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| **EFFECTIVE DATE: 04/05/2009** |

**Drainage Management**

**1. Introduction**

Effective drainage management is essential in food manufacturing units to prevent waterlogging, maintain hygiene, and minimize the risk of pest infestation and contamination. This document outlines key aspects of drainage management for food processing plants.

**2. Drainage System Design**

* Slope: Design the drainage system with an appropriate slope to ensure efficient water flow.
* Materials: Use durable, corrosion-resistant materials for drainage pipes and channels (e.g., PVC, stainless steel).
* Size & Capacity: Ensure the drainage system has sufficient capacity to handle peak water volumes.
* Accessibility: Design the system for easy cleaning and maintenance.
* Separation of Wastewater Streams: Separate clean water drainage from wastewater to simplify treatment and prevent cross-contamination.

**3. Drainage System Maintenance**

* Regular Cleaning: Implement a regular cleaning schedule for drains, channels, and gutters. This prevents clogging and the build-up of organic matter that can attract pests.
* Inspection: Regularly inspect the entire drainage system for leaks, blockages, or damage.
* Repair & Replacement: Promptly repair or replace any damaged components to maintain system efficiency.
* Pest Control: Implement effective pest control measures to prevent pests from entering or nesting within the drainage system.

**4. Stormwater Management**

* Stormwater Collection: Implement measures to collect and manage stormwater runoff to prevent contamination of the surrounding environment.
* Oil & Grease Separation: Separate oil and grease from stormwater runoff to prevent environmental pollution.
* Sediment Control: Implement sediment control measures to prevent soil erosion and sediment from entering the drainage system.

**5. Compliance and Best Practices**

* Adherence to Regulations: Ensure the drainage system complies with all relevant environmental regulations and local building codes.
* Regular Monitoring: Monitor the drainage system for proper functionality and identify any issues promptly.
* Record Keeping: Maintain records of all maintenance activities and inspections.
* Employee Training: Train employees on the proper use and maintenance of the drainage system.

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