

ILLINOIS REGISTER

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED REPEALER

- 1) Heading of the Part: Soft Drink Manufacturers
- 2) Code Citation: 77 Ill. Adm. Code 740
- 3)

<u>Section Numbers:</u>	<u>Proposed Actions:</u>
740.10	Repealed
740.20	Repealed
740.30	Repealed
740.40	Repealed
740.50	Repealed
740.60	Repealed
740.70	Repealed
740.80	Repealed
- 4) Statutory Authority: Implementing and authorized by the Illinois Food, Drug and Cosmetic Act [410 ILCS 620]
- 5) A Complete Description of the Subjects and Issues Involved: This Part is being repealed because all relevant content is contained in 21 CFR 120 Hazard Analysis and Critical Control Point Systems and 21 CFR 146 Canned Fruit Juices which are being incorporated by reference into the Manufacturing, Processing, Packing or Holding of Food Code (77 Ill. Adm. Code 730).

The economic effect of this proposed repealer is unknown. Therefore, the Department requests any information that would assist in calculating this effect.

The Department anticipates adoption of this repealer approximately six to nine months after publication of the Notice in the *Illinois Register*.
- 6) Published studies or reports, and sources of underlying data, used to compose this rulemaking: None
- 7) Will this rulemaking replace any emergency rulemaking currently in effect? No
- 8) Does this rulemaking contain an automatic repeal date? No
- 9) Does this rulemaking contain incorporations by reference? No

ILLINOIS REGISTER

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED REPEALER

- 10) Are there any other proposed rulemakings pending on this Part? No
- 11) Statement of Statewide Policy Objectives: This rulemaking does not create or expand any State mandates on units of local government.
- 12) Time, Place and Manner in which interested persons may comment on this proposed rulemaking:

Written or e-mail comments may be submitted within 45 days after this issue of the *Illinois Register* to:

Elizabeth Paton
Assistant General Counsel/Rules Coordinator
Division of Legal Services
Illinois Department of Public Health
535 W. Jefferson St., 5th floor
Springfield, Illinois 62761

(217) 782-2043
e-mail: dph.rules@illinois.gov

- 13) Initial Regulatory Flexibility Analysis:
- A) Types of small businesses, small municipalities and not for profit corporations affected: None
- B) Reporting, bookkeeping or other procedures required for compliance: None
- C) Types of professional skills necessary for compliance: None
- 14) Regulatory Agenda on which this rulemaking was summarized: January 2016

The full text of the Proposed Repealer begins on the next page:

ILLINOIS REGISTER

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED REPEALER

TITLE 77: PUBLIC HEALTH
CHAPTER I: DEPARTMENT OF PUBLIC HEALTH
SUBCHAPTER m: FOOD, DRUGS AND COSMETICS

PART 740
SOFT DRINK MANUFACTURERS (REPEALED)

Section

740.10	Definitions
740.20	Scope
740.30	Plant and Grounds
740.40	Equipment and Utensils
740.50	Sanitary Facilities and Controls
740.60	Sanitary Operations
740.70	Processes and Controls
740.80	Personnel

AUTHORITY: Implementing and authorized by the Illinois Food, Drug and Cosmetic Act (Ill. Rev. Stat. 1981, ch. 56½, pars. 501 et seq.).

SOURCE: Filed September 19, 1972; codified at 8 Ill. Reg. 8924; repealed at 40 Ill. Reg. _____, effective _____.

Section 740.10 Definitions

For the purpose of this Part, 77 Ill. Adm. Code 730.10 (a), (b) and (c) of the General Rules for The Manufacturing, Processing, Packing or Holding of Food apply as well as the following definitions:

A "Carbonated Beverage" shall be any beverage containing one or more volume of carbon dioxide. These beverages may also be known as soda water, soda pop, pop, and tonic.

"Closed" shall mean fitted together snugly leaving no openings large enough to permit the entrance of vermin.

"Closing Machine" shall mean the machine that places the crown cap on a glass container.

"Closure" shall mean a metal seal lined with cork or other suitable non-toxic

ILLINOIS REGISTER

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED REPEALER

material whose edges are crimped over the mouth of or rolled on glass container.

A "Finished Product" shall be a beverage that has been bottled, canned or packaged.

"Liquid Sugar Storage Tanks" shall mean a storage tank used to store liquid sucrose or other liquid carbohydrate sweetener and does not include storage tanks used for flavored syrups.

"Return Bottles" are bottles designed to be sanitized and reused as containers for soft drinks.

"Sealed" shall mean free of cracks or other openings which permit the entry or passage of moisture.

"Seamer" shall mean the machine used to put the lid on metal containers.

A "Soft Drink" shall be any nonalcoholic beverage, carbonated, or noncarbonated, having synthetic or natural flavoring, but does not include coffee, tea or milk drinks. Any drink purporting to be a standardized product shall comply with the applicable standard in 21 CFR Chapter 1 – Food and Drugs.

Section 740.20 Scope

This Part is intended to explain how the General Regulations for Food Manufacturing, Processing, Packing or Holding of Food may be satisfactorily complied with by manufacturers of soft drinks. These are not intended to be all inclusive and it may be possible to satisfactorily comply by using other means. If other means are used, they must be approved by the Illinois Department of Public Health prior to their use. Proof of such approval shall be maintained by the firm for presentation to a representative of the Illinois Department of Public Health during an inspection of the establishment.

Section 740.30 Plant and Grounds

- a) Grounds
 - 1) The area surrounding the manufacturing plant shall be free of discarded truck bodies, discarded equipment, litter, uncut weeds and uncut grass and any other condition that may constitute an attractant, breeding place or harborage for rodents, insects and other pests.

ILLINOIS REGISTER

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED REPEALER

- 2) Roads and parking lots shall be constructed or surfaced in such a manner as to minimize dust and dirt. All adjacent yards which constitute part of the property shall be sodded or surfaced so as to prevent an excess of dirt and dust.
 - 3) The premises shall be drained to prevent a pooling or an accumulation of liquids and shall be graded so that drainage is away from the bottling plant so as to prevent surface water from seeping or draining into the plant.
- b) Plant Construction and Design
- 1) The manufacturing plant shall be large enough to provide adequate working and storage space. The floors of rooms where ingredients are stored, compounded, mixed, or processed or where containers or equipment are washed shall be constructed of an impervious, smooth, easily cleaned material. They shall be kept in good repair and graded to drain properly to trapped drains. The interior walls and structural features of these rooms shall be smooth, washable, impervious to moisture, and light-colored. They shall be clean and in good repair. Above the splash height, the walls and ceiling may be constructed of suitable sound reducing material. Ceiling in the syrup and container filling rooms should be of hard, sound materials with smooth, easily cleanable surfaces and maintained in good order.
 - 2)
 - A) The syrup room and bottle washing and filling room shall not open directly into any living quarters or toilet room.
 - B) Facilities shall be provided for the orderly storage of employees' clothing and personal belongings. This area shall be separate from the syrup or filling rooms and shall include containers for storage of soiled clothing prior to laundering.
 - 3)
 - A) All working surfaces shall be illuminated to a minimum of 50 foot-candles of light except that at least 100 foot-candles of light be available at the inspecting stations. Toilet facilities shall have a minimum of 20 foot-candles of light. All other areas shall have a minimum of 5 foot-candles of light at a distance of 30 inches

ILLINOIS REGISTER

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED REPEALER

above the floor.

- B) All artificial lights in the syrup room and bottle washing and filling room shall be equipped with protective shielding or of the safety type to prevent contamination by breakage.

4)

- A) All rooms shall be adequately ventilated to prevent development of objectionable odors, excessive condensation, and mold growth. Where mechanical ventilation equipment is used, it shall be so located and controlled as to prevent contamination of equipment, raw materials, in process product or finished product. Provisions shall be made for intake or make-up air in such a fashion as to prevent contamination of equipment and products.
- B) Toilet rooms shall be ventilated to the outside air by a window, louver or a mechanical ventilating system. These and all other vents shall be screened or have self-closing louvers and all exhaust outlets shall be properly located so as to prevent creating a nuisance.
- C) Equipment such as space heaters, water heaters, etc., which is fired by gas, oil, kerosene or some other fuel which may give off noxious odors, fumes or vapors shall be vented to the outside.

Section 740.40 Equipment and Utensils

- a) Suitable for intended use. All equipment and utensils being used shall be of the type designed and manufactured for use in a food processing or beverage manufacturing plant.
- b) Cleanable
 - 1) Design
 - A) All equipment and utensils shall be so designed and of such material and workmanship as to be smooth, easily cleanable, and durable, and shall be in good repair; food-contact surfaces of such equipment and utensils shall, in addition, be easily accessible for cleaning, nontoxic, corrosion resistant and relatively nonabsorbent.

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED REPEALER

Bottle washers shall be properly designed to fulfill the washing procedure outlined in Section 740.70(f) and shall be equipped with accurately functioning indicating thermometers. In all new installations the thermometer determining the temperature of the alkali washing solution shall be of the recording type or shall be of the dial-type with temperatures being recorded on quality control records at least every two hours while the bottle washer is in operation. All bottling plants shall record the temperature of the main tank of the bottle washer on the quality control records at least every two hours during operation of the bottle washer. This record shall also include the start-up time and close-down time of the bottle washer.

- B) All apparatus used in syrup making or storage of liquid sugar and finished syrups shall be free from recesses, self-draining, covered and equipped with a mechanical means of mixing the syrup where mixing is required.
- C) Equipment shall be so designed that ingredient contact surface shall be free of difficult to clean internal corners and crevices and all pipe threads which contact beverages or ingredients shall be of a sanitary design. All piping, fittings and connections carrying finished syrup and beverage shall be designed to permit easy cleaning and shall be free of breaks or corrosion. All interior surfaces of demountable piping, including valves, fittings, and connections shall be designed, constructed and installed to permit visual inspection.

2) Equipment Designed for In-place Cleaning

- A) Piping and other equipment intended for in-place cleaning shall be so designed, constructed and installed that cleaning and sanitizing solutions can be circulated throughout a fixed system, so that cleaning and sanitizing solutions will contact all interior surfaces and the cleaning and sanitizing procedure results in a thoroughly cleaned and sanitized piece of equipment or piping.
- B) Where necessary, each cleaning circuit shall have access points such as valves, removable sections, fittings, etc., that are adequate for inspection of the interior of the line in addition to the entrances

ILLINOIS REGISTER

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED REPEALER

and exits. These access points shall be located at sufficient intervals to determine the general condition of the interior surface of the piping and shall be so constructed as to not create a nuisance or reduce the effectiveness of the in-place cleaning.

- C) Cleaned in-place beverage pipelines and return solution lines (if used) shall be rigid, self-draining, and supported in a manner as to maintain uniform slope and alignment. Return solution lines shall be constructed of sanitary piping as designated in Section 740.40(b)(3).
- D) All gaskets shall be of a material approved for use as a beverage ingredient contact surface and shall form a smooth, flush interior surface. Interior surfaces of welded joints in pipelines shall be smooth and free from pits, cracks, or inclusions.

3) Food Contact Surfaces

- A) All beverage or beverage ingredient contact surfaces of equipment, containers, utensils and sanitary piping shall be smooth, free of breaks, cracks, chips, pits, open seams or other imperfections and shall be constructed of stainless steel of the American Iron and Steel Institute 300 series, equally corrosion-resistant metal which is non-toxic and non-absorbent, heat resistant glass or plastic materials which are relatively inert, resistant to scratching, scouring, decomposition, cracking, chipping and distortion under normal use and which are non-toxic, non-absorbent, and do not impart flavor or odor to the product.
- B) Tanks used for holding water prior to treatment to prepare the water for use in the filling operation may be of construction other than that listed above, provided that they are constructed of materials which will not contaminate the water.
- C) Carbonated water, finished syrups, and finished products shall not be conveyed in pipelines of galvanized iron, lead, zinc, copper or other deleterious materials.

4) Non-food Contact Surfaces. Surface of equipment not intended for contact with beverages or beverage ingredients, but which are exposed to

ILLINOIS REGISTER

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED REPEALER

splash, debris or otherwise require frequent cleaning, shall be reasonably smooth; washable; free of unnecessary ledges; projections, or crevices; readily accessible for cleaning; and of such material as to be readily maintained in a clean and sanitary condition.

- c) Maintenance. All equipment and utensils shall be maintained in good repair and shall be clean to sight and touch. Beverage and beverage ingredient contact surfaces not designed for in-place cleaning shall be accessible for manual cleaning and inspection without being disassembled, by disassembling without the use of tools or by easy disassembling with the use of simple tools kept available near the equipment.
- d) Prevents Contamination.
 - 1) Lubricated Bearings and Gears. Lubricated bearings and gears of equipment shall be so constructed and installed that lubricants cannot get into the product or onto beverage or beverage ingredient contact surfaces.
 - 2) Solder. Soft solder, when used as a beverage or beverage ingredient contact surface, shall be limited to joining metal or closing seams between abutting metal surfaces; shall be non-toxic under use conditions; containing a minimum of 50 percent tin; no more lead than necessary under good manufacturing procedures; and free of cadmium, antimony, bismuth, and other toxic materials. Hard solder (silver solder), when used as a beverage or beverage ingredient contact surface, shall be of such formulation as to be non-toxic under use conditions; shall be corrosion resistant; and shall, consistent with good industrial practice in the refining of its constituent elements, be free of cadmium, antimony, bismuth and other toxic materials.
 - 3) Other Contaminants
 - A) When liquid sugar storage tanks are of the type which contain vents, they shall be equipped with air filter-type vents in order to reduce the possibility of surface growth of mold or air contamination within these tanks. Air vents shall be designed in such a manner that all parts are readily accessible and easily removable for cleaning.
 - B) Compressed air utilized for air cleaning of cans or other single-

ILLINOIS REGISTER

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED REPEALER

service containers prior to filling or used for any other purpose where it contacts a beverage or beverage ingredient contact surface or which is introduced into the product, shall be filtered. Where piston-type compressors are used, the air lines shall be equipped with oil and moisture traps.

e) Installation

- 1) Floor-mounted Equipment. All floor mounted equipment that is not readily movable shall be installed on raised platforms of concrete or equivalent in such a manner as to prevent liquids or debris from seeping or settling underneath, between or behind such equipment in spaces which are not fully open for cleaning and inspection; or shall be elevated at least six inches above the floor. The space between adjoining units, and between a unit and the adjacent wall, shall be closed unless exposed to seepage, in which case it shall be sealed; or sufficient space shall be provided to facilitate easy cleaning between, behind and beside all such equipment.
- 2) Aisles and Working Spaces. Aisles and working spaces between equipment and walls, and between pieces of equipment, shall be unobstructed and of sufficient width to permit employees to perform readily their duties without contamination of food or food products, or food contact surfaces by clothing or through personal contact.
- 3) Equipment Drain Lines. Drain lines from equipment shall not discharge waste water in such a manner as will permit the flooding of floors or the flowing of water across working or walking areas or into difficult-to-clean areas, or otherwise create a nuisance.
- 4) Bottle Washing, Filling and Closing Devices. These units shall be arranged so as to prevent human contact with the necks or tops of the bottles from the time of washing until they have been crowned.

Section 740.50 Sanitary Facilities and Controls

a) Water Supply

- 1) General. The water supply shall be adequate, of a safe, sanitary quality, and from an approved public or private water-supply system which is

ILLINOIS REGISTER

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED REPEALER

constructed, protected, operated, and maintained in conformance with applicable state and local laws, ordinances, and regulations; provided, that a nonpotable water-supply system may be permitted within the bottling plant for purposes such as air conditioning and fire protection, only if such system complies fully with Section 740.50(c), and the nonpotable water supply is not used in such a manner as to bring it into contact, directly or indirectly, with the beverages or beverage ingredients, equipment or utensils.

- 2) Hot and Cold Running Water. Hot and cold running water under adequate pressure shall be conveniently accessible in the syrup room, filling room, toilet room (or directly adjacent to the toilet room) and any other area where the washing of equipment, utensils or personnel may be required. The hot water system must deliver water of a minimum of 140° F at the point of use during all periods of operations.
- b) Sewage Disposal. All sewage and liquid wastes from a beverage plant shall be disposed of in a public sewerage system when one is available. When a public sewerage system is not available, all sewage and liquid wastes shall be disposed of in an approved sewage disposal system which is constructed and operated in conformance with applicable state and local laws, ordinances and regulations.
- c) Plumbing
 - 1) General. All plumbing shall be sized, installed, and maintained in accordance with applicable provisions of the Illinois Plumbing Code (77 Ill. Adm. Code 890).
 - 2) Prevent Backsiphonage and Contamination of Product
 - A) The potable water system shall be installed in such a manner so as to preclude the possibility of backsiphonage or cross connections. Potable water supply piping shall not be directly connected with any nonpotable water supply nor connected to equipment or have outlets in the beverage preparation area. All piping conveying nonpotable water shall be adequately and durably identified as by a distinctive yellow-colored paint.
 - B) Flexible water distribution lines to tanks shall be protected by a vacuum breaker or air gap, shall be elevated at all times, and shall

ILLINOIS REGISTER

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED REPEALER

be protected so as to prevent contact with the floor or extension into the contents of the tank or other receptacle.

- C) No overhead drainlines or piping shall be located over syrup tanks, beverage ingredients, stored or raw materials or where contamination may be introduced. All overhead drainlines and piping shall be so located or protected that leakage and/or condensation therefrom will not drip onto the floors in the working areas.

3) Drains

- A) In manufacturing plants hereafter constructed, drainage lines shall be separate from toilet sewer lines to a point outside the building, and shall be joined in such a manner as to preclude the possibility of sewage backing up into the plant.
- B) The bottle washer and any piece of equipment with a waste discharge line shall not be directly connected to the drainage system. Each waste pipe from such equipment shall discharge into an open, accessible, individual waste sink, floor drain or other suitable fixture which is properly trapped and vented. The discharge from this and other equipment shall not cause flooding of the floors or flow across working or walking areas, into difficult-to-clean areas, or other wise create a nuisance.

d) Toilet Facilities

- 1) Adequacy, Location and Accessibility. All bottling plants shall be provided with toilet facilities that are adequate, conveniently located, and accessible to employees at all times the plant is in operation.
- 2) Installation. Facilities shall be installed in accordance with the provisions of the Illinois State Plumbing Code or local regulations if they exceed the standards of the aforementioned Code.
- 3) Sanitary Design. Water closets and urinals shall be of a sanitary design.
- 4) Construction. Toilet rooms shall be completely enclosed, equipped with tight fitting, self-closing doors, and shall be ventilated to the outside.

ILLINOIS REGISTER

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED REPEALER

Doors shall not be left open except during cleaning and maintenance and shall not open directly into syrup or filling rooms. If vestibules are provided, they shall be kept clean and in good repair and shall not be used as a storage area.

- 5) Maintenance. All toilet facilities shall be kept clean and in good repair and free of objectionable odors. A supply of toilet tissue shall be provided at each toilet at all times. Easily cleanable receptacles shall be provided for waste materials; these receptacles in toilet rooms for women shall be covered. All receptacles shall be emptied at least once a day and more frequently when necessary to prevent excessive accumulation of waste material.

e) Hand-Washing Facilities

- 1) General. All bottling plants shall be provided with adequate, conveniently located handwashing facilities for its employees, including a lavatory or lavatories equipped with hot and cold or tempered running water, hand cleansing soap or detergent, and approved sanitary towels or other approved hand-drying devices. These facilities shall be kept clean and in good repair.
- 2) Location and Size. Hand-washing lavatories shall be located within or immediately adjacent to all toilet rooms or vestibules. The lavatories shall be adequate in size and number and so located that employees can conveniently wash their hands before beginning work and after each interruption.
- 3) Where separate hot and cold running water is provided, a mixing valve or combination faucet is recommended. Steam mixing valves are prohibited.
- 4) New Installation. Lavatories which are newly installed, due to remodeling or new construction, shall have tempered water or hot and cold water supplied through a mixing valve or combination faucet.
- 5) Signs. Signs reminding employees to wash hands before returning to work shall be posted in toilet rooms and near lavatories.

f) Waste Disposal

ILLINOIS REGISTER

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED REPEALER

- 1) Containers
 - A) All garbage and refuse containing food wastes shall be kept in containers of durable metal or other approved types of material which do not leak and do not absorb liquids; which are provided with tight fitting lids and shall, unless kept in a special vermin proofed room or enclosure or in a waste refrigerator, be kept covered when stored or not in continuous use.
 - B) Each manufacturing plant shall have a sufficient number of these containers to hold all of this type waste which accumulates between periods of removal from the premises. After being emptied, each container shall be thoroughly cleaned on the inside and outside in a manner so as not to contaminate ingredients, beverages, equipment, utensils or the processing area. Waste water from such cleaning procedures shall be considered sewage.
- 2) Storage
 - A) Garbage and refuse containing food waste shall be stored so as to be inaccessible to vermin. All other rubbish shall be stored in a manner approved by the health officer. Storage facilities shall be adequate for the proper storage of all garbage and refuse. Storage areas shall be clean and not constitute a nuisance. Storage rooms or enclosures shall be constructed of easily cleanable, washable materials with floors and walls of relatively smooth, nonabsorbent materials (at least up to the splash and spray level); and shall be vermin proofed. Garbage containers outside the plant shall be stored either on a concrete or equally impervious slab, or on a rack which is at least 12 inches above the ground for a single bank of containers, or 18 inches above the ground for a multiple bank of containers.
 - B) After garbage or other wastes are once removed from syrup and filling rooms, storage area or sale rooms, they shall not be returned to or transported through such rooms. Wastes shall not be handled or routed within such rooms in any manner which may cause contamination of the beverage products.
- 3) Disposal. All garbage and rubbish shall be disposed of daily or of such

ILLINOIS REGISTER

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED REPEALER

other frequencies as may be approved by the health authority, and in such a manner as to prevent a nuisance. Where garbage or combustible rubbish is burned on the premises, an approved incinerator shall be provided and shall be operated in such a manner as to comply with state and local regulations and so that it does not create a nuisance. Areas around such incinerators shall be kept in a clean and orderly condition.

- 4) Solid Waste in Liquid. Liquid wastes which contain solid materials which might clog the drainage system shall be passed through a separator or indirect-waste receptor which effectively prevents solids from being discharged into the drainage systems. The solid waste thus removed shall be stored and disposed of as discussed above.

Section 740.60 Sanitary Operations

a) General Maintenance

- 1) Physical Facilities. All buildings, fixtures and other physical facilities are kept neat, clean, free of litter and rubbish, and in good repair. All manufacturing plants shall have a definite cleaning schedule set up for all areas of the plant to guarantee the preceding sentence.
- 2) Toxic Materials
 - A) Only those poisonous and toxic materials required to maintain a beverage manufacturing plant in a sanitary condition, and for sanitization of equipment and utensils, shall be present in any area used in connection with food processing operations. All containers of poisonous and toxic materials shall be marked and labeled, and when not in use shall be stored in cabinets which are used for no other purpose. These storage cabinets shall not be located in the syrup, bottle washing and filling, or ingredient storage rooms. Bactericides and cleaning compounds shall not be stored in the same cabinet or room area with poisonous and/or toxic materials.
 - B) Bactericides, cleaning compounds or similar materials for use on beverage or beverage ingredient contact surfaces shall not be used in a manner or concentration so as to leave a toxic residue on such surfaces, nor constitute a health hazard to employees or consumers. Poisonous polishing materials shall not be used on equipment or

ILLINOIS REGISTER

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED REPEALER

utensils or be stored in a beverage manufacturing plant.

- C) Poisonous materials shall not be used in any way so as to contaminate beverages, beverage ingredients, bottles or other containers, closures, equipment or utensils nor to constitute any hazard to employees or customers.

b) Animal and Vermin Control

- 1) The beverage manufacturing plant shall be free of rodents, rodent harborages, insects and insect-breeding places. Effective measures shall be used to control and eliminate insects, rodents, other vermin, dogs, cats and all other animals from the plant at all times.
- 2) Insecticides and rodenticides shall be used in a manner which precludes the possibility of contaminating beverages, beverage ingredients, containers, closures and equipment. In the case of rodenticides this shall mean the use of an enclosed bait station of sufficient strength and so fastened to prevent its being crushed or tipped over, thereby allowing the rodenticide to become scattered outside of the bait station.

c) Sanitation of Equipment and Utensils

Equipment and Utensil Sanitation

- 1) General. Multiple-service gallon jugs, premix and post-mix tanks, equipment, and utensils used in the handling, processing, storing, or transporting of beverages or beverage ingredients shall be thoroughly cleaned after use. They shall be subjected effectively to an approved sanitizing process prior to each use. The methods shall be such that soft drinks and their ingredients shall not be contaminated or adulterated. Chemicals used for cleaning and bactericidal treatments shall have labels which identify the contents. Fillers shall be cleaned and sanitized at the end of each day's operation and flushed with potable water before beginning operations. Since accepted industry practice permits syrup to remain in the syrup tanks and lines between periods of processing operations, the syrup tanks and lines will be cleaned and sanitized when emptied, as scheduled by the plant. After scheduled cleaning and sanitizing, the syrup tanks and lines shall be flushed with potable water before beginning operations.

ILLINOIS REGISTER

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED REPEALER

- 2) Single Service Articles
 - A) Single service articles including bottles, cans, or other containers, closures and gaskets shall be stored in sanitary boxes, cartons, tubes or otherwise protected. Such articles shall be dispensed in such a manner as to prevent contamination.
 - B) No single service article shall be used more than once.
- d) Storage and Handling of Cleaned Portable Equipment and Utensils
 - 1) Cleaned, and sanitized, portable equipment, equipment parts, and utensils shall be stored above the floor in a clean, dry location in suitable area in the manufacturing facility to protect contact surfaces from splash, dust and other contamination. Contact surfaces of fixed equipment shall also be protected from splash, dust and other contamination. Equipment parts may be reassembled after air drying provided that the assembled equipment is protected from contamination and rinsed with a sanitizing solution followed by a potable water rinse prior to being used.
 - 2) Whenever practicable, equipment and utensils shall be stored, inverted or covered. In all cases the equipment and utensils shall be air dried.

Section 740.70 Processes and Controls

- a) Raw Material Inspection, Storage and Preparation
 - 1) Source and Inspection. All ingredients used in the preparation of syrups and beverages shall be in compliance with the Illinois Food, Drug and Cosmetic Act and its regulations, and shall have been protected from contamination and spoilage during subsequent handling, packaging and storage and while in transit. The operator must maintain a quality assurance program acceptable to the Department of Public Health.
 - 2) Storage. All ingredients and raw materials shall be stored in such a manner as to protect them from contamination by dust, flies, rodents, and other vermin, unclean equipment, unnecessary handling, employees, or any other source of contamination. This shall include, but not be limited to, the storage on pallets or other devices to keep the materials off the

ILLINOIS REGISTER

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED REPEALER

floor and to permit cleaning. Ingredients and finished product must be segregated from toxic materials, animals feed, and any other items that are not human food or required in the manufacturing operation of the firm.

- 3) Preparation. Syrups shall be prepared in a sanitary manner and shall be protected from contamination throughout the preparation procedures. This shall include, but not be limited to, the use of equipment designed and constructed in accordance with Section 740.40(b).
- b) Raw Material Carrier Inspection. All carriers delivering raw materials and/or ingredients in mixed lots shall be visually inspected prior to acceptance of the materials to check for the presence of insects and rodents or toxic contaminants which may be caused by the carrier and render the materials unfit for human consumption or for their intended use.
- c) Potable Ice. If ice is used for any purpose in a beverage manufacturing plant, it shall be manufactured from an approved water supply in an ice-making machine which is located, installed, operated and maintained so as to prevent contamination of the ice; or shall be obtained from an approved source. The ice shall be handled, transported, and stored in such a manner as to be protected against contamination. Block ice must have all outer surfaces thoroughly flushed with potable water before being used. Any ice crusher used shall be maintained in a clean condition and shall be covered when not in use. Ice handling utensils and equipment shall comply with Section 740.40(b).
- d) Multiple Use Equipment. None of the equipment used for handling beverages, beverage ingredients, bottles or single service articles shall be used for non-food products. No area of the plant shall be used to process or store non-food products unless it is so isolated and on a separate ventilation system so that there is no possibility of cross-contamination.
- e) Equipment Cleaning. All product contact surface of equipment and utensils used in handling, processing, storing, or transporting of beverages or beverage ingredients within the plant shall be thoroughly cleaned after use. They shall be subjected effectively to an approved bactericidal process prior to each usage. The methods used shall be such that soft drinks and their ingredients shall not be contaminated or adulterated. Chemicals used for cleaning and bactericidal treatments shall have labels which identify the contents. All syrup pipelines, apparatus, and containers used in the manufacturing processes shall be thoroughly sanitized at adequate intervals. Apparatus shall be washed and rinsed before

ILLINOIS REGISTER

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED REPEALER

sanitization. Tanks and lines containing syrup between periods of processing operations shall be cleaned and sanitized when they are emptied, as scheduled by the plant. A schedule and record of cleaning and sanitizing of syrup tanks and lines must be maintained. After scheduled cleaning and sanitation, the syrup tanks and lines shall be flushed with potable water before beginning processing operations. Chlorine or equally effective bactericidal agents are permissible for sanitization.

f) Proper Processing

- 1) Methods. Manufacturing plant operations shall be performed in such a manner as to prevent contamination, adulteration or deterioration of the product or its ingredients. This shall include, but not be limited to, the prevention of the operator or his clothing from coming in contact with beverages, beverage ingredients or sanitized product contact surfaces.
- 2) Bottle Washing
 - A) All reusable glass containers shall be thoroughly cleaned and sanitized, immediately before filling, by means of a suitable automatic mechanical washing machine. No bottles shall be washed by hand except as a preliminary to mechanical washing. Mechanical washing machines shall be in compliance with Section 740.40 (b)(1) and where recording thermometers are used the recording charts shall be kept on file for two years. The pre-rinse section shall be cleaned on a daily basis.
 - B) Proper mechanical washing of reusable glass containers means the exposure of returned containers to a 3% alkali solution of which not less than 60% is caustic (sodium hydroxide) at a temperature of at least 130°F for at least 5 minutes, or to an equivalent cleansing and sanitizing process, followed by the removal of the washing solution by rinsing with potable water.
 - C) Single service containers may be cleaned by air or water rinsing machines or sanitized by a method approved by the Illinois Department of Public Health so as to assure clean containers.
 - D) All returnable bottles shall be inspected immediately before filling to remove all improperly cleaned and/or defective containers. If

ILLINOIS REGISTER

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED REPEALER

manual inspection is being done, the persons inspecting shall have no other duties while they are inspecting on the line. Manual inspectors shall be changed at least once every half hour with other employees who have not been inspecting during that time. If electric equipment is being used for the inspection, it shall be checked at least once every hour to determine that it is functioning properly. Containers having different degrees of contamination in them shall be used in making this test. Records should be kept to show the time and initials of the persons conducting these tests on the mechanical inspection schedule and change of inspectors. These records, if kept, shall be available to the Department representative at the time he makes an inspection or any other request for the records.

- 3) Distilled or Purified Water. All processes shall be properly set up and operated to obtain a distilled or purified water and to prevent contamination of the product. Distillation equipment and deionizing beds shall be cleaned and backwashed at intervals which are frequent enough to guarantee their functioning properly.

g) Testing Procedures

- 1) Washing Solution. All manufacturing plants using returned bottles shall have the necessary testing equipment to determine the strength of the alkali solution, and shall check the solution at least twice a day when in operation. The results of these tests shall be kept as a quality control record for a period of at least two years and shall be made available to a representative of the Department upon his request. These records shall show at least the strength of the solution determined and the person making the determination as well as the time and date of the test.
- 2) Standardized Beverages. Standardized beverages shall comply with the standard designated in the Code of Federal Regulations for that product.

- h) Packaging. Containers shall be filled and sealed by means of automatic machinery and neither the operator nor his clothes shall come in contact with any part of the bottle or machinery that might result in contamination of the product. Removal of the closure of imperfectly closed bottles and resealing shall not be permitted. Closures which have been touched on the inner side by the operator, as may occur while adjusting the closing machine shall be discarded. Imperfectly

ILLINOIS REGISTER

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED REPEALER

sealed containers shall be discarded.

- i) Products Coded and Records Retained
 - 1) Container Code. All containers shall be coded with a meaningful code to designate a production period. The production period, preferably should be daily but shall be limited to not more than two weeks with the same code. The code must be such as to enable positive identification of a lot or of individual bottles of a lot as necessary to effect recalls to protect the public health.
 - 2) Records Retained. Code records shall be retained for a period of time exceeding the shelf life of the product or for one year which is considered to be a normal shelf life.
- j) Product Storage and Carriers
 - 1) Storage. Storage of the finished product shall comply with the requirements of raw material storage as designated in Section 740.70(a)(2).
 - 2) Delivery Vehicles. Finished product carriers shall not carry any toxic materials and shall be maintained in a clean condition. The vehicles shall be inspected prior to their loading to determine compliance.

Section 740.80 Personnel

- a) Disease Control
 - 1) No person while affected with a disease in a communicable form or while a carrier of such disease, or while affected with boils, infected wounds, or acute respiratory infection, shall work in a manufacturing plant in an area and capacity in which there is a likelihood of that person contaminating the beverages, beverage ingredients or contact surface with pathogenic organisms or of transmitting disease to other individuals. No such person shall be employed in such an area and capacity in a manufacturing plant.
 - 2) When suspicion arises as to the possibility of transmission of a disease from any person through a beverage, the Director or his representative is authorized to require any or all of the following measures:

ILLINOIS REGISTER

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED REPEALER

- A) The immediate exclusion of that person from any beverage handling activity;
 - B) The immediate exclusion of the beverage in question from distribution and use; and
 - C) The adequate medical and bacteriological examination of the person, of his associates and his and/or their body discharges.
- b) Cleanliness
- 1) Hand Washing. All employees shall thoroughly wash their hands and arms with soap and warm water before starting work, and shall wash hands during work hours as often as may be required to remove soil and contamination, as well as after visiting the toilet room. The hands of all employees shall be kept clean while engaged in handling beverages, beverage ingredients and contact surfaces. Employees shall also keep their fingernails clean and neatly trimmed.
 - 2) Outer Garments. The outer garments of all employees working in the syrup room and bottle washing and filling rooms shall be other than street clothes and shall be kept reasonably clean. Soiled clothing shall be placed in non-absorbent containers or laundry bags. Hair nets or caps shall be worn by employees in the above mentioned areas of the plant.
 - 3) Tobacco. Employees shall not use tobacco in any form while engaged in the beverage processing or while in equipment and utensil washing or processing areas.
 - 4) Eating. Employees shall not consume food in the plant except in designated areas which shall be located outside the processing and utensil washing and storage areas.
 - 5) Other Practices. Employees shall maintain a high degree of personal cleanliness and shall conform to all other good hygienic practices during all work periods.
- c) Education and Training. Personnel responsible for quality control in the bottling plant shall have a sufficient background of education, experience or combination

ILLINOIS REGISTER

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED REPEALER

thereof, to provide a level of competency necessary for the production of a clean and safe finished product. All employees shall have received proper indoctrination in handling techniques as to be aware of the dangers of poor personal hygiene and insanitary conditions.

- d) Supervision. There shall be an assigned chain of command designating areas of responsibility to competent supervisory personnel to provide for compliance with this Part.