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

GB/T 43145-2023

**Green manufacturing - Green supply chain management in
manufacturing enterprises - Reverse logistics**

绿色制造 制造企业绿色供应链管理 逆向物流

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1. Structure and Drafting Rules of Standardization Documents" Drafting. Please note that some content in this document may be subject to patents. The publisher of this document assumes no responsibility for identifying patents. This document is proposed and coordinated by the National Green Manufacturing Technology Standardization Technical Committee (SAC/TC337). This document was drafted by: China Machinery Productivity Promotion Center Co., Ltd., Shanghai Jiao Tong University, GEM Co., Ltd., China Electrical Appliances Technology Co., Ltd. Research Institute Co., Ltd., Sichuan Changhong Electric Co., Ltd., Guangdong Bangpu Recycling Technology Co., Ltd., Shanghai Second Polytechnic University, Shenzhen University, Beijing Saidemei Resource Recycling Research Institute Co., Ltd., Hubei Sanhuan Forging Co., Ltd., Wuhan Power Battery Regeneration Technology Co., Ltd. Co., Ltd., China New Aviation Technology Group Co., Ltd., Wuhan Mingzheng Power Engineering Co., Ltd., Shanghai Xinjinqiao Environmental Protection Co., Ltd., Tongyi (Quanzhou) Light Industry Co., Ltd., Hisense Home Appliances Group Co., Ltd., Kweichow Moutai Co., Ltd., Zhejiang Kane New Materials Co., Ltd. Company, Guangdong Dongpeng Holding Co., Ltd., Ningbo Jialian Technology Co., Ltd., Jiamusi Motor Co., Ltd., Hunan Xingbang Intelligent Equipment Co., Ltd., Changzhou Swick Photovoltaic New Materials Co., Ltd., Zhejiang Jiangshan Transformer Co., Ltd., Shenzhen BAK Power Battery Co., Ltd., Jiangxi Ganfeng Lithium Industry Group Co., Ltd., Wuzhou Bureau of China Southern Power Grid Co., Ltd. Ultra-High Voltage Transmission Company, Inspur Electronic Information Industry Co., Ltd., Harbin Electric Power Generation Equipment National Engineering Research Center Co., Ltd., SCS-CSTC Standardization Technology Research Institute (Beijing) Co., Ltd., Zhongce Rubber Group Co., Ltd.,

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Reverse logistics is the transfer of raw materials, intermediate inventory, final products and related information from production, distribution or use for value recovery or reasonable disposal. The process of planning, implementing and controlling the efficient flow of resources from recycling nodes to recycling nodes, disposal nodes or upstream nodes in their supply chain. Inverse Inbound logistics is an indispensable and important content of green supply chain. Systematic management of all aspects of reverse logistics in manufacturing enterprises will help enterprises. It can reduce costs and increase efficiency in the industry, which is conducive to reducing returns from the manufacturing source, reducing waste generation and pollutant emissions, and improving product recyclability and regeneration. The proportion of materials used, the collection rate and recycling rate of returned and discarded products achieve efficient use of resources, strict protection of the ecological environment, and effective Control greenhouse gas emissions and promote the green, low-carbon and cyclic development of the manufacturing industry. As part of the green supply chain management standards, this document is based on GB/T 33635-2017 "Green Supply Chain for Green Manufacturing Enterprises". The principles and framework formulated in the "Reverse Logistics Management Guidelines" formulate the reverse logistics management requirements for manufacturing enterprises, which are used to guide and standardize the reverse logistics management of enterprises. Logistics management work promotes the formation of green, low-carbon cycle production methods and helps achieve sustainable development of the manufacturing industry. This document does not change the original logistics management system structure of the manufacturing enterprise. The enterprise shall add new materials based on this document and the actual situation of the product (or industry). Add reverse logistics management processes and requirements. Green manufacturing Green supply chain management of manufacturing enterprises reverse logistics

1 Scope

GB/T 43145-2023 covers reverse logistics within green supply chain management for manufacturing enterprises. Forward logistics is a solved problem; the return path is not, and it is where extended producer responsibility actually bites - the manufacturer that has to take back its packaging, its returns, its warranty replacements and eventually its products at end of life needs a route for them that does not simply end in a landfill contract. The

standard sets the management requirements at each stage of the reverse flow: the manufacturing process, circulation and consumption, recycling and terminal disposal, and the information management that tracks the material through them, with an informative annex giving the principal indicators and their calculation formulae. It took effect on 1 January 2024.

This document stipulates the purpose, scope and overall requirements of reverse logistics management for green supply chain management of manufacturing enterprises, manufacturing, circulation and Management requirements and information management requirements for consumption, recycling and terminal disposal. This document is suitable for reverse logistics management of manufacturing enterprises, and other organizations can refer to it.

2 Normative reference documents

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, the dated quotations For undated referenced documents, only the version corresponding to that date applies to this document; for undated referenced documents, the latest version (including all amendments) applies to this document.

GB 15562.2 Environmental protection graphic signs for solid waste storage (disposal) sites

GB/T 18354 Logistics terminology

GB 18597 Standard for pollution control of hazardous waste storage

GB 18599 General industrial solid waste storage and landfill pollution control standards

GB/T 20861 Terminology for waste product recycling

GB 22128 Technical specifications for end-of-life motor vehicle recycling and dismantling enterprises

GB/T 26821 Logistics management information system function and design requirements

GB/T 31268 General rules for restricting excessive packaging of goods

GB 34330 General principles for solid waste identification standards

GB/T 39258 Green supply chain management and procurement control for green manufacturing enterprises

GB/T 39259 Materials list requirements for green supply chain management of green manufacturing enterprises

GB/T 40480 Logistics traceability information management requirements

HJ2025 Technical specifications for collection, storage and transportation of hazardous

wastes WB/T 1061 Waste battery recycling management specifications

3 Terms and definitions

The terms and definitions defined in GB/T 18354, GB/T 20861 and the following apply to this document.

3.1 reverse logisticsreverse logistics The transfer of raw materials, intermediate inventories, final products and related information from manufacturing, circulation or consumption nodes to return for value recovery or reasonable disposal. The process of planning, implementing and controlling the efficient flow of recycling nodes, disposal nodes or upstream nodes in their supply chain. [Source: GB/T 18354-2021, 3.35, with modifications]

3.2 waste productwaste product Products that have lost their use value and are no longer in use, as well as substandard products and reports produced during the production, transportation, sales, and use processes