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HACCP GUIDANCE FOR THOSE PRODUCING WILD GAME MEAT FOR HUMAN CONSUMPTION EITHER
AT AN APPROVED GAME HANDLING ESTABLISHMENT OR UNDER EXEMPTION ALLOWED BY THE
FOOD HYGIENE REGULATIONS

HACCP guidance for those producing wild game meat for human consumption either at an approved game handling establishment or under an exemption allowed by the Food Hygiene Regulations

Introduction:

Where food is prepared, manufactured or processed, operators can develop their own food safety management procedures by following the traditional HACCP process, or by following Guides to Good Practice, including generic HACCP guides.

Documentation is an important part of the HACCP process, providing evidence of the operator's thinking and decisions that can be audited. Hygiene procedures, checks and actions need to be documented. But this does not mean recording everything; a flexible approach may be taken allowing the possibility of making a record only when there is a problem or if something unusual happens and recording the corrective action as a result. All records should identify the persons who complete them. Records must be kept for a sufficient time to allow the operator to verify the HACCP based system, and the competent authority to audit it.

Smaller businesses (such as shoots preparing oven ready birds) should use the 'Food Safety Management Diary for Wild Game Meat Producers' if they do not have alternative arrangements in place. Large and/or complicated businesses (such as those preparing oven ready birds and cooked ready meals) need more sophisticated systems. The food risk associated with a business is dependant on the type of products handled and produced and not necessarily dependant on the size of the business in question.

Generic HACCP Guides:

The meat production process is similar enough across the industry to justify a 'generic' approach for implementing HACCP principles. This approach helps to provide uniformity in training, implementation, and enforcement but cannot reflect the individual features of each plant and how it operates. So, if they want to follow generic guidance, operators need to adapt it to reflect their own circumstances.

- Model HACCP template documents are at pages 2-3
- A partial generic HACCP plan for wild game is at pages 4-10

SCOPE

HACCP Plan Template

HACCP PLAN FOR:

Hazards:

- **Biological Safety**: to prevent, eliminate or reduce the microbiological contamination of meat and to reduce the potential for growth.
- Physical and Chemical Safety: to avoid the physical and chemical contamination of meat.

Product: Wild deer carcases and in feather wild game birds

Intended use: Primal cuts (haunches etc) and oven ready birds

Process:

- Check condition of all carcases at delivery including declarations and temperature
- Skin and pluck carcases avoiding physical/chemical contamination of carcases
- Eviscerate birds avoid contamination from pathogenic bacteria, dirt or faecal material
- Deer carcases should already be eviscerated (at the shoot by the hunter/trained person)
 if not and suspected abnormality is reported on the trained person declaration notify the
 competent authority
- Place carcases in chiller, (temperature deer no more than 7°C, birds no more than 4°C) avoiding contamination particularly cross contamination between skinned/plucked game and in skin/feather carcases
- Trim if necessary and present for official post mortem inspection
- Cut primals and package (check packaging equipment)
- Place in chiller until dispatch

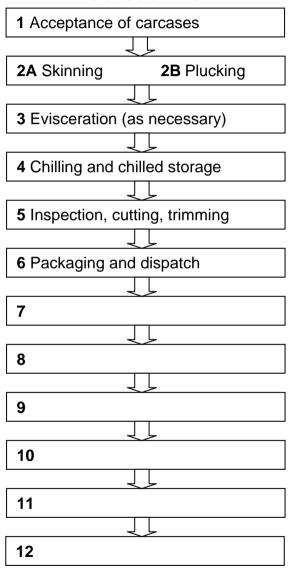
Packaging, Storage, Distribution:

- Package primal cuts and oven ready birds in temperature controlled environment
- Keep products chilled until dispatch in refrigerated transport vehicles
- Follow cleaning/disinfection schedule for vehicles and check vehicle refrigeration before dispatch

Customers: Local butchers, hotels and restaurants. London wholesale market and retailers in France and Belguim

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PROCESS STEPS



BELOW IS A HACCP TEMPLATE - COMPLETE ONE PAGE FOR EACH PROCESS STEP

SUBSEQUENTPAGES SHOW EXAMPLE ENTRIES FOR THE HIGHLIGHTED COLUMNS ON THE HACCP PLAN TEMPLATE, EXCLUDING DETAILS OF WHO IS RESPONSIBLE FOR ACTIONS OR WHAT RECORDS ARE KEPT

IMPORTANT: COMPLETE A COPY OF THIS PAGE FOR EACH PROCESS STEP - AMEND LOWER COLUMN HEADINGS # AS APPROPRIATE

PROCESS STEP: 1		NOTES
FOOD SAFETY HAZARDS AND CAUSES	CONTROL MEASURES	A Critical Control Point (CCP) is a process step at which control is essential to prevent, eliminate or reduce a hazard to an acceptable level. The decision tree annexed to PART THREE Chapter 1 of the Meat Industry Guide may be used to help determine CCPs. If this process step is a CCP establish at least one critical limit, monitoring procedures and corrective actions for this step. If this process step is one of these: Acceptance of carcases (visual contamination / temperature) Acceptance of raw meat (visual contamination / temperature) Dressing Procedures (visual contamination) Chilling/storage/dispatch (temperature) it is a control point required by the regulations. If not identified as a CCP, establish a 'legal' limit, monitoring procedures and corrective actions for this step.

# CP / CCP No # CRITICAL / LEGAL		MONITORING PLAN				CORRECTIVE ACTION PLAN		
	LIMIT(S)	Procedure	Procedure Frequency Responsibility Records		Procedures	Responsibility	Records	
				Named person or job description	Complete as appropriate		Named person or job description	Complete as appropriate

Process Step 1 - Acceptance of carcases

HAZARDS & CAUSES	CONTROL MEASURES	CRITICAL LEGAL	MONITORIN	IG PLAN	CORRECTIVE ACTION
		LIMITS	Procedure	Frequency	PLAN
Carcases derived from unhealthy animals and birds	 Large wild game carcases rejected if not accompanied by trained person's declaration and/or frozen Batches of small wild game carcases rejected if not accompanied by trained person's declaration 	Presence of trained person's declaration Traceability requirement	Check each large wild game carcase has declaration.	Each batch/large wild game carcase	 If pluck has been sent with carcase or suspected abnormality reported on declaration inform MHS Official Retrain / inform staff if procedure not followed. Report to/change supplier if no declaration is provided.
Contamination of carcases from excessive dirt on hides or feathers	 Game that cannot be skinned / plucked hygienically due to contamination on hides/feathers not accepted 		Pre-dressing check that standards are being met	Each delivery	 Inform OV Retrain / inform staff Report to / change supplier Reject delivery
Contamination of carcases from faecal material in abdominal or thoracic cavities due to "belly" shots or unhygienic gralloching	Game with contaminated abdominal or thoracic cavities not accepted		Pre-dressing check that standards are being met	Each delivery	 Inform OV Retrain / inform staff Report to / change supplier [Reject delivery]
Growth of pathogenic bacteria on carcases due to too high temperature during transport or improper storage by supplier	 Only accept chilled carcases or carcases shot the same day Only "un-heaped" game accepted 	Temperature through out the meat no more than: 7° C for large wild game 4° C for small wild game	Check carcase temperature using calibrated disinfected temperature probe		 Report to / change supplier / haulier Check refrigeration equipment is working and carry out maintenance Retrain instruct staff [Reject delivery]

Process Step 2A - Skinning

HAZARDS & CAUSES	CONTROL MEASURES	CRITICAL LEGAL	MONITORIN	NG PLAN	CORRECTIVE ACTION
		LIMITS	Procedure	Frequency	PLAN
Contamination of carcases by faecal material / pathogenic bacteria on the hide	 Trained staff instructed in correct skinning technique with prevention of in rolling by using clips Two knife system used Knife rinsed and disinfected between each carcase following cleaning / disinfection procedures Sanitiser water temperature [at least 82°C] Any visible contamination removed 	No visible faecal contamination of the carcase Water temperature 82°C	Visual check that standard is being met Check on water temperature with probe thermometer	Each carcase At start up and []	 Trim affected carcases Investigate the cause, amend procedures as necessary Adjust / repair water heater Retrain / instruct staff if procedures not followed Re-assess adequacy of operating instructions
Contamination of carcases by physical contaminants (e.g. hair) from equipment	 Plant and equipment cleaning and maintenance schedule followed 		Refer to opera instructions ind cleaning proce usual supervis activities/recor	cluding dures [*] and ory	 Re-assess adequacy of operating instructions Retrain / instruct staff if procedures not followed
Contamination of carcases by bacteria on hands, arms, aprons of dressing staff	 Trained staff instructed to wash/rinse hands, arms and aprons to be washed and rinsed between handling each carcase 		Refer to opera instructions ind personal hygie [*] and usual activities/recor	cluding ene procedures supervisory	 Re-assess adequacy of operating instructions Retrain / instruct staff if procedures not followed

^{*} Cross reference to instructions/procedures kept elsewhere

Process Step 2B - Plucking

HAZARDS & CAUSES	CONTROL MEASURES	CRITICAL LEGAL	MONITORING PLAN	CORRECTIVE ACTION
		LIMITS	Procedure Frequency	PLAN
Contamination of carcases by pathogenic bacteria from plucking machine / surfaces	Company cleaning schedule followedVisual inspection before start up		Refer to operating instructions including cleaning procedures [*] and usual supervisory activities / records	 Re-assess adequacy of operating instructions Retrain / instruct staff if procedures not followed

Process Step 3 – Evisceration

HAZARDS & CAUSES	CONTROL	NTROL CRITICAL LEGAL MONITORING		NG PLAN	CORRECTIVE
	MEASURES	LIMITS	Procedure	Frequency	ACTION PLAN
Contamination of carcases by pathogenic bacteria / faecal material from ruptured stomach / gut / crop	Trained staff instructed in evisceration techniques / procedures	No visual contamination	Visual check of carcases	Each game carcase	 Carcases correctly trimmed Check and if necessary, trim carcases produced since last monitoring Investigate the cause of the failures, amend procedures as necessary Retrain / instruct staff if procedures not followed
Contamination of carcases by pathogenic bacteria / faecal material from dirty knives / evisceration equipment	 Knives / evisceration spoons rinsed and disinfected [between each large game carcase] Sanitiser water temperature [at least 82°C] 	Water temperature 82°C	Check on water temperature with probe thermometer	At start up and	 Remove knives to correctly operating sanitiser Adjust / repair water heater Retrain / instruct staff if procedures not followed
Contamination of carcases by pathogenic bacteria on hands, arms, aprons of dressing staff	 Trained staff instructed to wash and rinse hands, arms and aprons regularly 		including person procedures [*		 Re-assess adequacy / frequency of washing / rinsing Retrain / instruct staff if procedures not followed

* Cross reference to instructions/procedures kept elsewhere Process Step 4 – Chilling and chilled storage

HAZARDS & CAUSES	ZARDS & CAUSES CONTROL		MONITORING PLAN		CORRECTIVE
	MEASURES	LIMITS	Procedure	Frequency	ACTION PLAN
Growth of pathogenic bacteria on carcases / product due to too high chilling and storage temperature	 Air temperature of chill store maintained at [x]°C Internal muscle temperature of chilled stored carcases kept below 7°C for large and 4°C for small game Chiller alarm set at []°C Carcases do not touch during cooling 	 Carcase temperature reduced and maintained through out the meat at 7°C for large game and 4°C for small game within [x] hours 	Check automatic log of air temperature	[] times a day Test alarm [once a week]	 If needed, move carcases to a correctly functioning chill store Check / correct carcases produced since the last monitoring showed this process was under control Retrain / instruct staff if procedures not followed
Growth of pathogenic bacteria on carcases / product due to too slow chilling process/too long in chilling hall / close spacing carcases during cooling / poor stock rotation in chill store	 Carcases stored in food grade polypropylene crates (birds) Trained staff instructed in chill and storage procedures, including correct carcase spacing 	Stock dispatched within [] days of kill date	Check on carcase temperature before loading using calibrated disinfected temperature probe Visual check of carcase	[] times a day [Once a day]	 Reduce air temperature where carcases are held Move carcases to a correctly functioning room Check / correct carcases produced since the last time monitoring showed this process was under control Investigate the cause of
			spacing during cooling Check stock	[Once a day]	failures and amend procedures as necessary Move the carcases to
			rotation	[Critica a day]	get the desired spacing Retrain / instruct staff if procedures not followed Destroy old stock

Contamination of carcases / product by pathogenic bacteria, physical, chemical contaminants from dirty chill store/equipment	Plant and equipment cleaning and maintenance schedule followed	Refer to operating instructions including cleaning and maintenance procedures [*] and usual supervisory activities / records	 Re-assess adequacy of operating instructions Retrain / instruct staff Re-assess adequacy / frequency of cleaning and maintenance schedule
Contamination of carcases / product by pathogenic bacteria from store / handling staff	Trained staff instructed to follow personal hygiene procedures	Refer to operating instructions including personal hygiene procedures [*] and usual supervisory activities/records	 Retrain / instruct staff Re-assess adequacy of operating instructions

Process Step 5 – Inspection, cutting, trimming

HAZARDS & CAUSES	CONTROL MEASURES	CRITICAL LEGAL	MONITORING PLAN		CORRECTIVE
		LIMITS	Procedure	Frequency	ACTION PLAN
Contamination of meat by pathogenic bacteria from faecal material	Trained staff instructed to check product against agreed product specification before cutting	No visible contamination	Visual check	[Each carcase]	 Product removed from line Carcases trimmed / cleaned / reworked Product rejected / destroyed Check / correct carcases produced since the last time monitoring showed this process was under control Investigate the cause of failures, amend procedures as necessary Retrain / inform staff if procedures not followed

^{*} Cross reference to instructions/procedures kept elsewhere

Contamination of meat by pathogenic bacteria from other meat (especially of other species)	 Meat handled in separate batches Trained staff instructed to handle meat of different species separately and to follow company hygiene procedures 		Refer to operating instructions including cleaning procedures between batches [*] and usual supervisory activities / records	 Re-assess adequacy of operating instructions Retrain / instruct staff if procedures not followed
Contamination of meat by pathogenic bacteria / physical / chemical contaminants from knives / cutting tables / equipment during trimming	 Trained staff instructed to follows operating, cleaning and staff hygiene procedures Two knife system used Batch sterilisers used for knives / chain mail, temperature [at least 82°C], checked with probe thermometer twice a day 	Water temperature 82°C	Refer to operating instructions including cleaning and disinfection procedures [*] and usual supervisory activities / records Check water temperature At start up and []	 Re-assess adequacy of operating instructions Retrain / instruct staff if procedures nor followed Adjust/ repair water heater
Contamination of meat with metal fragments from broken knife blades / band saws and chain mail	 Knives / chain mail checked for damage before and during use Regular maintenance checks on cutting equipment Metal detection at step [] 		Refer to operating instructions including maintenance procedures [*] and usual supervisory activities / records	 Re-assess adequacy of operating instructions Retrain / instruct staff if procedures not followed
Contamination of meat by pathogenic bacteria / physical contaminants from cutting staff	 Trained staff instructed to follow personal hygiene rules 		Refer to operating instructions including personal hygiene procedures [*] and usual supervisory activities / records	 Re-assess adequacy of operating instructions Retrain / instruct staff if procedures not followed
Growth of pathogenic bacteria on meat due to poor temperature control from being too long in cutting room	 Cutting room maintained below []°C Trained staff instructed to ensure product spends less than [x] minutes in cutting room 	Cutting room temperature below [] °C Meat temperature below [] °C	Check air temperature [] times a day Check meat temperature [] times a day	 Move product to chiller Investigate the cause of high temperatures, amend procedures / repair temperature control equipment /monitoring equipment as necessary Retrain / instruct staff if procedures not followed

* Cross reference to instructions/procedures kept elsewhere **Process Step 6 – Package and dispatch**

HAZARDS & CAUSES	CONTROL MEASURES	CRITICAL LEGAL	MONITORIN	G PLAN	CORRECTIVE ACTION	
		LIMITS	Procedure	Frequency	PLAN	
Growth of pathogenic bacteria due to inadequate temperature control at dispatch	 Carcases / product chilled before dispatch below [x]	Product temperature below: 7° C for large wild game 4° C for small wild game Vehicle air temperature below [y] °C before loading	carcase / product temperature before loading using	[Sample from each load] [Each vehicle]	 Stop despatch until meat reaches required temperature Investigate the cause, amend procedures as necessary Stop loading until vehicle reaches required temperature Retrain/instruct staff if procedures not followed 	
Contamination of carcases / product by pathogenic bacteria from outer packaging during packing/loading process	 Trained staff instructed in packing/loading procedures, including transport of game birds / product in food grade polypropylene crates palleted and over-wrapped 		Refer to operating instructions including packing and loading procedures [*] and usual supervisory activities / records		 Re-assess adequacy of operating instructions Retrain / instruct staff if procedures not followed 	
Contamination of carcases / product by pathogenic bacteria, physical, chemical contaminants from dirty vehicles	Cleaning and maintenance schedule for vehicles followed		Refer to operating including cleaning maintenance pro and usual superviewords	g and cedures [*]	 Re-assess adequacy of operating instructions Retrain / instruct staff if procedures not followed 	
Contamination of carcases by pathogenic bacteria from loading staff	Trained staff instructed to follow personal hygiene procedures		Refer to operating including personal procedures [*] a supervisory activity	al hygiene and usual	 Re-assess adequacy of operating instructions Retrain / instruct staff if procedures not followed 	

^{*} Cross reference to instructions/procedures kept elsewhere