

GUIDELINES FOR IMPLEMENTING GMP IN FOOD PROCESSING

8. Cleaning Systems

8.1 *Cleaning schedules documented*

8.1.1 Written, formalised cleaning procedures and schedules must be available for every department within the factory. They must be clear, legible and easy to follow.

8.1.2 The cleaning schedules must dictate the frequency and method of cleaning and disinfecting agents that are to be used for all plant, equipment and surroundings.

8.1.3 For companies employing different ethnic groups in significant numbers, the cleaning procedures should also be explained in a language that is understandable to the workers. This may best be achieved or supported through picture diagrams

8.2 *Approved food grade detergents in use e.g. taint risks/phenols*

8.2.1 All cleaning and disinfection agents used on site must be "approved" food grade materials, supplied by a reputable company.

8.2.2 They must not be perfumed because of the risk of product taint and must not pose a threat in terms of residual toxin.

8.3 *Cleaning materials controlled including data sheets*

8.3.1 All cleaning and disinfection agents must be stored safely in a designated, secure area, off the production floor.

8.3.2 They must only be used in accordance with the manufacturer's instructions and their use kept to an absolute minimum when production is in progress.

8.3.3 Such cleaning and disinfection agents must be clearly identified with the appropriate Health and Safety symbol and full product description.

8.3.4 The responsibility for dispensing cleaning and disinfection agents must be with designated personnel and their usage monitored to ensure that the correct, safe percentage dilution is being used.

8.3.5 Containers and implements for the preparation and dispensing of sanitising agents must be kept under the control of designated persons.

8.3.6 Protective goggles, gloves and overshoes must be available to all persons handling cleaning chemicals on site and their use regularly enforced by management.

8.3.7 An up-to-date list must be available for all cleaning and disinfection agents used on the premises and all operatives and first aiders aware of their chemical content in the event of an accident.

8.4 *Availability and condition of cleaning equipment and methods*

8.4.1 Plastic or metal handled utensils must be used in production areas. When not in use, correct hanging storage should be provided. All brooms and hand brushes must be maintained in good condition, free from deterioration and soiling. Brushes must have coloured, easily detectable, synthetic bristles which cannot easily become detached or break away through continuous use. Wood must not be used for stocks and handles in production areas.

8.4.2 All cleaning implements must be discarded before they become a foreign body risk e.g. when badly worn.

8.4.3 The use of cleaning cloths is not recommended because of the potential microbiological and foreign body contamination risk.

8.4.4 Scouring pads should only be used if simple brushing is inadequate. In such cases the pads must be colour coded, only used in conjunction with the daily sanitation procedure and renewed before any signs of deterioration. Scouring pads present a definite foreign body risk and must be accounted for after use. Wire wool is not acceptable

8.4.5 The facilities must be adequately supplied with potable running water, and a detergent dosing system where possible. Provision should be made for soaking, cleaning and rinsing.

8.4.6 An adequate number of tanks suitable for the immersion of loose pieces of equipment must be available for cleaning purposes. The tanks must have either a supply of hot water or cold water and a disinfectant and must be located in designated sanitation areas, which are separate from production.

8.4.7 The controlled use of pressure hoses in production areas, must be limited to specific times when open food is not in process. Extreme caution must be exercised to avoid spreading contamination in this way. It is preferred that low pressure hoses and alternative cleaning methods are used in such areas.

8.4.8 The use of compressed air hoses to blow down is to be avoided. Vacuum systems are preferred.

8.4.9 Proper provision must be made for the correct, neat storage of hose pipes and other cleaning utensils off the floor to prevent contamination.

8.4.10 Where CIP (clean in place) systems are adopted e.g Gyro-freezer, which are programmed by computer, the equipment should be regularly calibrated, the programme checked and the detergent dilutions independently analysed.

8.4.11 It is essential that throughout production a "clean as you go" philosophy is adopted, to minimise the amount of food debris and soilage left for cleaning at the end of the shift. This is normally above the normal specified cleaning frequency

8.5 ***Separate areas for tray and equipment***

8.5.1 It is recommended that separate facilities be provided for utensil washing and for general purpose cleaning. These must be appropriately identified and signed.

8.5.2 All utensil washing areas should be physically separated from the production area where this operation is to be completed during production periods.

8.5.3 Adequate, designated storage space must be provided to allow for the complete segregation of clean and dirty utensils.

8.6 ***Adequate space for equipment to dry***

8.6.1 Cleaned utensils must be stored in a clean and well maintained storage area, which allows for good drainage and drying. The utensils must be stacked in such a manner as to prevent recontamination.

8.6.2 The area must be adequately ventilated with extraction canopies if necessary to prevent mould growth.

8.7 Training of cleaners

8.7.1 Cleaning operatives must be adequately trained, so that they fully understand:-

- i. the cleaning schedules.
- ii. chemicals listed and safety precautions required.
- iii. the need for protective clothing.
- iv. the appropriate dilutions of cleaning agents.
- v. the need to remove food products from the line during “clean as you go” procedures.
- vi. the personal hygiene standards expected of them.
- vii. the use and care of cleaning equipment

8.7.2 Personnel employed purely to fulfil a cleaning role should be separately identified either by the use of different coloured protective clothing, design/colour of hat or by overall symbols.

8.8 Supervision and monitoring

8.8.1 Whether cleaning is carried out by a separate team on a different shift or by the operators themselves at the end of the shift, it must be supervised.

8.8.2 Checklists must be available for each department to ensure that every single piece of equipment used has been appropriately cleaned. The checklist should be signed by the supervisor in charge after he/she has checked that the standard is acceptable.

8.8.3 The cleaning supervisor should have an inventory of all cleaning equipment within the department, which is checked daily and any damaged/broken cleaning utensils replaced immediately.

8.8.4 The cleaning supervisor must also cross check the percentage dilution of cleaning agents dispensed from the dosing equipment or manually diluted , and take corrective action if it is either too weak or too strong.

8.9 Physical checks and bacteriological swabs taken

8.8.1 If the cleaning regime (either manual or CIP) is sufficient to tackle the soilage evident, there should be no visible food debris on the equipment surface at the end of the wash cycle.

8.8.2 Physical inspection of the equipment should reveal clean, smooth surfaces free of “gritty” or greasy substances.

8.8.3 Bacteriological swabs should be taken which after incubation on the appropriate medium, should demonstrate that the cleaning programme is adequate for the level of soilage.

8.8.4 Where long distances of pipe work are involved in CIP operations, they should be broken down into sections for examination and swabs taken at the joint seal.

8.8.5 Bacteriological swabs can only be used to monitor “trends”, but if the results indicate less effective cleaning than usual, the cleaning operatives should be informed immediately.

8.10 ***'Clean-as-you-go' and good housekeeping***

8.10.1 Within the limitations of the production process, the whole site and buildings must be kept clean and tidy at all times.

8.10.2 The factory perimeter and external areas must be kept clean and tidy and free from redundant equipment, empty containers, pallets, spillages or other items which could encourage pests.

8.10.3 Within the preparation and production areas, the food debris levels must be a minimum consistent with the process. Debris must be removed on a "clean as you go" principle.

8.10.4 Sufficient waste containers must be provided to dispose of food debris, packaging waste and other rubbish, at strategic points throughout the process. The waste containers must be large enough to retain all rubbish and completely covered to prevent overspill. They must be regularly emptied by a designated operative.

8.10.5 Floor debris should be removed by designated hygiene operatives rather than on line process workers who run the risk of contaminating product.

8.10.6 To avoid congestion and to create a feeling of space, any packaging materials brought into the process area must be kept to a minimum for that day's production and must be neatly stored and adequately protected.

8.10.7 All staff facilities including locker rooms, toilets, changing facilities, canteens and rest room areas should be regularly cleaned and tidied throughout the day. This not only sets a good example to the staff, but encourages a mutual "take care" attitude.