录完成情况。

组织应建立、实施和保持一套程序，以规定记录的标识、贮存、保护、检索、保存期限和处置所需的控制。

记录应保持清晰、易于识别和可追溯性。

#### 4.5.5 内部审核

组织应确保按策划的时间间隔对环境管理体系进行内部审核，从而

a) 判定环境管理体系是否

1) 符合对环境管理工作的预定安排和本国际标准的要求；

2) 得到了正确的实施和保持。

b) 向管理者报送审核结果。

组织应策划、建立、实施和保持审核方

cause(s) and taking actions in order to avoid their recurrence,

c) evaluating the need for action(s) to prevent nonconformity(ies) and implementing appropriate actions designed to avoid their occurrence,

d) recording the results of corrective action(s) and preventive action(s) taken, and

e) reviewing the effectiveness of corrective action(s) and preventive action(s) taken.

Actions taken shall be appropriate to the magnitude of the problems and the environmental impacts encountered.

The organization shall ensure that any necessary changes are made to environmental management system documentation.

#### 4.5.4 Control of records

The organization shall establish and maintain records as necessary to demonstrate conformity to the requirements of its environmental management and of this International Standard, and the results achieved.

The organization shall establish, implement and maintain a procedure(s) for the identification, storage, protection, retrieval, retention and disposal of records.

Records shall be and remain legible, identifiable, and traceable.

#### 4.5.5 Internal audit

The organization shall ensure that internal audits of the environmental management system are conducted at planned intervals to

a) determine whether the environmental management system

1) conforms to planned arrangements for environmental management including the requirements of this International Standard, and

2) has been properly implemented and is maintained, and

案，并考虑到所涉及运行的环境重要性和以前审核的结果。

应建立、实施和保持审核程序，指出：

- 策划和实施审核、报告结果及保持相关记录的职责和要求；

- 审核标准、范围、频率及方法的决定。

审核员的选择及审核的实施应确保审核过程的客观性和公正性。

b) provide information on the results of audits to management.

Audit programme(s) shall be planned, established, implemented and maintained by the organization, taking into consideration the environmental importance of the operation(s) concerned and the results of previous audits.

Audit procedure(s) shall be established, implemented and maintained that address

- the responsibilities and requirements for planning and conducting audits, reporting results and retaining associated records,
- the determination of audit criteria, frequency and methods.

Selection of auditors and conduct of audits shall ensure objectivity and the impartiality of the audit process.

#### 4.6 管理评审

最高管理者应按策划的时间间隔评审环境管理体系，以确保其持续的适宜性、充分性和有效性。评审应包括评价环境管理体系改进机会和变更的需要，包括环境方针、环境目标和指标。应保持管理评审的记录。

管理评审的输入应包括：

a) 内审结果，对与组织相关的法规要求及其他组织应遵守的要求的遵守情况的评价；

b) 来自外部相关方的信息交流，包括投诉；

c) 组织的环境表现；

d) 目标和指标的达成程度；

e) 纠正和预防措施的状况；

f) 以往管理评审的跟踪措施；

#### 4.6 Management review

Top management shall review the organization environmental management system, at planned intervals, to ensure its continuing suitability, adequacy and effectiveness. Reviews shall include assessing opportunities for improvement and the need for changes to the environmental management system, including the environmental policy and environmental objectives and targets. Records of the management reviews shall be retained.

Input to management reviews shall include

- a) results of internal audits and evaluations of compliance with legal requirements and with other requirements to which the organizations subscribes,
- b) communication(s) from external interested parties, including complaints,
- c) the environmental performance of the organization,
- d) the extent to which objectives and targets have been met,
- e) status of corrective and preventive actions,
- f) follow-up actions from previous management

g) 不断变化的客观环境,包括与其环境因素相关的法律和其他要求的变化;

h) 改善建议。

管理评审的输出应包括与环境方针、目标、指标及环境管理体系其他要素的可能的变化有关的任何决定和措施,且符合持续改进的承诺。

reviews,

g) changing circumstances, including developments in legal and other requirements related to its environmental aspects, and

h) recommendations for improvement.

The outputs from management reviews shall include any decisions and actions related to possible changes to environmental policy, objectives, targets and other elements of the environmental management system, consistent with the commitment to continual improvement.

**附录A(提示的附录) 本标准使用指南(略)**

**Annex A (informative) Guidance on the use of this International Standard**

**附录B(提示的附录) ISO 14001:2004与ISO 9001:2000的联系(略)**

**Annex B (Informative)**

**Correspondence between ISO**

**14001:2004 and ISO 9001:2000**

**文献目录(略)**

**Bibliography**