ICS 13.020
CCS C51

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB 7959-2012

Replacing GB 7959-1987

Hygienic requirements for harmless disposal of night soil

粪便无害化卫生要求

Issued on: November 20, 2012 **Implemented on: May 1, 2013**

Issued by: Ministry of Health of the People's Republic of China;
Standardization Administration of China

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Foreword

All technical contents of this standard is mandatory. This standard was drafted in accordance with rules GB/T 1.1-2009 given. This standard replaces GB 7959-1987 "stool sanitary standards." This standard GB 7959-1987 major changes compared as follows:

--- according to GB/T 1.1-2009 "Standardization Guide Part 1. Standard structure and write rules" adjust the structure, The text of the standard made overhaul;

--- added terms and definitions, such as sound processing manure, faecal coliform values and the like;

--- by aerobic, anaerobic and facultative anaerobic fermentation, sealed storage, the dry manure urine separation and solid-liquid separation process flocculation - dehydration Processor Class Act are proposed health requirements; This standard is referred

--- and feces sound, to reduce, remove or kill intestinal bacteria in the stool, and other biological pathogenic parasite eggs Factor, emphasizing the use of agricultural resources and land treatment is an integral part of the advanced treatment of manure;

--- clear the stool responsibility of dealing with regulatory and operational health supervision and inspection departments;

--- modified and added some content monitoring and supporting this standard test methods. This standard is proposed and administered by the Ministry of Health of People's Republic of China. This standard drafting unit. China Disease Prevention and Control

Center for Environmental Health and Related Product Safety. Participated in the drafting of this standard. Sichuan Provincial Center for Disease Control and Prevention, Centers for Disease Control and Prevention, Henan Province, Chongqing City, disease prevention and control center. The main drafters of this standard. from Wang Jun, Wang Youbin, Pan Lijun, Zhang sector, Tian Hongchun, Sun Fengying, Han Keqin, Wang Xinli, Xie Hong, Pan Shunchang. Fecal harmless hygiene requirements

1 Scope

GB 7959-2012 is the Chinese national standard on hygienic requirements for harmless disposal of night soil, in the field of environment and health protection, safety. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 20 November 2012 by the Ministry of Health of the People's Republic of China; Standardization Administration of China, and has been in force since 1 May 2013. Classification: ICS 13.020, CCS C51. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies hygiene requirements fecal harmless limits and monitoring the quality of health inspection methods of excreta disposal. This standard applies to urban and rural household toilet, supervision and inspection and sanitary excreta disposal plant (field) and small fecal harmless treatment effect of treatment facilities Evaluation.

2 Ascaris eggs mortality rate >=95%

3 schistosome eggs and live eggs of hookworm eggs may not be detected

4 fecal coliform values >=10-4

5 supervision and monitoring

5.1 manure treatment plant should be monitored in accordance with the provisions of the daily operation CJJ/T 30's.

5.2 relevant departments should conduct regular supervision and monitoring of the effect of excreta disposal and hygienic evaluation.

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 Excrement excreta, nightsoil Human feces and urine excreted, collectively referred to as feces.

3.2 Fecal harmless treatment harmlessdisposalofnightsoil Reduction, removal or kill intestinal bacteria in the stool, parasite eggs and other pathogens, to control mosquito breeding, to prevent diffusion of odor, and Its processing product processing technology to achieve agricultural land treatment and resource utilization.

3.3 Aerobic fermentation aerobicfermentation High temperature composting thermophiliccomposting Artificial and mechanical stacking manner, under aerobic conditions, the microorganisms, feces and garbage and other organic matter, the temperature reached Above 50 °C and processing method, and can maintain a certain time.

3.4 Anaerobic digestion anaerobicfermentation Organic substances under anaerobic conditions feces, feces by obligate anaerobes in the degradation of organic matter and producing biogas processing method, which process is provided Shi including high, moderate room temperature methane digestion tank.

3.5 Facultative anaerobic fermentation facultativeanaerobicfermentation According to the facultative anaerobic treatment of organic matter degradation in the stool, its processing facilities include three grid septic tanks, septic tanks double urn.

3.6 Fecal coliform value valuesoffecalcoliforms Detecting a minimum sample size fecal coliform colony forming units, an important health evaluation index based feces harmless effect, the larger the value of bacteria The better the treatment effect.

3.7 Disinfection disinfection Reduction, removal or killing of pathogenic microorganisms in the feces the process technology to achieve the propagation without harm.

4 Of excreta disposal hygiene requirements

4.1 manure processing technology used in urban and rural areas, should follow health and safety, resource utilization and ecological environment protection principles.

4.2 pairs of manure must be harmless, it is strictly prohibited without safe disposal of manure and fertilizer for agricultural direct emissions.

4.3 manure treatment plants should be designed to comply with the provisions of CJJ64. Solid-liquid separation - flocculation manure processing method dehydration treatment, the resulting supernatant Solution should be combined with the treatment of sewage water treatment plant, sludge treatment method to be high-temperature composting. The final effluent discharged after treatment, its total nitrogen, Eutrophication total phosphorus content of the material should be consistent with GB 18918 requirements.

4.4 should effectively control mosquitoes, flies breeding. The compost pile body, septic tanks and reservoirs Zhou Bian the toilet no surviving larvae, pupae and emergence of new adult flies.

4.5 clearing out the storage pits fecal residue, manure leather, digester sediment, sludge treatment facilities of all kinds, shall be subject to the safe disposal of high-temperature composting qualified Square can be used as agricultural fertilizer.

4.6 intestinal infectious diseases, to deal with manure, manure storage pits and potentially contaminated sites, container and other disinfection, sterilization and disinfection methods Applications should refer to request agent "disinfection technical specifications" is performed.

4.7 fecal product was treated by various methods to comply with Table 1 to Table 4 hygiene requirements. Table 1 aerobic fermentation (high temperature compost) hygiene requirements No. Item hygiene requirements Temperature and duration

1 Artificial Reactor temperature >=50 °C, for at least 10d Reactor temperature >=60 °C, for at least 5d Mechanical reactor temperature >=50 °C, for at least 2d

5 Salmonella not detected

a non-endemic areas of schistosomiasis and hookworm, schistosome eggs and hookworm eggs indicators exemption. Table 3 hygiene sealed storage processing No. Item hygiene requirements Sealing a storage time of less than 12 months

6 Monitoring and Testing Methods

6.1 the high-temperature composting temperature measurement method given in Appendix A. See Appendix

6.2 faecal moisture content determination method B.

6.3 Detection of Salmonella in Appendix C.

6.4 compost, manure diluted in Appendix fecal coliform test method D.

6.5 Inspection Act Ascaris eggs in Appendix E. See Appendix

6.6 with dilute manure hook egg inspection method F. See Appendix

6.7 schistosome eggs in feces dilute inspection method G.

6.8 Identification of life and death worm eggs in Annex H.

6.9 mosquitoes, flies density monitoring methods, see Appendix I.

Appendix A

(Normative) High temperature composting temperature measurement method A.1 Scope Suitable for high temperature measuring internal body temperature of the compost heap. A.2 temperature requirements Of Reactor aerobic fermentation process, the temperature