

APPENDIX 1

TARGET AREAS OF INSPECTION

- i. Plan of the plant lay out
- ii. Flow of materials
- iii. Movement of staff, equipment and materials from dirty areas to clean areas
- iv. Uninterrupted flow of raw materials to final product
- v. Storage of products and temperature control
- vi. Critical control points

MANAGEMENT

- i. Technical staff structure and responsibilities, qualifications/training/experience and hours of work
- ii. Company training policy for all staff grade
- iii. Availability of written product and operational specifications
- iv. Availability of maintenance and sanitation manuals
- v. Availability of test methods manuals
- vi. Availability of written quality control (QC) organization and specifications
- vii. Recording, presentation and checking of QC data
- viii. Procedures for dealing with out of specification situations
- ix. Product security, recall procedures and other emergency procedures
- x. Familiarity of staff with appropriate codes of GMP
- xi. Steps taken to ensure visitors, maintenance staff and outside contractors do not affect product quality

GENERAL AREAS

Factory environment

Premise should be in a location free from undue risk of contamination from outside sources and should be accessible and free from flooding risks.

- i. Is the area exposed to potentially harmful substances, which could lead to unacceptable level of this substance in processed food?
- ii. Is the factory in an area free from airborne contaminants?
- iii. Is there a danger of flooding from poor drainage or effluent storage tanks?
- iv. Are roadways to and in the vicinity of the plant suitable for wheeled traffic and do they have adequate draining?

Hygiene

The premise should be constructed so that contaminants brought into the factory can be maintained. And contaminants from the factory can be removed without danger to product contamination and pest infestation.

- i. Are pest control measures carried out and documented evidence available?
- ii. Do personnel who handle pest control understand the potential hazards associated with control procedures?
- iii. How often are pest control inspections done?
- iv. Can access to the processing areas by animals and man be controlled?
- v. Are effluent and waste disposal systems capable of coping with peak loads and are they maintained in a sanitary condition?

Construction

The ability to maintain hygiene in a premise depends a lot on the structure of the premise. This relates to the actual material of construction and design, as well as the plant layout and separation of areas presenting different levels of hazards.

- i. Are all buildings of sound construction and suitable for the intended purpose, well maintained (from reception to the distribution)
- ii. Does design of building allow for easy cleaning and prevent ingress and harboring of pests?
- iii. Is their adequate space for production, maintenance and storage?

- iv. Is the building design and lay out such that the flow from raw material to finished product can take place with minimum chances of cross contamination?
- v. Are floors of suitable material, washable, non-slip and well drained?
- vi. Are walls of appropriate construction and design, no crevices and unsealed joints, light colour and cleanable?
- vii. Does the ceiling design minimize the chances of accumulation of dirt and condensation?
- viii. Are windows designed to prevent entrance of pests, e.g. birds?
- ix. Are doors of appropriate construction and close fitting?
- x. Is there adequate lighting, and food protected from any breakage's?
- xi. Adequate ventilation and temperature control?
- xii. Are auxiliary structures including overhead pipes and surfaces constructed so that they can be cleaned do not collect dirt and do not encourage malpractice's that can lead to product contamination?
- xiii. Is there a staff canteen?
- xiv. Are toilets, canteen and rest areas adequately separated from the processing hall?
- xv. Are adequate storage areas, changing facilities and lockers available for the staff?
- xvi. Are adequate hand washing facilities provided in the factory?
- xvii. Is there an adequate facility for cleaning small items of the plant?
- xviii. Are there adequate waste disposal facilities for waste product and inedible material before removal from the site?
- xix. Is waste removed on a regular basis?

Toilets

- i. Are there sufficient toilets for staff members?
- ii. Are they cleaned and maintained regularly?

Changing rooms

- i. Are lockers available and general changing room kept clean?

Personnel

One of the major sources of potential contaminants of all types is from people and their working practices. Hence, they must be adequately controlled. All personnel concerned with production should ideally receive medical screening before handling food. The screening should be directed to the absence of nose, ears and throat infection; Skin infections such as boils, sores, etc, gastrointestinal illness or contact with known cases of food borne illness. Training of personnel should embody the importance personnel hygiene and the legal requirements of current food hygiene regulations.

- i. Have personnel received health certificate by medical screening?
- ii. Do personnel conform to the requirements of the food hygiene (SABS 049 1989)?
- iii. Do personnel wear adequate protective clothing and avoid taking personnel effects like jewelry to the plant?
- iv. Do personnel wash their hands adequately after being away from the processing hall?
- v. Do personnel eat, expectorate, smoke, pick ears and or nose in the plant?
- vi. Are visitors prevented from entering the process hall unless they take adequate hygienic precautions?
- vii. Is training adequate?

Quality control systems

- i. Determine CCPs for the operation
- ii. Examine QC manuals- are they available, can available copies be revised, do they contain details of procedures and standards, can they be used for training as well as reference purposes?
- iii. Examine spot check data
- iv. Assess whether staff are corresponding to QC data; what actions are taken?
- v. Collect blank QC forms are tests listed carried out?

Cleaning and sanitation

In order to achieve safety and quality it is imperative to have adequate cleaning and sanitation systems operating within the factory. They should be written down and demonstrated to be effective.

- i. Are materials of construction compatible with the cleaning and disinfecting agents used?
- ii. Is the system of cleaning up used appropriate with the equipment? Is dirt sprayed on to clean equipment?
- iii. Where adequate is equipment dismantled for cleaning?
- iv. Are the chemicals clearly labelled and the hazards and remedial actions associated with their use clearly stated?
- v. Are only approved cleaning agents used and instructions for use followed?
- vi. Are documented cleaning procedures available and are followed?
- vii. Are work surfaces properly rinsed?
- viii. Is frequency and time of cleaning adequate to ensure a good hygiene standard?
- ix. Are their adequate protective clothing?
- x. Is protective clothing properly washed?
- xi. When not in use are cleaning materials and equipment kept separate in designated areas?
- xii. Are cleaning equipment clearly marked to designate those of the processing hall from those of other facilities like toilets?

ABATTOIR

The abattoir includes handling of livestock, slaughtering and dressing, and dealing with offals, blood, and glands and condemned material. The following facilities are required for slaughterhouses:

- i. Adequate lairage for holding animals
- ii. Slaughter premises large enough for work to be carried out satisfactorily. Where both pigs and other animals are slaughtered, a special place must be provided for slaughter pigs unless the species are slaughtered at different times; in such cases scalding, depilation, scraping, and singeing must be clearly separated from the slaughter line either an open space of at least 5 m or by a partition of at least 3 m high
- iii. A room for emptying and cleansing intestines
- iv. Rooms for dressing gut and tripe
- v. Separate rooms for the storage of fat and hides, horns and hooves that are not removed on the day of slaughter

- vi. Premises reserved solely for the sick and suspect animals, slaughter of such animals, detained meat
- vii. Adequate chilling rooms to cope with target throughput
- viii. Adequate equipped, lockable room for veterinary use
- ix. Changing rooms, wash basins, showers and flush lavatories which do not open directly into the workrooms. Wash basins must have hot and cold water, materials for cleansing and disinfecting hands and hand dryers
- x. Capability for veterinary inspection to be carried out at any time
- xi. Means of controlling access to and exit from the slaughter house
- xii. An adequate separation between clean and dirty sections
- xiii. In the workrooms adequate equipment for cleansing and disinfecting hands as near as possible to the workstation. Taps must not be hand operable; there must be hot and cold running water. For cleaning instruments water must not be less than 82°C
- xiv. An overhead system of rails for handling of meat
- xv. Instruments and equipment of non-corrosion and easily cleaned material
- xvi. A special section for manure
- xvii. Laboratory

Chilling

- i. Are chilled products held at between 0-4°C not over 7°C
- i. Are temperature records available
- ii. Are temperature monitoring facilities calibrated regularly
- iii. What is the maximum number of carcass for each chill room to operate efficiently?
- iv. Are carcasses allowed to touch walls, floors or other carcasses? Does water condensation drip on the carcass
- v. Are hot carcasses mixed with chilled carcasses?
- vi. Are there adequate drainage in the chill rooms and are floors cleaned regularly?
- vii. Is there a sign outside giving maximum and minimum loading and approximate chilling times?

How were the chilling times established is there a first in / first out control system?

Slaughtering

- i. What method of stunning is used and is it used correctly? Are animals stunned properly the first time?
- ii. Are sterilizers available for sticking knives and steels?
- iii. Are sticking techniques and bleeding times satisfactory?
- iv. How is the blood handled?
- v. What is the condition of offal conveyors, trolleys, inspection platforms, tables chutes, bins and covers, saws, blades and knives?
- vi. Are condemned meat containers clearly labelled and only used for condemned meat?
- vii. What cleaning procedure is used for the slaughter hall?
- viii. Does each carcass go through inspection and identification stamp?

Condemned meat

- i. Are there proper facilities for holding materials unfit for human consumption prior to dispatch?
- ii. Is the facility lockable?
- iii. Are staining facilities available for unfit meat?

Lairage

- i. Is the number of pens adequate for the number of animals held?
- ii. Are pen design and construction acceptable (e.g. height and rail gaps)
- iii. What is the state of lairage floors?
- iv. Are pens cleaned upon arrival of new animals?
- v. How are pens cleaned?
- vi. What is the general condition of the animals? (fighting, bruising, stress)
- vii. How long are the animals held before slaughter? (are they fed if held for longer periods)
- viii. Is there a supply of fresh water for animals? Are the heights of troughs satisfactory?
- ix. Does the lairage have adequate ventilation and lighting?
- x. Are animal's species placed into separate pens if mixed species are slaughtered?

- xi. How are the animals handled by the lairage staff? Are there hose pipes, sticks, drain rods or other items, which can be used to drive animals inhumanely near the lairage?

Animal isolation block

- i. Is the position suitable in relation to that of the lairage?
- ii. Is the block lockable?
- iii. Are boot and hand washing facilities available?
- iv. How often is the isolation block cleaned?

Manure bay

- i. Is the manure bay sited in a suitable position (i.e. dirty side of the plant)?
- ii. Is the bay kept tidy?
- iii. Is the manure covered? Are there signs of fluid leakage?
- iv. How often is the manure collected?
- v. Have steps been taken to reduce the presence of insects near the bay?

Animal feed store

- i. Is the feed store sited in a suitable position?
- ii. Is the store kept tidy?
- iii. Is the feed rotated regularly?
- iv. Have steps been taken to eliminate the presence of rodents, birds and insects in the store?

Animal unloading

- i. What distance do the animals travel from farm to the factory?
- ii. Is there adequate vehicle docking and turning space?
- iii. What times are the animals delivered?
- iv. Are there facilities to clean vehicles after unloading?
- v. What is the general condition of vehicles? Are there signs of mould growth, algae or dried faeces? Is there adequate ventilation?
- vi. Is the correct number of animals loaded into each vehicle? Is adequate documentation available?
- vii. How are the animals treated during offloading from vehicles?

Are there signs of bruises, abscess or stick marks on the animals?

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9	
Environmental location	
1	
2	
3	
Environmental location	
1	
2	
3	
4	
Factory general	
1	
2	
3	

ABATTOIR INSPECTION FORM

Factory type and class -		
Age of building –	Size of factory -	number of employees -
code: s: satisfactory, f: fair, u: unsatisfactory		

Factory processing rooms	
1	Floor cleanliness
2	Floor construction
3	Wall cleanliness
4	Wall construction
5	Ceiling cleanliness
6	Ceiling construction

Animal unloading and lairage		
1		Weeds
2		Litter
3		Waste disposal
4		Accessory buildings
5		Manure
6		Lairage
7		Other waste material
8		Toilets
9		Maintenance programme
Environmental waste programme		
1		Surface water drainage
2		Waste solids disposal
3		Waste liquids disposal
Environmental infestation		
1		Rodents
2		Insects
3		Birds
4		Domestic animals
Factory general		
1		Rodent proofing
2		Insect proofing
3		Adequate for its purpose
4		Maintanance
5		General orderliness
6		Screening

Factory processing rooms		
1		Floor cleanliness
2		Floor construction
3		Walls clealiness
4		Wall construction
5		Ceiling cleanliness
6		Ceiling construction

Factory facilities		
1		washing facilities
2		Toilets
3		Lighting
4		Ventilation
5		first aid
Factory waste control		
1		waste solids removal
2		waste liquids removal
3		waste containers
Factory cleanup		
1		Frequency
2		effectiveness checks
3		detergents and disinfectants
4		cleaning facilities
5		Documentation
Pest prevention and control		
1		Rodents
2		Flies
3		domestic pets
4		Birds
5		pest control procedures
Plant and equipment		
1		Sanitation
2		Procedures
3		Design
4		material storage
5		Maintance
Potable water supply		
1		Source
2		Treatment
3		Testing
Personnel hygiene		
1		hygiene training/knowledge
2		hand washing/expectoration
3		Clothing/hair
4		food contact
5		medical certificates

Dry storage		
1		Cleanliness and orderliness
2		Rodent infestation
3		Insect infestation
Chill storage		
1		Cleanliness and orderliness
2		Rodent infestation
3		Insect infestation
4		Adequacy of equipment
5		Time delay before refrigeration
Control action		
1		Raw material sources
2		Handling
3		Production process
4		Final product
5		Transportation
Raw material final		
1		Spoilage
2		Infestation
3		Handling
Bacterial swab results		
1		Total count
2		Staphylococci
3		Coliforms
4		<i>Escherichia coli</i>