

HJ

INDUSTRY STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

HJ 662-2013

Environmental protection technical specification for co-processing of solid wasters in cement kiln (English Translation)

Issued on: December 27, 2013

Implemented on: March 1, 2014

Issued by: Ministry of Environmental Protection

Table of Contents

Foreword...	3
1 Application scope...	4
2 Normative references...	4
3 Terms and definitions...	6
4 Technical requirements for co-processing facilities...	8
5 Solid waste characteristics requirements...	13
6 Technical requirements for running and operation of co-processing...	14
7 Co-processing pollutant emission control requirements...	24

Foreword

In order to implement the "People's Republic of China Environmental Protection Law", "People's Republic of China Solid Waste Pollution Prevention Law", "People's Republic of China Air Pollution Prevention Law", "People's Republic of China Circular Economy Promotion Law" and "Decision of the State Council on Scientific Development and Strengthening Environmental Protection" and other laws and regulations; regulate cement kiln co-processing of solid waste management; prevent solid waste disposal and its co-products making secondary pollution to the environment; and protect ecological environment and human health, this Standard is formulated.

This Standard specifies the use of cement kiln co-disposal of solid waste facilities selection, equipment construction and renovation, operation and running to environmental technical requirements and other aspects of pollution control.

This Standard was developed by Science-Technology Standard Division of Ministry of Environmental Protection of China.

Main drafting organizations of this Standard. China Environmental Science Research Institute, China Building Materials Academy, BBMG Mangrove

Environmental Technology Limited, Foreign Economic Cooperation Office,
Ministry of Environmental Protection.

This Standard was approved by Ministry of Environmental Protection on
December 27, 2013.

This Standard shall be implemented since March 1, 2014.

This Standard shall be interpreted by Ministry of Environmental Protection.

Environmental protection technical specification for
co-processing of solid wasters in cement kiln

1 Application scope

This Standard specifies facility selection, equipment construction and renovation, operation and running, environmental technical requirements and other aspects of pollution control by utilizing co-processing of solid waste in cement kiln.

This standard applies to co-processing of solid wasters in cement kiln, e.g., hazardous waste, household garbage (including waste plastics, waste rubber, waste paper, waste tires, etc.), city and industrial wastewater treatment sludge, animal and vegetable processing waste, contaminated soil, emergency waste, etc.

Cement products which use fly ash, slag, sulfuric acid slag, blast furnace slag, coal gangue and other general industrial solid wastes as alternative raw materials (including mixed materials) or fuel refer to provisions in 7.2 of this Standard.

2 Normative references

The following standards contain the provisions which, through reference in this Standard, constitute the provisions of this Standard. For undated reference documents, the latest versions apply to this Standard.

GB 175 Common Portland Cement

GB 4915 Emission Standard of Air Pollutants for Cement Industry

GB 5805.1 Identification standards for hazardous wastes - Identification for corrosivity

GB 5805.4 Identification standards for hazardous wastes - Identification for ignitability

GB 5805.5 Identification standards for hazardous wastes - Identification for reactivity

GB 8978 Integrated Wastewater Discharge Standard

GB 12573 Sampling method for cement

GB 14554 Emission standard for odor pollutants

GB 15562.2 Graphical signs for environmental protection solid waste storage (disposal) site

GB 18597 Standard for pollution control on hazardous waste storage

GB 30485 Standard for pollution control on co-processing of solid wastes in cement kiln

GB 50016 Code of Design on Building Fire Protection and Prevention

GBZ 2 Occupational exposure limits for hazardous agents in the workplace

HJ 421 Standard of packaging bags containers and warning symbols specific to medical waste

HJ/T 20 Technical specifications on sampling and sample preparation from industry solid waste

HJ/T 76 Specification and test procedures for continuous emission monitoring systems of flue gas emitted from stationary sources (on trial)

HJ/T 176 Technical specifications for centralized Incineration facility construction on hazardous waste

HJ/T 177 Technical specifications for centralized Incineration facility construction on medical waste

HJ/T 298 Technical specifications on identification for hazardous waste

HJ/T 299 Solid waste - Extraction procedure for leaching toxicity - Sulphuric

acid & nitric acid method

AQ/T 9002 Guidelines for enterprises to develop emergency

Regulations on the Safety Administration of Dangerous Chemicals (Order of the State Council of the People's Republic of China No. 344)

Guide on Preparation Plan for Hazardous Waste Management Organizations (Announcement of the State Environmental Protection Administration No. 48 in 2007)

Measures for the Prevention and Control of Environment Pollution by Discarded Dangerous Chemicals (Order of the State Environmental Protection Administration of China, Order No.27 in 2005)

d) with kiln dust return devices so as to send kiln dust collected by dust remover and other flue gas treatment devices back to raw materials into kiln system.

4.1.3 Location for collaborative treatment of solid waste in cement production

facilities should meet the following conditions.

- a) in line with the overall urban development plan, urban industrial development planning requirements;
- b) in area with no flooding or waterlogging flood threat; facility should be located in place where the elevation of the return period is not less than once in 100 years flood level above, and constructed outside flooded area and protected area with various types of existing and planned reservoirs and other artificial storage facilities;
- c) co-hazardous waste disposal facilities, distance between residential, commercial areas, schools, hospitals and other environmentally sensitive areas confirmed by environmental Impact assessment conclusions which are approved by local environmental protection authorities, shall meet the needs of environmental protection;
- d) co-disposal of hazardous waste of which the transport routes should not