

Good Manufacturing Practices Lesson

1. Policy

- 1.1. A documented Good Manufacturing Practices (GMP) program is established according to a written risk analysis outlining the justification to ensure food safety is not compromised, with periodic training for all employees.
- 1.2. All relevant pre-requisite programs (PRPs) applicable to the company, site, and product(s) are documented and effectively implemented.
- 1.3. There is a documented site plan showing the location of the premises and the surrounding land use and evidence from the local authority indicating that the premise is approved for the purpose.
- 1.4. The premises, buildings, and equipment are located, constructed, and designed to facilitate proper processing, handling, storage, and delivery of safe food. The premises are maintained structurally sound and in a sanitary manner.
- 1.5. Pre-requisite programs are documented and implemented as applicable to the scope of certification.
- 1.6. The SQF practitioner verifies each applied pre-requisite program to ensure that it is achieving its intended purpose.
- 1.7. The SQF practitioner signs off each pre-requisite program, indicating that the verification has been completed.
- 1.8. Everyone entering the facility, including employees, visitors, and contractors, complies with the GMP requirements.

2. Procedure

2.1. Good Manufacturing Practices

2.1.1. Personnel

- 2.1.1.1. Disease control - Any person who, by medical examination or supervisory observation, is shown to have an illness, open lesion, including boils, sores, or infected wounds, or any other abnormal source of microbial contamination which there is a reasonable possibility of food, food-contact surfaces, or food-packaging materials becoming contaminated, are excluded from any operations until the condition is corrected unless conditions such as open lesions, boils, and infected wounds are adequately covered (e.g., by an impermeable cover). Personnel report such health conditions to their supervisors.
- 2.1.1.2. Cleanliness - All persons working in direct contact with food-contact surfaces and food-packaging materials conform to hygienic practices while on duty to the extent necessary to protect against allergen cross-contact and contamination of food.
- 2.1.1.3. Wear outer garments suitable to the operation that protects against cross-contact and the contamination of food-contact surfaces or food-packaging materials.
- 2.1.1.4. Maintain adequate personal cleanliness.
- 2.1.1.5. Wash hands appropriately or sanitize to protect against contamination with undesirable microorganisms in the hand-washing facility before start working, after each absence from the workstation, and at any other time when the hands may have become soiled or contaminated.
- 2.1.1.6. Remove all unsecured jewelry and other objects that might fall into equipment, containers, or finished product.
- 2.1.1.7. Remove hand jewelry that cannot be adequately sanitized during times when food contact packaging material is manipulated by hand. If such hand jewelry cannot be removed, cover it with a band-aid, by wearing gloves, or material that can be maintained in an intact, clean, and sanitary condition and effectively protects against contamination by these objects of the food-contact surfaces and food packaging materials.
- 2.1.1.8. Always keep gloves intact, clean, and in a sanitary condition.

- 2.1.1.9. Wear hairnets, headbands, caps, beard covers, or other effective hair restraints at all times when handling food contact and packaging materials.
- 2.1.1.10. Store clothing or other personal belongings in areas where food contact materials are not exposed or equipment or utensils are not washed.
- 2.1.1.11. Eat food, chew gum, drink beverages, or use tobacco in designated areas other than where food contact materials are exposed or where equipment or utensils are washed.
- 2.1.1.12. Take necessary precautions to protect against allergen cross-contact and against contamination of food-contact surfaces or food-packaging materials with microorganisms or foreign substances (including perspiration, hair, cosmetics, tobacco, chemicals, and medicines applied to the skin).
- 2.1.2. Plant and grounds
 - 2.1.2.1. Grounds - the grounds of the plant under the company's control are kept in a condition that will protect against the contamination of food contact materials.
 - 2.1.2.2. Properly store equipment, remove litter and waste, and cut weeds or grass within the plant's immediate vicinity that constitutes an attractant, breeding place, or harborage for pests.
 - 2.1.2.3. Maintain cleanliness of roads, yards, and parking lots so that they do not constitute a source of contamination in areas where food is exposed.
 - 2.1.2.4. Drain the areas regularly that may contribute to contamination of food contact materials by seepage, foot-borne filth, or providing a breeding place for pests.
 - 2.1.2.5. Properly operate waste treatment and disposal so that they do not constitute a source of contamination in areas where food contact materials are exposed.
 - 2.1.2.6. Proper maintenance of plants such as regular inspection, extermination, or other means to exclude pests, dirt, and filth may be a source of food contamination if grounds border the plant grounds not under the facility's control.
- 2.1.3. Plant construction and design
 - 2.1.3.1. The plant is suitable in size, construction, and design to facilitate maintenance and sanitary operations for food contact material production purposes, and manufacturing of food contact materials.
 - 2.1.3.2. Adequate space for such placement of equipment and storage of materials that are necessary for maintenance, sanitary operations, and the production of safe food contact materials are provided.
 - 2.1.3.3. Adequate precautions to reduce the potential for allergen cross-contact and contamination of food-contact surfaces and food-packaging materials with microorganisms, chemicals, filth, and other extraneous material through food safety controls and operating practices or effective design are taken
 - 2.1.3.4. Adequate precautions to protect food contact material in installed outdoor bulk vessels by any effective means are taken when applicable.
 - 2.1.3.5. Use protective coverings are provided when applicable.
 - 2.1.3.6. Areas over and around the vessels to eliminate harborage for pests are controlled when applicable.
 - 2.1.3.7. A regular check for pests and pest infestation is performed regularly.
 - 2.1.3.8. Floors, walls, and ceilings are cleaned and kept clean, and in good repair.
 - 2.1.3.9. Drip from fixtures, ducts, and pipes do not contaminate food contact surfaces and food-packaging materials.
 - 2.1.3.10. Aisles between equipment and walls are unobstructed. An adequate width of approximately 18 inches is provided to permit employees to perform their duties and protect against contaminating food-contact surfaces and food-packaging materials with clothing or personal contact.

- 2.1.4. Adequate lighting in hand-washing areas, dressing and locker rooms, and toilet rooms and in all areas where food contact materials are examined, manufactured, processed, packed, or held and where equipment or utensils are cleaned is provided.
- 2.1.5. Shatter-resistant light bulbs, fixtures, skylights, or other glass suspended over exposed food contact materials in any step of preparation or otherwise protect against contamination in case of glass breakage is provided.
- 2.1.6. Adequate ventilation or control equipment to minimize dust, odors, and vapors (including steam and noxious fumes) in areas where they may cause allergen cross-contact or contaminate food contact materials is provided.
- 2.1.7. Fans and other air-blowing equipment that minimize the potential for allergen cross-contact and contaminate food-packaging materials and food-contact surfaces are located and operated to prevent cross-contamination.
- 2.1.8. Adequate screening or other protection against pests is provided in applicable areas.
- 2.1.9. Sanitary operations
 - 2.1.9.1. General maintenance - buildings, fixtures, and other physical facilities of the plant are maintained in a clean and sanitary condition and are kept in repair to prevent food contact materials from becoming adulterated.
 - 2.1.9.2. Substances used in cleaning and sanitizing and storage of cleaning and sanitizing materials.
 - 2.1.9.3. Cleaning compounds and sanitizing agents are free from undesirable microorganisms and safe and adequate under the conditions of use. Compliance with this requirement is verified effectively, including purchasing these substances under a letter of guarantee or certification or examining these substances for contamination.
 - 2.1.9.4. Toxic cleaning compounds, sanitizing agents, and pesticide chemicals are identified, held, and stored against contamination of food-contact surfaces or food-packaging materials.
 - 2.1.9.5. Pests control - pests are not allowed in any area of the plant. Effective measures are taken to exclude pests from the manufacturing, processing, packing, and holding areas and protect against the contamination of food contact materials on the premises by pests. Using pesticides to control pests in the plant is permitted only under precautions and restrictions that will protect against the contamination of food-contact surfaces and food-packaging materials.
 - 2.1.9.6. Sanitation of food-contact surfaces - all food-contact surfaces, including utensils and food-contact surfaces of equipment, are cleaned frequently to protect against allergen cross-contact and contamination of food-contact materials.
 - 2.1.9.7. Before use, food-contact surfaces used for manufacturing/processing, packing, or holding food packaging materials are in a clean, dry, sanitary condition. When the surfaces are wet, cleaned, sanitized it, and thoroughly dried before subsequent use.
 - 2.1.9.8. Sanitation of non-food-contact surfaces - non-food-contact surfaces of equipment used in the operation of a food plant are cleaned as frequently as necessary to protect against allergen cross-contact and contamination of food-contact surfaces and food-packaging materials.
 - 2.1.9.9. Storage and handling of cleaned portable equipment and utensils. Cleaned and sanitized portable equipment with food-contact surfaces and utensils are stored in a location and manner that protects food-contact surfaces from allergen cross-contact and contamination.
- 2.1.10. Sanitary facilities and controls
 - 2.1.10.1. Water supply - the water supply is adequate for the operations intended and derived from an adequate source. Water is not allowed to contact food packaging materials. Water that contacts food-contact surfaces such as equipment is safe and of sanitary quality.

Running water is at a suitable temperature and under pressure and is provided. All areas were required to clean equipment, utensils, and employee sanitary facilities.

2.1.10.2. Plumbing is of adequate size and design and installed correctly. Thus,

2.1.10.2.1. Carry adequate quantities of water to required locations throughout the plant.

2.1.10.2.2. Properly convey sewage and liquid disposable waste from the plant.

2.1.10.2.3. It is not a source of contamination to food, water supplies, equipment, or utensils or creates an unsanitary condition.

2.1.10.2.4. Adequate floor drainage in all areas where floors are subject to flooding-type cleaning or where normal operations release or discharge water or other liquid waste on the floor.

2.1.10.2.5. There is no backflow from or cross-connection between piping systems that discharge wastewater or sewage and piping systems.

2.1.10.3. Sewage is disposed into an adequate sewage system.

2.1.10.4. Toilet facilities- the plant provides employees with adequate, readily accessible toilet facilities. Toilet facilities are kept clean and not be a potential source of contamination of food-contact surfaces and food-packaging materials.

2.1.10.5. Hand-washing facilities - the plant provides hand-washing facilities that are adequate, and convenient, furnish running water at a suitable temperature, and are designed to ensure that an employee's hands are not a source of contamination of food-contact surfaces or food-packaging materials.

2.1.10.6. Rubbish and offal disposal- rubbish and any offal are conveyed, stored, and disposed of to minimize the development of odor, minimize the potential for the waste becoming an attractant and harborage or breeding place for pests, and protect against contamination of food-contact surfaces, food-packaging materials, water supplies, and ground surfaces.

2.1.11. Equipment and utensils

2.1.11.1. All plant equipment and utensils used in manufacturing, processing, packing, or holding food contact materials are designed to be adequately cleanable and maintained to protect against allergen cross-contact and contamination.

2.1.11.2. Equipment and utensils are designed, constructed, and used appropriately to avoid adulterating food contact materials with lubricants, fuel, metal fragments, contaminated water, or other contaminants.

2.1.11.3. Equipment is installed in adjacent spaces to facilitate the cleaning and maintenance of the equipment.

2.1.11.4. Food-contact surfaces are corrosion-resistant when in contact with food-contact materials.

2.1.11.5. Food-contact surfaces are made of non-toxic materials and designed to withstand the environment of their intended use and the action of food-contact materials and, if applicable, cleaning compounds, sanitizing agents, and cleaning procedures.

2.1.11.6. Food-contact surfaces are maintained to protect food-contact materials from allergen cross-contact and contamination by any source, including unlawful indirect food additives.

2.1.11.7. Seams on food-contact surfaces are smoothly bonded or maintained to minimize the accumulation of particles, dirt, and organic matter and thus minimize the opportunity for the growth of microorganisms and allergen cross-contact.

2.1.11.8. Equipment in areas where food packaging is manufactured, processed, packed, or held and that does not come into contact with food is constructed to be kept in a clean and sanitary condition.

2.1.11.9. Hold, convey, and manufacture systems, including gravimetric, pneumatic, closed, and automated systems, are designed and constructed to be maintained in an appropriately clean and sanitary condition.

- 2.1.11.10. Compressed air or other gases mechanically introduced into food contact materials or used to clean food-contact surfaces or equipment are treated so that food contact materials are not contaminated with unlawful indirect food additives.
- 2.1.12. Processes and controls
 - 2.1.12.1. All operations in the manufacturing, processing, packing, and holding of food packaging (including operations directed to receiving, inspecting, transporting, and segregating) are conducted following adequate sanitation principles.
 - 2.1.12.2. Appropriate quality control operations are employed to ensure that food packaging material is suitable for its intended use and that food packaging materials are safe and suitable.
 - 2.1.12.3. Overall sanitation of the plant is under the supervision of one or more competent individuals assigned responsibility for this function.
 - 2.1.12.4. Adequate precautions are taken to ensure that production procedures do not contribute to allergen cross-contact and contamination from any source.
 - 2.1.12.5. Chemical, microbial, or extraneous-material testing procedures are used where necessary to identify sanitation failures or possible allergen cross-contact and food contamination.
 - 2.1.12.6. All food packaging material that has become contaminated to the extent that it is adulterated is rejected.
- 2.1.13. Raw materials and other ingredients
 - 2.1.13.1. Raw materials used for food contact packaging are inspected and segregated or otherwise handled as necessary to ascertain that they are clean and suitable for processing and are stored under conditions that will protect against allergen cross-contact and contamination and minimize deterioration.
 - 2.1.13.2. Raw materials used for food contact packaging do not contain levels of microorganisms that render the food packaging material injurious to the health of humans.
- 2.1.14. Manufacturing operations.
 - 2.1.14.1. Equipment and utensils and food contact material containers are maintained in an adequate condition through appropriate cleaning and sanitizing, as necessary. Insofar as necessary, equipment is taken apart for thorough cleaning.
 - 2.1.14.2. All food packaging material manufacturing, processing, packing, and holding are conducted under such conditions and controls as are necessary to minimize the potential for the growth of microorganisms, allergen cross-contact, contamination, and deterioration.
 - 2.1.14.3. Effective measures protect finished food packaging materials (finished product) from allergen cross-contact and contamination or refuse.
 - 2.1.14.4. Food contact materials transported by the conveyor are protected against allergen cross-contact and contamination as necessary.
 - 2.1.14.5. Equipment, containers, and utensils used to convey, hold, or store food contact materials are constructed, handled, and maintained during manufacturing, processing, packing, and holding, protecting against allergen cross-contact and contamination.
- 2.1.15. Warehousing and distribution
 - 2.1.15.1. Storage and transportation of food packaging materials are under conditions that are protected against allergen cross-contact and biological, chemical (including radiological), and physical contamination of food packaging materials, as well as against deterioration of the container.

3. Responsibility

3.1. Senior Management

3.1.1. Ensures the proper documentation and effective implementation of all relevant pre-requisite programs (PRPs)

3.2. SQF Practitioner

3.2.1. Verifies each pre-requisite program

3.2.2. Signs off each pre-requisite program to indicate verification has been completed.

4. Corrective Action

4.1. Review and revalidate the documented and implemented PRP if the PRPs, including alternative controls, do not achieve the desired result.

5. Review – Quality

5.1. Annual review of compliance to Good Manufacturing Practices requirements by observing the following:

5.1.1. The company has documented and implemented the correct PRP module(s).

5.1.2. Procedures and or work instructions are in place to cover all applicable PRPs in the relevant PRP module(s).

5.1.3. Applicable PRPs are effectively implemented.

5.1.4. Exempted PRPs are documented.

5.1.5. The effectiveness of PRPs, including alternative controls where applicable, has been verified to ensure that they achieve the desired result.

5.1.6. Records of PRP validations are available.

5.1.7. The property, buildings, and equipment meet the PRP requirements, are clean and achieve hygienic production.

5.1.8. Personnel practices and processing techniques meet the PRP requirements and the documented procedures.

6. History

Revision No.:	Revision Date:	Description of Change:	Originator / Author Name:	Title / Department:
0	20221026	Original	Arnel Ryan	PCQI / Compliance

Requirements:

- (1) The trainee (employee/visitor) has read or received a verbal translation of all or part of the policy, procedure, method, and/or SOP for which they are being trained.
- (2) The trainee has observed a demonstration of the task they are to perform or the procedure for which they are being trained as required.
- (3) The trainee has demonstrated the ability to perform the task with acceptable proficiency and minimal supervision.