

ANNEX 1

To Final Report about the

Evaluation of Food Safety and related Aspects at ZAMBEEF Products PLC.

December 18, 2009

BEEF OPERATIONS ACTION PLAN					
LOCATION	ISSUE	POTENTIAL RISK	RECOMMENDED ACTION	PRIORITY	MONITORING INDICATORS
Huntley	Slippery floors	Occupational Health risks	Rehabilitate floors to non slippery/provide workers with safety shoes	B/A	Number of worker accidents from slippery floors
	Prolonged time between stunning and bleeding	Animals stressed and this affects meat quality/ subconscious bleeding	Training of staff on slaughter procedures/enforcement of correct slaughter procedures	A	Number of trained personnel/Number of animals on the floor after stunning
	Carcass washing with the same brush	Cross contamination	Training on meat safety and handling	B	Number of trained personnel
	Solid in effluent/open air burring of solid waste	Environmental pollution water/air	Separation of solids from effluent by using screens to sieve off solids/ construction of an incinerator	A	Effluent water quality/air quality
	Condemn room in poor state	Recontamination of meat products environmental pollution disease outbreaks	Rehabilitate condemn room and proper positioning	A	Air quality/ disease out breaks
	Unlined effluent treatment ponds	Environmental pollution water/air and soil	Lining of effluent treatment ponds/ establish an efficient system for effluent treatment	A	State of treatment ponds, water quality/soil quality and air
	No foreign material control	Meat contamination	Use of metal detectors	B	Presence of foreign material in meat
	Weak traceability	Difficult to have a product recall system	Proper labeling for traceability	B	Product recall system
	Use of the same knife for bleeding	Cross contamination between carcasses	Training of staff on slaughter procedure and food safety/ two knives system	A	Number of trained personnel/ system of sterilizing bleeding tools

Namwala	Weak traceability	Difficult to have a product recall system	Proper labeling for traceability		Product recall system
	Use of the same knife for slaughter	Cross contamination	Training of staff on slaughter procedure and food safety/ two knives system	A	Number of trained personnel/ system of sterilizing bleeding tools
	Unlined effluent treatment ponds	Environmental pollution water/air	Lining of effluent treatment ponds	B	State of effluent ponds water quality/soil quality and air
	Non tight door at dispatch point leads to pests entering	Meat contamination	Construct tight fitting doors	B	Condition of fitting doors in the dispatch room
Mazabuka	Unlined effluent treatment ponds from skin storage container	Air, water and soil pollution	Redirect effluent to lined ponds	A	State of treatment ponds from skin storage
Sinazongwe	Carcass washing in chiller room	Cross contamination	No washing of carcass in chiller room	A	No washing done in chiller room
	Unlined effluent treatment ponds	Environmental pollution of water, air, soil	Lining of effluent treatment ponds	A	State of treatment ponds from water quality/soil quality and air
	Weak traceability	Difficult to have a product recall system	Proper labeling for traceability	A	Product recall system
	Use of the same knife for slaughter	Cross contamination between carcass	Training of staff on slaughter procedure and food safety	A	Number of trained personnel/ system of sterilizing bleeding tools
	Open air burning of solid waste	Air pollution	Construct incinerator to burn waste	A	Incinerator constructed
	Sticking of sharpening rode in carcass	Meat contamination	Training of staff on slaughter procedure and food safety	A	Number of trained personnel

Mongu	Poor handling of animals at slaughter	Stress animal which affects the meat quality	Training of staff on slaughter procedures and food safety	A	Handling procedures for animals/number of trained personnel
	Weak traceability	Difficult to have a product recall system	Proper labeling and record keeping	B	Product recall system
	Stacking of sharpening rode in carcass	Meat contamination	Training of staff on slaughter procedure and food safety	A	Number of trained personnel
	Poor location of spare parts room and change room	Meat contamination	Relocate change room and spare parts room outside abattoir plant	B	Position of change room and spare parts room

A: Immediate action within 1 to 3 months

B: Midterm action within 6 months to 12 months

POULTRY OPERATIONS ACTION PLAN					
LOCATION	ISSUE	POTENTIAL RISK	RECOMMENDED ACTION	PRIORITY	MONITORING INDICATORS
Huntley	No hand washing in Processing Plant	Re-contamination of chicken at cutting and packaging	Install hand washing station and soap dispenser in plant	A	Frequency of hand washing by staff in plant
	Drainage holes on the floor in processing plant	Accidents: workers could fall in the drain	Put a wire mesh or seal the hole with concrete	A	Number of accidents related to drainage holes
	Condemned carcass on the floor	Contamination and poor hygiene	Place a container in the plant for condemned carcasses	A	Presence of condemned carcass on floor
	Insufficient separation of solids from waste water	High risk of environmental pollution due to effluent from plant	Effective separation of solids from wastewater in the plant.	A	Presence of solids in waste water Water quality Soil quality
	No dark periods in the raising of broilers	Stressed birds and poor animal welfare	Include dark periods in the raising of broilers	B	Stressed birds
	No Salmonella control program in production houses	Salmonella in chicken products in the outlets and ZamChick Inns	Start a salmonella control program	A	Disease out breaks related to salmonella

A: Immediate action within 1 to 3 months

B: Midterm action within 6 months to 12 months

PORK PRODUCTION ACTION PLAN					
LOCATION	ISSUE	POTENTIAL RISK	RECOMMENDED ACTION	PRIORITY	MONITORING INDICATORS
Master pork	Poor animal handling at unloading	Animals stressed; affects meat quality	Proper unloading of animals and increase holding times	A	PH of meat
	Wrong positioning of hand washing basins	Meat contamination	Reposition hand washing facilities/lab for micro-testing	B	Position washing facilities
	Poor house keeping in storage room	Worker safety	Proper storage	A	State of storage room
	Incomplete incinerator	Environmental pollution of air	Completed incinerator	B	Completed incinerator
	Unlined effluent settling ponds	Environmental pollution water and air	Lining of effluent settling ponds	A	Water, soil and air quality
	No foreign material control	Meat contamination	Metal and foreign material detectors to be put in place	A	Presence of foreign materials in meat
	Weak traceability	Difficult to have a recall system	Proper labeling/ local printing of packaging materials	B	Product recall system
Nkumba Farm	Unlined effluent treatment ponds	Environmental pollution of water, air and soil	Lining of effluent ponds	B	Water quality air and soil quality
	Feed not stored on pallets	Cross contamination of feed	Proper storage of feed on pallets/training of staff on storage	B	State of feed storage

A: Immediate action within 1 to 3 months

B: Midterm action within 6 months to 12 months

DAIRY OPERATIONS ACTION PLAN					
LOCATION	ISSUE	POTENTIAL RISK	RECOMMENDED ACTION	PRIORITY	MONITORING
Kalundu Dairy Farm	Sub-standard storage of feed	Pests and foreign material in feed	1. Improve house keeping 2. Put in concrete floor	A B	Condition of the storage room
Kalundu Dairy Farm	Cleaning chemicals next to the milk in the milk collection room	Contamination of milk particularly that which is collected and given to calves	Create separate storage space for cleaning chemicals	A	Quantity of contaminated milk
Huntley Milk Processing Plant	Unknown concentration of waste water after CIP	Possible contamination environment where the waste water is discharged (e.g. ground water)	Testing concentration of waste water after CIP and treatment before release	B	Concentration of waste water quality
Huntley Milk Processing Plant	No separate change rooms for male and female		Have two change rooms for male and female	A	Male and female change rooms

A: Immediate action within 1 to 3 months

B: Midterm action within 6 months to 12 months

FFED MAKING ACTION PLAN					
LOCATION	ISSUE	POTENTIAL RISK	RECOMMENDED ACTION	PRIORITY	MONITORING INDICATORS
Huntley-Feed	No mouth caps for staff	Occupational health risk: Dust inhalation and respiratory infections for staff	Provide mouth caps for staff and enforce wearing	A	Number of workers in protective gear
	High noise level	Unsafe working conditions- damage to ears	Measurement of noise levels and purchase of ear muffs	A	Number of workers in protective gear Noise level
	Uncontrolled spillage of materials	Foreign material risk and poor working conditions	Proper house keeping	B	Presence of foreign material in feed
	Weak traceability	No protection from consumer complaints	Put in place traceability procedures	B	Product recall system
	Soya Extruder in poorly maintained and cleaned	Regular Break downs of equipment	Regular maintenance and cleaning	A	Frequency of breakdowns

A: Immediate action within 1 to 3 months

B: Midterm action within 6 months to 12 months

FLOUR MILL AND BAKERY ACTION PLAN					
LOCATION	ISSUE	POTENTIAL RISK	RECOMMENDED ACTION	PRIORITY	MONITORING INDICATORS
Huntley-Flour mill	No head gear for staff	Flour contamination e.g. hair in flour bags,	Provide hair nets and caps for staff and enforce wearing	A	Number of workers in head gear
	High noise level	Occupational health risk e.g. damage to ears	Measurement of noise levels and provision of muffs	A	Noise level Number of workers in protective gear
	Packaging room of bread pre-mix room disorderly	Flour contamination from foreign material	Good house keeping	B	State of the bread pre-mix room
Huntley Bakery	No Hand washing	Contamination of bread at packaging	Install a hand washing station with a soap dispenser	A	Presence of hand washing facilities
	High foreign material risk	Foreign material in bread at point of sale	Sieving of flour at the intake (after opening flour bags)	A	Presence of foreign material

A: Immediate action within 1 to 3 months

B: Midterm action within 6 months to 12 months

ZAMANITA EDIBLE OIL PLANT ACTION PLAN					
LOCATION	ISSUE	POTENTIAL RISK	RECOMMENDED ACTION	PRIORITY	MONITORING INDICATORS
Zamanita	Accumulation of dust in the Crushing plant	Worker welfare in inhaling dust particles; infestation with rodents/pests	1. Install efficient dust abatement system 2. Regular cleaning	A	Quantities of dust in plant
	Poor handling of Hexane, some in open cut drums	Fire accidents	Enforce proper handling of hexane	A	Reduced Hexane in air State of storage facilities
	Poor maintenance of equipment in refinery and margarine processing plants	Contamination of cooking oil and margarine and	Regular maintenance of equipment	B	Leakages
	Insufficient ventilation in the Refinery	Occupational health risk	Regular maintenance to assure working fans when plan is in operation	B	Temperature in the plant Condition of equipment for ventilation
	Not all workers in protective wear	Accidents, damage to ear drums in areas with high noise levels	Enforcement of wearing of protective gear, measurement of noise in refinery and crushing plant and purchase of ear muffs if required	A	Workers all in protective wear

A: Immediate action within 1 to 3 months

B: Midterm action within 6 months to 12 months

BUTCHERY OUTLETS ACTION PLAN					
LOCATION	ISSUE	POTENTIAL RISK	RECOMMENDED ACTION	PRIORITY	MONITORING INDICATORS
Lusaka, Sinazongwe and Namwala	No or not enough hand washing facilities	Food contamination	Install appropriate hand washing facilities	A	Presence of hand washing facilities
	Workers not in uniforms	Food contamination	Provide uniforms for workers, enforcement	A	Number of workers in uniform
	Staff sometimes inadequately trained on food safety issues	Poor food handling leading to food contamination	Training of staff on food safety	B	Number of staff trained
	No traceability in place	Difficult to have product recall system	Proper labeling from source	B	Receiving control of deliveries Product recall system
	Poor storage of product on the floor	Food contamination	Storage of food on pallets or shelves	A	State of storage room/presence of shelves
	Mince meat delivered in sacs without inner lining or protection	Food contamination and foreign material risk	Proper packaging materials	A	State of packaging materials Presence of foreign material control
	No separation of meat products from dairy products	Cross contamination	Separation of dairy from meat products in displays	A	Presence of separator
	No procedure for handling expired products	Possibility of selling expired products and legal issues with consumers	Documented procedures for handling expired products	B	Number of outlets following documented procedures
	Poorly maintained buildings	Low attractiveness to customers	Regular maintenance	B	State of building
	No proper change rooms for workers	Occupational Health	Proper change rooms; consult green team for new outlets	B	Change rooms available; Green Team signs off plans for new/renewed outlets
	No proper control of temperatures in the cold rooms	Reduced shelf life of products	Regular maintenance of the fridges	A	Maintained freezers with temperature gauges

A: Immediate action within 1 to 3 months

B: Midterm action within 6 months to 12 months

ZAMCHICK INNS ACTION PLAN					
LOCATION	ISSUE	POTENTIAL RISK	RECOMMENDED ACTION	PRIORITY	MONITORING INDICATORS
Lusaka	Inadequate hand washing facilities	Food contamination	Improve hand washing facilities Ensure that all outlets have hand washing facilities	A	Hand washing basins in place
	Poor storage of products directly on the floor	Food contamination	Store all products on pallets or putting shelves in storage rooms	A	State of products storage/shelves in storage room
	Different/inappropriate procedures used in the thawing and frying of chickens	Poor quality of cooked products/cross bacterial contamination	Procedure for thawing and preparation standardized	A	Number of Inns using standard procedure Presence of documented procedure for chicken preparation.

A: Immediate action within 1 to 3 months

B: Midterm action within 6 months to 12 months