

APPENDICES

Appendix A

General description of slaughterhouse facilities, operation and processing

A) Administrative information of Slaughterhouse

Name of Slaughterhouse	
Owner of Slaughterhouse	
Approved work or operation	
Other process in plant	
Average No. of slaughter per day	
No. of slaughter per hour	
Number of Employee (Slaughter line)	
Working Days per week	
Operation time (slaughter)	
No. of shift per day	
Working hour per shift (slaughter)	
Others	

B) Facilities

	Available	Functioning	In use	Remark
Lairage area				
Stunner				
Shackle line and overhead conveyor				
Chiller				
Cutting area				
Freezer				
Cold storage				
Worker facility				
Water treatment				
Waste water treatment				
Knife sanitation facility				

C) Processing/Method

Live animal handling	
Stunning method	
Slaughtering method -	
Dead animal handling	
Bleeding method	
Scalding	
Dehairing/flame	
Belly opening	
Evisceration method	
Carcass splitting	
Cleaning/washing carcass	
Chilling process	
Cutting	
Packing	
Storage	

Appendix B

Checklist based on new Ministerial Notification B.E.2555 (2012)

Criteria		acceptable	unacceptable	remark
Criteria, Procedures and Conditions for Establishing the Slaughterhouse, Lairage				
Point 6	Suitable Location			
	- Not in the restriction area			
	- Far from medical care center, religious place community, government office or school at least 100 meters			
	- Not located in frequent flooding area			
	- Not in risk area which can contaminate from agricultural or industry chemical			
Point 7	Surrounding of the building			
	- Fence			
	- Good maintain			
	- Drainage			
	- Lairage area			
	- Separate live animal entrance and carcass exist			
	- Prevent pest system from outside the building			
	- Mange the waste and by-product			
Point 8	Construction of the building			
	- Floor			
	- Wall			
	- Door and door frame			
	- Ceiling			

Criteria		acceptable	unacceptable	remark
Point 9	Interior of Building			
	- Enough space for working and separate area			
	- Separate clean and unclean area			
	- Place for collecting waste			
	- Drainage system			
	- Ventilation			
	- Lighting			
	- Water and Ice			
	- Hand washing basin			
Point 10	Tool machine and equipment			
	- Equipment material			
	- Lubricant is food grade			
	- Contact surface should not have chemical contaminant			
	- Machine should have space from wall at least 30 cm.			
Point 11	Lairage area (not count for drinking for animal in chicken)			
	- Far from clean area			
	- Enough area			
	- Construction with roof			
	- Door, fence or partition made from durable material			
	- Floor should not be slippery or precipitous			
	- Prevent animal walk back			
	- Separate area for illness or suspected animal			

Criteria		acceptable	unacceptable	remark
	- Provide water and enough water pipe			
	- Enough water supply and proper pressure to clean			
	- Good drainage and well-plan flow			
	- Ventilation			
	- Lighting			
	- Place to collect manure			
Point 12	Waste water treatment		not checked	
Criteria, Procedures and Conditions for Animal Slaughter				
Point 13	Movement and transport animal to slaughterhouse follow the Epidemic Act and relevant law		not checked	
Point 14	Slaughter animal criteria			
	- Appropriate resting time			
	- Withdrawal of feed and water			
	- Stunning method except religion slaughter			
	- Record ante-mortem and post-mortem inspection			
	- Preventive measure for meat and carcass contamination			
Point 15	Disease Prevention procedure			
Point 16	Hygienic control			
	a. Personal hygiene			
	- Medical health check at least once a year			
	- Not ill or suspect ill person from transmission disease work			
	- Wear the proper cloth, clean and person hygiene practice			

Criteria		acceptable	unacceptable	remark
	- Person who is cut or injured shall have bandaged and water proof cover			
	- Washing hand before work, after handle with unclean material and after use toilet			
	- Not eat, spit, smoke, wear the jewelries			
	b. Process hygiene			
	- Cleaning program			
	- Cleaning and disinfection program for tool, machine, equipment, table, container and etc.			
	- Cleaning program for truck for transport carcass			
	- Pest control program inside and outside building			
	- Approved chemical for using in slaughterhouse			
	- Chemical storage room separate from meat storage, separate kind of chemical and labeled			
	- Manage the waste and garbage			
	- Enough changing room, shower room and toilet			
	- Appropriate manage the not fit for human consumption product.			
Point 17	Manual and work instruction			
Point 18	Recall and traceability and keep the record			
Point 19	Facilitate to officer for auditing			

Appendix C

A listing of study Slaughterhouses meeting building, process and inspection requirements in Livestock Region 1, Thailand

<u>General set-up at meat inspection point</u>	Slaughterhouses meeting criteria
working space satisfactory	
lighting sufficient	
appropriate working height	
<u>Facilities and equipment near the inspection point</u>	
Reserve knife or knife sterilizer available	
water tap/hose for washing hands available	
Condemnation container	
- Available	
- lockable	
Speed of slaughter allowing proper inspection	
Slaughter line not obstructed	
<u>Pig Inspection</u>	
- viscera and head displayed and carcass paired with viscera and head for inspection	
<u>Chicken inspection</u>	
- whole carcass inspection possible	

Appendix D

Poultry Post-mortem Inspection Report

Date.....Name of Slaughterhouse.....

No. of slaughtered animal			
Carcass			
- DOA			
- Incomplete bleeding			
- Overscalded			
- Contamination			
- Bruised/fractures			
- wing bruised/fracture			
- Emaciated/small			
- Abnormal colour/septicemia			
- Skin disease/lesion			
- Arthritis/Joint			
- Hock burn			
- Breast Blisters			
- Ascites			
- scratch			
Internal organ			
- Pericarditis			
- Perihepatitis			
- Air sacculitis/CRD			
- Juandice/liver abnormal			
- Gastitis/intestinal abnormal			
Others (please identify).....			
<u>Remarks</u>			

Pig Post-mortem Inspection Report

Date.....Name of Slaughterhouse.....

No. of slaughtered animal			
Weight average			
Carcass			
- Kidney lesion			
- Wounds and abscess			
- Trauma			
- Fractures			
- Abnormal smell or colour			
- Skin lesion			
- Lymph nodes			
- Joint			
- Scratch			
- Others			
Total (Heads)			
Head lesion (Please specify).....			
Offal			
- Liver lesion			
- Heart lesion			
- Stomach lesion			
- Spleen lesion			
- Lung lesion and pleuritis			
- Intestine lesion			
- Parasite			
- Others			
Remark:			

DECLARATION

I, the undersigned herewith, declare that this thesis is my original work and has not been presented for a degree in any university.

Signature:

Name: **Mrs. Suphanan Boonyakarn**

Date of submission: September , 2013

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
Copyright© by Chiang Mai University
All rights reserved

CURRICULUM VITAE

Name	Mrs. Suphanan Boonyakarn, DVM
Date of Birth	3 August 1972
Educational Background	
1879 – 1988	Certificate of Primary school and Secondary school Satriwisutthisuksa School
1988 - 1991	Certificate of Upper Secondary school, Nakhonsawan school
1992 - 1998	Doctor of Veterinary Medicine (D.V.M), Faculty of Veterinary Science, Chulalongkorn University
Scholarships	Veterinary Public Health Center for Asia Pacific (VPHCAP) Scholarship Award (2011-2013)
Working experience	
1998 - 1999	Veterinary Officer, Veterinary Public Health Division, DLD
1999 – 2006	Veterinary in charge at poultry slaughterhouse and meat processing plant for export
30 Mar - 27 Jun 2006	Temporary work at Office of Agricultural Affaires, Royal Thai Embassy in Brussels, Belgium
2006 - 2009	Checked and processed the company's application document for compliant of importing countries
19 Jun - 15 Sept 2009	Temporary work at Office of Agricultural Affaires, Royal Thai Embassy in Tokyo, Japan
2009 - present	Senior Veterinary officer, Zone supervisor - supervise veterinary meat inspectors at slaughterhouse and meat processing plants for export BLSC, DLD