AFDO* GUIDELINES
FOR THE INSPECTION AND ENFORCEMENT
OF GMP REGULATIONS
FOR HANDLING AND MANUFACTURING PACKAGED ICE

Introduction

This nation has established very comprehensive standards governing the sanitary processing of food and the safety of food. Ice is a food and is subject to these same standards. It makes sense to prepare beverages under strict sanitary and safety standards and to pour these beverages over ice subjected to the same standards.

Ice is a manufactured food and as such is subject to the Good Manufacturing Practices Regulations for Foods contained in the Code of Federal Regulations, Title 21, Chapter 1, Part 110. Additionally, many states have passed the model Food and Drug Act which contains the same language as the federal statute. Therefore, ice is also defined as a food under most state laws and regulations.

Purpose

These guidelines provide information to uniformly apply the Good Manufacturing Regulations to packaged ice manufacturing and handling operations. This information should be used as guidance during inspections of packaged ice manufacturing and handling operations and should be taken into consideration when violations of Good Manufacturing Practices are evaluated for regulatory follow-up.

These guidelines have been prepared as an adjunct to the GMP Regulations and do not replace or supersede them. In addition, the Packaged Ice Association has developed specific guidance for ice manufacturing and handling operations which, if followed, will result in general compliance with the GMP regulations and these guidelines.

Many inspections are being conducted by state and local governments which cover convenience stores and other types of establishments that also house a small ice manufacturing operation. These inspections should evaluate the packaged ice manufacturing and handling processes for compliance with the GMP Regulations and these guidelines.

Inspections of large ice manufacturing plants must be inspected using these same standards to evaluate compliance.

Personnel-Management

Evaluate the cleanliness of employees' clothing. If it is heavily soiled, immediate correction is required. Clothing that contains grease, oil, dirt, or other material must not be permitted for an employee who handles ice or food contact surfaces.

Employees must wash and sanitize hands after handling objects that are not clean or sanitized. Frequent handling of unsanitized objects and returning to handling ice or food contact surfaces represents a serious violation of GMP Regulations.

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Where ice is manufactured in facilities housing more than one operation and employees are engaged in both operations assessments must be made about the potential for cross-contamination of the ice. Therefore, it may be necessary for health officials to prohibit the housing of the two operations in the same area. For example, housing ice manufacturing operations in garages and gas stations is unacceptable unless very carefully controlled conditions are met.

Employees must not be allowed to consume food, drink beverages, smoke, etc. in the ice manufacturing area. Also, employees must wear hair restraints.

Management is responsible for a sanitation training program that promotes continual awareness and adherence to high sanitary standards. This can be evaluated through an observation of employee's personal cleanliness and practices. When good sanitary practices are violated, management must take appropriate action to correct them.

When good sanitary practices are violated, discuss them with the owner and recommend changes that will solve the problems. Serious deficiencies in good sanitary practices cannot be solved without management's commitment.

Ice Plant Environment

The area surrounding the ice manufacturing area must be free of debris that will harbor rodents, insects, and other pests. Thus, the inspection should evaluate the environment. Old equipment must be removed, tall grass and weeds must be cut frequently, and pools of water in the yard area must be eliminated.

The sewer system must function properly and never constitute a problem with back-ups or overflows that have the potential of contaminating equipment or ice.

Generally, plant environments can be easily controlled, and there should be no reason for harborages to exist. These violations may become more significant when the ice plant is infested with rodents, insects, or other pests. When this occurs, health officials must insist that the plant environment be improved as part of the plant clean up process. Live infestations by pests require that the plant be closed until the animals and insects are removed.

Plant Construction and Design

There are several ice manufacturing systems sandwiched into other operations which are not compatible with food manufacturing processes. When this situation occurs, health officials have a responsibility to require that the ice processing area be separated by an enclosure within these buildings or other suitable separation to prevent the potential for contamination.

The enclosed area must be large enough to permit employees to work within the enclosure and to perform all the manufacturing and packaging steps within the enclosure. The enclosure must be well constructed, clean, and prevent potential entry of rodents, insects, or other pests.

Health officials must insist that holes in walls be repaired, that ill fitting doors, windows, and screens be repaired, and that the construction itself permit easy cleaning of the walls, floor, and equipment.

Sanitary Operation and Controls

Equipment must be cleaned on a schedule of frequency that prevents accumulation of mold, fungus, and bacteria. A formal cleaning program and schedule which includes the use of sanitizers to eliminate micro-organisms must be developed and used. Inspections must include an evaluation of the cleaning schedules and an evaluation of the status of all equipment and the plant environment.

Health officials must insist that cleaning of the plant and equipment be frequent enough to prevent contamination. At the least, equipment must be cleaned and sanitized before the beginning of operations when the operation or plant has been shut down. Other cleaning schedules will be based on the needs of individual plants and must cover cleaning following processing interruptions.

Ice cannot be packaged on platforms open to the environment; nor can it be processed in a truck, unless the truck is specifically dedicated to the packaging of ice and meets the same standards set forth in these guidelines.

Live animals and birds must not be permitted in the plant. Infestations by live animals and birds require immediate correction. Therefore, the facility must be closed until these pests are eliminated.

Single service supplies, such as bags and other containers, must not be reused. Single service containers must be stored in an area free from potential contamination with non food items such as toxic substances, and dirt. These containers must be free from potential contamination from pests such as insects, rodents, and animals.

Water

Water used in the entire plant must be potable water unless the health authority authorizes the use of non-potable water for certain operations. Water from an approved city water supply is considered potable water and needs no testing for quality.

A plant may use a private water supply provided the following conditions are met:
--The water must be tested under worst case environmental conditions to establish a water quality profile. This research should demonstrate that worst case environmental conditions have no adverse impact on water quality or reveal those conditions which do impact on quality.

--Plans must be established to suspend use of private water supplies under those conditions which have been shown to adversely affect the quality of the water without regard to further testing before suspension of use. Water tests must be conducted before the private supply is again used.

For example, private well water must be assessed following periods of heavy rainfall producing heavy rainfall run off. These assessments will produce a profile that establishes the impact of such events. This data provides guidance to control the quality of water without conducting laboratory analysis to establish water quality following these events.
It is not enough to simply test water from private wells randomly according to an arbitrary schedule. Rather, evaluations must be performed in relationship to events that may adversely affect water quality as mentioned above.

Water quality is one of the highest priorities in an ice plant. Health officials must carefully evaluate water quality control programs during every inspection.

Private well water must be tested monthly in addition to the tests specified above. This will detect changes in water quality which are not triggered by environmental events. Pesticide and chemical contamination should be part of any periodic test program.

Enforcement Guidelines
Public health officials must insist on high standards and compliance with the Good Manufacturing Practices for Foods Regulations.

1. When employees are dressed in clothing that is heavily soiled with grease, dirt, or other debris, immediate correction must be made. This can be corrected by the plant owner providing clean outerwear when these employees handle ice, or other suitable alternatives. It is a serious violation of GMPs when employees clad in filthy garments handle ice or food contact surfaces. Failure to correct these conditions should result in suspension of operating permits or closure until corrections are made.

2. It is a serious violation of GMPs to manufacture or process ice in a building infested with rodents, insects, or wild or domestic animals. Plants so infested must be closed until a permanent correction has been made.

3. Water from private wells must be tested under worst case environmental conditions. Failure to develop appropriate profiles for private wells represents a serious public health problem. Public health officials should help develop a plan to test private wells and to develop an acceptable overall water control program. Once a plan is developed, it must be implemented immediately. Failure to implement and adhere to this plan should result in closure until correction is made.

4. Ice must be tested periodically for the presence of bacteria. This should be done each 90 to 120 days. These tests must be more frequent when internal conditions do not conform to Good Manufacturing Practices Guidelines. Failure to perform this key step should result in immediate sampling by the health authority. Also, licenses should be suspended until an appropriate product testing program is implemented or other action appropriate to local standards may be taken. Under no circumstances should the public be expected to consume ice that has not been subjected to an effective quality control program, and periodic testing is a cornerstone of all public health and Good Manufacturing Practices programs.

5. The ice manufacturing area must be in a facility housing a food plant providing barriers to a potential contamination of the ice, be in a facility dedicated to the manufacture of ice, or be within an enclosure in another facility. Failure to follow these guidelines should result in closure and license suspension until permanent correction is made.

6. Cross connections between potable water and non-potable water lines are cause for immediate closure until the plumbing has been corrected. This requires permanent correction before ice can be manufactured.

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