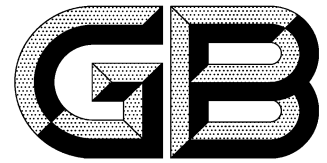


ICS 65.020.01
CCS B 16



National Standard of the People's Republic of China

GB/T 39916-2021

**Guidelines for the establishment of plant quarantine system in entry and exit
container depot**

Issued on April 30, 2021

Implemented from November 01, 2021

Issued by **State Administration for Market Regulation**
National Standardization Administration Committee

National standards of the People's Republic of China
Guidelines for the establishment of plant quarantine system in entry and exit container depot
GB/T 39916-2021

Published and distributed by Standards Press of China
No. A 2 Hepingli West Street, Chaoyang District, Beijing (100028)
No. 16 Sanlihe North Street, Xicheng District, Beijing (100045)
Website: www.spc.org.cn
Service hotline: 400-168-0010
April, 2021 1st edition
Book number: 155066.1-66978

Preface

This document is drafted in accordance with GB/T 1.1—2020 “Directives for standardization - Part 1: Rule for the structure and drafting of standardizing documents”.

Please note that some of the contents in this document may be patent related. The issuing authority of this document does not assume the responsibility for identifying patents.

This document is proposed and administered by the National Technical Committee for Phytosanitary Standardization (SAC/TC 271).

Drafting units of this document: Shenzhen Customs District of P.R.China, Shenzhen Academy of Inspection and Quarantine, Animal and Plant Inspection and Quarantine Technology Center of Shenzhen Customs District P.R.China, China Academy of Inspection and Quarantine, Xili Customs House of P.R.China, Huanggang Customs House of P.R.China, Rongcheng Customs House of P.R. China, Guanlan Customs House of P.R.China, Shanghai Customs District of P.R.China, Container Branch of China Ports & Harbours Association and Dalian Customs.

The drafters of this document are Guanghao GU, Huale WAN, Tao LIU, Zhinan CHEN, Lang XU, Lie QIAN, Zegao LU, Wenyong DONG, Xianyu BAO, Yang WANG, Xiaoling DAI, Shuhui ZHOU, Zhongbing CHEN, Daojian YU, Ying WANG, Ruxing ZHANG and Zhankui QIU.

Guidelines for the establishment of plant quarantine system in entry and exit container depot

1 Scope

This document provides guidance and suggestions for establishing a phytosanitary system in entry and exit container depots (hereinafter referred to as depots), and gives relevant information that needs to be considered in operation site and infrastructure, disinfection treatment facilities and equipment, management system, pest monitoring, staffing and other aspects.

This document is applicable to the establishment of plant quarantine system for entry and exit container depots in China, and is also used for reference by domestic container depots for transportation purposes.

2 Normative References

The contents in the following documents constitute the essential clauses of this document through normative references in the text. Among them, only the version corresponding to the date of the referenced document is applicable to this document; For undated reference documents, the latest version (including all modification lists) is applicable to this document.

GB/T 11601-2000 The rule for inspection and exchange of container of port or station for in or out

GB/T 16561-1996 Equipment interchange receipt for freight container

GB/T 27618-2011 Guidelines for surveillance of pests

GB/T 31752-2015 Technical requirements for methyl bromide quarantine fumigation chamber

GB/T 35551-2017 Safe handling rules in container storage area in port

SN/T 3175-2012 General requirements for pest surveillance

SN/T 3282-2012 General requirements for quarantine fumigation treatment

CTU CODE container loading operation guide (IMO/ILO/UNECE Code of Practice for Packing of Cargo Transport Units)

IICL General Guide for container cleaning (the Institute of International Container Lessors General Guide for Container Cleaning)

3 Terms and Definitions

The following terms and definitions shall apply to this document.

3.1

container depot

A place in the logistics chain where containers handover occurs.

NOTE: It includes container yards and container freight stations.

3.2

pest

Any species, strain or biotype of plant, animal or pathogenic agent injurious to plants or plant products.

[Source: ISPM 5-2019]

3.3

quarantine pest

A pest of potential economic importance to the area endangered thereby and not yet present there, or present but not widely distributed and being officially controlled.

[Source: ISPM 5-2019]

3.4

IICL certified container inspector

Professional and technical personnel who have passed the IICL International Container Examiner Examination and obtained the qualification for judging the conformity of containers entering and leaving the depot.

Note: IICL publishes the list of qualified personnel and the list of employers they work for on its website every year.

3.5

Objects prohibition from entering the country

Objects prohibition from entering the country by the Law of People`s Republic of China on the Entry and Exit Animal and Plant Quarantine..

Note: It includes pathogenic micro-organisms (including seed cultures of bacteria and viruses) of animals and plants, insect pests and other harmful organisms, relevant animals and plants, their products and other quarantine objects from countries or regions with prevalent epidemic animal or plant diseases, animal carcasses and soil.

4 System Composition

In order to effectively prevent and control the spread of alien pests and live quarantine pests with containers, the depot shall establish a plant quarantine system for entry and exit container, including operation sites and infrastructure, disinfection treatment facilities and equipment, management system, operation of pest monitoring and control system, staffing, etc.

5 Operation Site and Infrastructure

5.1 Operation Site and Function Division

The depot shall have an area equivalent to its business to meet the needs of entry and exit container for the storage, charging and discharging of cargo, and meet the requirements of plant quarantine. According to the needs, it can be divided into container check-waiting area, container loading and unloading area, container cleaning area, unqualified container processing area, checked container storage area, hazardous chemicals area, office area and other areas.

5.2 Infrastructure

Infrastructure shall include but not limited to the following.

- a) The ground of the depot is hardened, and the design of drainage system meets the requirements of plant quarantine.
- b) The inspection site is built with an inspection platform that can meet the field operation, which can park more than two container trucks at the same time and can carry out forklift truck unloading operations.
- c) The site is equipped with container stacker and special power supply.
- d) The inspection site has supporting facilities for auxiliary inspection. Equipped with necessary plant quarantine tools and equipment, such as knives, magnifying glasses, writing brushes, flashlights, cameras, etc.
- e) Facilities shall be provided in the container handling and processing areas to prevent secondary pollution or escape of pests.
- f) Video monitoring facilities are installed in key areas such as container charging and discharging, inspection, disinfection treatment and storage to meet the requirements of Customs informationization supervision system.
- g) Configure information facilities that can meet the needs of Customs, and provide logistics information, loading and unloading dynamics of containers entering and exiting the depot.
- h) If possible, a depot can be equipped with preliminary screening laboratory for plant quarantine.

6 Disinfection Treatment Facilities and Equipment

6.1 Cleaning Equipment

The depot shall have basic container cleaning equipment to meet the needs of cleaning, vacuum cleaning, washing, steam cleaning and other removal of phytosanitary pollutants inside the container. It shall also have facilities with sewage collection, filtration and treatment functions.

6.2 Disinfection Treatment Facilities

It is very necessary to have a qualified disinfection treatment operator authorized by the Customs District where the depot is located. Meanwhile, the following contents shall be considered when the disinfection treatment facilities are equipped.

- there are disinfection treatment facilities approved by the Customs District where the depot is located. Among them, fumigation warehouse shall comply with the relevant regulations in Chapter 5 of GB/T 31752-2015, 4.4 and 4.5 of SN/T 3282-2012; or supporting the construction of incinerators and other harmless disposal equipment, spraying equipment, etc., the processing capacity can meet the needs of the daily turnover of containers.
- the depot shall be equipped with effective pesticides and spraying equipment according to the types of imported cargo and the types of high-risk pests usually carried by cargo and transportation tools, and have a storage warehouse for quarantine medical equipment far away from the living and office areas to ensure safe storage.

7 Management System

7.1 Depot Management System

The depot management system includes the safe storage and operation regulation of containers in the inspection site and each operation area, the safe operation rule of loading containers, and the depot safety guarantee regulation, and conforms the following contents.

- establish the regulation of container storage and safe operation in accordance with Chapter 5 of GB/T 35551—2017.
- establish the operation rule for safe loading of containers in accordance with Chapter 9 of

CTU CODE.

—establishing a depot security regulation, including but is not limited to the following contents:

- The function of the power switch is normal, the power line is not aged, and not pulled illegally.
- Equip with firefighting equipment, and ensure that the firefighting equipment runs normally for 24 hours. Cargos and sundries shall not be stacked at the firefighting facilities to avoid affecting the use of firefighting equipment.
- Carry out publicity on safe driving in the port area, and urge drivers to drive safely.
- Imply post responsibilities, and consciously strictly implement the entry and exit system according to the requirements of security.
- Properly handle all kinds of emergencies and report to relevant leaders in time.

7.2 Container Inspection Management System

Container inspection management system includes container inspection regulation, cleaning regulation, prevention of pest escape and diffusion regulation, and conforms the following contents.

—establish container inspection regulation, including but not limited to the following contents:

- Establish cleaning and appearance inspection requirements in accordance with 8.2.2, 8.2.3 and 8.2.4 in the CTU CODE, and ensure that the interior and exterior of the container are completely clean and free of soil (dirt), animals and plants and their remains, animal carcasses and pests;
- Comprehensive storage yard shall be equipped with at least one IICL container inspector.

—establish container cleaning regulation, including but not limited to the following contents:

- Containers entering the depot are inspected by IICL container inspector. If they need to be cleaned continuously, they will be cleaned according to procedure and then stacked;
- Formulate specific cleaning procedure and cleaning standards in accordance with Chapter 3, Chapter 4 and Chapter 5 of IICL General Guide for Container Cleaning;
- See Appendix A for cleaning technical principles of potential different quarantine risks of containers.

7.3 Container Traceability Management System

Container traceability management system includes but is not limited to the following contents.

—establish a container delivery regulation that conforms the requirements of 6.1 and 6.2 in GB/T 11601-2000.

—the use of container handover receipt documents or equipment interchange receipt shall be implemented according to the requirements of Chapter 6 and Chapter 7 in GB/T 16561—1996.

—once the plant epidemic found, check the records, trace the original cause of the epidemic, take corrective measures, and timely feed back the situation to the Customs.

7.4 Container Major Epidemic Situation Report and Emergency Response System

The container major epidemic situation report and emergency response system includes but is not limited to the following contents.

- if the live quarantine pests are found, carry out on-site isolation in time, and feed back the situation to the Customs in time.
- the depot staff shall cooperate with the Customs officer to sample the containers with epidemic situation or suspected epidemic situation for testing.
- before the results are issued by the laboratory, the containers shall be sealed and isolated, and parked in designated places to prevent the spread of the epidemic. If quarantine pests are found, the disinfection treatment shall be carried out.
- cleaned-up wastes such as soil, animal & plant remains and pests are centralized storage, and supervised of their destruction.
- strengthen the prevention, response and emergency training of major entry and exit epidemics regularly, and imply emergency drills to strengthen emergency response capabilities.

7.5 The treatment system of unqualified containers in plant quarantine

The treatment system of unqualified containers in plant quarantine includes but is not limited to the following contents.

- it is found that soil, animal & plant remains, and pests are carried inside and outside the container, being judged that the container is unqualified for quarantine inspection.
- take samples on site and send them to laboratories with relevant qualifications for testing. If live quarantine pests are found, the treatment effect shall be evaluated after treatment. Meeting the requirements of pest treatment is judged as qualified. If it fails to meet the requirements, continue to carry out pest treatment until it meets the requirements. The batch of containers is prohibited from entry/exit if there is no effective disinfection treatment method.

7.6 Monitoring and control system of alien pests and live quarantine pests

The depot monitoring and prevention system includes but is not limited to the following contents.

- equip with necessary broad-spectrum and specialized trapping equipment, and cooperate with local customs to carry out epidemic monitoring.
- set up special storage places for epidemic prevention pesticides and medical equipment in the office area.
- set up a record of epidemic prevention. See Appendix B for the format.
- according to the requirements of the local Customs, the necessary epidemic prevention pesticides and equipment for pests shall be provided. See Appendix C for the list of typical epidemic prevention monitoring equipment and pesticides.
- Take measures to prevent the spread of pests. Incineration equipment is recommended to incinerate pollutants removed from containers.

7.7 Other Related Systems

Establish a management system for Customs inspection sites, which shall be formulated according to the requirements of local Customs.

8 Operation of Pest Monitoring and Control System

It is necessary for the depot to equip with trapping equipment and chemicals according to the types of high-risk pests usually carried by imported cargos and means of transport, and cooperate with the Customs to carry out the monitoring of alien pests and quarantine pests, which shall be carried out according to the requirements of Chapters 6, 8 and 9 in GB/T 27618-2011 and Chapters 6,

8 and 9 in SN/T 3175-2012.

9 Personnel Allocation

It is necessary to allocate plant quarantine and epidemic prevention officers to the depot suitable for the import and export business. Epidemic prevention personnel are familiar with the laws, regulations and relevant standards of entry and exit container inspection and quarantine, master the container on-site quarantine technology, common pest identification technology, biosafety knowledge, etc., and pass the relevant pre-job training.

Appendix A
(Informative)

Clean Technology Principles for Different Epidemic Risks

See Table A.1 for clean technology principles for different epidemic risks.

Table A.1 Clean Technology Principles for Different Epidemic Risks

Risk category		Clean technologies	
		Container	Detected content
Phytosanitary risk	Objects prohibition from entering the country	Cleaning, fumigation and spraying disinfection (choose one method according to the actual situation)	Fumigation or heat treatment (including chemical treatment)
	Plant quarantine pests and other living pests with quarantine risks are found, which may cause diffusion	Cleaning and fumigation	Insect detection: fumigation, cold treatment, heat treatment or microwave treatment (choose one method according to the actual situation) Disease detection: fumigation, heat treatment, spraying disinfection or soaking treatment (choose one method according to the actual situation) Weed detection: heat treatment or crushing treatment
	The importing country or region requires disinfection treatment	Fumigation or spray disinfection	—

Appendix C
(Informative)

Typical Plant Epidemic Prevention Monitoring Equipment and Drug List

See Table C.1 and Table C.2 for the typical plant epidemic prevention monitoring equipment drugs, tools and equipment list.

Table C.1 Typical Plant Epidemic Prevention Monitoring Equipment and Drug List

Monitoring project	Types of attractants	Trap	Other tools and pesticides
Surveillance of quarantine fruit flies	Trimedlure (TML)	All-in-one trap (solid core type)	Protective equipment such as telescopic rod, GPS instrument, digital camera, gloves, mask, etc., maintenance, insect collection and recording equipment, such as plastic bucket, tweezers, insect collection bottle, sealing pocket, marker, record table, etc. It is necessary to verify that about 5% of marathon drug has been added, and about 8% of marathon drug has been added before CUE drug is used.
	Methyl Eugenol (ME)	All-in-one trap (liquid attractant)	
	Cuelure (CUE)	All-in-one trap (liquid attractant)	
	Protein bait (PB)	All-in-one trap (protein bait type)	
Monitoring of alien forest pests at ports	Broad-spectrum attractant for forest pests	Trap for common forest pests	Digital camera, GPS locator, fine iron wire, thimble tube, alcohol, cotton, silicone plug with slow release function, dichlorvos, rubber gloves, tweezers, writing brush, recording equipment, etc. Traps can be selected according to the actual situation of the port
	Intra-generic attractant and broad-spectrum attractant for bark beetles	Solar attractant trap	
	Sexual attractant	Common multifunctional trap for forest pests	

Table C.2 List of Typical Plant Epidemic Prevention Monitoring Tools and Equipment

Monitoring project	Field investigation and collection tools	Specimen making tool	Safety equipment for weed control and monitoring personnel
Monitoring of alien weeds	Maps, toolboxes, GPS locators, digital cameras, palm computers or notebook computers, branch scissors, spatulas, collection bags, specimen clips, absorbent paper, collection labels, notebooks, markers, pencils, etc.	Dryer, plastic film, specimen holder, absorbent paper, rope, table paper, specimen recording paper, glue, thick paper strip, needle and thread, seed bag, etc.	Sprayer, shovel, electric weeding device, fatigue dress, rubber boots, hiking shoes, first-aid medicines, etc.

References

- [1] ISPM 5-2019 Glossary of Phytosanitary Terms
-