

ICS 91.100.10

CCS Q 11



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

GB 30760-2014

Replacing GB/T 30760-2014

**Technical specification for co-processing of solid waste in
cement kiln**

(English Translation)

Issued on: March 15, 2024

Implemented on: October 1, 2024

**Issued by: State Administration for Market Regulation, China National
Standardization Administration**

Table of Contents

Preface
1 Scope
2 Normative references
3 Terms and Definitions
4 Identification and detection of co-disposal of solid waste
4.1 Solid wastes that should not be co-processed in cement kilns
4.2 Identification and detection of co-disposal of solid waste
5 Cement kiln production and disposal requirements
5.1 Management requirements for co-treatment of solid waste in cement kilns
5.2 Site and storage of cement kiln co-processing solid waste facilities
5.3 Transportation of solid waste in cement kiln co-processing
5.4 Pretreatment of solid waste in cement kiln co-processing plant area
5.5 Cement kiln process technology equipment and operation
5.6 Feeding of cement kiln for co-treatment of solid waste
6 Reference limits for heavy metal content in raw materials entering the kiln
7 Heavy metal content limit in cement clinker
8 Limits of heavy metal content that can be leached from cement clinker
9 Testing frequency
10 Air pollutant emission limits and monitoring
Appendix A (Informative) Analysis Items of Solid Waste
Appendix B (Normative) Determination of heavy metal content in cement clinker
Appendix C (Normative) Rapid determination of heavy metal content in cement clinker Single wavelength excitation energy dispersive X-ray fluorescence spectrometry
Reference

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 replaces GB/T 30760-2014 "Technical Specification for Co-treatment of Solid Wastes in Cement Kilns" and is consistent with GB/T 30760-2014.

In addition to structural adjustments and editorial changes, the main technical changes are as follows.

- a) The scope of application of this document has been changed (see Chapter 1, Chapter 1 of the 2014 edition);
- b) The definitions of "solid waste" and "solid waste co-processed in cement kilns" have been changed (see 3.1 and 3.2 of the 2014 edition);
- c) Changed the expression of "identification and detection of co-disposal of solid waste" and added the identification and analysis requirements for domestic waste (See 4.2, 4.2 of the 2014 edition);
- d) Added the following information about the scope of responsibilities of full-time personnel and the allocation of technical personnel in the "Management requirements for the coordinated disposal of solid waste in cement kilns".

Relevant provisions (see 5.1.2);

- e) Added relevant provisions on isolation facilities in the management requirements for "site and storage of cement kiln co-treatment of solid waste facilities" (see 5.2.1);
- f) Added the management requirements for the transportation, transshipment and marking of hazardous wastes in the process of solid waste co-treatment in cement kilns.

The relevant provisions of the labeling have changed the explosion-proof technical measures requirements for transportation and transfer pipelines (see 5.3.1, 5.3.2, 2014 edition 5.3);

- g) Changed the technology type of "Pretreatment of solid waste in cement co-treatment plant" to include oxidation, biological treatment, and noise prevention Relevant provisions (see 5.4.1, 5.4.2, 5.4 of the 2014 edition);
 - h) The requirements for the scale of cement kilns for the co-treatment of solid wastes have been deleted, and the requirements for the treatment of atmospheric pollutants during the co-treatment of solid wastes in cement kilns have been changed.
- and some contents of online monitoring, and changed the relevant requirements of online monitoring (see 5.5.1, 5.5.3, 5.5 of the 2014 edition);
- i) Added the recommended preferred feeding locations for different solid wastes in the process of cement kiln co-treatment (see 5.6.1, 5.6.3, 5.6 of the 2014 edition);
 - j) Deleted the following clause when cement kilns are used to dispose of solid wastes. "cement clinker produced by cement kilns should meet the requirements of GB/T 21372" (see 2014 edition 7.1);
 - k) The detection method for the limit value of heavy metal content in cement clinker has been changed, and inductively coupled plasma emission spectrometry and single

wavelength have been added.

Excitation energy dispersive X-ray fluorescence spectrometry (see 7.2, 7.1 of the 2014 edition);

l) The method for determining the heavy metal content of cement clinker by acid dissolution digestion method has been changed (see Appendix B, Appendix B of the 2014 edition);

m) A method for rapid determination of heavy metal content in cement clinker has been added (see Appendix C).

1 Scope

This document specifies the identification and detection requirements for the co-disposal of solid wastes in cement kilns, the production and disposal requirements of cement kilns, the raw materials and cement entering the kiln, and the Clinker heavy metal content limits, cement clinker leachable heavy metal content limits, testing methods and testing frequency, air pollutant emission limits and monitoring, etc.

This document applies to the control and management of the production process, products and processes of co-disposal of solid waste in cement kilns.

2 Normative references

The contents of the following documents constitute the 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.

GB/T 1345 Cement fineness test method - Sieve analysis method GB/T 4842 Argon GB 4915 Cement Industry Air Pollutant Emission Standard GB 5085.7 General Standards for Identification of Hazardous Wastes GB/T 6682 Specifications and test methods for water used in analytical laboratories GB 8978 Comprehensive sewage discharge standard GB/T 14014 Synthetic fiber screen GB 18597 Hazardous waste storage pollution control standard GB/T 21372 Portland cement clinker GB 30485 Pollution control standard for co-treatment of solid waste in cement kilns GB/T 30810 Determination of leachable heavy metals in cement mortar GB 34330 General Standards for Identification of Solid Wastes GB 50016 Code for Fire Protection Design of Buildings (2018 Edition) CJ/T 313 Sampling and analysis methods for domestic waste HJ/T 20 Technical Specification for Sampling and Preparation of Industrial Solid Waste HJ76 Technical requirements and detection methods for continuous monitoring system of flue gas (SO₂, NO_x, particulate matter) emissions from stationary pollution sources HJ/T 298 Technical Specification for Identification of Hazardous Wastes HJ662 Technical Specification for Environmental Protection of Co-disposal of Solid

Waste in Cement Kilns HJ2025 Technical Specifications for the Collection, Storage and Transportation of Hazardous Wastes

3 Terms and definitions

The following terms and definitions apply to this document.

solid waste

Those produced in production, life and other activities that have lost their original value of use or have not lost their value of use but have been abandoned or given up