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

GB/Z 44377.2-2024

**Fine bubble technology - Guideline for indicating benefits - Part
2: Applications in sustainable development goals (SDGs)**

微细气泡技术 效益指示指南 第2部分：可持续发展目标中的应用

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part

1. Structure and drafting rules for standardization documents" Drafting. This document is part 2 of GB /Z 44377 "Guidelines for the Indication of the Benefits of Microbubble Technology". GB /Z 44377 has published the following part.

2. Application to sustainable development goals. This document is equivalent to ISO /T R24217-2.2021 "Guidelines for the effectiveness of micro-bubble technology Part

2. Micro-bubble technology The document type was adjusted from ISO 's technical report to my country's national standardization guidance technical document. The following minimal editorial changes were made to this document.

--- Change the name of the standard to "Guidelines on the Benefit Indicators of Microbubble Technology Part

2. Application in Sustainable Development Goals". Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents. This document was proposed by the Chinese Academy of Sciences. This document is under the jurisdiction of the National

Technical Committee for Standardization of Microbubble Technology (SAC/TC584). This document was drafted by: Ningbo Haibo Group Co., Ltd., Shanghai Misu Environmental Protection Technology Co., Ltd., Fuji Keiki Technology (Guangdong) Co., Ltd. Company, East China University of Science and Technology, Ningbo Haiweisi Intelligent Technology Co., Ltd., Gaoli Technology (Ningbo) Co., Ltd., National Center for Nanoscience and Technology, Ningbo Vocational and Technical College, Taizhou Juna New Energy Co., Ltd., Institute of Geochemistry, Chinese Academy of Sciences. The main drafters of this document are: Xia Shaohua, Qian Yundong, Du Haifeng, Xu Xiao, He Shaojie, Zhao Zhaolei, Mao Shuangling, Huang Liaoyun, Li Zhaojun, Zhou Lan, Lu Chuang, Ding Rong, and Wang Jingfu.

In 2015, the United Nations launched a 15-year plan to address some of the world's most pressing problems. SDGs is a global action program to eliminate poverty, protect the earth and ensure that people all over the world enjoy peace and prosperity. It is divided into 17 global development goals. The 17 goals build on the success of the Millennium Development Goals and include climate change, economic inequality, innovation, sustainable development. These goals are interrelated - and this is often key to the success of individual projects, as they are often interrelated. With the spread of the Sustainable Development Goals, there has been a trend to invest in sustainable development, such as environmental, social and ESG bonds are creating ESG investments. Investors around the world will evaluate projects based on whether they are promoting sustainable development goals. For example, in March 2017, the World Bank issued its first loan related to the Sustainable Development Goals. The credit will be used to support projects that achieve sustainable development goals (such as eliminating poverty, reducing environmental pollution, correcting gender disparities, and improving public health). Provide funding. Catching this trend is key. Since sustainable development goals can be applied to various fields, they also apply to microbubble technology, which has the following advantages. There are two main features. First, it involves simple ingredients (water and air), and most of the microbubble generating systems are compact and mobile; Secondly, it is applicable and effective in many fields such as water treatment, cleaning, agriculture, fishery applications and environmental remediation. Micro bubble technology can be used It is a general technology used in environmental protection and food production. Although it is possible to link microbubble technology with the above characteristics to sustainable development goals, at present, microbubble technology is not. The links between the SDGs are not yet sufficient. Therefore, it is necessary to develop a framework that links the SDGs with microbubble technology. Come guide. This document provides a way for microbubble suppliers to contribute to the achievement of sustainable development goals. Investors showcase investments that have successfully contributed to the SDGs to help them make the most of their investments and avoid ineffective ones. GB /Z 44377 "Guidelines for the Benefit Indication of Microbubble Technology" aims to provide users and potential customers with the best possible application of microbubble technology. Provide guidance

to suppliers on how to select appropriate sustainable development goals and explain the corresponding contribution of microbubble technology South is planned to consist of two parts.

1. Classification requirements for micro-bubble efficacy systems. The purpose is to promote the effectiveness of micro-bubble technology in various application fields. Provide guidance.
 2. Application in Sustainable Development Goals. The purpose is to provide micro bubble technology with a Ways to contribute. A guide to the benefits of microbubble technology
- Part

1 Scope

GB/Z 44377.2-2024 addresses how suppliers of fine bubble technology should state its benefits against the UN Sustainable Development Goals. Fine bubbles - micrometre and smaller - behave unlike ordinary bubbles: they rise slowly or not at all, dissolve gas efficiently, and are used in water treatment, aquaculture, cleaning and agriculture. The field has a marketing problem that a technical standard can actually address: claims are made expansively and without a defined basis, and mapping a product onto an SDG has become a favoured way of making a claim that sounds substantiated and is not testable. This part provides guidance to suppliers on selecting the appropriate targets within the Sustainable Development Goals for describing the contribution their fine bubble technology makes, so that the claim identifies a specific target and states what is being contributed rather than gesturing at a goal. As a GB/Z it is a guiding technical document, which is the right form for guidance on how to make a claim. Under ICS 07.030 and CCS A20, it is written for fine bubble equipment suppliers, for their industrial and agricultural customers, and for the bodies that assess sustainability claims.

This document provides guidance to suppliers on selecting appropriate targets within the Sustainable Development Goals to describe the role of microbubble technology in Corresponding contribution. This document provides guidance to authors on how to assess the relevance of their microbubble technology documents to the Sustainable Development Goals. contribute. This document also helps users understand the advantages of microbubble technology.

2 Normative references

The contents of the following documents constitute essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document. ISO 20480-

3 Terms and definitions

For the purposes of this document, the terms and definitions defined in ISO 20480-1 and ISO 20480-2 and the following apply. The terminology bases maintained by ISO and IEC for standardization work are as follows:

3.1 Sustainability Systems that meet the environmental, social and economic needs of the present without compromising the ability of future generations to meet their own needs state. Note

1.The environment, society and economy interact and depend on each other and are usually referred to as the three dimensions of sustainability. Note 2 to entry. Sustainability is the goal of sustainable development (3.2). [Source: GB/T 33719-2017, 3.1]

3.2 Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Note. Derived from the Brundtland Report.