

GL 10-2-1

**Guidelines for Maintenance and Management
of Environment and Sanitation of Buildings
in EXPO Venues**

(November 2004)



Japan Association for the 2005 World Exposition

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Separate sheets and forms

- Guidelines for management of the environment and sanitation in the Exhibition venues (Separate sheet 1)
- How to fill out a voluntary management checklist for environment and sanitation of pavilions and the like (Separate sheet 2)
- Facility overview for Exhibition pavilions (Form 1-1)
- Sanitation management plan for pavilions (Form 1-2)
- Voluntary management checklist for environment and sanitation of pavilions (Form 2-1)
- Air environment measurement record sheet (Form 2-2)
- Complaint receipt and processing sheet (Form 3)

Reference (Notification form)

- Notification for specified building

Introduction

The present guidelines, compiled under the supervision of Aichi Prefecture, are based on the Law for Maintenance of Sanitation in Buildings (hereinafter referred to as “LMSB”), and Special Regulation No. 10 concerning General Services and the Maintenance of Sanitation in Buildings Action Plan prescribed by the Japan Association for the 2005 World Exposition (hereinafter referred to as the “Association”) as applied to the maintenance and management of installations, water supply facilities, sewerage facilities and miscellaneous-use water facilities for use by the visiting public. The guidelines aim at enabling visitors to enjoy the 2005 World Exposition, Aichi, Japan (hereinafter referred to as the “Exhibition”) in a comfortable environment, while also allowing those working in Exhibition venues to conduct their activities in a comfortable environment.

Not only the Association, but also official and non-official participants (hereinafter referred to as “Participants”) are kindly requested to follow these guidelines in managing the above-mentioned installations and facilities, so as to provide a comfortable installation and facility environment.

1 Scope

The present guidelines apply to management in general of the building environment and sanitation as carried out by Participants in the Exhibition display halls (hereinafter referred to as “Pavilions”).

2 Management structure

(1) Nomination of the individual responsible for managing environment and sanitation

To manage installations and facilities properly, designate an individual responsible for managing environment and sanitation in compliance with the following:

- ① For a specified building (a building with a total floor area of 3,000 m² or more; the same definition applies in the following) as prescribed in the LMSB, designate as the individual responsible for management a building environment and sanitation management engineer as prescribed in the same law.
- ② For applicable installations other than specified buildings, nominate as the individual responsible for management a suitable individual from among those engaged by installation.

(2) The individual responsible for management must perform the following jobs:

- ① Management of air conditioning facilities and indoor air environment
- ② Sanitary management of water supply and sewerage facilities
- ③ Sanitary management of miscellaneous-use water facilities
- ④ Confirmation of any infestation by rodents and unsanitary insects, and their prevention
- ⑤ Inspection of cleaning activities and waste disposal
- ⑥ Recording and retention of voluntary management activities
- ⑦ Sanitation education for employees
- ⑧ Other activities concerning environment and sanitation management

3 Cooperation with Aichi Prefecture and the Japan Association for the World Exposition

Participants are requested to cooperate with the activities of the Food and Environmental Sanitation Center (hereinafter referred to as the “Center”) established in the Exhibition venue by Aichi Prefecture, and to receive its necessary advice and guidance concerning building environment and sanitation.

Participants are also requested to cooperate with the Association (the venue management and service group) when it inspects the management status of pavilions and similar installations.

4 Preparation and submission of overviews, plans, and similar documents

- (1) Participants are requested to prepare and submit to **the Association (the group in charge)** no later than March 4 (Friday), 2005, the “facility overview for Exhibition pavilions and the like” (hereinafter referred to as the “Overview”), separate form 1-1,

and the “sanitation management plan for pavilions and the like,” separate form 1-2, concerning their pavilions and the like.

For a pavilion or similar building categorized as a specified building, submit a copy (seal not required) of the notification for a specified building described in item (2), instead of the Overview.

The Association (the venue management and service group) will submit collectively to the Center the Overviews it receives.

- (2) In compliance with the LMSB, for a pavilion or similar building categorized as a specified building, submit **to the Center** the specified building notification (See attached notification form) for the building concerned within one month of the day on which use of that building commences.

Should a change be made to a notification item, notify **the Center** of such change within one month of the day on which the change is made.

5 Management of pavilions and the like

With a view to providing comfortable environment and sanitation in the pavilions and the like, Participants are requested to manage their pavilions and the like in compliance with separate sheet 1, “guidelines for the management of the environment and sanitation in the Exhibition venues” (hereinafter referred to as the “Guidelines”) and to record management situations on separate form 2-1, the “voluntary management checklist for the environment and sanitation of pavilions and the like,” and retain it in the installations concerned.

(1) Management of indoor air environment and the like

- ① Maintain and control the indoor air environment and illumination levels in compliance with the guidelines, and record and retain the results.
- ② Perform maintenance inspection of air-conditioning facilities and mechanical ventilation facilities regularly, at least once a month, and repair them as needed. Pay special attention to the following:
 - a. Inspect cooling towers and cooling water for stains and contamination, and clean them and change water as needed.
 - b. Inspect humidifiers for stains and contamination, and clean them as needed.
 - c. Inspect drains of facilities for stains, contamination and clogging, and clean them as needed.
- ③ Use city water for cooling towers and humidifiers.
- ④ Carry out tests for legionella bacteria in cooling water as needed.

(2) Sanitary management of water supply facilities

To supply safe and sanitary water, observe the following instructions:

- ① Before opening the gates every day, make sure that water is free of abnormalities such as color, turbidity, odor and taste at end water taps. Measure the free residual

chlorine concentration at least once a week, making sure that the concentration is 0.1 mg/L or more.

- ② If a cistern is used to supply potable water, make an effort to conduct water quality testing regularly, in accordance with the method shown in the table below.

If water quality testing reveals that the water does not meet the water quality standard set by the Water Works Law, immediately notify the Association and the Center of the nonconformity, which in turn will tell the public not to drink the water. Determine the cause and take necessary remedies.

Inspect the cistern at least once a week and clean it at least once during the Exhibition.

Water quality test items	Water quality test frequency
Number of bacteria, <u>colon bacillus</u> , <u>lead and its compounds</u> , nitrogen as nitrate and nitrogen as nitrite, <u>zinc and its compounds</u> , <u>iron and its compounds</u> , <u>copper and its compounds</u> , chloride ions, <u>evaporation residues</u> , organic substances, pH values, taste, odor, chromaticity, and turbidity	Twice during Exhibition session (The underlined items may be omitted in the second water quality test if they met the water quality standard in the first test.)
Cyanide ions and cyanogen chloride, chloronitric acid, chloroform, dichloroacetate, dibromochloromethane, bromic acid, total trihalomethane, trichloroacetic acid, bromodichloromethane, bromoform and formaldehyde	Once during the Exhibition (June through September)

- ③ When water coolers are installed, remove remaining water by letting water flow for five minutes or activating automatic washing before opening the gates each day, and then measure the concentration of free residual chlorine; make sure that the concentration is 0.1mg/L or more and that the water is free of abnormalities such as color, turbidity, odor and taste.

(3) Sanitary management of sewerage facilities

Manage sewerage facilities in compliance with the following:

- ① Inspect drain pipes and the like for leakage of waste water and odor at least once a month, and take measures such as repair as needed.
- ② When waste is found to be accumulated in or leaking from drainpipes, immediately take measures such as cleaning and repairing.

(4) Sanitary management of miscellaneous-use water facilities

Manage miscellaneous-use water facilities in compliance with the following:

- ① As a rule, use city water to supply landscaping facilities (such as places where visitors play with water, artificial streams and fountains).

- ② Before opening the gates each day, measure the concentration of free residual chlorine at end taps for miscellaneous-use water, making sure that the concentration is 0.1 mg/L or more.

If a free residual chlorine concentration of 0.1 mg/L or more is not maintained, service chlorine disinfection equipment.

- ③ If a miscellaneous-use water tank or filtering facility is installed to supply miscellaneous-use water, make an effort to conduct water quality testing regularly in accordance with the method shown in the table below.

If water quality testing reveals that the water does not meet the water quality standard, immediately notify the Association and the Center of the nonconformity; simultaneously, track down the cause of the nonconformity and take necessary corrective actions.

Inspect the miscellaneous-use water tank or filtering facility at least once a month, and clean it as needed.

Inspection item	Water quality standard	Inspection frequency
pH value	From 5.8 to 8.6 inclusive	At least once per week
Odor	Shall not be abnormal	
Appearance	Shall be nearly clear and colorless	
<i>Colon bacillus</i>	Shall not be detected	At least once every two months
Turbidity	Two degrees or less	
<i>Legionella bacteria</i>	Less than 10 CFU/100 mL	Twice during Exhibition

Note: The standard for legionella bacteria is based on the revised guidelines for legionellosis prevention.

(5) Confirmation of infestation by rodents and unsanitary insects, and their prevention

Carry out management to prevent rodents and unsanitary insects in compliance with the following instructions:

- ① Regularly investigate places where rodents and unsanitary insects breed, where they live, and any damage caused by them. With a view to securing a sanitary environment throughout all Exhibition venues, general preventive cleaning activities, to be shared in by the Association and Participants, are scheduled once before the opening (in mid-March) and twice during the Exhibition (mid-May and mid-July).
- ② Regularly inspect rodent- and insect-prevention facilities to ensure that they work properly; service them as needed.
- ③ Use rodenticides and insecticides registered as medical drugs or quasi-drugs for rodent and insect prevention; after prevention activities are completed, store and control such drugs properly and make an effort to prevent any accidents related to such drugs by providing sufficient ventilation or cleaning.

(6) Cleaning activities and waste disposal

Carry out the management to beautify the environment and maintain cleanliness in compliance with the following instructions:

- ① Carry out cleaning and waste disposal properly every day. For example, do not leave waste generated during one day to be taken care of the next day.
- ② Clean the waste depot at least once a day; disinfect it at least once a week.
- ③ Keep track of cleaning and waste disposal; take measures such as the addition of trash boxes as needed.

(7) Other items of management

If you commission part or all of your management activities to a person or firm, give necessary instructions to said person or firm under contract; at the same time, ask said person or firm to report the ongoing status of the commissioned work, so that you are always informed regarding the management situation.

6 Measures against emergencies and complaints

- (1) If a complaint is made by a visitor or similar person, Participants are requested to record each such complaint using form 3, the complaint receipt and processing sheet, to investigate the complaint as required and take appropriate counteraction.
- (2) If a health problem arises (or is likely to arise) that is possibly due to an aspect of building environment and sanitation, immediately notify the Center or Association and follow the instructions given.