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Environmental management -- Water footprint -- Principles, requirements and guidelines

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Foreword

This standard is drafted in accordance with the rules given in GB/T 1.1-2009.

This standard uses the translation method to use the international standard ISO 14046..2014 "Principles, requirements and guidelines for environmental management of water footprint".

This standard is proposed by the National Environmental Management Standardization Technical Committee (SAC/TC207).

The drafting of this standard. Beijing Forestry University, China Standardization Research Institute, Light Industry Environmental Protection Research Institute, animal husbandry and animal husbandry Co., Ltd.

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Introduction

Water is the basic natural resource.

Water resources and its management issues have become the focus of global sustainable development debate. Increased demand for water resources, water resources in most areas

The scarcity of water and the decline in water quality make these issues much attention. Need to better understand the environmental impact of water-related, as a way to improve the local, regional, and national

Therefore, it is necessary to develop a common evaluation technique. Water footprint evaluation technology is one of them.

There is a growing number of ways to evaluate and report on water footprints, but there are a number of ways, but the focus is different. Therefore, it is necessary to develop generic

Water Footprint Evaluation Technology.

This standard provides a transparent, consistent, reproducible, credible water footprint evaluation and reporting for products, processes and organizations,

Weaving, government and interested parties around the world.

The water footprint assessment carried out according to this standard has the following characteristics.

--- based on life cycle assessment (according to GB/T 24044);

--- modular (ie, the water footprint of each life cycle can be added);

- the ability to identify potential environmental impacts associated with water;

--- contains geography and time range;

Identify changes in water and water quality;

Application of hydrological knowledge.

Water Footprint Assessment helps.

a) assess the size of the potential environmental impact associated with water;

b) Identify opportunities to reduce the potential environmental impact associated with water for product, process and organizational life cycle stages;

c) strategic risk management related to water;

d) improve water efficiency and improve water management for products, processes and organizations;

e) Provide information on water-related potential environmental impacts to policy makers in industry, government, or non-governmental organizations (eg, strategic planning,

Prioritization, product or process design or redesign, resource investment decision making);

f) Provide consistent and reliable information based on scientific evidence of water footprint reporting results.

Only water footprint evaluations do not adequately describe the full potential environmental impact of a product, process, or organization.

The water footprint assessment carried out in accordance with this standard may be used as an independent evaluation involving only the environmental impact of water, and may also be used as a life cycle

Environmental impact assessment, rather than limited to water-related environmental impacts.

In this standard, the term "water footprint" refers only to the results of the impact

assessment.

The specific scope of the water footprint is determined by the user of this standard in accordance with the requirements of its water footprint evaluation.

Note 1. In this standard, the term "product" includes services.

Note 2. In this standard, the term "environmental impact" includes general categories in the impact model used in the life cycle assessment, such as those for ecosystems, human health and

Source effect.

Note 3. The report is different from the information exchange. This standard contains the requirements and guidelines for reporting, but the requirements and guidelines for information exchange, such as environmental labeling or declarations,

The scope of this standard.

Environmental management water footprint principles, requirements and guidelines

1 Scope

This standard specifies the principles, requirements and guidelines for the evaluation of water footprints for products, processes or organizations based on the Life Cycle Assessment (LCA).

This standard may be used to implement and report on independent water footprint evaluations, or as part of an integrated environmental assessment.

Analyze only substances that affect water quality into the atmosphere and soil, not all substances that are discharged. The water footprint evaluation results can be a single value,

Or a set of indicators of the impact of the results.

This standard applies to reports and does not apply to information such as identification or declarations.

Note. The specific requirements and guidelines of the organization are given in Appendix A.

2 normative reference documents

The following documents are indispensable for the application of this document. For dated references, only the dated edition applies to this article

Pieces. For undated references, the latest edition (including all modifications) applies to this document.

GB/T 24044-2008 Environmental Management Lifecycle Evaluation Requirements and

Guidelines (ISO 14044..2006, IDT)

3 terms and definitions

The following terms and definitions apply to this document.

3.1 Types of water and classification related terms

3.1.1

Freshwater

Soluble solids are low in water.

Note 1. In general, the concentration of dissolved solids in fresh water is less than 1000 mg/L, and is usually suitable for use and conventional treatment to produce drinking water.

Note 2. Total dissolved solids concentration can vary significantly with space and/or time.

3.1.2

Brackish water

Soluble solids concentrations lower than seawater (3.1.4), but higher than municipal, household and irrigation water standards.

Note 1. The total dissolved solids concentration in brackish water is usually between 1000 mg/L and 30000 mg/L.

Note 2. The total dissolved solids concentration of most brackish water can vary significantly with space and/or time.

3.1.3

Surface water

Surface runoff and stored water, such as rivers and lakes, excluding seawater (3.1.4).

3.1.4

Seawater seawater

The water in the ocean.

Note. The dissolved solids concentration of seawater is greater than or equal to 30000mg/L.