

Standards for the Establishment of an Alcohol Production Factory

Announced Date: 2005-10-17

Amended Date: 2014-12-31

Category: Ministry of Finance

1. Full text of 10 articles established and promulgated by Ministry of Finance Order TaiTsaiKu Tzu No. 09403515781, Department of Health, Executive Yuan Order She Tsu No. 0940406827, and Ministry of Economic Affairs Order Ching Kung Tzu No. 09404608230 on October 17, 2005, and shall be enforced from January 1, 2006.
2. Full text of 10 articles amended and promulgated by Ministry of Finance Order TaiTsaiKu Tzu No. 10303768670, Ministry of Health and Welfare Order BuShouShi Tsu No. 1031304242, and Ministry of Economic Affairs Order Ching Kung Tzu No. 10304606680 on December 31, 2014, and shall be enforced from January 1, 2015.

Article 1 These Standards are enacted pursuant to Paragraph 2 of Article 27 of the Tobacco and Alcohol Administration Act (hereinafter referred to as the “Act”).

Article 2 I. The construction of buildings and installation of equipment of alcohol production factories that are subject to factory registration shall comply with the provisions of these Standards; those exempt from factory registration shall comply with the provisions of Article 2, Article 3, Article 8, and Article 9. The producer who establishes an additional factory, changes the factory location, adds new types of products produced, or has obtained an establishment permit prior to the enforcement of the amended Standards but has not yet obtained a license permit for an alcohol producer shall comply with the provisions of these Standards.

II. The review of the matters set forth in the preceding paragraph shall, for alcohol production factories subject to factory registration, be conducted by the industrial competent authority of the special municipality or the county (or county-level city) in conjunction with the health competent authority and the competent authority; for those exempt from factory registration, such review shall be conducted by the competent authority of the special municipality or the county (or county-level city).

Article 3 I. The floor area of manufacturing workplaces of an alcohol production factory shall be no less than 50 square meters. However, for factories established on land designated as an industrial district under urban planning or on non-urban Type D construction land, the provisions of the Building Design and Construction Section of the Building Technical Regulations shall apply.

II. The manufacturing workplaces referred to in the preceding paragraph include work areas for raw materials handling,

manufacturing, processing, blending, repackaging, packaging, and other activities directly involving alcohol products.

Article 4 The environment of an alcohol production factory shall be in compliance with the following provisions:

1. The factory premises shall be constructed with unobstructed gutters, the open space paved with concrete, asphalt, or green covering and free from flying dust. The environment shall be kept clean at all times.
2. The drainage system shall be cleaned regularly to keep it unobstructed and free from foul smell.
3. The on-site restaurants, retail stores, or staff dormitories within the factory premises shall be separated from areas designated for ingredients handling, brewing, blending, alcohol storage, or the placement of additives in alcohol products.
4. For the reuse of recycled containers, a designated storage area shall be set up within the factory premises to ensure proper stacking and cleanliness.
5. Livestock, pets, etc., shall be kept under control, and appropriate measures shall be taken to prevent contamination of alcohol products. Staff dormitories shall be completely separated from the operation sites and shall have separate entrances and exits.
6. Vector control measures shall be effectively implemented.

Article 5 The building and facilities of an alcohol production factory shall be in compliance with the following provisions:

1. Walls and pillars: The walls and pillars of ingredients processing sites, processing, dressing, and other buildings shall be white or light-colored, and their surfaces shall be smooth with no cracks and kept clean regularly.
2. Floor: The floors of manufacturing workplace buildings shall be paved with non-absorbent, water-impermeable, acid- and alkali-resistant, and wear-resistant materials, and shall be provided with an adequate drainage system.
3. Floor slab or ceiling: The floor slab or ceiling directly above exposed alcohol products shall be white or light-colored to facilitate cleaning, shall not allow condensation to form, and shall be kept clean and maintained in good condition.
4. Light: Except for warehouses, all buildings of an alcohol production factory shall have adequate lighting. The illumination of machinery and equipment tables shall reach at least 100 lux, that of work surfaces or preparation tables shall maintain at a minimum of 200 lux, and that of light inspection tables shall have an illumination of at least 540 lux. The light source used shall not alter the color of alcohol products. Lighting equipment shall be kept clean and equipped with protective covers to prevent contamination of alcohol products.

5. Ventilation facilities: The factory buildings shall be well-ventilated and shall be equipped with fans, exhaust fans, and other effective ventilation equipment. The air vents shall be equipped with facilities to prevent the intrusion of disease vectors. Any confined processing room or packaging room shall be equipped with air conditioning facilities.
6. Entrances, doors, windows and other openings: They shall be made of non-absorbent, easily washable, water-impermeable, and durable materials, and shall be equipped with facilities to prevent the intrusion of disease vectors.
7. Drainage system: The drainage system shall be complete and unobstructed. Gutters shall be equipped with facilities to intercept solid waste, and the outlets shall be equipped with facilities to prevent the intrusion of disease vectors.
8. Warehouses:
 - (1) Warehouses for raw materials, semi-finished products, and finished products shall be separately established or appropriately segregated, and shall provide sufficient space for the handling and movement of goods. They shall be constructed of water-impermeable materials.
 - (2) Pallets provided within the warehouse shall be sufficient to meet the needs of inventory storage and production operations.
9. Toilets:
 - (1) The toilet construction site shall be prevented from contaminating the water source.
 - (2) The toilet entrance shall not face directly towards the operation sites for alcohol products, but such restriction does not apply if it is constructed with a buffer facility to control airflow effectively and to prevent contamination.
 - (3) Toilets shall be equipped with proper ventilation, adequate lighting, pest and rodent control facilities, as well as detergent, hand washing and drying facilities such as hand dryers or paper towels, and trash bins.
 - (4) A sign to remind users to wash their hands after visiting the toilet shall be installed in a visible location.
10. Changing rooms: Changing rooms may be provided as needed and shall be separated from the operation sites. Staff shall have individual lockers to store their clothing.
11. Handwashing facilities:
 - (1) The locations of hand washing and drying facilities shall be appropriate and sufficient in number. Where necessary, appropriate disinfection facilities shall also be provided.
 - (2) The handwashing sinks shall be constructed of water-impermeable materials, designed and constructed to prevent the accumulation of dirt and facilitate easy cleaning and disinfection.
 - (3) Handwashing and disinfection facilities shall be designed to

prevent recontamination of washed hands during use. Clear and easily understandable handwashing instructions shall be posted in a conspicuous location.

12. Vector control: Vector control measures shall be effectively implemented, and no vectors or traces of their activity shall be found.

13. Water supply facilities:

(1) Water in direct contact with the alcohol products, and used for blending, cleaning equipment, and utensils, shall comply with the Drinking Water Quality Standards. Where tap water is not used, water treatment facilities shall be installed.

(2) For those using groundwater sources, the water source shall be kept at least 15 meters away from pollution sources such as septic tanks and waste accumulation sites, to prevent contamination.

(3) Water storage facilities (towers or tanks) shall be constructed of non-toxic materials that do not contaminate water quality and shall be kept clean, with protective measures in place to prevent contamination. They shall be located at least 3 meters away from contaminated areas, septic tanks, and other sources of pollution.

(4) The piping systems for drinking water and non-drinking water shall be completely separated, and the water outlets shall be clearly distinguished.

14. Layout and space:

(1) For sites with different operational characteristics defined by process and sanitation safety requirements, each shall be separated or effectively segregated.

(2) There shall be sufficient space for the placement of equipment and alcoholic product utensils, installation of sanitation facilities, storage of raw materials, and to meet the requirements for maintaining sanitary operations and producing safe alcohol products.

Article 6 The equipment and utensils of an alcohol production factory shall be in compliance with the following provisions:

1. The use of containers, utensils, or equipment made of lead, copper (excluding saccharification equipment for beer and distillation equipment for distilled spirits), or other items that may release toxic substances is strictly prohibited in processes where such items may come into contact with alcohol products.

2. All equipment used in the production of various alcohol products within the factory shall be arranged systematically, maintaining adequate spacing and sufficient working space for operation. Containers, utensils, and other tools shall be stored in clean and sanitary locations.

3. Sufficient quantities of work clothes, hats or hairnets, gloves, and other protective clothing shall be provided for production operators.

4. The use of polychlorinated biphenyls (PCBs), chemicals containing

PCBs, or any other toxic heating medium is strictly prohibited within the factory.

- Article 7
- I. The premises of an alcohol production factory shall, as needed, be equipped with reception areas, cold storage (freezing) rooms, raw material warehouses, ingredients handling areas, steaming zones, cooling zones, liquefaction zones, saccharification zones, koji-making zones, fermentation zones, distillation zones, alcohol storage zones, processing/dressing zones, inner packaging container washing areas, inner packaging areas, outer packaging areas, finished product warehouses, changing rooms, laboratory (testing/inspection rooms), offices, toilets, and other necessary areas, all of which shall be clearly labeled.
 - II. For safety and hygiene considerations, the areas referred to in the preceding paragraph shall be separately established or effectively segregated. In particular, the koji-making zones and inner packaging areas shall be effectively separated from other areas.

- Article 8
- I. An alcohol production factory shall be equipped with the following basic production equipment:
 1. Fermentation tanks (barrels), maceration tanks (barrels), or blending tanks (barrels).
 2. Storage tanks (barrels).
 3. Filling and packaging equipment.
 4. Light inspection equipment or facilities for liquid level and foreign matter detection.
 5. Batch number printing equipment.
 - II. In addition to the equipment specified above, depending on the actual manufacturing process, the following equipment shall be provided:
 1. Raw material pre-treatment equipment: including washing equipment, polishing equipment, soaking equipment, grinding equipment, destemming, crushing and pressure filtration equipment.
 2. Steaming equipment.
 3. Saccharification equipment.
 4. Malting equipment.
 5. Microbial culture equipment.
 6. Distillation equipment (required for factories manufacturing distilled spirits, ethyl alcohol, or cooking rice wine).
 7. Wooden casks (required for factories manufacturing brandy or whisky) or other maturation equipment.
 8. Clean-in-place (CIP) equipment.
 9. Conveying equipment.
 10. Sterilization equipment (sterilizers or sterilization kettles).
 11. Container washing and disinfecting equipment.
 12. Filtration equipment.

- Article 9
- I. For routine quality control inspections and for determining the sanitary quality of raw materials, semi-finished products, and finished products, an alcohol production factory shall be equipped with the following basic inspection equipment:
1. Thermometer.
 2. pH meter or litmus paper.
 3. Alcohol meter (with a minimum graduation of 0.2% or finer).
 4. Alcohol distillation equipment.
 5. Titration equipment.
 6. Volume and weight inspection equipment.
- II. In addition to the equipment specified in the preceding paragraph, the following inspection equipment shall be provided as required by actual needs:
1. Refractometer.
 2. Constant temperature water bath.
 3. Salinity measurement equipment (mandatory for factories manufacturing general cooking wine).
 4. Acidity measurement equipment.
 5. Pressure or gas volume measuring instrument (mandatory for factories manufacturing carbonated alcoholic beverages).
 6. Viscometer.
 7. Turbidity and color determination equipment.
 8. Residual chlorine analyzer.
 9. Rapid methyl alcohol testing devices (mandatory for factories using edible ethyl alcohol as ingredients).
 10. Analytical balance
 11. Sulphur dioxide measurement devices.

Article 10 These Standards shall come into force on January 1, 2015.

Note

In case of any discrepancy between the English version and the Chinese text of this statute, the Chinese text shall govern.