OliveCulture

Holistic and Multi-professional Mechanism for a Pakistani Olive Oil Value Chain

GUIDELINES FOR HYGIENE AND HAZARDS ANALYSIS CRITICAL CONTROL POINTS (HACCP) IMPLEMENTATION IN OLIVE OIL MILLS

ITALIAN AGENCY FOR DEVELOPMENT COOPERATION

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ITALIAN AGENCY FOR DEVELOPMENT COOPERATION

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1. Introduction

The legislation requires that all food processing units shall implement a documented system of self-control of hygiene using the principles on which the HACCP system is based. The protocol is aimed at defining and controlling or "preventing" the risks for the consumer's health. In this regard, it should be noted that, compared to other agro-food sectors, no dramatic episodes of intoxication or serious damage deriving from the consumption of olive oil have ever been reported. This is motivated by the extraction technology that does not involve any chemical manipulation and the presence of natural substances (polyphenols) that make the growth of microorganisms in the oil extremely difficult.

In this sense, these Guidelines for hygiene and self-control plans establish the basic hygiene standards to be implemented and specify the documentation needed. The quantities of olive oil absorbed make it extremely difficult to recognize any acute pathologies associated with it. On the other hand, it is not possible to exclude "prior" pathological manifestations which, assuming a chronic nature, could become manifest in the long term and not be directly associated with its consumption. This is the case of the consumption of oil stored in an inadequate manner or for too much time in which there is the formation of secondary oxidation compounds (free radicals, aldehydes, ketones, and acids, etc.) which can cause damage to the human body.

1.1 Field of Implementation

These guidelines refer to the olive oil sector starting from the reception of the olives in the mill and consider the different technological phases of oil extraction (removal of leaves and branches, washing, crushing, malaxing, its conditioning-storage, packaging, and distribution). The products referred to are the categories of edible virgin olive oil as defined by the Pakistani Standard PS5159 – 2010.

The Guidelines are complemented and integrated with several Annexes (from A to D) which clarify, highlight, and emphasize the overall process and steps.

Based on the mentioned documentation, each Unit/ Mill/Processing Plant shall prepare its own HACCP Plan.

1.2 Normative References

PS 5159-2010: PAKISTAN STANDARD SPECIFICATION FOR OLIVE OIL, VIRGIN AND REFINED OLIVE – POMACE OIL.
ISO 22005:07: Traceability in the feed and food chain — General principles and basic requirements for system design and implementation.
Pakistan Pure Food Laws (PFL), 1963: Regulations address purity issues in raw food and deal with additives, food preservatives, food and synthetic colors, antioxidants, and heavy metals.
The Pure Food Ordinance, 1960: To ensure purity of food being supplied to people in the market and, therefore, provides for preventing adulteration.
The Pakistan Standards and Quality Control Authority (PSQCA) Act, 1996: To inspect and test products and services, including food items, for their quality, specification, and characteristics during use, and for import and export purposes.

Pakistan Standards and Quality Control Authority Act of 1993: Constitution of the Authority

1.3 Terms and Definitions

Lot/Batch: "A set of units of a product which have been produced and/or processed or packaged under similar circumstances"; "The batch is determined by the manufacturer or packer of the food product and is affixed under his responsibility".
HACCP - Hazard Analysis and Critical Control Points: the method established by Codex Alimentarius (FAO) establishing the general principle of food hygiene.
Critical Control Point (CCP): A step at which a control measure or control measures, essential to control a significant hazard, is/are applied in a HACCP system.
Critical Limit: A criterion, observable or measurable, relating to a control measure at a CCP that separates acceptability from unacceptability of the food.
Deviation: Failure to meet a critical limit or to follow a GHP procedure.
Hazard: A biological, chemical, or physical agent in food with the potential to cause an adverse health effect.
Significant Hazard: A hazard identified by a hazard analysis, as reasonably likely to occur at an unacceptable level in the absence of control, and for which control is essential given the intended use of the food.
Hazard Analysis: The process of collecting and evaluating information on hazards identified in raw materials and other ingredients, the environment, in the process or the food, and conditions leading to their presence to decide whether or not these are significant hazards.
Prerequisite Program: The program includes good hygiene practices, good manufacturing practices, as well as other practices and procedures such as training and traceability, that establish the basic environmental and operating conditions that set the foundation for implementation of a HACCP system.
Monitor: The act of conducting a planned sequence of observations or measurements of control parameters to assess whether a control measure is under control.
Food Handler: Any person who directly handles packaged or unpackaged food, equipment and utensils used for food, or surfaces that come into contact with food and that is expected, therefore, to comply with food hygiene requirements.
Food Hygiene: All conditions and measures necessary to ensure the safety and suitability of food at all stages of the food chain.
Food Hygiene System: Prerequisite program, supplemented with control measures at CCPs, as appropriate, that when taken as a whole, ensures that food is safe and suitable for its intended use.
Food safety: Assurance that food will not cause adverse health effects to the consumer when it is prepared and/or eaten according to its intended use.
Food Suitability: Assurance that food is acceptable for human consumption according to its intended use.
Good Hygiene Practices (GHPs): Fundamental measures and conditions applied at any step within the food chain to provide safe and suitable food.
HACCP Plan: Documentation or set of documents, prepared following the principles of HACCP to ensure control of significant hazards in the food business.
HACCP System: The development of a HACCP plan and the implementation of the procedures for that plan.

Traceability: The ability to follow the movement of a feed or food through specified stage(s) of production, processing, and distribution.
Traceability System: Totality of data and operations that is capable of maintaining desired information about a product and its components through all or part of its production and utilization chain.
Farmer/Grower: Registered and recognized subject that cultivates and produces higher quality olives, exclusively within the Pakistani territory.
Olive Mill: Structure used for processing the product that meets the requirements of the mandatory legislation. It could also act as a storage and/or packaging entity.
Packer: Registered and recognized subject that stores, bottles, packs, and places the finished product on the market.
Self-Control: Verification of compliance with the requirements of the HACCP method implemented.
Conformity Control: Act by which the Control Authority verifies compliance with the defined requirements of a batch of Olive Oil or table olives, as specified in this document.
Non-Conformity*:* Failure to comply with a specified requirement.
Corrective Action*:* Activity carried out to analyze and remove the cause of non-conformity and prevent the repetition.
Correction: Action carried out to immediately remove the non-conformity.
Labeling: The wordings, indications, brand, images, or symbols present on bottles, packaging, documents, cards, labels, ribbons, and strips that accompany or concern the indication of the product.

2. Description of the Processing Plant, Facilities and Building

In Pakistan, at present, about 30 olive processing units of various capacities are installed in the olive-growing areas. Although these plants are from different manufacturers, with different capacities and operating procedures, the basic principles for maintaining good quality and precautions against the occurrence of unpleasant events which deteriorate quality parameters are the same for all units.

At present, they don't comply with the criteria established for adoption of the HACCP, however, they must be aligned on the course of action of establishing the Olive Value Chain with the mentioned HACCP standard criteria.

The processing plants would be structured as follows[1]:

2.1 The building/shelter must be large enough to ensure smooth operations for each section of the processing. The area occupied by the unit/plant should be divided into different sections:

[1] **The olive processing plants to be established afresh in Pakistan would follow the described scheme, in use in the countries having an established Olive Sector. For the existing plants, adaptation must be sought. Moreover, the current ownership is mostly belonging to Public Sector. In the documentation prepared, this document and the Annexes, the term "Company" defines the owner/manager entity of the mill.**

- An external area**:** It must have a gated entrance, partly covered, used for storing the olives in the bins and partly uncovered for the reception, weight determination, and handling of the olives.
- An Internal area: The premises consist of an entrance, waiting room, office, and a large room for the olive oil processing plant. The main access shall have a paved floor, with tiles up to a height of 2.20 meters in the walls in the processing area. From the processing area, a room is used for the unloading of pomace and a room for storage and conditioning of oil.

The facility must have a supply of water and equipped for sewage. Shall have natural ventilation, by the presence of various windows (with a thin net) and adequate doors. Given the high temperatures recorded in the existing plants at the starting of the milling season (September), and partly October, it is recommended that the processing area would be air-conditioned. This is anyway necessary for dedicated rooms for the storage and packaging. Sufficient lighting to ensure good visibility should be provided by LED lights, distributed at various points through an electrical system.

2.2 The standard unit/plant consists of:

- ✓ A loading stainless-steel hopper with a rubber conveyor belt;
- ✓ A stainless-steel leaf remover for olives;
- ✓ A stainless-steel washer with flowing water;
- ✓ A rubber conveyor belt for washed olives;
- ✓ A hopper for loading the olives into the mill by means of a stainless-steel screw;
- ✓ A crusher with replaceable hammer and sieves;
- ✓ One or more stainless steel malaxers with a heating/cooling system;
- ✓ A stainless-steel transport pump for olive paste;
- ✓ A horizontal decanter with an outlet for oil and a transport screw for olive pomace;
- ✓ A pump for transferring the oil.

The following components are suitable, depending also on the manufacturer and if the machine is operating on the 3-phase system:

- ✓ An automatic centrifugal separator, present only on Pieralisi mills.
- ✓ Stainless steel tanks, to be used for the storage of oil,
- ✓ A filter-press, on the two-phase system (Mori Team mills),
- ✓ A stainless-steel weight filler for bottles and cans of oil, equipped with automatism for argon gas.

3. Personnel involved in the Process

Key operators of the olive mills should be identified as per the following tasks and responsibilities:
Manager: Food Technologist/Post-harvest horticulturist.
Engineer: Mechanical/electrical, for the assistance and maintenance of the olive mills machineries and tools.
Operators/Handlers: Experts in handling procedures, in number variable according to the capacity of the plant.
Workers: For cleaning and maintenance of the structure.

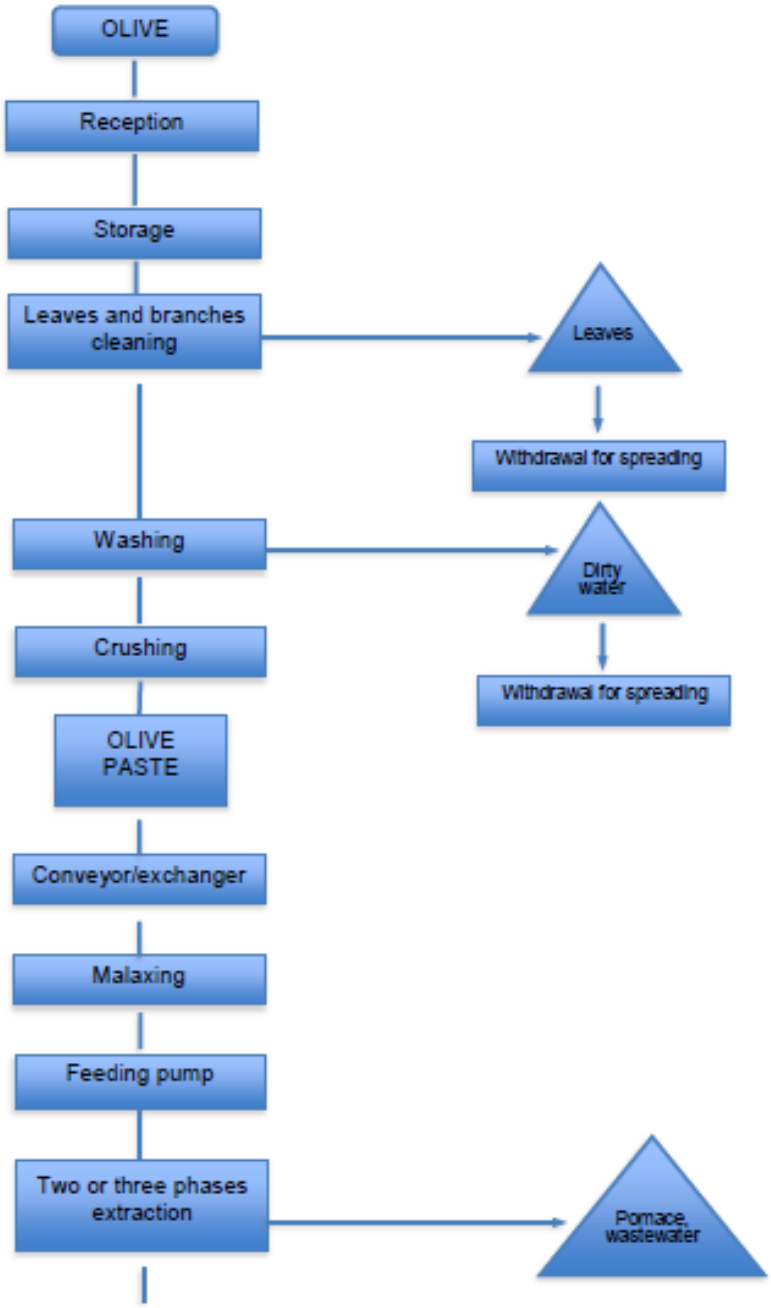
The Manager, whose technical knowledge and experience derives from the technical courses or university study of Food Science and Technology or Post-harvest horticulture, would be in-charge of the plant. He/she will coordinate the logistics, oversee, and train the staff, and monitor the processing, quality, and safety of the finished product through chemical-physical and sensory analyses entrusted to licensed and accredited laboratories.

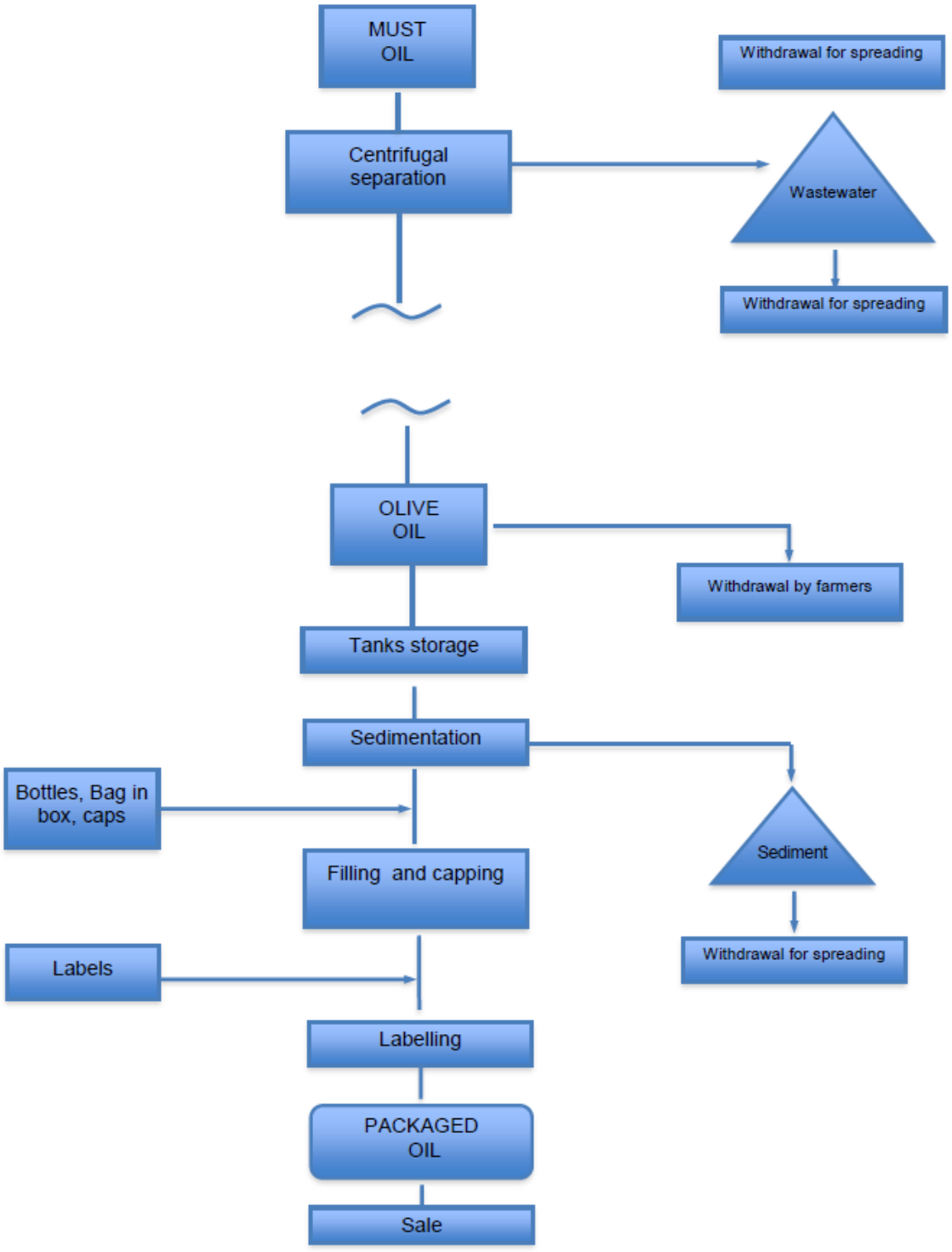
4. The Production Process

To ensure proper management of the harvest, farmers should agree in advance, with the miller, the day their olives will be processed. This will minimize the duration of post-harvest time before the oil extraction. After extraction, the oil should be stored in preferably stainless-steel and air-tight containers at 15-18 C and in dark rooms where the temperature fluctuation should be minimized. After 7-10 days the settled residues from the bottom would be removed. This is if the filtration was not done.

One of the first steps of the HACCP analysis is related to the description of the entire process, from the field to the delivery of the final product. This analysis should be conducted and verified on site and the results expressed in a flow chart, as follows:

FLOW CHART (as an example)




MUST OIL
Withdrawal for spreading
Centrifugal separation
Wastewater
Withdrawal for spreading
OLIVE OIL
Withdrawal by farmers
Tanks storage
Sedimentation
Bottles, Bag in box, caps
Sediment
Filling and capping
Withdrawal for spreading
Labels
Labelling
PACKAGED OIL
Sale

4.1. Delivery and Storage of Raw Materials

The olives harvested are transported by the farmers to the mill on the same day, in plastic crates or bins (which can be supplied by the olive mill), which are emptied on the floor. It must be stressed that the use of bags (of any material) must be avoided because the weight of the fruits causes a fermentation process. The olives must be processed within 24-48 hours after harvesting. During the time that elapses between harvesting and processing, no heating or mold phenomena shall occur.

The olives harvested both manually and with the help of mechanical means originated from different varieties, which have different periods of ripening. Therefore, the olives must be processed in different stages, as a sole variety by blending two or more of them, considering the characteristic of oil that the grower or the packer desires to obtain, which depends on the demand of the market. Also, olives can be processed well ripe or green. It is very important to highlight that fruits that are in poor health condition (presence of anthracnose, mold, fermented, or dropped fruits) shall not be accepted for milling.

The milling season, in the different regions of Pakistan, usually begins in September and ends in December. The plants work during the day, and in some cases till late and on Saturday, to complete the processing of the batches.

4.2. The Processing

4.2.1 Working Capacity

The actual working capacity of the different plants in Pakistan ranges from 100 to 600 kgs/hour. Some examples of the process taking place in the different sections are as follows:

- **Milling:** For an average crushing capacity and malaxing of about 25 minutes (from 20 to 30 minutes), the full capacity of the Pieralisi mills present in Pakistan of 600 kgs/hour is fully achieved. The processing time for each operation from crushing to centrifugation is calculated anti-clockwise so that the processing can be started accurately by maintaining the proper time duration between the batches and to avoid the delay or over-processing of any batch.
- **Malaxing:** Two malaxers having a combined theoretical capacity of 500 kgs (250 kgs each) is the characteristic of several plants of Mori Tem. They must, however, work continuously, in line, to ensure that the capacity is fully achieved.
- **Centrifugal Separation:** Is present in the Pieralisi mills only (three phases). The oil after the decanter is transferred by a single screw pump from the collection tank to the tank above the centrifugal separator. The separation takes place after passing by centrifugal force at 6000/7000 rpm through 72 rotary filter plates, which retain part of the sediment.

4.2.2. Process Control

The water supply for washing the olives, rinsing them with the pressurized continuously flowing in the washing tank, for the decanter, for the separator, and in any use in the plant shall be compliant with the potability requirements imposed by law.

The control on the process must be exerted as regards the crushing temperature, which shall be around 25-26 degrees Celsius, for which the water is either warmed up by means of resistances or supplied from a boiler if the external temperature is too low, or cooled if the external temperature exceeds the limits, through a chiller.

The duration of the malaxing time, which has been significantly reduced compared to the past, shall not exceed the recommended time given by the manufacturer, to not be harmful to the quality of the oil.

In conclusion, the two most important process parameters to monitor the quality of the extracted oil will be temperature and time.

4.2.3. System Maintenance and Hygiene – PRP (Pre-Requisites Program)

Both the premises and the equipment of the plant are subject to cleaning, washing, and sanitizing at the beginning and end of the milling campaign.

During the milling campaign, cleaning and rinsing of machinery and equipment in contact with the olive paste are carried out several times, depending on the duration of the campaign, with detergents. The cleaning related to the workplaces (defoliation and washing area, press and separation area) is carried out daily. The water used for washing should be continuously flowing. The detergents or sanitizing substances are stored in special rooms and the relative technical sheets are attached to the self-control plan.

Extraordinary maintenance is generally carried out before the starting of the olive processing campaign, paying attention to the painting of non-washable parts, possibly damaged during the processing period, and to the replacing and painting of parts of machinery and equipment that are rusting, whereas the mills are manufactured with stainless steel on all the surfaces which are in contact with food. The most common failures during the working period are related to malfunctions of the electrical and mechanical parts of the various machinery and equipment, which shall be replaced with relevant gaskets and spare parts. The necessary equipment, greases, lubricants, and specific substances are stored in a special cabinet.

In case of processing the olives as a service provider to the farmers, as it is the case of the entire Pakistan, the olive oil extracted is immediately withdrawn by them. However, when the payment of the service is done by keeping 10% of the oil extracted, the storage in the mill would be done in appropriate tanks in stainless steel of various capacities. They must be equipped with a floating stainless-steel plate for hermetic sealing and possibly some to be equipped with a system with food

nitrogen or argon for linger conservation. The storage room shall be thermo-conditioned and separated from the processing area. It is also strongly recommended to filter the olive oil produced.

4.3. By-Products and Wastewater

The olive pomace resulting from the manufacturing process is unloaded into a hopper and transported by means of a screw to a special underground paved tank. The sewage water resulting from the process and the washing water are conveyed through a special pipe to the external collection tank. Subsequently, a special tanker should be provided for the final storage by the subject in charge of disposal as required by law.

5. Packaging and Marketing

The rooms intended for packaging, distinct and separated from the processing of the olives, should be paved with ceramic tiles, and the surrounding walls treated with washable paint approved for food industry. They are served by a water system and a siphoned water collection well. The ventilation occurs naturally from the window and opening communicating with the outside (ever adequately screened to avoid insects and infestants entrance) and the lighting by means of a lighting system per the law. The packaging process will take place by taking the oil previously stored in special stainless-steel tanks and filling the cans and bottles of various capacities, using a specific equipment. Stainless steel scales may be equipped with a kit for injecting food nitrogen into the headspace of bottles or cans. The capping, closing with the heat-shrink capsule, and labeling operation will be done manually.

The containers, stored in a suitable way, will be previously cleaned through compressed air for the elimination of any foreign bodies; their compliance with the requirements of the law is certified by the supplier's declarations attached to the self-control plan.

6. Staff

All the workers involved in the production processes and produce handling are needed to be adequately trained on hygiene and safety procedures in the olive mill and should be healthy at the recruitment. The responsible of the mill must ensure that the hygiene rules are applied in production and that the staff is continuously trained and acting in compliance with the hygiene rules.

The staff working in the mill shall be trained on how to carry out the activities. The training program, carried out relevant institutions or by the mills, includes:

- General hygiene,
- Obligations and responsibilities of the food industries,
- Hygienic risks associated with production, handling, and packaging,
- Prevention measures to be adopted in relation to the job performed.

7. Development of the Self-Control Plan

In addition to the general risks associated with the entire process, the possible detectable hazards are pre-identified, the control of which is essential for guaranteeing the hygiene and safety of the product.

At least once per year, and in any case every time some changing in the process and/or machines happens, a complete internal assessment is foreseen. The scope of the assessment is to evaluate, at any step all the implemented measure, the efficacy, and efficiency of the implemented HACCP plan.

When the mill is operating for farmers, is obliged to guarantee immediately before the processing the self-control of hygiene, aimed at avoiding both accidental contamination and the pollution of a batch of olives with any harmful substances (e.g. residues of pesticides, soil, sand, mold, etc.) present in the batch.

The HACCP method identifies specific hazards and measures for their prevention and control to ensure food safety. This tool is used to assess hazards, estimate risks, and establish specific control measures by emphasizing prevention and control rather than employing traditional inspection and testing methods.

The HACCP method can be traced back to seven basic principles as defined in Codex Alimentarius (ALINORM 97/13 A, Appendix II):

1. Conduct hazard analysis and risk assessment;
2. Determine critical control points;
3. Establish critical limits and specific control standards for each critical point;
4. Monitor each critical point;
5. Establish corrective actions to be implemented when a critical point is not under control;
6. Establish procedures for verification;
7. Archiving records.

This method, which is based on the seven basic principles mentioned above, is aimed at identifying Critical Control Points (CCPs) for each individual product, each process step, and each production facility.

A hazard is identified by a hazard analysis, as reasonably likely to occur at an unacceptable level in the absence of control, and for which control is essential given the intended use of the food.

The hygiene self-control manual will include the following documents:
- Manual – shall describe, when necessary, also the Procedures adopted,
- The PRP – the Program of Pre-Requisite (as per Annex A: Pre-requisite Programme),
- Technical Data Sheets of the marketed product (as per annex B: TS_Olive Oil),
- Procedures,

- Documents and records.

The General Part describes analytically the methodology applied, the organization of the company structure, processes and products, as well as the documented system of prevention, management of raw materials and hygiene provisions.

The Olive Data Sheet contains specifics about its characteristics; the flow chart, hazard analysis and preventive measures, identification of Critical Control Points (CCPs) and control actions are all parts of the procedures, documents and records.

7.1 Definition of HACCP Group

As already stated, the olive milling process takes place in a limited period of the year (from the start of September to the end of December in Pakistan), employing about four to six seasonal workers or more, depending to the dimension and working capacity of the plants. The extraordinary maintenance of machinery and general cleaning of the same and of the premises, in general, precede and end the real phase of the milling activity. Seasonal workers have to perform all duties. The Technical Manager has the responsibility to ensure fruit and oil safety and quality, and instruct and train the staff. The HACCP group will be established from year to year, in relation to the staff hired and their role, involving the host institution and at least one experienced employee (per shift, if are organized in two or more).

To set up a HACCP Plan the Company/Owner must identify the team. The HACCP team is responsible for developing the HACCP plan to ensure that the appropriate knowledge and expertise are available for the development of an effective HACCP system. This may be achieved by assembling a multidisciplinary team responsible for different activities within the operation, e.g. Technical Engineer for maintenance, Quality responsible for quality control, cleaning, and disinfection.

7.2. Hazard Analysis

The HACCP group starts to analyze the entire process to evaluate the potential risks and hazards at any step and considering the control activities at any stage to avoid any risk to food safety. The analysis should continue considering the significant risk factors during the process as described above and once identified, establish in which stages of the process it is necessary to keep the causes of risk under control to ensure the healthiness of the product (if any raised). So, all the steps of the process should be analyzed in deep, and control measures at any stage defined with the aim of avoiding any risk.

The analysis has to consider the three potential categories of risks that could affect the product: microbial, chemical, and physical, as shown in the following table.

Microbial Hazards	Chemical Hazards	Phyisical Hazard
• Thermic treatment (cooking, heating, cooling, ……); • Acidification (Fermentation, pH control); • Salt or **oil** addition (or others preservatives); • Drying. 	• Product origin Control (suppliers qualification); • Process control; • Adequate tools and installations; • Packaging useful for food and conform to the laws 	• Raw material control • Production control (filters, stone remover, metal detector, others) 

A CCP, Critical Control Point, is defined as a step at which a control measure or control measures, essential to control a significant hazard, is/are applied in a HACCP system. At any CCP identified, a critical limit is defined. A critical limit is defined as a criterion, observable or measurable, relating to a control measure at a CCP which separates acceptability from unacceptability of the food.

7.2.1. Hazards Analysis – An example

Process stage	Hazard	Preventive action	Verification activity	Corrective action
1.Olives reception	Residues of pesticides.	Request, to the farmer, a declaration of compliance with the times of decadence (active ingredient used, dose, and date of the last treatment); raise awareness of olive growers, the establishment of a register of suppliers.	Periodic analytical check on olives or olive oil.	Refuse olives. Wash the system after processing insufficiently qualified batches.
	Dirtiness and/or development of toxicogenic molds.	Requires adequate hygienic conditions for storage/transport; raise awareness of olive growers/transporters, establish a register of suppliers.	Visual inspection of the olives.	Refuse olives. Wash the system after processing suspicious batches.
2. Storage of olives	Excessive oxidation and development of toxicogenic molds.	Prepare ventilated rooms with suitable humidity and temperature parameters. Minimize olive storage times (implementation of a milling calendar). Proper washing of the olives.	Visual inspection.	Restore optimal conditions. Re-train employees.
	Dirtiness	Take care of the hygiene and management of the premises (application of a cleaning procedure).	Visual inspection.	Retrain employees.
3.Defoliation and olive washing	Accumulation of pesticides, mud, foreign bodies, and dirtiness.	Frequent washing and final rinsing water of the olives.	Visual inspection.	Restore optimal conditions. Re-train employees.
4. Processing	Metal residues (from working parts (e.g.: defoliator).	Use plants and equipment suitable for food processing.	Periodic analytical verification/visual inspection.	Restore optimal conditions by replacing the parts that result in damage or that are no longer suitable. Re-train employees.

	Pollution with mineral oils.	Apply a maintenance procedure of the plant	Visual inspection.	Carryout improvements. Re-train employees.
	Oxidations and molding of paste residues in the systems (filters, kneaders, pipes, augers, etc.).	Take care of hygiene and sanitation of equipment and plants (application of a washing procedure).	Periodic analytical verification/visual inspection. Organoleptic test of the oil.	Restore optimal conditions. Discard the spoiled oil.
5. Olive oil storage	Transfer of substances by tanks.	Use tanks suitable for food	Periodic check/visual inspection. Olfactory examination.	Replace tanks that are damaged or no longer suitable for food. Discard the altered product.
	Fermentation of sediment and sediment.	Carry out frequent purging or racking.	Periodic analytical verification. Organoleptic test.	Discard the altered product. Restore optimal conditions.
	Free radicals	Use oxygen-tight and light-shielding containers. Provide storage systems in a modified atmosphere (Nitrogen or Argon gas). Prepare the air conditioning system for the storage room. Provide internal thermostatic systems in the tanks.	Periodic analytical verification. Organoleptic test.	Discard the altered product. Restore optimal conditions. Re-train employees.
6. Bottling	Glass residues and organic fragments of insects and vertebrate animals.	Check bottle supplies. Properly clean and store empty bottles.	Visual inspection in acceptance and in the bottling phase.	Discard bottles. Blow in a jet of compressed air.
7. Packaging in other types of containers (cans, Bag in box)	Transfer of substances by the containers. Organic fragments of insects and vertebrate animals.	Use of suitable containers for food. Check supplies. Properly store empty containers.	Visual inspection in acceptance and in the filling phase.	Discard containers. Blow in a jet of compressed air.
8. Packaged product storage	Free radicals	Use oxygen-tight and light-shielding containers. Provide storage systems in a modified atmosphere (Nitrogen or Argon gas).	Periodic analytical verification. Organoleptic test.	Discard the altered product. Carry out structural improvement. Re-train employees.

		Use the air conditioning system for the storage room. Provide internal thermostatic systems in the storage room.		

7.2.2 Non-specific hazards that can occur at different moments in the process and possible control activities

Hazard	Preventive action	Verification activity	Corrective action
Pollution with environmental contaminants (Smoke, hydrocarbons, and engine vapors)	Place any boilers and combustion engines in a specific room. Avoid access to internal combustion engine vehicles.	Verification of the layout.	Carry out improvements.
Insect and rodent infestation	Structural adjustment. Control interventions (application of a pest control procedure).	Visual inspection. Verify capture of insects and rodents.	Carry out improvements. Re-train employees.
Pollution with residues of detergents and descalers	Rinse thoroughly with potable water. Applying a cleaning procedure.	Verification of the operations carried out.	Carry out improvements. Re-train employees.
Contamination of microorganisms and development of abnormal fermentations	Take care of hygiene and sanitization of premises, equipment, and systems (application of a cleaning procedure). Implement staff training.	Visual inspection to verify the cleanliness of the premises and equipment.	Carry out improvements. Re-train employees.

7.2.3 – Example of Hazard Analysis Worksheet

(1) Step*	(2) Identify potential hazards introduced, controlled, or enhanced at this step B = Biological C = Chemical P = Physical		(3) Does this potential hazard need to be addressed in the HACCP plan?		(4) Justify your decision for column 3	(5) What measure(s) can be applied to prevent or eliminate the hazard or reduce it to an acceptable level?
			Yes	No		
	B					
	C					
	P					
	B					
	C					
	P					
	B					
	C					
	P					

(*) The analysis should identify any possible associated risk (Biological, Chemical, Physical) at any step, starting from the arrival of the olives in the olive mill till the delivery of the final product (oil in bulk or in the final package).

7.2.4: Example of a CCP determination worksheet (apply to each step where a specified significant hazard is identified)

The CCPs are identified by applying a logical procedure outlined in a diagram shown below, for each phase of the process, the so-called "decision tree".

Process step	**Significant hazards**	**Q1**. Can the significant hazard be controlled to an acceptable level at this step by prerequisite programs (e.g. GHPs)? **a**.	**Q2**. Do specific control measures for the identified significant hazard exist at this step?	**Q3**. Will a subsequent step prevent or eliminate the identified significant hazard or reduce it to an acceptable level?	**Q4**. Can this step specifically prevent or eliminate the identified significant hazard or reduce it to an acceptable level? **c**.	CCP number
Identify process step	**Describe the hazard and cause**	If yes, this step is not a CCP. If no, proceed to **Q2.**	If yes, proceed to **Q3.** If no, this step is not a CCP. Subsequent steps should be evaluated for a CCP. **b**	If yes, that subsequent step should be a CCP. If no, proceed to **Q4.**	If yes, this step is a CCP. If no, modify the step, process, or product to implement a control measure. **d**	Number the CCP and include in the HACCP worksheet.

a. Consider the significance of the hazard (i.e. the likelihood of occurrence in the absence of control and the severity of impact of the hazard) and whether it could be sufficiently controlled by prerequisite programs such as GHPs. GHPs could be routine GHPs or GHPs that require greater attention to control the hazard (e.g. monitoring and recording).

b. If a CCP is not identified at questions 2–4, the process or product should be modified to implement a control measure and a new hazard analysis should be conducted.

c. Consider whether the control measure at this step works in combination with a control measure at another step to control the same hazard, in which case both steps should be considered as CCPs.

d. Return to the beginning of the decision tree after a new hazard analysis.

7.2.5: Example of a HACCP Worksheet

Critical Control Points (CCPs)	Significant hazard(s)	Critical limits	Monitoring				Corrective actions	Verification activities	Records
			What	How	When (frequency)	Who			

ANNEXES

Annex A – Pre-requisite program: a set of Good Practices to manage the risk at any step.
Annex B – Technical Sheet: information about the olives to be processed and parameters defining oil characteristics.
Annex C – The General Requirements - Checklist: a good tool to implement the HACCP method and periodically inspect its correct application.
Annex D – Basic Hygiene Rules: hygienic and safe management of the product, work environment, and behavior in olive mills.

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GUIDELINES FOR HYGIENE AND HAZARDS ANALYSIS CRITICAL CONTROL POINTS (HACCP) IN OLIVE SECTOR

Annex - A

PRP – Pre Requisite Program

WRONG

RIGHT

Make it clean!!!

Anti-skid paving

Floor shall be designed, constructed and serviced to be safe!!

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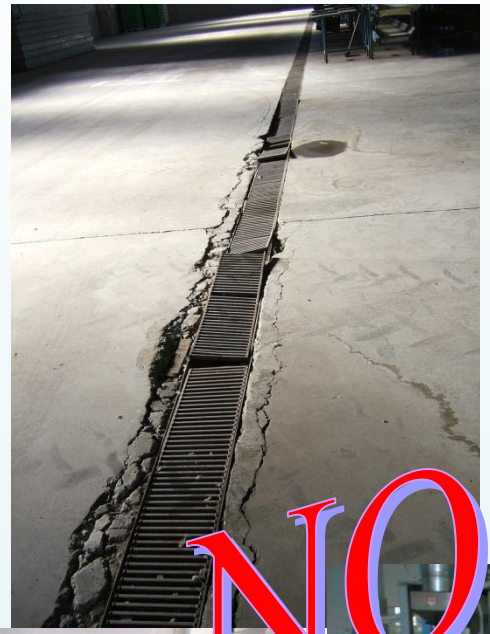
YES



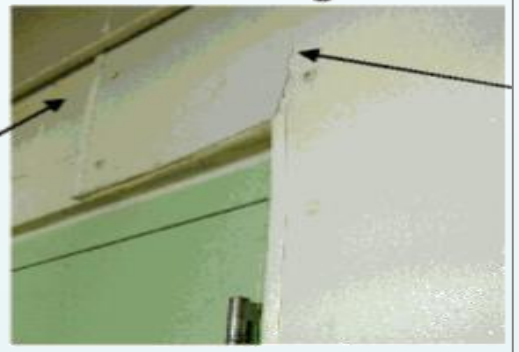
NO

Waste water drains shall be fitted with screens and usually serviced.

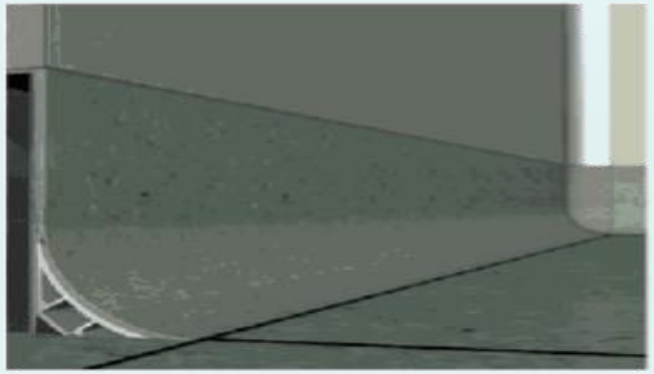
c. Walls, floors, ceilings

"Buildings should be constructed and maintained so that floors, walls, and ceilings can be adequately cleaned and kept clean and in good repair."

- Cleanable, durable, impervious to moisture



- A coved juncture between floors and walls prevents accumulation of dirt



- Expansion joints should be filled and sealed

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All the equipment shall be cleaned with the appropriate planned frequency.

Use it to clean machines and tools efficiently!!

Using proper cleaning materials and chemicals!!

The crates and packages should be stored appropriately

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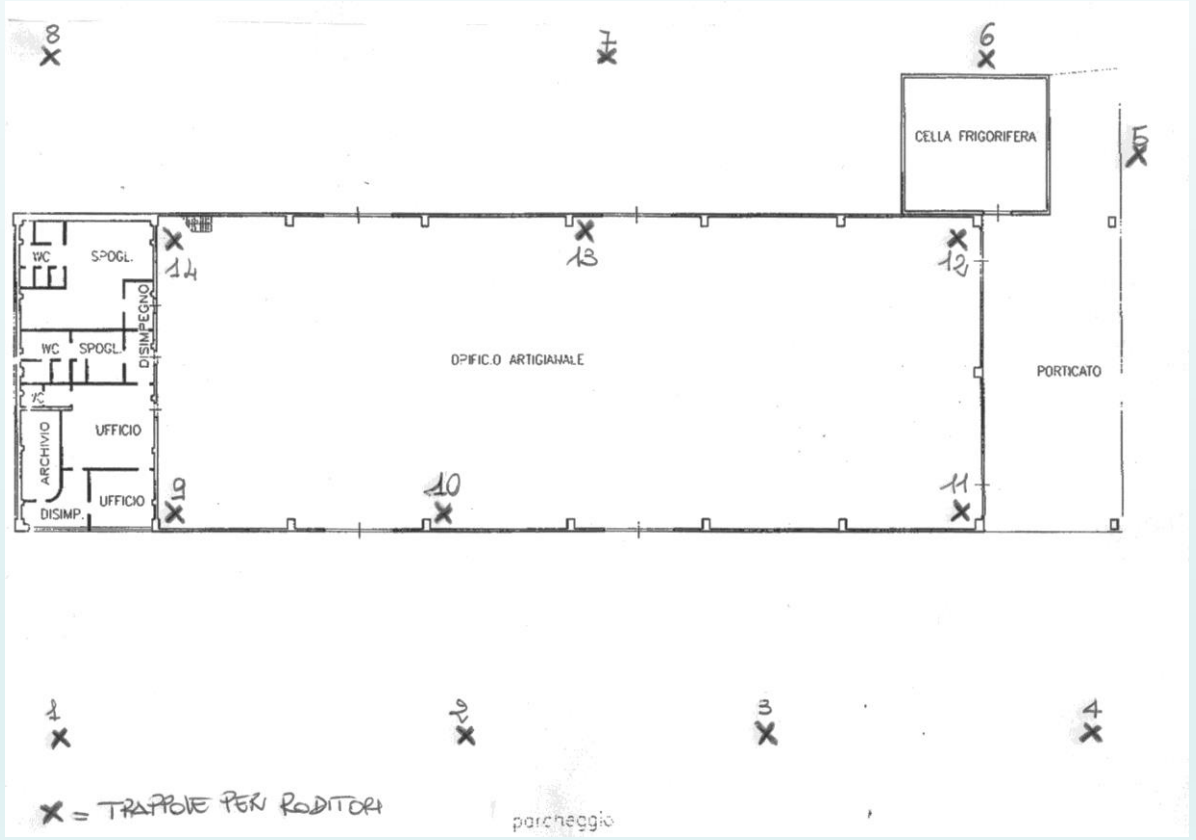
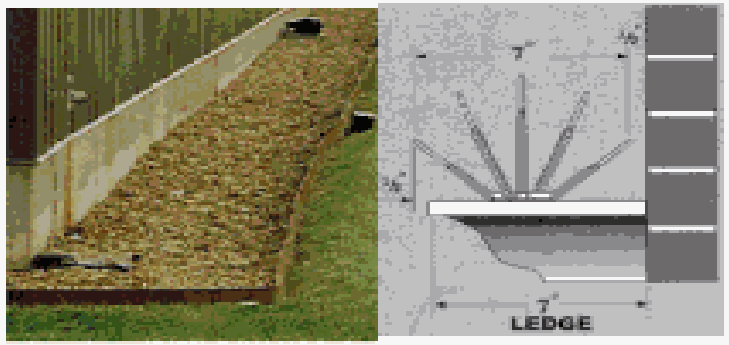
Pest monitoring: protect the baits into plastic boxes, they're poisonous also for humans!!

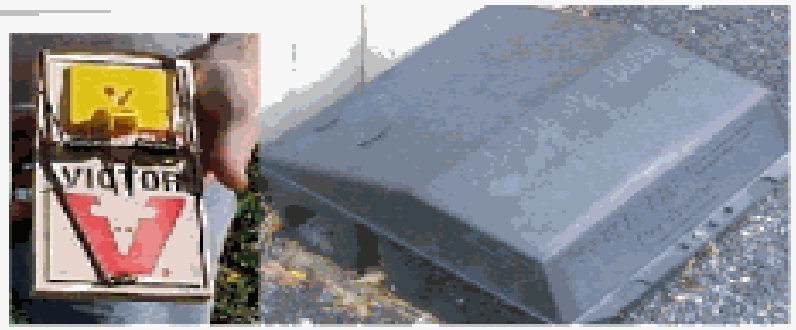


Make each bite identifiable by signs in the packhouse and on the packhouse's map

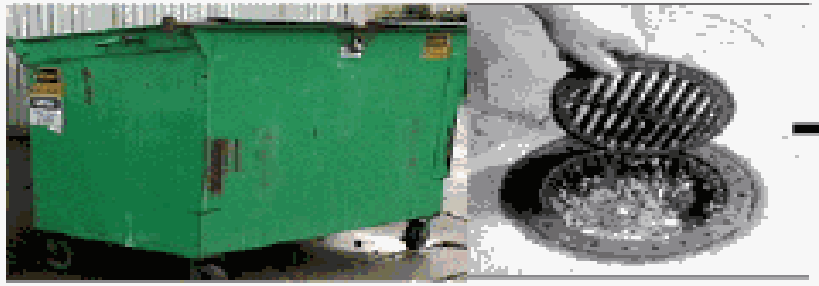
Integrated pest management



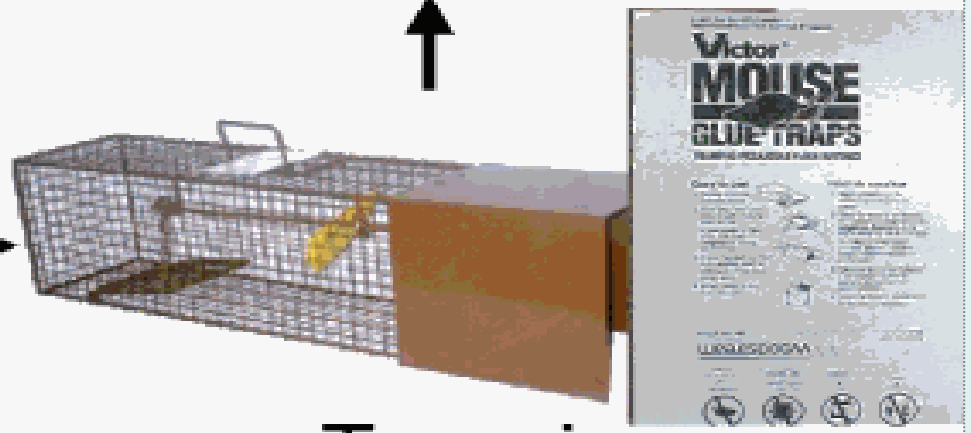
Exclusion



Baiting



Sanitation



Trapping

Ceilings and overheads shall be designed, constructed, and SERVICED to prevent contamination of food and to facilitate their cleaning.

It could happen that the paint is flacking.

Windows open for ventilation shall be **screened** to prevent the entering of pests and birds

Unbreakable

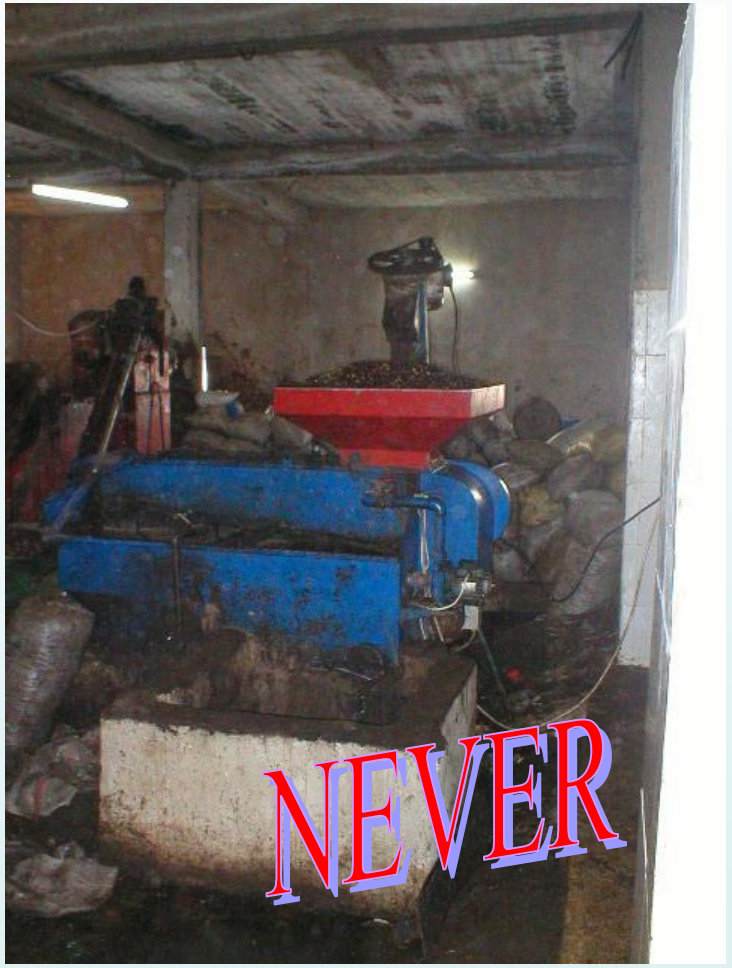
All glasses must be protected against breakage.

"Safety-type light bulbs that prevent contamination of mushrooms with glass should be used and regularly cleaned."

Unbreakable

Lights suspended above produce or raw materials' areas must be made of a safety material or must be protected to prevent food contamination in case of breakage.

To be protected

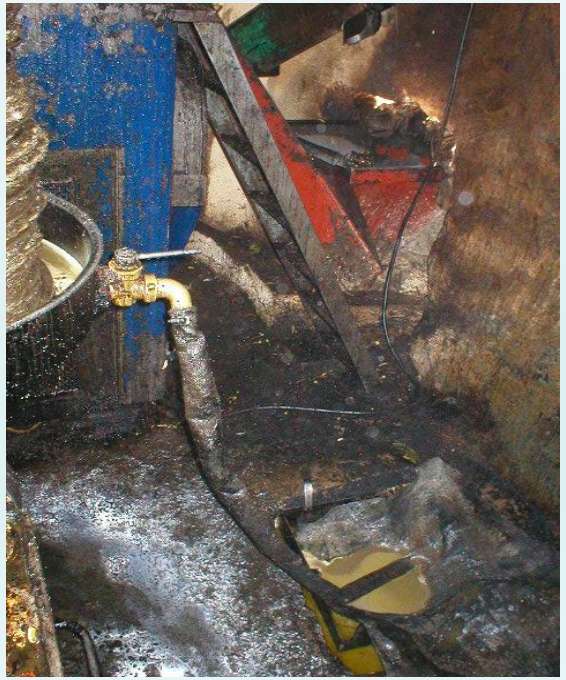


Equipment shall be positioned to give access under, inside, and around it, cleaning and servicing easily.

All the equipment shall be cleaned with the appropriate frequency.

Don't follow it!!!

Don't NEVER follow it!!!



The stopped and stored equipments should be covered.

PRODUCT HYGIENE STANDARDS

shall be documented and adopted by all the person and visitors too.

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ITALIAN AGENCY FOR DEVELOPMENT COOPERATION

CIHEAM BARI

PERSONNEL HYGIENE STANDARDS shall be documented and adopted by all personnel…visitors too.

caps

coverall

gloves

mask

safety footwear

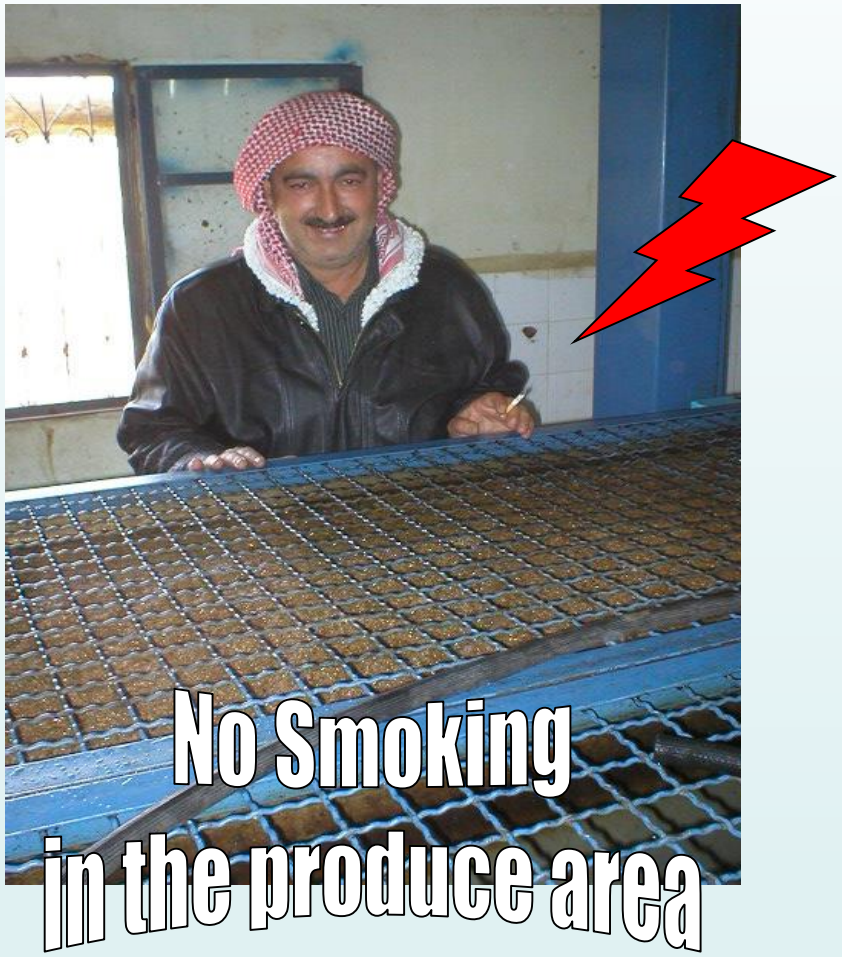
Protective clothing shall be put on by food handlers, visitors, contractors, and all the people working in or entering food handling areas.

The factory should be Designated changing areas sited to allow direct access to the production area.

Lockers divided for working clothing and private item/clothing.

The factory should have a DESIGNATED eating area.

Toilets shall have antibacterial soap,non-handed operated washbasins, air blower or paper tissue to dry hands and the sign “WASH YOUR HANDS”.



The factory should have a DESIGNATED smoking area.

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SAFETY SIGNS

WORKERS SAFETY

In the working areas at least
FULL First Aid Kit must be available.

Warning to short false ceilings or overheads… make them visible by white/red lines!

WORKERS SAFETY

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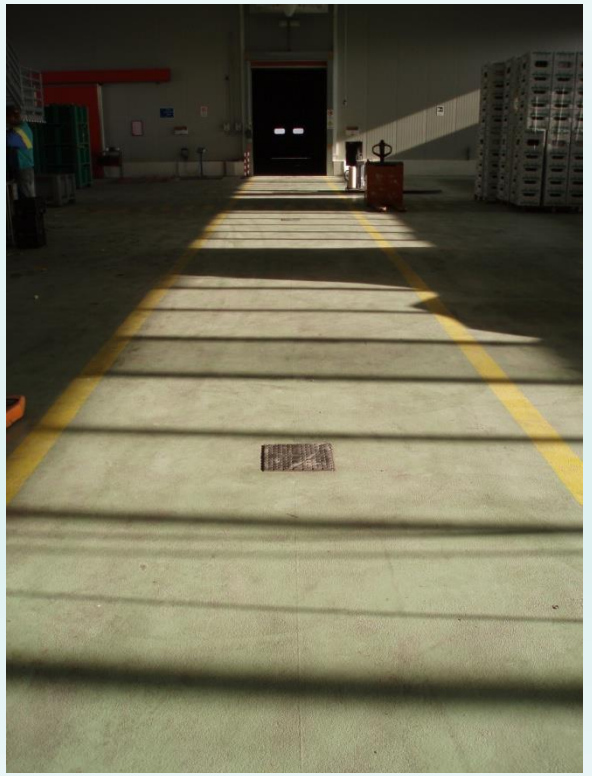
WORKERS SAFETY

Make sirens on the forklifts reverse gear operating

Make yellow lines on the floor to designate walking areas, forklifts areas and storage areas



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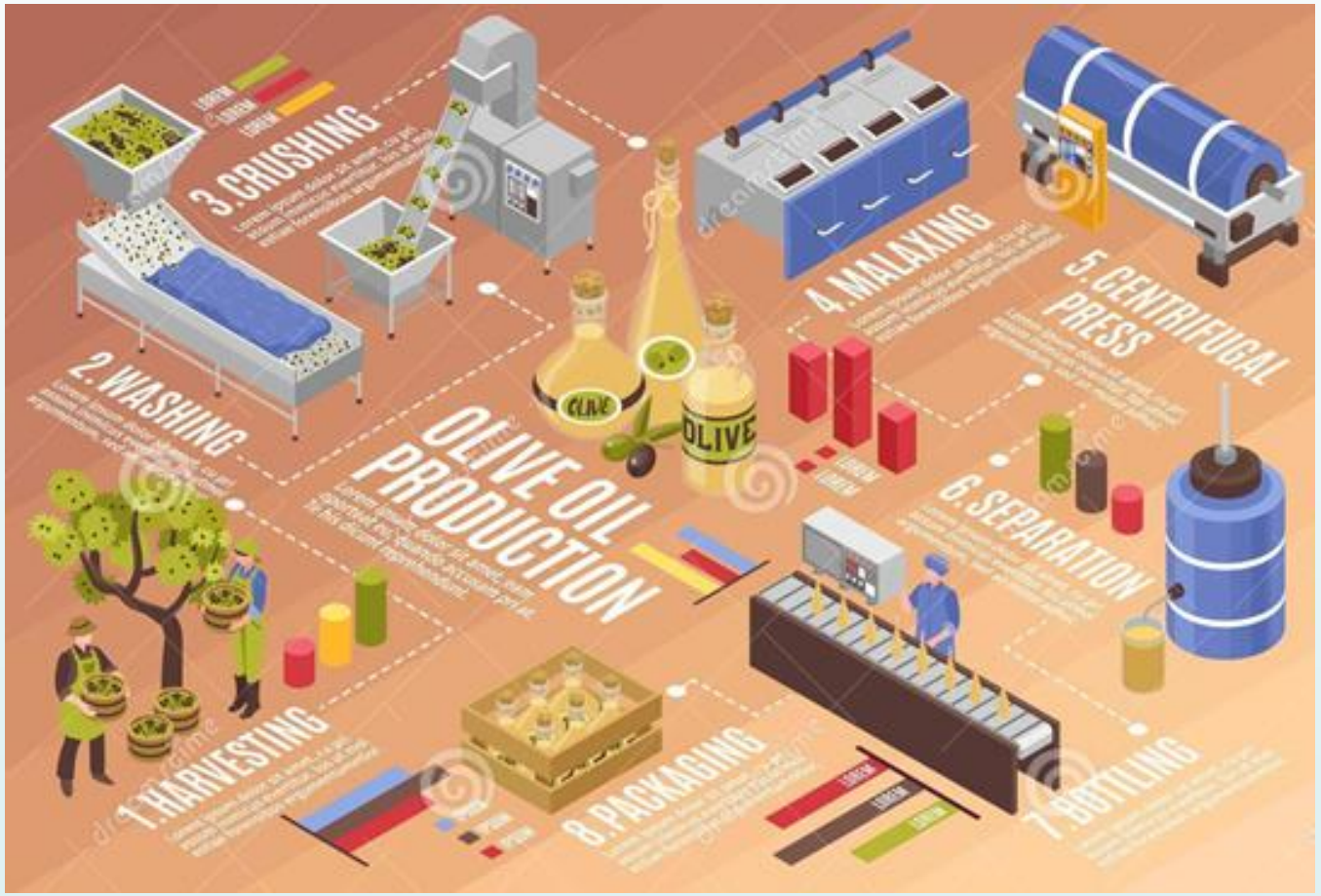

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GUIDE LINES FOR HACCP IMPLEMENTATION

TECHNICAL SHEET OLIVE OIL

VARIETIES:

PRODUCTION AREA:

HARVESTED PERIOD:

(Harvesting period is in red).

Jan.	Feb.	Mar.	Apr.	Maj	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.

Extra virgin olive oil:
Virgin olive oil:
Pomace olive oil:

HYGIENIC CHARACTERISTIC:

- Pesticide residue under law limits; total absence of chemicals.
- Absence of foreign bodies (iron, glass, stone, etc.).
- Absence of Toxenogenic mold.

STORAGE CONDITION:

Olives:

In a covered area for a short period (24-48 hours maximum) with ventilated plastic crates to avoid fermentation. No plastic bags.

Oil:

Inside the mill, in tanks (metallic, stainless steel) plastic is not suggested.

OLIVE OIL USE:

Olive oil comes from the olive fruit and contains monounsaturated fatty acids. Fatty acids in olive oil seem to decrease cholesterol levels and have anti-inflammatory effects. Olive oil is commonly used in foods. people commonly use it for heart disease, diabetes, and high blood pressure

PACKAGING MATERIAL:

Glass, tank, stainless steel.

STORAGE AND TRANSPORT OF FINAL PRODUCT:

In tank and stainless-steel containers;

Store area: White light, 10-15° C.

OLIVE OIL QUALITY STANDARD:

Extra Virgin

Free acidity (% Oleic acid 0.8 gram per 100 gram);

Peroxide value (≤20 milliequivalents of active oxygen/kg oil);

Specific absorbent (UV) ([K232 ≤ 2.5], [K270 ≤ 0.22]; [ΔK ≤ 0.01]);

Typical colour: Very intense golden to dark green

Smell: Fruit or vegetable scent

Flavor: Fruity Flavor and can have a pleasant bitterness, pungency, and astringency.

Virgin

Free acidity (Oleic acid not more than 2.0 grams per 100 grams);

Peroxide value (<15 milliequivalents of active oxygen/kg oil);

Specific absorbent (UV) ([K232 ≤2,6], [K270 ≤0,25]; [ΔK ≤0,01]);

Typical color: Green or Golden

Smell: Fruit or Vegetable Scent

Flavour: Fruity flavor with fresh herbs and fruit characteristics

Pomace

Free acidity (% Oleic acid Not more than 1 g per 100g);

Peroxide value (<15 milliequivalents of active oxygen/kg oil);

Specific absorbent (UV) ([K232 >2,60], [K270 >0,25]; [ΔK -]);

Typical colour: Gold to light-green

Smell: No taste or odor

Flavour: Almost tasteless

Holistic and Multi-professional Mechanism for a Pakistani Olive Oil Value Chain

HACCP Guidelines on Olive Mills and Table Olive Industries

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3. Product Specification
4. Procedures
5. Record Keeping
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III. HYGIENE CONTROL
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11. Transport
IV. SPECIFIC REQUIREMENTS FOR PRODUCT
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13. Product Control and Analysis
14. Control of Non-Conforming Product
15. Calibration and Control of Measuring and Monitoring Devices
V. SPECIFIC REQUIREMENTS FOR PERSONNEL
16. Personnel: Training and Hygiene

Issued on 25/10/2023

GENERAL REQUIREMENTS - CHECKLIST

HACCP Guidelines on Olive Mills and Table Olive Industries

N.	Requirements (English)	Requirements (Urdu)
I. GENERAL REQUIREMENTS		
1. HACCP SYSTEM		
The basis of the Company's food safety control system shall be a HACCP plan which shall be systematic and comprehensive, fully implemented and maintained, and shall be based on the Codex Alimentarius HACCP principles, and reference shall be made to relevant legislation, codes of practice or guidelines.		
1.1	The HACCP system has been developed, reviewed and managed by a multidisciplinary team.	ایچ اے سی سی پی کا نظام اس کا جائزہ اور انتظام ایک کثیر الشعبہ ٹیم کے ذریعہ تیار کیا گیا ہے۔
1.2	The HACCP team leader or nominated team representative demonstrates competence in the understanding of HACCP principles and application.	HACCP ٹیم لیڈر یا نامزد ٹیم کا نمائندہ HACCP اصولوں اور اطلاق کو سمجھنے میں قابلیت کا مظاہرہ کرتا ہے۔
1.3	Key personnel identified as HACCP team members have adequate HACCP training and appropriate experience.	ایچ اے سی سی پی کے ٹیم کے ممبران کے طور پر شناخت کیے گئے کلیدی اہلکاروں کے پاس ایچ اے سی سی پی کی مناسب تربیت اور مناسب تجربہ ہو۔
The Company uses the HACCP principles to:		
1.4	Conduct a hazard analysis	خطرے کا تجزیہ کرنا
1.5	Determine the Critical Control Points (CCPs)	کریٹیکل کنٹرول پوائنٹس (CCPs) کا تعین کرنا

1.6	Establish critical limits	اہم حدود قائم کرنا۔
1.7	Establish a system to monitor control of the CCP's	سی سی پی کے کنٹرول کی نگرانی کے لیے ایک نظام قائم کرنا
1.8	Establish the corrective action to be taken when monitoring indicates that a particular CCP is not under control	جب نگرانی اس بات کی نشاندہی کرتی ہے کہ سی سی پی کنٹرول میں نہیں ہے تو اصلاحی کارروائی کی جائے
1.9	Establish procedures of validation and verification to confirm that the HACCP system is working effectively, including auditing of the HACCP system	اس بات کی تصدیق کرنے کے لیے کہ HACCP نظام مؤثر طریقے سے کام کر رہا ہے، جس میں HACCP سسٹم کا آڈٹ بھی شامل ہے، توثیق اور تصدیق کے طریقہ کار کو قائم کریں۔
1.10	Establish documentation concerning all procedures and records appropriate to these principles and their application.	ان اصولوں اور ان کے اطلاق کے لیے موزوں تمام طریقہ کار اور ریکارڈ سے متعلق دستاویزات قائم کریں۔
1.11	The HACCP study is based on an assessment of risk and identifies which hazards are of such a nature that their elimination or reduction is up to acceptable levels. In conducting the hazard analysis, wherever possible, the following has been included.	HACCP کا مطالعہ خطرے کی تشخیص پر مبنی ہے، اور اس بات کی نشاندہی کرتا ہے کہ کون سے خطرات اس نوعیت کے ہیں کہ ان کا خاتمہ یا کمی قابل قبول سطح تک ہے۔ خطرات کا تجزیہ کرنے میں، جہاں بھی ممکن ہو، درج ذیل کو شامل کیا گیا ہے۔
1.12	The likely occurrence of hazards and severity of their adverse health effects.	خطرات کی ممکنہ موجودگی اور ان کے صحت پر منفی اثرات کی شدت۔
1.13	The qualitative and/or quantitative evaluation of the presence of hazards.	خطرات کی موجودگی کا معیار یا مقداری جائزہ۔

1.14	The HACCP system is specific to the application, practical to implement, and effective in controlling the associated hazards of the operation. This includes all existing and new products and the HACCP system is regularly and appropriately reviewed.	HACCP نظام اطلاق کے لیے مخصوص ہے، عمل میں لانے کے لیے عملی اور آپریشن کے متعلقہ خطرات کو کنٹرول کرنے میں موثر ہے۔ اس میں تمام موجودہ اور نئی مصنوعات شامل ہیں اور HACCP نظام کا باقاعدہ اور مناسب جائزہ لیا جاتا ہے۔
2. ORGANISATIONAL STRUCTURE, RESPONSIBILITY AND MANAGEMENT AUTHORITY		
The Company shall have an organisational structure which clearly ensures job function, responsibility and reporting relationships of those staff whose activities affect product safety, legality and quality are clearly defined and documented.		
2.1	The Company's director/holder ensure that all employees are aware of their responsibilities and mechanisms are in place to monitor the effectiveness of their operation.	کمپنی کا ڈائریکٹر/ ہولڈر اس بات کو یقینی بناتا ہے کہ تمام ملازمین اپنی ذمہ داریوں سے واقف ہیں اور ان کے آپریشن کی تاثیر کی نگرانی کے لیے طریقہ کار موجود ہے۔
2.2	The Company has ensured that levels of responsibility and accountability are clearly defined for key staff involved in product safety, legality and quality systems with job descriptions available. There are arrangements to cover for the absence of key staff.	کمپنی نے اس بات کو یقینی بنایا ہے کہ پروڈکٹ کی حفاظت، قانونی حیثیت اور معیار کے نظام میں شامل کلیدی عملے کے لیے ذمہ داری اور جوابدہی کی سطحیں واضح طور پر بیان کی گئی ہیں جن میں ملازمت کی تفصیل دستیاب ہے۔ اہم عملے کی غیر حاضری کو پورا کرنے کے انتظامات ہیں۔
2.3	The Company ensures that information relating to the support and monitoring of the quality management system is available to relevant personnel at all times.	کمپنی اس بات کو یقینی بناتی ہے کہ کوالٹی مینجمنٹ سسٹم کی حمایت اور نگرانی سے متعلق معلومات متعلقہ اہلکاروں کو ہر وقت دستیاب ہوں۔

2.4	The Company has a system in place to ensure that it is informed of all relevant legislation, food safety issues, legislative scientific and technical developments and Industry Codes of Practice applicable in the country where the product will be sold.	کمپنی کے پاس اس بات کو یقینی بنانے کے لیے ایک نظام موجود ہے کہ اسے تمام متعلقہ قانون سازی، فوڈ سیفٹی کے مسائل، قانون سازی کی سائنسی اور تکنیکی پیشرفت اور اس ملک میں لاگو صنعتی ضابطوں سے آگاہ کیا جائے جہاں پروڈکٹ فروخت کی جائے گی۔
2.5	The Company ensures that a description of the general duties or work instructions are in place and communicated to all staff involved with activities relating to product safety, legality and quality.	کمپنی اس بات کو یقینی بناتی ہے کہ عمومی فرائض یا کام کی ہدایات کی تفصیل موجود ہے اور پروڈکٹ کی حفاظت، قانونی حیثیت اور معیار سے متعلق سرگرمیوں میں شامل تمام عملے کو بتائی گئی ہے۔
3. PRODUCT SPECIFICATIONS		
The Company shall ensure that appropriate specifications exist for: *• Raw materials (including packaging materials)* *• Finished products* *• Intermediate/semi-processed products (where appropriate)* *• Any product or service which could affect the integrity of the finished product.*		
3.1	The Company shall ensure that appropriate specifications exist for: raw materials, finished products, intermediate products (as appropriate), product or service which could affect the integrity of the finished product.	کمپنی اس بات کو یقینی بنائے گی کہ اس کے لیے مناسب تصریحات موجود ہیں: خام مال، تیار مصنوعات، درمیانی مصنوعات (جیسا کہ مناسب)، پروڈکٹ یا سروس جو تیار شدہ مصنوعات کی سالمیت کو متاثر کر سکتی ہے۔
3.2	Specifications are adequate and accurate and ensure compliance with relevant safety and legislative requirements.	وضاحتیں مناسب اور درست ہیں اور متعلقہ حفاظت اور قانون سازی کے تقاضوں کی تعمیل کو یقینی بناتی ہیں۔

4. PROCEDURES		
The Company shall have, and operate in accordance with written detailed procedures, instructions, and reference documents to cover all processes critical to product safety, legality and quality.		
4.1	Procedures and work instructions are clearly legible, unambiguous and sufficiently detailed to enable their correct application by appropriate personnel, and are readily accessible at all times.	طریقہ کار اور کام کی ہدایات واضح طور پر قابل فہم، غیر مبہم اور مناسب اہلکاروں کے ذریعہ ان کی درست درخواست کو فعال کرنے کے لیے کافی تفصیلی ہیں، اور ہر وقت آسانی سے قابل رسائی ہیں۔
5. RECORD KEEPING		
The Company shall maintain records to demonstrate the effective control of product safety, legality ,and quality.		
5.1	The records are legible, genuine, appropriately authorised and retained in good condition for an appropriate defined time period.	ریکارڈز قابل مطالعہ، حقیقی، مناسب طور پر مجاز ہیں اور مناسب مقررہ مدت کے لیے اچھی حالت میں برقرار ہیں۔
5.2	The Company operates procedures for collation, review, maintenance, storage and retrieval of all records appertaining to product safety, legality and quality.	کمپنی پروڈکٹ کی حفاظت، قانونی حیثیت اور معیار سے متعلق تمام ریکارڈز کو کولیشن، نظرثانی، دیکھ بھال، ذخیرہ کرنے اور بازیافت کرنے کا طریقہ کار چلاتی ہے۔
5.3	Any alterations to records are appropriately authorized and justification for alteration are recorded by the authorising person.	ریکارڈ میں کسی بھی قسم کی تبدیلی کو مناسب طور پر اجازت دی جاتی ہے اور تبدیلی کا جواز اجازت دینے والے شخص کے ذریعہ ریکارڈ کیا جاتا ہے۔
6. CORRECTIVE ACTIONS		
The Company shall ensure procedures exist to investigate the cause of significant non-conformity against standards, specifications and procedures, which are critical to product safety, legality and quality.		
6.1	Corrective actions are undertaken to avoid further occurrence of non-conformity.	عدم مطابقت کے مزید واقعات سے بچنے کے لیے اصلاحی اقدامات کیے جاتے ہیں۔

6.2	Any corrective action plan relating to safety, legality or quality is agreed by personnel who have defined responsibility and accountability for these areas of control. These personnel are also responsible for verifying that the corrective action plan has been completed satisfactorily.	حفاظت، قانونی حیثیت یا معیار سے متعلق کسی بھی اصلاحی ایکشن پلان پر عملہ متفق ہے جنہوں نے کنٹرول کے ان علاقوں کے لیے ذمہ داری اور جوابدہی کی وضاحت کی ہے۔ یہ اہلکار اس بات کی تصدیق کرنے کے بھی ذمہ دار ہیں کہ اصلاحی ایکشن پلان کو تسلی بخش طریقے سے مکمل کیا گیا ہے۔
6.3	Corrective actions are accurately documented, assigning responsibility and accountability.	اصلاحی اقدامات درست طریقے سے دستاویزی ہوتے ہیں، ذمہ داری اور جوابدہی تفویض کرتے ہیں۔
II. SPECIFIC REQUIREMENTS FOR THE FACTORY/MILLING UNIT		
7. FACTORY ENVIRONMENT STANDARDS		
A. External Environment Standards - Location		
The site shall be located and maintained so as to prevent contamination and enable the production of safe and legal products.		
7.1	Consideration has been given to local activities and environment which may have potentially adverse impact, and measures are taken to prevent product contamination. Where measures have been put into place to protect the site from any potential contaminants, these are regularly reviewed to ensure they continue to be effective.	مقامی سرگرمیوں اور ماحول پر غور کیا گیا ہے جو ممکنہ طور پر منفی اثر ڈال سکتے ہیں، اور مصنوعات کی آلودگی کو روکنے کے لیے اقدامات کیے گئے ہیں۔ جہاں سائٹ کو کسی بھی ممکنہ آلودگی سے بچانے کے لیے اقدامات کیے گئے ہیں، ان کا باقاعدگی سے جائزہ لیا جاتا ہے تاکہ یہ یقینی بنایا جا سکے کہ وہ موثر رہیں۔
7.2	The site boundaries are clearly defined.	سائٹ کی حدود واضح طور پر بیان کی گئی ہیں۔
B. Perimeters and Grounds		
All grounds within the site shall be finished and maintained to an appropriate standard.		

7.3	The external areas are maintained in good order. Where buildings are surrounded by grassed or planted areas, these are regularly well maintained.	بیرونی علاقوں کو اچھی ترتیب میں برقرار رکھا گیا ہو۔ جہاں عمارتیں گھاس یا پودے لگائے گئے علاقوں سے گھری ہوئی ہیں، ان کی باقاعدگی سے دیکھ بھال کی جاتی ہے۔
7.4	A clean and unobstructed area is provided along external walls of buildings used for production and storage. Where there are adjoining walls, procedures are in place to ensure an appropriate level of product protection and cleanliness.	پیداوار اور ذخیرہ کرنے کے لیے استعمال ہونے والی عمارتوں کی بیرونی دیواروں کے ساتھ ایک صاف ستھرا اور غیر رکاوٹ والا علاقہ فراہم کیا گیا ہو۔ جہاں ملحقہ دیواریں ہیں، وہاں پروڈکٹ کے تحفظ اور صفائی کی مناسب سطح کو یقینی بنانے کے لیے طریقہ کار موجود ہو۔
7.5	Where storage on the outside of the factory is necessary, items are protected from contamination and deterioration.	جہاں فیکٹری کے باہر ذخیرہ کرنا ضروری ہے، اشیاء کو آلودگی اور خراب ہونے سے محفوظ رکھا جاتا ہے۔
7.6	Where natural drainage is inadequate, external drainage has installed.	جہاں قدرتی نکاسی آب ناکافی ہے وہاں بیرونی نکاسی آب نصب کر دی گئی ہو۔
C. Internal Environment Standards - layout, product flow and segregation		
Premises and plants shall be designed, constructed and maintained and procedures shall be in place to control the risk of product contamination and to comply with all relevant legislation.		
7.7	Measures are in place to maintain site security and ensure only authorised staff have access to production and storage areas.	سائٹ کی حفاظت کو برقرار رکھنے اور اس بات کو یقینی بنانے کے لیے اقدامات کیے گئے ہیں کہ صرف مجاز عملے کو پیداوار اور ذخیرہ کرنے والے علاقوں تک رسائی حاصل ہو۔
7.8	The process flow from intake to dispatch is arranged to minimise the risk of product contamination.	انٹیک سے لے کر ڈسپیچ تک کے عمل کے بہاؤ کا اہتمام مصنوعات کی آلودگی کے خطرے کو کم کرنے کے لیے کیا گیا ہے۔

7.9	Physical barriers or demonstrably effective procedures are in place to minimise the risk of the contamination of raw materials, packaging and finished products.	خام مال، پیکیجنگ اور تیار شدہ مصنوعات کی آلودگی کے خطرے کو کم کرنے کے لیے جسمانی رکاوٹیں یا واضح طور پر مؤثر طریقہ کار موجود ہیں۔
7.10	The systems of working are such as to reduce any potential physical, chemical or microbiological contamination risks.	کام کرنے کے نظام ایسے ہیں جیسے کسی بھی ممکنہ جسمانی، کیمیائی یا مائکروبیولوجیکل آلودگی کے خطرات کو کم کرنا۔
7.11	Segregation takes into account the flow of product, nature of materials, equipment, personnel, airflow, air quality and services provision.	علیحدگی پروڈکٹ کے بہاؤ، مواد کی نوعیت، سامان، عملہ، ہوا کا بہاؤ، ہوا کے معیار اور خدمات کی فراہمی کو مدنظر رکھتی ہے۔
7.12	There is effective segregation in place to minimise the risk of product contamination where specific handling requirements are required, e.g. allergens or identity preserved products.	مصنوعات کی آلودگی کے خطرے کو کم کرنے کے لیے جہاں مخصوص ہینڈلنگ کے تقاضوں کی ضرورت ہوتی ہے، وہاں موثر علیحدگی موجود ہے، جیسے الرجین یا شناخت سے محفوظ مصنوعات۔
7.13	The location of all transfer points does not compromise high-risk and low-risk segregation and practices are in place to minimise risk of product contamination, e.g. disinfection.	تمام ٹرانسفر پوائنٹس کا مقام زیادہ خطرہ اور کم خطرہ والی علیحدگی سے سمجھوتہ نہیں کرتا ہے اور پروڈکٹ کی آلودگی کے خطرے کو کم کرنے کے لیے طریقے موجود ہیں، جیسے جراثیم کشی
7.14	On-site laboratory facilities, where provided, do not jeopardise the safety of product.	سائٹ پر لیبارٹری کی سہولیات، جہاں فراہم کی گئی ہیں، مصنوعات کی حفاظت کو خطرے میں نہ ڈالیں۔
7.15	Facilities for tray and utensil washing and general purpose cleaning are, where appropriate, adequately segregated from production activities.	ٹرے اور برتن دھونے اور عام مقصد کی صفائی کی سہولیات، جہاں مناسب ہوں، مناسب طریقے سے پیداواری سرگرمیوں سے الگ کر دی گئی ہیں۔

7.16	Premises allow sufficient working space and storage to enable all operations to be carried out properly under safe hygienic conditions.	احاطے کام کرنے کی کافی جگہ اور ذخیرہ کرنے کی اجازت دیتے ہیں تاکہ محفوظ حفظان صحت کے حالات میں تمام کارروائیوں کو صحیح طریقے سے انجام دیا جاسکے۔
D. Construction: Raw material handling, preparation, processing, packing and storage areas		
The constructionn of the site, buildings and facilities shall be suitable for the intended purposes.		
7.17	**Walls** are designed, constructed, finished and maintained which help to prevent the accumulation of dirt, reduce condensation and mould growth, and facilitate cleaning.	**دیواروں** کو ڈیزائن، تعمیر، مکمل اور برقرار رکھا گیا ہے جو گندگی کو جمع ہونے سے روکنے، گاڑھا ہونے اور مولڈ کی افزائش کو کم کرنے، اور صفائی کو آسان بنانے میں مدد کرتے ہیں۔
7.18	**Floors** are designed to meet the demands of the process, and withstand cleaning materials and methods. They are impervious and well maintained.	**فرش** کو عمل کے تقاضوں کو پورا کرنے اور صفائی کے مواد اور طریقوں کو برداشت کرنے کے لیے ڈیزائن کیا گیا ہے۔ وہ ناقابل تسخیر اور اچھی طرح سے برقرار ہیں۔
7.19	**Drainage,** where provided, is sited, designed and maintained to minimise risk of product contamination and not compromise product safety.	**نکاسی آب،** جہاں فراہم کی جاتی ہے، پروڈکٹ کی آلودگی کے خطرے کو کم کرنے اور مصنوعات کی حفاظت پر سمجھوتہ نہ کرنے کے لیے سائٹ، ڈیزائن اور دیکھ بھال کی جاتی ہے۔
7.20	**Floors** have adequate falls to cope with the flow of any water or effluent towards suitable drainage.	مناسب نکاسی آب کی طرف کسی بھی پانی بہاؤ سے نمٹنے کے لیے **فرشوں** میں کافی گرتے ہیں۔
7.21	**Ceilings** and **overheads** are designed, constructed, finished and maintained to prevent the accumulation of dirt, reduce condensation and mould growth, and facilitate cleaning.	**چھتوں اور اوور ہیڈز** کو مٹی کے جمع ہونے سے روکنے، گاڑھا ہونے اور مولڈ کی افزائش کو کم کرنے، اور صفائی کی سہولت فراہم کرنے کے لیے ڈیزائن، تعمیر، ختم اور دیکھ بھال کی جاتی ہے۔

7.22	Where false ceilings are used, adequate access to the void is provided to facilitate cleaning, maintenance of services and inspection for pest activity.	جہاں جھوٹی چھتیں استعمال کی جاتی ہیں، وہاں صفائی، خدمات کی دیکھ بھال اور کیڑوں کی سرگرمیوں کے لیے معائنہ کی سہولت کے لیے خالی جگہ تک مناسب رسائی فراہم کی جاتی ہے۔
7.23	Where **windows** are designed to be opened for ventilation purposes, they are adequately screened to prevent the ingress of insects.	جہاں **کھڑکیوں** کو وینٹیلیشن کے مقاصد کے لیے کھولنے کے لیے ڈیزائن کیا گیا ہے، وہاں کیڑوں کے داخلے کو روکنے کے لیے ان کی مناسب جانچ کی جاتی ہے۔
7.24	All glass windows are protected against breakage.	تمام شیشے کی کھڑکیاں ٹوٹنے سے محفوظ ہیں۔
7.25	Where external **doors** are opened to raw material handling, processing, packing and storage area, suitable precautions have been taken to prevent insects ingress. Doors and dock levellers in these areas are close fitting or adequately proofed.	جہاں خام مال کی ہینڈلنگ، پروسیسنگ، پیکنگ اور اسٹوریج ایریا کے لیے بیرونی **دروازے** کھولے گئے ہیں، وہاں کیڑوں کے داخلے کو روکنے کے لیے مناسب احتیاطی تدابیر اختیار کی گئی ہیں۔ ان علاقوں میں دروازے اور گودی لیولرز قریبی فٹنگ یا مناسب طور پر پروف ہیں۔
7.26	Adequate **lighting** is provided for all work areas.	تمام کام کے علاقوں کے لیے مناسب **روشنی** فراہم کی گئی ہے۔

7.27	All bulbs and strip lights, including those on electric fly killer units, where they constitute a risk to product, are protected by shatterproof plastic diffusers, sleeve covers or with a shatterproof protective coating. For high temperature lights, where plastic covers are not viable, a fine mesh metal screen has been fitted. Where full protection cannot be provided, the glass management system takes this into account.	تمام بلب اور سٹرپ لائٹس، بشمول الیکٹرک فلائی کلر یونٹس، جہاں وہ مصنوعات کے لیے خطرہ ہیں، شیٹر پروف پلاسٹک ڈفیوزر، آستین کے کور یا شیٹر پروف حفاظتی کوٹنگ سے محفوظ ہیں۔ ہائی ٹمپریچر لائٹس کے لیے، جہاں پلاسٹک کے کور قابل عمل نہیں ہیں، ایک باریک میش میٹل اسکرین لگائی گئی ہے۔ جہاں مکمل تحفظ فراہم نہیں کیا جا سکتا، شیشے کے انتظام کا نظام اس کو مدنظر رکھتا ہے۔
7.28	Adequate **ventilation** is provided in product storage and processing environments to prevent condensation or excessive dust.	پروڈکٹ اسٹوریج اور پروسیسنگ ماحول میں مناسب **وینٹیلیشن** فراہم کی جاتی ہے تاکہ گاڑھا ہونے یا ضرورت سے زیادہ دھول کو روکا جا سکے۔
7.29	Where the process requires screened or filtered air, the equipment used for this purpose is adequately maintained.	جہاں اس عمل کے لیے اسکرین شدہ یا فلٹر شدہ ہوا کی ضرورت ہوتی ہے، اس مقصد کے لیے استعمال کیے جانے والے سامان کی مناسب دیکھ بھال کی جاتی ہے۔
7.30	Where appropriate, positive air pressure systems are in place.	جہاں مناسب ہو، مثبت ہوا کے دباؤ کے نظام موجود ہیں۔

E. Services, Equipments and Maintenance

All services to and within the production and storage areas shall be designed, constructed, maintained and monitored to control the risk of contamination.
Equipment shall be suitably designed for the intended purpose and shall be used so as to minimise the risk of contamination of product.
A system of planned maintenance shall be in place covering all items of equipment, which are critical to product safety, legality and quality.

7.31	All water supplies used for equipment or plant cleaning, or in the manufacture of processed food or the preparation of primary product are potable (according to the National Law) or pose no risk of contamination. Where water is used for primary washing of raw materials prior to the manufacture of processed food and where potable water is not be used, procedures are in place to minimise the risk of contamination of semi-processed or processed product.	آلات یا پودوں کی صفائی کے لیے استعمال ہونے والے تمام پانی کی سپلائیز، یا پراسیسڈ فوڈ کی تیاری یا بنیادی مصنوعات کی تیاری میں پینے کے قابل ہیں (قومی قانون کے مطابق) یا آلودگی کا کوئی خطرہ نہیں ہے۔ جہاں پانی کو پراسیسڈ فوڈ کی تیاری سے پہلے خام مال کی بنیادی دھلائی کے لیے استعمال کیا جاتا ہے اور جہاں پینے کے قابل پانی کا استعمال نہیں کیا جاتا ہے، وہاں نیم پراسیس شدہ یا پراسیس شدہ مصنوعات کے آلودگی کے خطرے کو کم کرنے کے لیے طریقہ کار موجود ہیں۔
7.32	In case of usage of treated or re-circulated water (e.g. for olives washing), the chlorine level should be continuously monitored, to ensure that it is within acceptable limits specified in the drinking water national standard.	علاج شدہ یا دوبارہ گردش شدہ پانی کے استعمال کی صورت میں (مثلاً زیتون کو دھونے کے لیے)، کلورین کی سطح کی مسلسل نگرانی کی جانی چاہیے، تاکہ یہ یقینی بنایا جا سکے کہ یہ پینے کے پانی کے قومی معیار میں بیان کردہ قابل قبول حدوں کے اندر ہے۔
7.33	Based on the HACCP plan, a water risk analysis should be in place determining type and frequency of water analyis. The used laboratory, has attained recognised laboratory accreditation or operates in accordance with the requirements and principles of ISO 17025	HACCP پلان کی بنیاد پر، پانی کے تجزیہ کی قسم اور تعدد کا تعین کرنے کے لیے پانی کے خطرے کا تجزیہ ہونا چاہیے۔ استعمال شدہ لیبارٹری نے تسلیم شدہ لیبارٹری کی منظوری حاصل کر لی ہے یا ISO 17025 کی ضروریات اور اصولوں کے مطابق کام کرتی ہے۔
7.34	All equipment is properly specified before purchase, tested and commissioned prior to use.	تمام آلات کی خریداری سے پہلے مناسب طریقے سے وضاحت کی جاتی ہے، استعمال کرنے سے پہلے جانچ اور کمیشن کی جاتی ہے۔

7.35	Equipment is positioned so as to give access under, inside and around it for ease of cleaning and servicing, or where permanently sited is properly sealed to the floor.	سامان اس لیے رکھا گیا ہے کہ صفائی اور سرونگ میں آسانی کے لیے اس کے نیچے، اندر اور اردگرد رسائی دی جا سکے، یا جہاں مستقل طور پر جگہ رکھی ہو اسے فرش پر مناسب طریقے سے بند کر دیا جائے۔
7.36	Tools/equipments containing gears or moving parts are designed to prevent the lubricants from reaching food or food contact surfaces.	ٹولز/آلات جن میں گیئرز یا حرکت پذیر پرزے ہوتے ہیں ان کو چکنا کرنے والے مادوں کو کھانے یا کھانے کے رابطے کی سطحوں تک پہنچنے سے روکنے کے لیے ڈیزائن کیا گیا ہے۔
7.37	Lubricants used for gears or moving parts should be approved for food industry (food grade).	گیئرز یا حرکت پذیر حصوں کے لیے استعمال ہونے والے چکنا کرنے والے مادوں کو فوڈ انڈسٹری (فوڈ گریڈ) کے لیے منظور کیا جانا چاہیے۔
7.38	When commissioning new equipment and plant, a maintenance programme is established and put into place based on risk assessment.	نئے سازوسامان اور پلانٹ کو شروع کرتے وقت ایک دیکھ بھال کا پروگرام قائم کیا جاتا ہے اور خطرے کی تشخیص کی بنیاد پر اسے نافذ کیا جاتا ہے۔
7.39	The Company ensures that the safety or legality of product is not jeopardised during maintenance operations.	کمپنی اس بات کو یقینی بناتی ہے کہ دیکھ بھال کے کاموں کے دوران مصنوعات کی حفاظت یا قانونی حیثیت خطرے میں نہیں پڑتی ہے۔
7.40	Where temporary repairs are made, these are controlled to ensure the safety or legality of product is not jeopardised. These temporary measures are permanently repaired as soon as practicable.	جہاں عارضی مرمت کی جاتی ہے، ان پر کنٹرول کیا جاتا ہے تاکہ اس بات کو یقینی بنایا جا سکے کہ پروڈکٹ کی حفاظت یا قانونی حیثیت خطرے میں نہ پڑ جائے۔ یہ عارضی اقدامات جیسے ہی قابل عمل ہوتے ہیں مستقل طور پر مرمت کر دیے جاتے ہیں۔

7.41	Cleaning or replacing light fittings, glass or brittle plastics is done in a manner to minimise the potential for product contamination.	روشنی کی متعلقہ اشیاء، شیشے یا ٹوٹے ہوئے پلاسٹک کو صاف کرنا یا تبدیل کرنا اس طریقے سے کیا جاتا ہے تاکہ مصنوعات کی آلودگی کے امکانات کو کم کیا جا سکے۔
F. Staff Facilities		
Staff facilities shall be designed, and shall be operated, so as to minimise the risk of product contamination.		
7.42	Where workwear is required, designated **changing facilities** are provided for all personnel, whether staff, visitor or contractor, prior to entry to production or packing areas, and, where appropriate, prior to entry to storage areas.	جہاں کام کے لباس کی ضرورت ہوتی ہے، تمام اہلکاروں کے لیے مخصوص **تبدیلی کی سہولیات** فراہم کی جاتی ہیں، چاہے عملہ ہو، وزیٹر ہو یا ٹھیکیدار، پروڈکشن یا پیکنگ ایریاز میں داخلے سے پہلے، اور جہاں مناسب ہو، اسٹوریج ایریاز میں داخل ہونے سے پہلے۔
7.43	Suitable and sufficient **handwashing facilities** are provided at access to, and at other appropriate points within, production areas.	پروڈکشن ایریاز تک رسائی، اور دیگر مناسب مقامات پر **ہاتھ دھونے** کی مناسب اور کافی سہولیات فراہم کی جاتی ہیں۔
7.44	**Toilets** are adequately segregated from production, packing and storage areas and do not open directly into production, packing or storage areas.	**بیت الخلاء** کو پیداوار، پیکنگ اور ذخیرہ کرنے والے علاقوں سے مناسب طور پر الگ کیا گیا ہے اور وہ براہ راست پیداوار، پیکنگ یا ذخیرہ کرنے والے علاقوں میں نہیں کھلتے ہیں۔

7.45	There is a sufficient number of toilets suitable for food handlers (check the table) Number of washbasins / Number of toilets / Number of workers 2 / 2 / From 1-5 4 / 4 / From 16-20 6 / 6 / From 21-40 8 / 8 / From 41-60 10 / 10 / From 61-80 12 / 12 / From 81-100 12 for the first 100 and a washbasin is added for every 10 people / 12 for the first 100 and a toilet is added for every 10 people / More than hundred	فوڈ ہینڈلرز کے لیے مناسب بیت الخلاء کی کافی تعداد ہے (ٹیبل چیک کریں) واش بیسن کی تعداد / بیت الخلاء کی تعداد / کارکنوں کی تعداد پہلے 100 کے لیے 12 اور ہر 10 افراد کے لیے ایک واش بیسن شامل کیا جاتا ہے / پہلے 100 کے لیے 12 روپے اور ہر 10 افراد کے لیے ایک بیت الخلا شامل کیا جاتا ہے / سو سے زیادہ 12 / 12 / 81-100 سے 10 / 10 / 61-80 سے 8 / 8 / 41-60 سے 6 / 6 / 21-40 سے 4 / 4 / 16-20سے 2 / 2 / 1-5سے
7.46	Smoking is only permitted in appropriate designated areas separate from production, packing and storage areas.	تمباکو نوشی کی اجازت صرف مناسب نامزد علاقوں میں پیداوار، پیکنگ اور ذخیرہ کرنے والے علاقوں سے الگ ہو۔
7.47	Where catering facilities are provided, these are suitably controlled to prevent contamination of product.	جہاں کیٹرنگ کی سہولیات فراہم کی جاتی ہیں، ان پر مصنوعات کی آلودگی کو روکنے کے لیے مناسب طریقے سے کنٹرول کیا جاتا ہو۔
7.48	Suitable provision has been made for the storage of food brought onto the premises by staff.	عملے کے ذریعہ احاطے میں لائے جانے والے کھانے کو ذخیرہ کرنے کے لیے مناسب انتظام کیا گیا ہو۔
7.49	Where appropriate, changing facilities are sited to allow personnel direct access to the production, packing or storage areas without recourse to any external area.	جہاں مناسب ہو، تبدیل کرنے والی سہولیات فراہم کی جاتی ہیں تاکہ عملے کو کسی بیرونی علاقے کا سہارا لیے بغیر پیداوار، پیکنگ یا ذخیرہ کرنے والے علاقوں تک براہ راست رسائی کی اجازت دی جا سکے۔

7.50	Where a high-risk or high care operation exists, personnel enter via a specially designated changing facility, and follow appropriately specified procedures for donning visually distinctive clean overalls, headwear and footwear.	جہاں ایک اعلی خطرہ یا اعلی نگہداشت کا آپریشن موجود ہے، اہلکار ایک خاص طور پر نامزد کردہ تبدیلی کی سہولت کے ذریعے داخل ہوتے ہیں، اور بصری طور پر مخصوص کلین اوورلز، ہیڈ ویئر اور جوتے پہننے کے لیے مناسب طریقے سے مخصوص طریقہ کار کی پیروی کرتے ہیں۔
7.51	High-risk or high-care workwear is removed only in a specially designated changing area.	ہائی رسک یا زیادہ نگہداشت والے ورک ویئر کو صرف خاص طور پر تبدیل کرنے والے علاقے میں ہٹایا جاتا ہے۔
7.52	Outdoor clothing and other personal items are stored separately from workwear within the changing facilities.	بیرونی لباس اور دیگر ذاتی اشیاء کو بدلتی سہولیات کے اندر کام کے لباس سے الگ رکھا جاتا ہے۔
III. HYGIENE CONTROL		
8. Housekeeping and Hygiene		
Housekeeping and cleaning systems shall be in place which ensure appropriate standards of hygiene are maintained at all times and risk of contamination is minimised. *Housekeeping and cleaning systems shall be in place which ensure appropriate standards of hygiene are maintained at all times and that risk of contamination is minimised.*		
8.1	Documented cleaning schedules are in place and maintained for the building, services, plant and all equipment.	عمارت، خدمات، پلانٹ اور تمام آلات کے لیے دستاویزی صفائی کے نظام الاوقات موجود ہیں اور ان کی دیکھ بھال کی جاتی ہے۔
8.2	Cleaning practices are completed so as to minimise risk of contamination.	صفائی کے طریقوں کو مکمل کیا جاتا ہے تاکہ آلودگی کے خطرے کو کم کیا جا سکے۔
8.3	Cleaning and housekeeping are carried out in accordance with documented procedures and records are maintained.	صفائی اور ہاؤس کیپنگ دستاویزی طریقہ کار کے مطابق کی جاتی ہے اور ریکارڈ کو برقرار رکھا جاتا ہے۔

8.4	Cleaning chemicals are fit for purpose, suitably labelled, secured in closed containers and used in accordance with manufacturers' instructions.	صفائی کرنے والے کیمیکل مقصد کے لیے موزوں ہیں، مناسب طور پر لیبل لگے ہوئے، بند کنٹینرز میں محفوظ اور مینوفیکچررز کی ہدایات کے مطابق استعمال کیے جاتے ہیں۔
8.5	The effectiveness of the cleaning and sanitation procedures are verified and recorded.	صفائی اور صفائی کے طریقہ کار کی تاثیر کی تصدیق اور ریکارڈ کیا جاتا ہے۔
9. Waste/Waste Disposal		
There shall be adequate systems for the collection, collation and disposal of waste material.		
9.1	Systems are in place to minimise the accumulation of waste in production areas, and prevent the use of unfit materials.	پیداواری علاقوں میں فضلہ کے جمع ہونے کو کم سے کم کرنے اور غیر موزوں مواد کے استعمال کو روکنے کے لیے نظام موجود ہیں۔
9.2	Waste disposal meets legislative requirements. Where appropriate, waste is removed by licensed contractors.	فضلہ کو ٹھکانے لگانا قانون سازی کے تقاضوں کو پورا کرتا ہے۔ جہاں مناسب ہو، لائسنس یافتہ ٹھیکیداروں کے ذریعے فضلہ ہٹایا جاتا ہے۔
9.3	External waste collection containers and compactors are managed in such a manner as to minimise risk.	خارجی فضلہ جمع کرنے والے کنٹینرز اور کمپیکٹرز کا انتظام اس طرح کیا جاتا ہے کہ خطرے کو کم کیا جا سکے۔

9.4	Where substandard trademarked materials are transferred to a third party for destruction or disposal, that third party is in the business of secure product or waste disposal and shall provide records of material destruction or disposal.	جہاں غیر معیاری تجارتی نشان والے مواد کو کسی تیسرے فریق کو تباہی یا ٹھکانے لگانے کے لیے منتقل کیا جاتا ہے، وہ فریق ثالث محفوظ مصنوعات یا فضلہ کو ٹھکانے لگانے کے کاروبار میں ہے اور مواد کی تباہی یا ضائع کرنے کا ریکارڈ فراہم کرے گا۔
10. Pest Control		
The Company shall be responsible for minimising the risk of pest infestation on the site.		
10.1	The Company either contracts the services of a competent pest control organisation, or has appropriately trained personnel, for the regular inspection and treatment of premises to deter and eradicate infestation.	کمپنی یا تو ایک قابل پیسٹ کنٹرول تنظیم کی خدمات کا معاہدہ کرتی ہے، یا اس کے پاس مناسب طور پر تربیت یافتہ عملہ ہو، تاکہ انفیکشن کو روکنے اور اسے ختم کرنے کے لیے احاطے کے باقاعدہ معائنہ اور علاج کے لیے۔
10.2	Where the services of a pest control contractor are employed, the service contract is clearly defined and reflects the activities of the site.	جہاں کیڑوں پر قابو پانے والے ٹھیکیدار کی خدمات کام کرتی ہیں، سروس کنٹریکٹ کی واضح طور پر تعریف کی گئی ہے اور سائٹ کی سرگرمیوں کی عکاسی کرتا ہے۔
10.3	The location of all pest control measures is identified on a plan/diagram of the site.	کیڑوں پر قابو پانے کے تمام اقدامات کے محل وقوع کی نشاندہی سائٹ کے پلان/ڈائیگرام پر کی جاتی ہے۔
10.4	Process equipment handling raw materials vulnerable to infestation have been identified and scheduled inspection undertaken.	خام مال کو سنبھالنے کے عمل کے آلات کی نشاندہی کی گئی ہے جو انفیکشن کے خطرے سے دوچار ہیں۔
10.5	Results of pest control inspections are, on a regular basis, assessed and analysed for trends.	کیڑوں پر قابو پانے کے معائنے کے نتائج، مستقل بنیادوں پر، رجحانات کے لیے تشخیص اور تجزیہ کیے جاتے ہیں۔

10.6	Detailed records of the pest control inspections, recommendations and necessary action undertaken are kept.	کیڑوں پر قابو پانے کے معائنے، سفارشات اور ضروری کارروائیوں کا تفصیلی ریکارڈ رکھا جاتا ہو۔
10.7	Correctly sited, permanently operational electric fly killers and/or pheromone traps are, where appropriate, provided.	درست طریقے سے سائٹ، مستقل طور پر آپریشنل الیکٹرک فلائی کلرز اور/یا فیرومون ٹریپس، جہاں مناسب ہو، فراہم کیے گئے ہو۔
10.8	Drains are fitted with screens and traps to prevent pest entry.	کیڑوں کے داخلے کو روکنے کے لیے نالوں میں اسکرینیں اور پھندے لگائے گئے ہو۔
10.9	Incoming raw materials are, where appropriate, thoroughly checked on arrival for the absence of pest infestation.	آنے والے خام مال کی، جہاں مناسب ہو، کیڑوں کے حملے کی عدم موجودگی کے لیے پہنچنے پر اچھی طرح جانچ پڑتال کی جاتی ہے۔
10.10	Raw materials, packaging and finished products are stored so as to minimise the risk of infestation. Where stored product pests are considered a risk, appropriate measures are included in the control programme.	خام مال، پیکیجنگ اور تیار شدہ مصنوعات کو ذخیرہ کیا جاتا ہے تاکہ انفیکشن کے خطرے کو کم سے کم کیا جا سکے۔ جہاں ذخیرہ شدہ مصنوعات کیڑوں کو ایک خطرہ سمجھا جاتا ہے، وہاں مناسب اقدامات کنٹرول پروگرام میں شامل کیے جاتے ہیں۔
10.11	Documentation detailing the safe use and application of baits and other materials such as insecticide sprays or fumigants is in place.	کیڑے مار دوا کے اسپرے یا فیومیگینٹ کے محفوظ استعمال اور استعمال کی تفصیل والی دستاویز موجود ہو۔
11. Transport		
All vehicles used for the transportation of raw materials (including packaging) to the premises, and the dispatch of intermediate/semi-processed product and finished product to the customer or further storage facilitates shall be suitable for the purpose, maintained in good repair and in a hygienic condition. *Where the Company employs third-party contractors, all the specific requirements shall be defined within a contract and effectively managed.*		

11.1	Documented maintenance and hygiene procedures are maintained for all vehicles.	تمام گاڑیوں کے لیے دستاویزی دیکھ بھال اور حفظان صحت کے طریقہ کار کو برقرار رکھا جاتا ہے۔
11.2	Procedures are in place to ensure product is held under secure conditions during transportation.	نقل و حمل کے دوران پروڈکٹ کو محفوظ حالات میں رکھنے کو یقینی بنانے کے لیے طریقہ کار موجود ہے۔
11.3	Where product could be susceptible to cross contamination, procedures are in place to minimise the risk of contamination.	جہاں پروڈکٹ اس آلودگی کے لیے حساس ہو سکتی ہے، وہاں آلودگی کے خطرے کو کم کرنے کے لیے طریقہ کار موجود ہیں۔
11.4	Where the material transported is susceptible to taint uptake from other foods or previously transported materials, procedures are in place to minimise the risk of contamination.	جہاں منتقل کیا گیا مواد دیگر کھانے کی اشیاء یا پہلے سے منتقل شدہ مواد سے داغدار ہونے کے لیے حساس ہے، وہاں آلودگی کے خطرے کو کم کرنے کے لیے طریقہ کار موجود ہیں۔
11.5	Where the material transported is susceptible to weather damage, vehicles are loaded and unloaded in covered bays so as to protect the material.	جہاں منتقل کیا گیا مواد موسمی نقصان کے لیے حساس ہے، گاڑیوں کو ڈھانپے ہوئے خلیجوں میں لوڈ اور اتارا جاتا ہے تاکہ مواد کی حفاظت کی جا سکے۔
IV. SPECIFIC REQUIREMENTS FOR THE PRODUCTS		
12. Physical and Chemical Contamination Risk		
Appropriate facilities and procedures shall be in place to control the risk of physical or chemical contamination of products.		
12.1	Appropriate storage facilities are provided for the control and storage of chemicals.	کیمیکلز کو کنٹرول کرنے اور ذخیرہ کرنے کے لیے مناسب ذخیرہ کرنے کی سہولیات فراہم کی جاتی ہیں۔

12.2	Potential contamination risk from building and overhead structures is controlled through regular inspections and corrective action taken to minimise risk of product contamination.	عمارتوں اور اوور ہیڈ ڈھانچے سے ممکنہ آلودگی کے خطرے کو باقاعدگی سے معائنہ اور مصنوع کی آلودگی کے خطرے کو کم کرنے کے لیے کی جانے والی اصلاحی کارروائی کے ذریعے کنٹرول کیا جاتا ہے۔
12.3	All glass and brittle material in raw material handling, preparation, processing, packing and storage areas is checked for damage at an appropriate frequency determined by risk analysis.	خام مال کی ہینڈلنگ، تیاری، پروسیسنگ، پیکنگ اور سٹوریج کے علاقوں میں تمام شیشے اور ٹوٹنے والے مواد کو خطرے کے تجزیہ کے ذریعہ مقرر کردہ مناسب فریکوئنسی پر نقصان کے لئے چیک کیا جاتا ہے۔
12.4	Packaging materials (cans, bottles, plugs) are approved for food contact.	پیکیجنگ مواد (ڈبے، بوتلیں، پلگ) کھانے کے رابطے کے لیے منظور شدہ ہو۔
12.5	Incompatible materials are stored in an appropriate manner to prevent contamination.	غیر مطابقت پذیر مواد کو آلودگی سے بچنے کے لیے مناسب طریقے سے ذخیرہ کیا جاتا ہے۔
13. Product Control and Analysis		
The Company shall undertake or subcontract product inspection and analyses which are critical to confirm product safety, legality and quality, using appropriate procedures, facilities and standards. The Company shall ensure that product is not released unless release procedures have been followed		
13.1	**Monitoring** of all incoming materials for compliance is specified and based on risk assessment. Inspection method, frequency of inspection and procedures are specified and documented. Suppliers of incoming materials, as appropriate, provide evidence of guarantees, certifications/declarations of analysis or certificates of conformity.	تعمیل کے لیے آنے والے تمام مواد کی **نگرانی** مخصوص اور خطرے کی تشخیص پر مبنی ہو ۔ معائنہ کا طریقہ، معائنہ کی فریکوئنسی اور طریقہ کار بیان اور دستاویزی ہیں۔ آنے والے مواد کے سپلائرز، جیسا کہ مناسب ہو، ضمانتوں، سرٹیفیکیشنز/تجزیہ کے اعلانات یا موافقت کے سرٹیفکیٹ فراہم کرتے ہیں۔

13.2	Where the Company undertakes **analysis** which are critical to product safety or legality, the laboratory, or subcontractors has attained recognised laboratory accreditation or operates in accordance with the requirements and principles of ISO 17025.	جہاں کمپنی ایسا **تجزیہ** کرتی ہے جو مصنوعات کی حفاظت یا قانونی حیثیت کے لیے اہم ہیں، لیبارٹری، یا ذیلی ٹھیکیداروں نے تسلیم شدہ لیبارٹری کی منظوری حاصل کر لی ہے یا ISO 17025 کے تقاضوں اور اصولوں کے مطابق کام کرتی ہو۔
13.3	Personnel undertaking analyses are suitably qualified and/or trained, and are competent to carry out the analyses required.	عملے کے تجزیے مناسب طور پر اہل اور/یا تربیت یافتہ ہو، اور مطلوبہ تجزیوں کو انجام دینے کے اہل ہو۔
13.4	**Stock rotation**: Procedures shall be in place to ensure materials and products are used in the correct order within the allocated shelf life.	**اسٹاک کی گردش**: اس بات کو یقینی بنانے کے لیے کہ مواد اور مصنوعات کو مختص شیلف لائف کے اندر صحیح ترتیب میں استعمال کیا جائے، طریقہ کار موجود ہوگا۔
13.5	The Company ensures that the product is only **released** by authorised personnel.	کمپنی اس بات کو یقینی بناتی ہے کہ پروڈکٹ کو صرف مجاز اہلکاروں کے ذریعے **جاری** کیا جائے۔
14. Control of Non Conforming Products		
The Company shall ensure all out of specification product is clearly identified, labelled and quarantined.		
14.1	Clear procedures for the control of non-conforming material, including rejection, acceptance by concession, or regrading for an alternative use, are in place and understood by all authorised personnel.	غیر موافق مواد کے کنٹرول کے لیے واضح طریقہ کار، بشمول مسترد، رعایت کے ذریعے قبولیت، یا متبادل استعمال کے لیے ریگریڈنگ، اپنی جگہ پر ہو اور تمام مجاز اہلکار سمجھتے ہو ۔
14.2	Any product that has become contaminated has been effectively controlled. A relevant quarantine procedure is in place after any incident.	کوئی بھی پروڈکٹ جو آلودہ ہو گئی ہے اسے مؤثر طریقے سے کنٹرول کیا گیا ہو ۔ کسی بھی واقعے کے بعد قرنطینہ کا متعلقہ طریقہ کار موجود ہو ۔

14.3	Corrective actions are implemented to avoid recurrence of non-conformance and adequate documentation kept of the action taken.	اصلاحی کارروائیاں عمل میں لائی جاتی ہیں تاکہ عدم مطابقت کی تکرار سے بچا جا سکے اور کی گئی کارروائی کی مناسب دستاویزات رکھی جائیں۔
14.4	All non-conforming product is handled or disposed of according to the nature of the problem and/or the specific requirements of the customer.	تمام غیر موافق مصنوعات کو مسئلے کی نوعیت اور/یا گاہک کی مخصوص ضروریات کے مطابق ہینڈل یا نمٹا دیا جاتا ہے۔
15. Calibration and Control of Measuring and Monitoring Devices		
The Company shall identify measuring equipment used to monitor critical control points and product safety and legality. The identified measuring equipment shall be calibrated to a recognised national standard. Where a traceable calibration is not possible, the Company shall demonstrate the basis by which standardisation is carried out.		
15.1	The Company has adjusted or calibrated the prescribed measuring and monitoring devices (scales, termometers, etc.) to ensure accuracy within agreed parameters at a predetermined frequency or as necessary.	کمپنی نے طے شدہ پیمائش اور نگرانی کے آلات (پیمانہ، ٹرمومیٹر، وغیرہ) کو ایڈجسٹ یا کیلیبریٹ کیا ہے تاکہ پہلے سے طے شدہ فریکوئنسی پر یا ضرورت کے مطابق متفقہ پیرامیٹرز کے اندر درستگی کو یقینی بنایا جا سکے۔
15.2	Records of the results of calibration and verification are maintained.	انشانکن اور تصدیق کے نتائج کا ریکارڈ برقرار رکھا جاتا ہے۔
15.3	The prescribed measuring and monitoring devices have been identified and marked in accordance with calibration requirements.	تجویز کردہ پیمائش اور نگرانی کے آلات کو انشانکن کی ضروریات کے مطابق شناخت اور نشان زد کیا گیا ہے۔
15.4	Access for adjustment of the prescribed measuring and monitoring devices by employees is prevented.	ملازمین کے ذریعہ تجویز کردہ پیمائش اور نگرانی کے آلات کی ایڈجسٹمنٹ کے لئے رسائی کو روک دیا گیا ہے۔
15.5	The prescribed measuring and monitoring devices are protected from damage, deterioration or misuse.	تجویز کردہ پیمائش اور نگرانی کے آلات نقصان، بگاڑ یا غلط استعمال سے محفوظ ہیں۔

15.6	Procedures are in place to record action taken when prescribed measuring and monitoring devices are found not to be operating within specified limits.	جب تجویز کردہ پیمائش اور نگرانی کے آلات مخصوص حدود میں کام نہیں کرتے پائے جاتے ہیں تو کی جانے والی کارروائی کو ریکارڈ کرنے کے لیے طریقہ کار موجود ہے۔
V. SPECIFIC REQUIREMENTS FOR PERSONNEL		
16. Personnel: Training and Hygiene		
The Company's personal hygiene standards shall be documented and adopted by all personnel, including visitors to the factory. These standards shall be formulated with due regard to the risk of product contamination. Suitable Company-issued protective clothing shall be worn by food handlers, visitors, and contractors working in or entering food-handling areas.		
16.1	All personnel, including temporary personnel and contractors, are appropriately trained prior to commencing work and adequately supervised throughout the working period.	تمام عملے بشمول عارضی اہلکار اور ٹھیکیدار، کام شروع کرنے سے پہلے مناسب طریقے سے تربیت یافتہ ہو اور کام کو پوری مدت میں مناسب نگرانی کے ساتھ جاتی کرے۔
16.2	The Company has documented training procedures and full training records.	کمپنی کے ساتھ تربیتی طریقہ کار اور مکمل تربیتی ریکارڈ کی دستاویز ہے۔
16.3	Where personnel are engaged in activities relating to critical control points, relevant training and documented supervision monitoring procedures are in place.	جہاں اہلکار اہم کنٹرول پوائنٹس سے متعلق سرگرمیوں میں مصروف ہیں، متعلقہ تربیت اور دستاویزی نگرانی کے طریقہ کار موجود ہیں۔
16.4	The Company routinely reviews the effectiveness of the training procedures and modifies the content, methods, and trainer's techniques as appropriate.	کمپنی معمول کے مطابق تربیت کے طریقہ کار کی تاثیر کا جائزہ لیتی ہے اور مواد، طریقوں، اور ٹرینر کی تکنیکوں میں مناسب طور پر ترمیم کرتی ہے۔
16.5	A programme of the refresher training is in place.	ریفریشر ٹریننگ کا پروگرام جاری ہو۔
16.6	Where appropriate, the effectiveness of hygiene procedures with regard to hands is checked periodically.	جہاں مناسب ہو، ہاتھوں کے حوالے سے حفظان صحت کے طریقہ کار کی تاثیر کو وقتاً فوقتاً جانچا جاتا ہے۔

16.7	Smoking, eating and drinking only permitted in designated areas segregated from food-handling and storage areas.	تمباکو نوشی، کھانے اور پینے کی اجازت صرف ان مخصوص علاقوں میں ہے جو فوڈ ہینڈلنگ اور ذخیرہ کرنے والے علاقوں سے الگ ہیں۔
16.8	Procedures are in place to control the use of personal medicines to minimise the risk of contamination.	آلودگی کے خطرے کو کم کرنے کے لیے ذاتی ادویات کے استعمال کو کنٹرول کرنے کے لیے طریقہ کار موجود ہیں۔
16.9	All cuts and grazes on exposed skin are covered by a detectable blue metal strip plaster that is company issued and monitored. Where appropriate, in addition to the detectable blue metal strip plaster, a finger stall is worn.	بے نقاب جلد پر تمام کٹ اور گریز ایک قابل شناخت نیلے دھات کی پٹی کے پلاسٹر سے ڈھکے ہوئے ہیں جو کمپنی جاری اور نگرانی کرتی ہے۔ جہاں مناسب ہو، قابل شناخت نیلے دھات کی پٹی کے پلاسٹر کے علاوہ، انگلی کا اسٹال پہنا جاتا ہے۔
16.10	Where it has been deemed necessary to have metal detection carried out on the finished product, the plasters used for cuts and grazes are regularly tested through a metal detector.	جہاں تیار شدہ پروڈکٹ پر دھات کی کھوج لگانا ضروری سمجھا جاتا ہے، وہاں کٹوتی اور چرانے کے لیے استعمال ہونے والے پلاسٹر کو میٹل ڈیٹیکٹر کے ذریعے باقاعدگی سے جانچا جاتا ہے۔
16.11	Fingernails are kept short, clean and unvarnished. False fingernails not permitted.	انگلیوں کے ناخن چھوٹے، صاف اور بغیر رنگ کے رکھے جاتے ہیں۔ جعلی ناخنوں کی اجازت نہیں ہے۔
16.12	The Company has a policy which clearly specifies the type of jewellery allowed to be worn for ethnic, medical or religious reasons and there are controls in place to minimise the risk of contamination.	کمپنی کے پاس ایک پالیسی ہے جو واضح طور پر بتاتی ہے کہ کس قسم کے زیورات کو نسلی، طبی یا مذہبی وجوہات کی بنا پر پہننے کی اجازت ہے اور آلودگی کے خطرے کو کم کرنے کے لیے کنٹرولز موجود ہیں۔

16.13	Jewellery, with the exception of a plain wedding ring, a wedding wristband and sleeper earrings are not worn.	زیورات، ایک سادہ شادی کی انگوٹھی کے علاوہ، شادی کی کلائی اور سونے کی بالیاں نہیں پہنی جاتی ہیں۔
16.14	Other jewellery worn for ethnic, medical or religious reasons and is in one piece and appropriately controlled to minimise the risk of contamination.	دیگر زیورات جو نسلی، طبی یا مذہبی وجوہات کی بنا پر پہنے جاتے ہیں اور ایک ہی ٹکڑے میں ہوتے ہیں اور آلودگی کے خطرے کو کم کرنے کے لیے مناسب طریقے سے کنٹرول کیے جاتے ہیں۔
16.15	Rings and studs in exposed parts of the body, are not worn.	جسم کے بے نقاب حصوں میں انگوٹھیاں اور جڑیں نہیں پہنی جاتی ہیں۔
16.16	Excessive perfume or aftershave is not worn.	ضرورت سے زیادہ پرفیوم یا آفٹر شیو استعمال نہ کرنا چاہیے۔
16.17	**Protective clothing**, where appropriate, covers personal clothing above the knee and is designed to ensure product safety is not compromised.	**حفاظتی لباس**، جہاں مناسب ہو، ذاتی لباس کو گھٹنے کے اوپر ڈھانپتا ہے اور اس بات کو یقینی بنانے کے لیے ڈیزائن کیا گیا ہے کہ مصنوعات کی حفاظت سے سمجھوتہ نہ کیا جائے۔
16.18	For highrisk/highcare operations all protective clothing is removed before visiting the toilet and controls are in place to ensure product safety is not compromised before returning to food handling areas. Protective clothing is removed in a designated changing area. Laundering of protective clothing takes place in house or by an approved contracted and audited laundry and is monitored.	ہائی رسک/ہائی کیئر آپریشنز کے لیے تمام حفاظتی لباس ٹوائلٹ جانے سے پہلے ہٹا دیے جاتے ہیں اور اس بات کو یقینی بنانے کے لیے کنٹرولز موجود ہیں کہ فوڈ ہینڈلنگ والے علاقوں میں واپس آنے سے پہلے مصنوعات کی حفاظت سے سمجھوتہ نہ کیا جائے۔ حفاظتی لباس کو تبدیل کرنے والے نامزد علاقے میں ہٹا دیا جاتا ہے۔ حفاظتی لباس کی

		لانڈرنگ گھر میں یا منظور شدہ معاہدہ شدہ اور آڈٹ شدہ لانڈری کے ذریعے ہوتی ہے اور اس کی نگرانی کی جاتی ہے۔
16.19	Where there is the risk of contamination, smoking and eating whilst wearing protective clothing, is not permitted.	جہاں آلودگی کا خطرہ ہو، تمباکو نوشی اور حفاظتی لباس پہن کر کھانے کی اجازت نہیں ہے۔
16.20	All hair, where appropriate, is fully contained to prevent product contamination and hairnets or mobhats are single use.	تمام بال، جہاں مناسب ہوں، پروڈکٹ کی آلودگی کو روکنے کے لیے مکمل طور پر موجود ہیں اور ہیئر نیٹ یا موباٹس ایک ہی استعمال ہو۔
16.21	Beards are, where appropriate, contained in a snood.	داڑھیاں، جہاں مناسب ہو، ایک سنوڈ میں شامل ہو۔
16.22	Suitable footwear is worn within the factory environment.	مناسب جوتے فیکٹری کے ماحول میں پہنا جاتا ہے۔
16.23	For low-risk operations, controlled laundering of all protective clothing is carried out and a system is in place to ensure the effectiveness of the laundering process.	کم خطرے والے آپریشنز کے لیے، تمام حفاظتی لباس کی کنٹرولڈ لانڈرنگ کی جاتی ہے اور لانڈرنگ کے عمل کی تاثیر کو یقینی بنانے کے لیے ایک نظام موجود ہو۔
16.24	Gloves and other protective clothing, if worn, are subject to adequate control to avoid product contamination.	دستانے اور دیگر حفاظتی لباس، اگر پہنے جائیں تو مصنوعات کی آلودگی سے بچنے کے لیے مناسب کنٹرول کے تابع ہوتے ہیں۔

End of document

ANNEX D - Basic hygiene rules and safe conditions for olives mill management

Food contamination and pollution can appear in all the steps of the olives handling chain. This can cause serious prejudice for the final consumer health, in a short or long period.

The safety of your production depends on hygiene in all the steps of production management, from the field to the final product. Everyone, in the food chain, has the responsibility to control and guarantee safety for all the produce sold on the market.

Some simple but very important suggestions must be taken into serious consideration to elevate the safety standard of your produce.
Please, follow this simple scheme: **Who** has to do **what**, **how,** and **why?** It will be easy!

WHO	WHAT	HOW	WHY	RIGHT	WRONG
FARMERS	Correct storage of harvested olives.	Store and collect the harvested olives, for a very short time, in plastic* ventilated boxes, in a closed, clean, and controlled place. **(food grade crates)*	To prevent raw material contamination and quality decay.		

WHO	WHAT	HOW	WHY	RIGHT	WRONG
FARMERS	Correct olives transport	Clean your track, van or vehicle before charging and dispatching your olives. Don't bring others materials (no pesticides, fertilizers, chemicals, others) at once!	To prevent raw material cross contamination during transportation.		
MANUFACTURER	Correct storage of raw material	Maintain a good order the external areas. The raw material store areas must be covered, kept clean and controlled. Don't put boxes/crates or net bags directly on the soil (wood pallets could be suitable). Store the olives for the shortest time!	To prevent raw material contamination before processing.		

WHO	WHAT	HOW	WHY	RIGHT	WRONG
MANUFACTURER & FARMERS	Boxes and bags cleaning	Clean and disinfect (at least once per year) boxes and bags before use. Don't use it for other uses. Only food grade cleaning agents are allowed.	To prevent raw material contamination and cross contamination before processing.		
MANUFACTURER	Producing areas access Regulation	Give access to the production and store areas only to the authorized personnel. Physical barriers must be provided to separate the working areas. Restriction to the visitors must be displayed.	To prevent food contamination during processing and storing. For workers and visitor's safety.		

WHO	WHAT	HOW	WHY	RIGHT	WRONG
PERSONNEL & VISITORS	Personal Behavior	Don't smoke, eat and drink in the working and storage areas. Specific confined areas should be identified, for working break time.	To avoid/prevent cross contamination and pollution.		
MANUFACTURERS & PERSONNEL	Protective clothing wearing	Suitable protective clothing (caps, gloves, coverall, boots, etc.) must be provided for all the workers involved in produce handling and packaging.	To prevent produce contamination during process and storage, ensuring workers safety.		

WHO	WHAT	HOW	WHY	RIGHT	WRONG
MANUFACTURER	Personal hygiene	Washing hands facilities must be available in all the critical areas (running water, liquid soap and tissue). Cleaned and suitable toilettes must be available, according to the number of workers.	To prevent cross contamination and pollution	 Toilets shall have antibacterial soap, non-handed operated washbasing, air blower or paper tissue to dry hands and the sign "WASH YOUR HANDS".	

MANUFACTURER	Glass and hard plastic	All bulbs and strip lights, where they constitute a risk for the product (in production, in storage areas, or in bottling and packaging areas….) must be protected with a shatterproof protective coating. Glass and hard plastic should be monitored and protected.	To prevent/avoid foreign bodies contamination.		
MANUFACTURER	Windows and doors	Screen the windows and maintain closed the access doors. In the production areas fly catcher lamp must be provided.	To prevent/avoid Insects entrance.		

WHO	WHAT	HOW	WHY	RIGHT	WRONG
MANUFACTURER & FARMERS	Pest monitoring	Pest monitoring must be provided in all the storage and producing areas, on the farm, and on the premises. Mouse traps (protected bites) must be suitable and available and monitoring activities on place. Treatments to deter and eradicate rat infestation must be in place, if and when really necessary**.**	To prevent pest (mice, rats, beetles) entrance.		

MANUFACTURER	Cleaning	Regularly clean and disinfect working areas, floors, and services. Tools and equipment should be cleaned, at least once per year, with suitable and food- grade chemicals: specific degreasing products based on alkali salts, non-ionic surfactants, sodium hydroxide, glycol ethers, and dispersants could be used with hot water.	To prevent/avoid contamination and pollution during product handling and storing.		

WHO	WHAT	HOW	WHY	RIGHT	WRONG
MANUFACTURER	Water process control	Control the source of the water used for the process and monitor, at least once per year, the quality of the water in particular for microbial contaminants. A chemical contents test is highly recommended.	To prevent microbiological and chemical contamination		
PACKERS	Bottling process control	Choose only food-grade packaging (glass bottles, caps, and other). Continuous monitoring of the integrity of the bottles.	To avoid foreign body contamination (glass).		

OLIVE OIL STORAGE	Storage control	Store your oil in stainless steel tanks. Identify the tank to identify the origin of the product	To avoid contamination and quality decay. Identification of the origin of the product.		

"QUALITY OF FOOD IS QUALITY OF LIFE"

SAFETY IS ONE OF THE MAIN ASPECTS OF FOOD QUALITY: IMPROVE THE QUALITY STANDARD OF YOUR PRODUCE THROUGH OUT HYGIENE AND SAFETY RULES RESPECT.