

Agence canadienne d'inspection des aliments

# HIGH LINE SPEED INSPECTION SYSTEM (HLIS) BEEF AND SWINE

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# **DEFINITIONS**

# Assured Quality Level (AQL)

A percentage value assigned to the level of undetected defects that are present in a production lot based on a statistical method of analysis.

#### **Control Chart**

A statistical quality assurance tool for evaluating and controlling one or more process steps during the manufacturing procedure.

#### Corrective action

A course of action(s) which identifies and corrects non conformities at one or more locations in the slaughter process such that the product(s), process(es), procedure(s) or condition(s) are returned to minimum standards of compliance.

# Correlation testing

Simultaneous product performance testing conducted jointly but independently by CFIA and the plant operator to determine if results are being scored and recorded with similar interpretation. These may be randomly scheduled or non scheduled tests initiated by CFIA.

#### Final carcass approval area:

That area between the CFIA final carcass inspector and the main rail return switch where all carcasses receive final approval/rework and are released to the main line as approved carcasses.

# Finished Product Standards (FPS)

A defined set of food safety and other carcass defects including manufacturing and/or pathological defects that a carcass or its portions shall conform to in order to comply with the standard.

#### Defect/Attribute

A defined set of food safety and other carcass defects conditions which occur on the carcass or its portions as a result of manufacturing conditions or practices during the live handling, slaughtering, and/or dressing operations or occurs as a disease process in the live animal. Refer to HLIS form 002 and 003.

#### ISO

Refers to the International Organization for Standardization and its associated Quality Assurance rules, standards and sampling plans

#### Lot

A defined period of product manufacturing of 0.5 hrs. or 1.0 hrs.

# Other Carcass Defects (OCD's)

Those defects that may appear on a carcass that do not pose an immediate or direct food safety risk to the consumer but do fail to meet criteria for food wholesomeness or regulatory standards.

#### **Rework**

Reprocessing of an identified product lot/sample set to correct the condition(s) causing the nonconformance(s) such that all affected product conforms to prescribed minimum FPS criteria for the particular defect(s).

# Sample Set

A statistically determined number of units that are randomly selected from a defined population and used to represent the overall performance characteristics of that group.

# Sampling Plan (ISO 2859-1)

A standardized table prescribing specific sample sizes or sets that may be used to statistically evaluate product performance over a defined period of manufacturing activity.

#### **Shewhart Control Chart**

A control chart based on statistical principles of performance associated with a population of normally distributed attributes.

# Statistical Process Controls (SPC)

A statistical tool used to validate the performance of a particular process step.

# Trimmable pathological condition (TPC)

An unacceptable defect that may result from transportation, handling, dressing procedures or a disease process and does not necessarily affect the disposition of the entire carcass.

#### **Zero Tolerance Defect**

An unacceptable pathological or manufacturing defect for which there is no prescribed tolerance.

#### 1.0 INTRODUCTION

Technological advances in both building design and the equipment used in modern slaughter and processing facilities has provided new opportunities for establishment operators to function at much higher production volumes than those plants constructed even a decade ago. Beef, poultry and swine have all seen significant advances in the facility operator's ability to increase production volumes through the increased use of automation to perform many procedures that were formerly conducted through the use of traditional labour methods. Efficiency in plant monitoring methods have also changed dramatically through the application of science based quality assurance and food safety programs such as the Hazard Analysis Critical Control Point System (HACCP). These changes to plant operating methods also make it necessary to adjust and modernize the current method and approach to food inspection systems by CFIA in a modern slaughter facility in order that the Agency may continue to deliver reliable scientifically based methods of food safety inspection at these higher volumes.

The High Line Speed Inspection System (HLIS) is one such system that allows swine and beef slaughter facilities to operate at enhanced line speeds. This system can be implemented in federal establishments that slaughter market hogs as well as steers, heifers and mature cattle provided the facility operator agrees to certain facility and equipment modifications as well as specific process controls to ensure that the integrity of the product is maintained when it is produced under these high volume conditions. Before HLIS is adopted in any slaughter facility it is imperative that clear dialogue occurs between the CFIA and the facility operator regarding the resource impact of plant monitoring responsibilities, training needs, financial and human resource commitments.

HLIS incorporates modifications to the traditional swine and beef postmortem inspection procedures and inspection station configurations by establishing presentation standards (PS) for the heads, viscera, and carcasses prior to inspection and finished product standards of performance (FPS) for carcasses. Additionally the establishment shall have a HACCP system in place that has been approved and recognized under CFIA's FSEP program.

HLIS provides an opportunity for the establishment to adjust to assuming a greater responsibility for managing the quality and safety of their product through an initial one time CFIA certified training program for their plant personnel. CFIA provides this initial training for any starting facility so an initial block of trained plant personnel may be established. Further training is then assumed by the establishment. This format provides a co-operative and shared "inspection" approach to the slaughter and carcass dressing procedures. Significant inspection station reductions are realized at higher line speeds due to efficiencies gained through minimized product handling and a shift toward greater responsibility on the part of the company to present and manage its own product.

Under this program the establishment will be responsible for the identification and removal of defects that result during live handling, humane stunning, or dressing operations collectively referred to as "manufacturing defects". The operator will also assume responsibility for the removal of certain minor specified trimmable pathological conditions (TPC's). Removal of these defects will be accomplished by plant personnel that have undergone a training and accreditation program to become designated "Accredited Trimmers, Presenters, Monitors, Detectors." The establishment employee training program is to be established in writing and approved by the Veterinarian in Charge (VIC)/Regional Veterinary Officer (RVO).

# 1.1 WRITTEN QUALITY ASSURANCE PROGRAM/(FSEP)HACCP SYSTEM:

As mentioned earlier, before HLIS can be introduced into a registered facility the establishment shall be fully recognized under a CFIA's FSEP/HACCP Program. The HACCP System should reflect distinct levels for managing and monitoring the HLIS program; normally Plant Production performs product control and monitoring (monitoring may be optional), Quality Control (QC) performs verification and CFIA functions in an oversight capacity to monitor and verify the overall testing activities of both groups. For the system to operate properly, each of these three levels of evaluation needs to function independently while remaining part of one system. In certain facility settings it may be more advantageous and effective to have only the QC Dept. responsible for monitoring and verification procedures provided these activities are performed by different individuals.

The entire slaughter process may be divided into operational zones for easier control and monitoring of the program if the company so chooses. Again, this should be reflected in the written program along with all monitoring/process control points, employee training and accreditation programs and submitted to the VIC for review and approval.

### 1.2 PRODUCT TESTING:

Under traditional inspection, the Veterinarian-in-Charge has the authority to require line speed reductions or stoppages as well as other corrective actions when post-mortem inspection cannot be adequately performed at the current line speed because of preparation or presentation deficiencies or because of disease incidence etc. Under HLIS procedures the VIC or his/her designated Inspector still retains this final authority to stop the line or reduce its speed if it is evident that the plant's efforts are failing to manage the problem. Due to the high volume and rapid line speeds that these plants operate at all alternative process actions to manage the problem should be thoroughly considered before the decision to stop or reduce line speed is taken. If it is apparent from performance data that an operator cannot consistently perform at an acceptable AQL for any of the process control steps in HLIS the line speed maximums shall be re-assessed by the VIC and the facility operator. See below also.

Only designated trained industry personnel shall perform the tests described in the program. The test results are recorded in company logs/record sheets. It is normally the plant QC monitor's responsibility to review the entries made in the records for timeliness and accuracy and to assure that appropriate action is taken when the standards are not met. The QC monitor (or designated equivalent) will also conduct independent tests and compare the results of these with those of Production if applicable. In turn, CFIA personnel will periodically monitor the plant's quality control program by monitoring production activities, reviewing company records and by comparing and correlating the results of their own tests with those conducted by Production and/or plant Quality Control.

Unless otherwise stated in this policy the CFIA will perform on a random basis a minimum of one correlation test during each half shift during the initial 60 operating days of the program in order to validate operator results for the following; Presentation, Shewhart control chart and carcass FPS testing. At the discretion of the Veterinarian in Charge or designate one or more additional correlation tests may be performed during a production shift if it is determined that product performance or test results are being affected or influenced by unusual or extraordinary circumstances or poor operator performance.

The Veterinarian in Charge shall have discretion in initiating corrective action through consultation with the operator if it is determined that unsatisfactory or poor product/employee performance is occurring during non testing intervals or there is a general difficulty in achieving consistent satisfactory test score results. Repetitive occurrences shall be documented on the appropriate record and corrective action shall be undertaken by the operator or at the direction of the VIC/delegate.

If it becomes apparent from historical performance data (5 consecutive shifts or more) that an operator cannot perform consistently\* at an established AQL for any of the process control steps in the HLIS program and previous corrective action undertakings by the operator have not provided long term resolution to the problem, then the line speed maximums for the process step(s) involved shall be re-assessed by the VIC/RVO and the Operator and reset to a lower maximum level, using an **initial** increment reduction of 10%. If the initial line speed reduction does not provide satisfactory improvements within the first operating ½ shift a further reduction(s) shall be imposed until the accepted AQL for the affected process step(s) has been re-established. From the time a satisfactory line speed and associated AQL is established it shall remain in place for a minimum of 5 consecutive working shifts.

If during this reduced line speed period the operator can clearly demonstrate that the initial cause of the original under performance was due to a discrete and specific operational issue that has subsequently been fully corrected the operator may then request that the VIC immediately commence to restore line speeds to their original values in the same increments that they were reduced. Once restored should the same or similar under performance issues again arise within a 5 consecutive shift period the line speed shall be immediately reduced to it's former level and shall remain at this or a lesser line speed until 5 consecutive shifts have been completed at which time the Operator and the VIC/RVO shall consult and agree as to whether or not it is appropriate from records of performance for the past 5 shifts to restore line speeds to their original values.

If CFIA's correlation test result fails to correlate with that of the monitor an immediate retest shall be performed and QC will be notified. Two consecutive non matching correlation tests between the operator and CFIA will require that process action be initiated by the operator (if applicable) based on the results of the second CFIA test which shall be taken as the correct score. CFIA will monitor all Plant Production and QC corrective action activities to ensure program requirements are met. The discrepancy in scoring results shall be investigated and reconciled in consultation with the VIC after all required process actions have been implemented.

\*Note: For all AQL's (or equivalent) assigned to a process control step in the HLIS program a participating operator shall be expected to achieve at least the 80<sup>th</sup> percentile of performance on average when results from CFIA and the Operator are jointly examined over a period of 5 consecutive working shifts or longer.

# 1.3 GENERAL RESPONSIBILITIES :

Once a facility has had its application for HLIS inspection staff resources approved within the Region it will then be subject to a review process to confirm that it can provide adequate resources, materials and facilities to meet the requirements of the HLIS policy on an ongoing basis. In addition, those process steps that will be subject to a performance standard under the HLIS policy shall first have their existing performance level assessed. This shall be done by gathering sets of baseline data prior to implementing any process controls at these locations under the HLIS policy.

#### **Performance Standards:**

The HLIS policy introduces the application of process controls at certain critical locations along the processing line. In order to fairly assess these control points it is important to know what level the plant was performing at prior to entering the HLIS program and to also know at what level it is able to maintain itself. Therefore performance data based on a minimum of fifty sample sets taken at each designated process step gathered over a minimum of 10 working days are required before the facility may begin to apply the HLIS process controls at these locations.

#### Facility and Resource Requirements:

Under the HLIS Program Plant Management shall agree to provide an approved facility that meets CFIA HLIS and MOP construction standards. Before a facility can be approved for HLIS operations it shall undergo a facility review by the responsible Area Program and Regional Operational specialists along with the VIC to validate that all HLIS facility standards are in compliance with the policy requirements See Forms CFIA/HLIS 006/007: Beef/Swine Program Facility Assessment. Once the facility review is satisfactorily completed a signed Letter of Commitment from a responsible company officer shall be forwarded to the Veterinarian in Charge addressing items a) through e) below.

- a) the operator agrees to maintain a facility that meets the criteria referenced in the HLIS policy and/or CFIA Manual of Procedures (MOP) once the HLIS program application is approved.
- b) the operator agrees to provide sufficient material(s), financial and human resources, to carry out the various functions and responsibilities designated to the establishment under the HLIS Program.
- c) the operator agrees to carry out all functions and responsibilities assigned to the establishment under the HLIS program and to take all necessary actions as indicated therein during the operation of the HLIS program.
- d) should the operator decide to withdraw from the HLIS program CFIA shall be provided with written notification of the operator's decision10 working days prior to the final scheduled day of HLIS operations. After 6 months of continuous absence from the HLIS program the establishment shall lose its certification as an approved HLS facility.
- e) while certified as an HLIS facility all slaughter operations shall be performed in accordance with the HLIS program.

The letter of commitment shall be renewed at least annually or upon departure of the responsible signing official.

## Note:

The application of this HLIS policy manual must at all times remain in conformity with the Meat Inspection Act, Meat Inspection Regulations, Manual of Procedures as well as the Food Safety Enhancement Program. Unresolved differences in the interpretation of the application of the HLIS policy between facility CFIA personnel and the operator may be referred to CFIA headquarters for written clarification. During this interim period the decision of the Veterinarian in Charge/Regional Veterinary Officer shall prevail.

### 2.0 INTRODUCTION: STATISTICAL PROCESS CONTROLS:

All slaughtering plants are responsible for producing product that is consistently in compliance with minimum food safety standards as set out in the Meat Inspection Act and Regulations, Manual of Procedures and The Food Safety Enhancement Program (MIA, MIR, MOP and FSEP). In order to be able to evaluate as well as enhance an operator's ability to comply to these standards the HLIS program incorporates the use of Statistical Process Controls (SPC). These are science based tools that help to improve and at the same time objectively measure the performance effectiveness of a manufacturing process.

Under this system dressed carcasses and their relevant portions must meet several performance criteria during the dressing procedure. These performance criteria are applied in the form of Presentation Standards (PS), Finished Product Standards (FPS) and Control Chart performance standards. These tools provide the means for assessing the carcass and portions for food safety and wholesomeness while also determining if the slaughter process is in control. The PS, FPS and Control Chart tests are all tools that are applied at specified locations by randomly sampling and testing the carcass and/or its associated portions during the production shift for a pre-determined level of manufacturing performance.

#### 2.1 INTRODUCTION TO CONTROL CHARTS:

This section provides a brief introduction to the use of Control Charts. For detailed information on this as well as Presentation Standards and Finished Product Standards information. See Training Module A 45, Annex 1-5 and Sections 6 and 7 of this policy.

Control charts are used in various manufacturing environments to provide a statistical indication of how effectively a certain manufacturing step(s) is performing under a prescribed set of Quality Assurance standards. Their importance rests in being statistically reliable in evaluating the manufacturing step they are assessing. For optimal benefit it is critical that this evaluation occurs at a location immediately downstream from the process step that is being evaluated in order to provide real time performance measurement and feed back to the operating step under evaluation.

The Shewhart Control Chart operates on the principle of measuring a process step's departure from mean or average performance through the use of units of standard deviation. This approach has been shown to be an objective statistically reliable means of determining when early process intervention is warranted.

The application of the Shewhart Control Chart provides the additional benefit of allowing the use of ISO special sampling plans for evaluating final carcass performance rather than the conventional General Inspection Level II sampling plan which requires a larger carcass sample size.

A trained and accredited plant employee shall conduct scheduled randomized hourly control chart tests on 10 consecutive carcasses immediately after the evisceration step and prior to any further alteration or trimming of the carcass (in the event a facility performs hide removal a similar station shall be located after the last de-hiding procedure and prior to any further processing step). The carcasses will only be scored as "positive" or "negative" for the presence of any distinguishable fecal or ingesta defect related to the evisceration step. Any carcass found to be attribute positive during the test **shall be clearly "marked"** for positive identification and correction along the processing line prior to final approval. All test results are to be recorded on Form CFIA/HLIS 001S. CFIA will periodically monitor operator testing and recording activities during the production shift and will perform a minimum of one correlation test per half shift. See sec 1.2.

**TABLE 2.1** Shewhart Control Chart - Swine/Beef Evisceration Red Zone Unsat'y +3σ Red Zone Unsat'y (DEFECTIVE CARCASSES) +2σ Yellow Zone Fair +1σ Green Zone Satis'y Green Zone Satis'y -1σ 0 1 2 3 4 5 6 9 7 8 Hours of Production

 $\sigma$  = 1 standard deviation,  $\bar{x}$  = mean or average performance

#### 2.2 CORRECTIVE ACTIONS FOR SHEWHART CONTROL CHART DEVIATIONS:

As previously noted the Shewhart Control chart evaluates a process on the principle of units of standard deviation from the mean or average performance. One standard deviation (+/-) from average performance is considered to be acceptable or satisfactory performance. Two standard deviations is considered fair performance and three or four standard deviations are viewed as unsatisfactory performance. See Appendix A Shewhart Control Chart Decision Tree.

# Satisfactory Performance: Green Zone:

No action required.

#### Fair Performance: Yellow Zone:

Random testing shall be immediately suspended and the operator shall initiate immediate corrective actions as detailed in the facility's written program. All corrective action procedures shall have been previously approved by the VIC and RVO. Once corrective measures have been implemented the operator shall perform an immediate retest. Two consecutive satisfactory test scores taken at least 15 minutes apart shall be achieved before random testing is resumed. If the retest score remains in the fair performance zone after any two consecutive retests the floor supervisor and the VIC/delegate shall consult on the next course of action which shall include a line speed reduction.

# **Unsatisfactory Performance: Red Zone:**

Upon scoring an unsatisfactory test result random testing shall be suspended and an immediate 10% line speed reduction shall be initiated by the operator along with the corrective measures as approved and detailed in the facility's written program. These corrective measures shall have been previously approved by the VIC and Area Program Specialist/RVO. CFIA shall be notified immediately whenever an unsatisfactory score is recorded. Once corrective measures have been satisfactorily implemented a retest shall be performed by the operator no earlier than 15 minutes after the previously failed test. The operator shall first achieve a satisfactory score on the initial retest before line speed increases may commence. Upon completion of each consecutive satisfactory 15 minute retest thereafter the line speed may be increased by the same increment it was reduced until original line speed is re-established. When two consecutive satisfactory retest scores have been achieved and the line speed has returned to normal random testing frequencies shall be resumed.

In the event of a second consecutive unsatisfactory retest score a further 10% line speed reduction shall occur with re-evaluation of the corrective measures and consultation between the VIC/delegate and floor supervisor. Also see Product Testing Sec 1.2, Appendix A Decision Tree.

#### Note:

The corrective actions outlined in Appendix A are the minimum actions required at the entry level of the program. Based on individual plant performance the corrective actions decision tree may be modified to reflect an operator's improved data performance profile wherein a line speed reduction would not occur until 2 consecutive red zone failures had occurred (or some similar modification). These changes shall be approved by the Area and National Program based on supporting establishment data.

# 3.0 PERSONNEL REQUIREMENTS

### 3.1 TRAINING:

# 3.1.1 Training Protocol for Accredited Plant Employees:

An important part of the success of HLIS is the training and accreditation of key plant personnel. The positions for which accreditation is required are Presenters, Detectors, Trimmers, and Monitors. Training and accreditation for the initial group of plant employees will be done by CFIA certified staff using the CFIA National Training Program. Accreditation requires successful completion of both a theoretical classroom session as well as a practical evaluation. All subsequent training of new staff will be performed by accredited plant personnel through the establishment's HLIS training program. Thereafter CFIA under the supervision of the VIC/delegate will only monitor the training of plant personnel as well as the plant's written program to ensure sufficient training standards are being maintained. The VIC shall be responsible for approving the establishment's HLIS training program and shall review the establishment's HLIS employee training program at least annually to ensure that it is current and complete including records of all accredited employees.

Should six or more consecutive calendar months lapse in which any accredited plant employee is not exposed to the application and/or practices of the HLIS program any such affected employee will be required to undergo a refresher training course and satisfactorily demonstrate their knowledge and application of the HLIS program before being re-accredited. The QA Dept shall be responsible for monitoring and maintaining the accredited status of their employees. The VIC has the right to decertify any accredited plant employee by having their name removed from the company eligibility roster. There must be demonstrable factual information to show that the individual is not able to meet the required standards. A protocol describing the process of

deaccreditation and retraining must be included in the establishment's HLIS written program.

# 3.1.1 (1) Plant Employee Accreditation:

a) CARCASS DEFECT TRIMMER: (see also 5.3.1)

In order to accredit an employee as a "trimmer" the operator shall demonstrate that the following conditions are met:

- The accredited trimmers are establishment employees who are trained and accredited as proficient in the detection and sanitary removal of dressing nonconformances and Category I trimmable pathological conditions (TPC's).
- ii) The operator takes full responsibility for the training/re-training of accredited trimmers as well as for testing for proficiency as per CFIA HLIS training program criteria.
- iii) A current written training program signed off by a responsible plant officer, which outlines the establishment's training and testing procedures is maintained on file and approved by the Veterinarian-in-Charge and shall be made available upon request.
- iv) Maintenance of a current roster of employees who have passed the plant accreditation process is maintained on file and a current copy of the roster shall submitted to the Veterinarian-in-Charge at least quarterly and be available on demand should the need to consult the roster arise during the intervening period.
- b) CARCASS DEFECT DETECTORS (see also 5.3.1)

As for 3.1.1 a)

- c) PRESENTERS; Heads, Carcass, Viscera
  - The accredited presenters are proficient in preparing/orienting the appropriate portions in a manner that conforms to minimum performance standards.
     Items ii - iv under 3.1.1a) are applicable.
- d) PROCESS CONTROL MONITORS; Shewhart Control Chart, Presentation, FPS for FS and other carcass defects (includes Rework).
  - i) The process control monitors shall be proficient in their knowledge, understanding and application of the respective detection, scoring, recording and process action activities associated with the described positions for which they assume responsibility. Items ii - iv under 3.1.1a) are applicable.

### Note:

When an accredited plant employee is required to perform more than one task, be it another accredited task or non accredited task relating to that person's job, that employee shall not be distracted by additional responsibilities that would prevent him/her from otherwise satisfactorily performing the accredited functions of the position as if it were his/her sole responsibility. For example, the detector/trimmer function is often assigned as a joint responsibility. This may only occur if the above conditions can be met and there is an auditable means available for assessing detection and trimming performance.

# 3.1.1 (2) CFIA Employees:

# a) INDETERMINATE EMPLOYEES:

CFIA Employees are initially trained and certified through the CFIA National Certification Program. Should a lapse of six consecutive calendar months or more occur where a certified CFIA inspector has not been exposed to the principles and applications of the HLIS program they shall be required to undergo a refresher training course in accordance with the National Training Program guidelines. Under the direction of the VIC or his/her Supervisory delegate the candidate shall satisfactorily demonstrate their knowledge and application of the program through a written and practical test process.

# b) SEASONAL/TEMPORARY EMPLOYEES:

CFIA employees in this category will be trained for limited participation in the HLIS program. They shall be trained to understand and perform the necessary post mortem functions (see post mortem Modules 40 and 44) but shall not be responsible for floor monitoring activities. They shall be responsible for understanding and reporting on the activities of those plant employees who are improperly preparing carcasses and their portions for post mortem inspection. Any such employee who works in this capacity for greater than six continuous calendar months. (183 continuous calendar days) shall receive full HLIS certification training.

#### 3.2 PLANT OPERATIONS:

# 3.2.1 Plant Production

Plant Production designated staff shall assume the following responsibilities:

- Use qualified and trained personnel to carry out the assigned functions under the HLIS program.
- Train and assign plant employees in the proper presentation of heads, carcasses and viscera for inspection.
- Use accredited personnel for detecting/trimming dressing non-conformances and trimmable pathological conditions.
- Make available to CFIA inspection staff all test results from PS, FPS food safety and non food safety, Control Charts and QC checks.

# 3.2.2 Plant Quality Assurance/Control

Quality Assurance/Control designated staff shall assume the following responsibilities:

- Use accredited personnel to carry out the assigned functions under Presentation testing, Finished Product testing (food safety and non food safety), Control Chart testing, QC monitoring and implement corrective measures as required.
- Design, monitor and have approved by the CFIA a written Quality Assurance/HACCP Program covering the slaughter operation including the carcass holding cooler area.
- Design, implement and maintain a HLIS Employee Accreditation Program for Presenters, Detectors, Trimmers and Process Control Monitors. The program shall be written and shall be reviewed and approved by the VIC.

# 3.2.3 CFIA Inspection Staff

CFIA shall assume the following responsibilities:

- Make available sufficient certified CFIA HLIS inspectors to perform all required duties at designated CFIA inspection stations including monitoring and correlation testing of Presentation Standards, Shewhart Control Chart Performance Standards, Finished Product Standards and QC and Plant Production test monitoring program in accordance with the Inspection Station Staffing Standards outlined in Table 5.1. The CFIA floor monitoring function will be fulfilled as part of the CFIA inspection station rotation. See table 5.1

#### 4.0 FACILITY REQUIREMENTS

In addition to inspection facilities required under the Meat Inspection Act and Regulations and Manual of Procedures the following additional facilities/equipment are required for the implementation of the HLIS program.

#### (1) Mirrors:

Each carcass inspection station shall be equipped with a distortion free mirror(s) of sufficient size to provide a clear unobstructed view of the entire dorsal surfaces of the largest carcasses processed and provide a horizontal width at least equivalent to that of the CFIA inspection station(s). 2 metres x 2 metres is a recommended size/station. The mirror system can be a one piece tiltable mirror or a 2 piece vertical (to view the dorsal surface) canted (to view the posterior surface) system. In either case the mirror system shall be placed far enough from the vertical plane of the carcass to allow the carcass to be turned without contacting the mirror but close enough to provide the required view of the carcass.

**Swine Only:**{ The installation of a distortion free mirror at the viscera inspection station area is left to the discretion of the VIC. Based upon the method of viscera presentation (eg. hook and pan arrangement) and disposal this may or may not be of benefit. The mirror does provide a benefit in certain hook and pan configurations.}

The decision to install a distortion free mirror at the Shewhart control chart station to detect fecal spillage as a result of the bunging operation shall be made by the VIC of each HLIS facility. This decision shall be based on the nature of the equipment and the specific procedure being applied at the bunging station.

# (2) Lighting:

A minimum of 1000 lux of shadow-free lighting with a minimum Colour Rendering Index (CRI) of 85 is required at each postmortem inspection station and associated company detection station, Shewhart carcass inspection station and each product reinspection station. In addition, a diffuse light source (such as a double tube fluorescent light fixture) shall be mounted at the top of the carcass mirror to provide a minimum of 1000 lux of lighting at the carcass shoulder level. Directional lighting may also be required at the carcass inspection station to ensure that sufficient lighting is provided inside the thoracic cavity of the carcass as it passes through the inspection zone.

# (3) Carcass centre spacing:

The minimum distance between swine carcass centres shall be 61.0 cm (24 inches) and 1.83 metres (6.0 ft.) for beef.

# (4) Table Width:

The minimum moving table width shall be 1.52 meters (5 ft). However the table shall be sufficiently wide enough and sufficiently long enough to provide a drag space to allow for the proper inspection of viscera and prevent any interference and/or common contact from other portions of the same carcass or from other carcasses.

# (5) CFIA Inspection/Plant employee Space Requirements:

Adequate unencroached space shall be available for those plant employees who are responsible for proper presentation of heads and viscera for inspection as well as for the performance of presentation testing. Presentation testing requires a minimum of 92 cm. (3 feet). This space should be located next to and upstream from the various inspection stations. Each head, viscera and carcass CFIA inspection station requires 185 cm (6 feet) of adjustable platform work space without encroachments.

# (6) Sanitizers:

Must be of sufficient size and readily accessible to an inspector's working position.

#### (7) Shewhart Test Stations:

The Shewhart inspection stand or allocated space shall be in conformance with the space requirements of the presentation station and shall have lighting standards as for final carcass inspection. It shall be positioned close enough to the carcass line (comfortable arm's length) to satisfy OSH requirements and so the evaluator may manipulate the carcass if necessary. It shall be located directly after the process step(s) it evaluates and prior to any further alteration to the product. This provides for effective evaluation of the process step and a timely response interval when process action is required. A sanitizer is not required if trimming is not performed. Beef operators shall provide three Shewhart test stations. Two stations shall evaluate hide removal. These shall be located so they can evaluate the rump/bung area and the shank/brisket area immediately after hide removal. The third station shall evaluate the evisceration procedure. In swine only the latter station is required unless hides are being removed.

# (8) Head Station (Cervical): BEEF ONLY:

The space required to perform head (cervical) inspection is based on minimum unobstructed work space for head inspectors when heads are presented on 1.22 meters (4 ft.) centers. If spacing is greater than 1.22 meters (4 ft), extra work space may be required. See Table 4.1

Table 4.1 Steers/Heifers Head Inspection Station Requirements; Tongue Out Presentation				
Head Chain Speed	CFIA Inspection Stations EG	Minimum width of unobstructed work space		
140-180	1	1.52 m (5 ft)		
181-310	2	3.05 m (10 ft)		
> 310	3	5.70 m (19 ft)		

## (9) Viscera Beef Only

The requirement for the beef viscera inspection station is 2.44 meters (8 ft) per inspector.

#### (10) Carcass Finished Product Standards Test Stations:

The evisceration floor carcass FPS test station shall be located off the main chain and be adequate in length to collect, inspect and hold the required number of carcasses for a sample set based on ISO sampling plan 2859-1.On line inspection may be performed in a registered facility but only after an acceptable study has been performed and approved by National Headquarters to demonstrate its equivalency to off-line inspection. It is necessary that it be located downstream from all company trimming procedures and shall be placed, in the case of swine, **before** the final carcass wash cabinet. This station must also be equipped with a permanent platform preferably adjustable with enough room to allow two people access to all levels of the carcass. It shall be equipped with a sanitizer, soap and towels and safety rails, have a minimum 1000 lux of shadow-free lighting with a minimum CRI of 85 and have a clipboard holder for holding recording sheets.

### {Beef Only}

{The inside/outside carcass inspection platform shall be large enough to accommodate two persons, may be adjustable, shall be equipped with safety devices to prevent anyone from falling off the platform, and shall be designed to allow for quick exit. The platform shall be located opposite the mirror prior to the splitting saw and in a position such that the carcass inspector can easily view the viscera table and communicate with the viscera inspector. Each platform is to be equipped with a sanitizer, sink, soap, and towels. The sink shall be installed on the outside of the platform, not inside. The platform shall be a minimum of 0.75 metres (2.5 ft) wide and 1.83 metres (6 ft) long with the lengthwise dimension running parallel to the moving chain. Unhampered access to and from the platform shall be provided. The platform shall be designed with a 1.05 metre (42") high back rail and 1.27 cm (I/2") foot bumpers on all sides, excluding access and exit points.}

# {Beef Only}

{If adjustable, as measured from the rail, the upper platform height can be less than or equal to 2.54 metres (I00 inches). The lower platform can be greater than or equal to 2.85 metres (II2 inches). If adjustable, as measured from the floor, the upper platform can be greater than or equal to 1.17 metres (46 inches). The lower platform height can be less than or equal to 83.82 cm (33 inches).}

# (11) Carcass Cooler Rework/Trim Station:

The carcass cooler reinspection station may be a permanent trim station or mobile station. The location of the stand shall be in an open area, avoid common contact and shall receive the final approval of the Veterinarian in Charge/Area Program Specialist. Each stand must adhere to OSH safety guidelines and be fully equipped with a sanitizer, record/clipboard holder and sufficient lighting (1000 lux) shall be provided with convenient access to handwash facilities.

# (12) Carcass Rework Holding Capacity:

Sufficient cooler space/rails shall be provided to separate detained lots of carcasses that have been identified for rework or reconditioning procedures by CFIA or the operator from those carcass lots that have been approved. An acceptable area that will allow effective rework of the detained lot shall be provided.

(13) Display metre:

An accurate digital line speed indicator (chain speed) for the carcass evisceration chain must be provided on the slaughter floor so that it be easily read by the inspectors performing presentation testing.

#### 5.0 GENERAL INSPECTION PROCEDURES

# 5.1 CFIA Post-Mortem Inspection Procedures

Under HLIS there are a number of changes that affect postmortem carcass and portion presentation methods when compared to those procedures that occur in plants under traditional inspection. With respect to specific CFIA post mortem inspection tasks in a HLIS facility all procedures remain essentially the same as in traditional inspection but with a notable reduction in manipulation of portions and carcasses resulting in a reduction of the number of required inspection stations at higher line speeds.

CFIA Inspectors working on line shall only be responsible for identifying Category II Trimmable Pathological Conditions (TPC's) and not for conditions that are classified as dressing defects or Category I TPC's (see table 7.1). Conditions such as toenails, eyelids, hair etc. are the responsibility of operator. It is the responsibility of the plant Detector to identify defective conditions and decide if the carcass is to be railed out for trimming or left on line. It may not be possible at higher speeds for one person to identify, mark and trim carcasses. Therefore once determined by the VICand or RVO that an individual cannot perform multiple tasks effectively the Detector(s) shall only identify and mark dressing defects and Category I TPC's and one or more accredited Trimmers shall be in place to effectively perform the sanitary removal of the identified defects (or some acceptable alternative).

### 5.2 CFIA INSPECTION STATION REQUIREMENTS - SWINE AND BEEF

Table 5.1A Swine Head/Carcass Inspection Station Requirements				
STATION HEAD	STATION CARCASS / VISCERA	STATION VM	PROGRAM MONITORING* Ergonomic/Admin rotation	LINE SPEED (shackles / hour)
1	1	1	Approximately 0.35	144 - 357
1	2	1	FTE will be required for monitoring/verifying operator activities	358 - 536
2	2	2		537 - 714
2	3	2		715 - 850
2	4	2		851 - 1000
3	4	2		1001-1350

#### Note:

In plants where the viscera inspectors are unable to adequately visualize the carcass, the number of viscera inspection positions are reduced by one and one carcass inspection position is added on the main carcass line; this inspector shall be assisted by an accredited plant Detector. At the discretion of the VIC the ratio or distribution of carcass/viscera inspectors may be reconfigured (total # remains the same) as operational requirements may dictate and provided inspectional control is maintained.

Table 5.1B Steers/Heifers Inspection Station Requirements						
Line speed or chain speed*	Ante mortem	Head EG	Viscera EG	Carcass EG	Floor Monitor	VM
140 - 180	shared	1	2	1	1 (shared)	2
181 - 250	shared	2	2	1	1 (shared)	2
251 - 310	shared	2	4	1	1 (shared)	2
311 -375	shared	3	4	1	1 (shared)	3

Table 5.1C Cows/Bulls Inspection Station Requirements						
Line speed or chain speed*	Ante mortem	Head EG	Viscera EG	Carcass EG	Floor Monitor	VM
140 - 180	shared	1	2	1	1 (shared)	2
181 - 250	shared	2	2	1	1 (shared)	2
251 - 290	shared	2	4	1	1 (shared)	2

<sup>\*</sup> Where a facility uses a mechanically driven chain for the continuous movement of carcasses along the evisceration line the chain speed shall be assessed as the gross uninterrupted speed calculated over a 60 sec cycle past a fixed point and shall not be calculated on the net number of carcasses dressed per hour.

The HLIS monitor position shall be managed through the use of inspection station rotation. CFIA inspection personnel shall perform general daily record monitoring, perform correlation tests for presentation standards, finished carcass product standards and Shewhart control chart performance as per specified frequencies and generally oversee the activities of the Production and QC departments. It is recommended that the same individual be assigned to the floor monitoring position for at least the full shift and work in conjunction with and under the supervision of the slaughter floor veterinarian.

The figures that are indicated for the various inspection stations may be impacted by various facility configurations with respect to carcass presentation. The VIC may redistribute the recommended staffing numbers as s/he may so determine in conjunction with the Area Program Specialist/Regional Veterinary Officer provided the total numbers are not altered.

#### 5.2 RANDOM TESTING GUIDELINE

One of the major principles in any statistical testing program involving the selection of samples is that each unit in the population **should** have an equal chance of being selected as a sample. This is not completely possible under HLIS slaughtering conditions. These guidelines are intended to support that principle within the practical restraints of this inspection system.

#### **Plant Personnel**

As a general observation production employees should be exempted from the testing procedure if they may be in a compromised circumstance with respect to objectivity when conducting these tests. If a production employee is used in performing any test special efforts should be in place to ensure s/he is not influenced by the presence of the Production Supervisor. It is recommended that the QC Department be in charge of all testing requirements when this situation is encountered. The VIC shall review this situation in their respective facilities and determine what arrangement is most effective in providing the most reliable product evaluation procedure.

#### Finished Product Standard (FPS) Checks

A designated plant person(s) shall select random times according to the plant's written program for conducting the carcass tests for food safety and non food safety defects. The selected times shall be submitted to the Veterinarian-in-Charge or his/her designate by the operator before the beginning of each shift.

#### **Presentation Checks:**

The operator need only perform the required checks within the thirty minute or one hour period required by the program, additional randomness is not required. These test times shall also be submitted to the Veterinarian-in-Charge or his/her designate by the operator before the start of each shift.

#### **Shewhart Control Chart Checks:**

These shall be performed by the operator on a random basis ensuring that each hour of the production shift is tested. The schedule of times shall be submitted to the Veterinarian in Charge or his/her designate by the operator prior to the start of each shift.

# **Rework Checks:**

These shall be performed by the operator after all rework tasks have been performed on the detained lot. The entire population of the lot shall have an equal opportunity of being selected for the carcass subgroup test. The CFIA shall be notified when a rework is being performed on a detained lot and records of performance shall be maintained by the operator. Rework testing frequency by CFIA shall be discretionary.

#### **Carcass Testing:**

When the various carcass monitoring tests and evaluations are being performed either by the operator or by CFIA the general rule of observation is that the proximity of the carcass surface shall beat arm's length and conducted from an acceptable inspection platform as referenced under sec 4.0 Facility Standards.

#### **CFIA Oversight and Verification Activities:**

CFIA shall perform daily periodic oversight monitoring and verification functions with respect to the operator's testing, recording activities as well as employee performance to ensure the satisfactory application of the HLIS program. These activities shall also include randomly scheduled daily correlation tests but may also include unscheduled or spontaneous correlation tests if deemed necessary by the Veterinarian in Charge or the delegated EG 04 (equivalent) supervisor. Independent verification tests of a particular process control step are not routinely performed by CFIA but at the discretion of the VIC such test(s) may be authorized where it is determined that such a test is warranted.

# 5.3 CFIA/Accredited Employee Carcass Identification and Trimming Procedures:

CFIA HELD tags are to be used for conditions requiring veterinary disposition (category II TPC) or in special circumstances as deemed necessary by CFIA personnel. In addition, an in-plant identification tag or ink marking system will be used by plant employees to identify dressing defects and Category I TPC's.

In-plant identification tags or ink marks must be removed once the defect is corrected. Defects so identified may be trimmed at any working position down the line or off line at the plant's discretion as long as the defect is removed sanitarily before leaving the final carcass approval area.

CFIA HELD tags may only be removed (not repositioned) by a CFIA inspector or by an accredited plant employee under the direct and immediate supervision of a CFIA inspector.

### 5.3.1a Duties of Trained/Accredited Plant Personnel -Sec 5.3.1a SWINE ONLY

- (1) Head/Mandibular Lymph Node Presenter:
  - a) Dorsal Presentation: carcass is approached from the dorsal side and the head is disarticulated at the atlanto-occipital joint and dropped but shall remain attached to carcass by the jowl skin. The mandibular lymph nodes shall be presented at the angle of the mandible (see diagram). The tongue shall remain in the buccal cavity until after final carcass inspection.
  - b) Ventral Presentation: head is not disarticulated and access to I. nodes is prepared in traditional manner via a ventral pharyngeal opening with mandibular lymph nodes exposed in the area of the mandibular angle. The tongue shall remain in the buccal cavity until after final carcass inspection.
  - c) Attached to Tongue: Both mandibular lymph nodes are attached to laryngeal/lingual area.

# (2) Viscera Presenter:

The viscera shall be presented in a consistent orientation that normally provides a hands free environment for the CFIA inspector. Under normal operating conditions the plant will provide one or more "presenters" upstream from the CFIA inspection station to ensure the all viscera are properly oriented to meet the presentation scoring standard.

# (3) Kidney/Carcass Presenter:

The kidney presenter must expose the kidneys in the carcass for visual inspection before the carcass is in front of the viscera/carcass inspector. This employee will either;

a) Remove and place in viscera pan all abnormal kidneys and be instructed by inspection staff on a protocol for handling hydronephrosis kidneys.

OR

b) Leave all kidneys in the carcass (IF PANS ARE TOO FAR FROM CARCASSES) and be instructed by CFIA staff on a protocol for handling hydronephrosis kidneys.

### (4) Carcass Detector:

The carcass detector will use an approved in plant marking system to identify all dressing defects and Category I TPC's and also place CFIA HELD tags on certain carcasses at the direction of CFIA Inspection staff.

#### (5) Carcass Trimmers:

The carcass trimmer will trim all identified defects on line or off line but NO trimming shall be performed on CFIA HELD carcasses until after veterinary disposition. CFIA Held tags are only removed after trimming and at the direction of a CFIA Inspector. The carcass trimmers shall remove all other identification marks after trimming and no carcass shall leave the final carcass approval area until these procedures are completed.

### (6) Process Control Step Monitors:

This includes those accredited employees who monitor all presenter activities, perform FPS (FS and OCD rework) carcass monitoring and Shewhart Control Chart monitoring. The monitors shall score, record and initiate process action as required in each of their respective monitoring functions.

#### Note:

When an accredited plant employee is required to perform more than one task, whether an accredited task or non accredited task relating to that person's job, that employee shall not be distracted by additional responsibilities that would prevent him/her from otherwise satisfactorily performing the accredited functions of the position as if it were his/her sole responsibility.

#### 5.3.1b Duties of Trained/Accredited Plant Personnel -Sec 5.3.1b BEEF ONLY

(1) Head and Tongue Preparation and Presentation:

Head and tongue preparation may vary between establishments such as tongue attached to the head or detached, head oriented up or head oriented down, but once decided must remain consistent within the establishment. The employee shall thoroughly palpate the tongue and mark or signal the CFIA inspector of any abnormalities. The employee shall also incise the lateral and medial muscles of mastication exposing predominantly muscle tissue (at least 75%) and minimum connective tissue (no more than 25%). The medial retro pharyngeal and mandibular lymph nodes shall be prepared and presented intact and in a consistent location.

# (2) Viscera Preparation and Presentation

The viscera shall be presented in a consistent orientation that normally provides for minimum manipulation by the CFIA inspector. Under normal operating conditions the plant will provide one or more "presenters" upstream from the CFIA inspection station to ensure the all viscera are properly prepared and oriented.

- (a) Heart:- a trained plant employee shall open the heart such that all chambers are exposed and also incise the interventricular septum
- (b) Kidneys:- a trained employee shall open the kidney capsule (min 75%), remove them from the carcass and present them on the table in a consistent location for CFIA inspection.

(c) Stomach/intestines:- a trained plant employee shall orient the rumen and its attached components in a consistent orientation as determined by the Veterinarian in Charge and the Area Program specialist. A diagram depicting the orientation of all viscera components shall be posted in the employee training area and in the CFIA inspection office.

### (3) Carcass Detectors:

The carcass detector will use an approved in plant marking system to identify all dressing defects and Category I TPC's and may also place CFIA HELD tags on certain carcasses at the direction of CFIA Inspection staff.

#### (4) Carcass Trimmers:

The carcass trimmer will trim all identified defects on line or off line but NO trimming shall be performed on CFIA HELD carcasses until after veterinary disposition. CFIA Held tags are only removed after trimming and at the direction of a CFIA Inspector. The carcass trimmers shall remove all other identification marks after trimming and no carcass shall leave the final carcass approval area until these procedures are completed.

#### (5) Process Control Step Monitors:

This includes those accredited employees who monitor all presenter activities, perform FPS (FS and OCD rework) carcass monitoring and Shewhart Control Chart monitoring. The monitors shall score, record and initiate process action as required in each of their respective monitoring functions.

**Note:** When an accredited plant employee is required to perform more than one task, whether an accredited task or non accredited task relating to that person's job, that employee shall not be distracted by additional responsibilities that would prevent him/her from otherwise satisfactorily performing the accredited functions of the position as if it were his/her sole responsibility.

### 6.0 PRESENTATION STANDARDS

The provision for uniform presentation standards is a key element in the implementation of HLIS. It provides not only consistency in presentation of the carcass and its portions but also reduces potential food safety concerns and offers early indication as to whether certain carcass dressing procedures are in control.

Uniform presentation is essential in maintaining inspection efficiency and is critical at the higher rates of slaughter. When the carcass or its parts are not uniformly presented in a predetermined manner, time allotted for inspection must be used to correct or compensate for presentation errors. Therefore, the presentation standards must be met to ensure the effectiveness and efficiency of inspection when the HLIS standards are used. The adequacy of presentation is affected by several factors such as disease conditions, carcass uniformity, evisceration line configuration, sequence of evisceration procedures, adequate equipment, lighting, but most notably well trained and efficient production employees.

# 6.1 General Responsibilities:

# 6.1.1 Plant Responsibility:

Plant management is responsible for implementing the prescribed presentation standards as well as initiating all corrective actions. The operator shall ensure the proper presentation of heads, carcasses and viscera using trained accredited personnel. The operator shall also designate responsible persons to schedule and conduct monitoring tests and take corrective action whenever the required standards are not met. This function is normally shared between Production and QC but may be performed by the QC Dept alone if the operator so chooses. The VIC/delegate shall be informed whenever process action is initiated. See Table 6.1

# 6.1.2 CFIA Inspection Responsibility:

Inspection personnel will monitor the activities of plant employees assigned to perform presentation monitoring checks. This will include evaluations of records, observation of employee performance and correlation tests for comparison with plant results.

# 6.2a PRESENTATION STANDARDS:- Sec 6.2a SWINE ONLY

Note: Orientation for proper presentation is from the inspector's viewpoint facing perpendicular to the moving chain.

# 6.2a.1 HEAD-Dorsal Presentation(See fig.1)

The head shall be presented in the dropped position attached to the carcass by the skin/soft tissue of the chin area, the atlanto-occipital joint severed or disarticulated with the mandibular region facing the Inspector.

The mandibular lymph nodes must be readily accessible and attached to the mandible.

The head shall normally be presented with essentially no movement that would be considered to interfere with the inspection procedure.

The midline of the dorsal surface of the carcass with the dropped head attached shall face the Inspector.

#### 6.2a.2 HEAD-Ventral Presentation

The head shall be presented attached to the carcass with the ventral surface of the carcass/jowl area facing the Inspector.

The mandibular lymph nodes must be readily accessible and consistently located in the same anatomical area as determined by the operator's standards of carcass preparation.

Head/carcass shall be presented with essentially no movement that would be considered to interfere with the inspection procedure.

## 6.2a.3 VISCERA Presentation (See fig. 2& 3)

## (1) Red Offal Presentation (Hook):

Red offal includes the larynx, trachea, esophagus, lungs, heart and liver and must be suspended from the hook by the larynx which is placed immediately adjacent to the hook cradle. Placement of the larynx in the cradle is critical to presenting the correct surface of the red offal for inspection (the tongue shall remain in the buccal cavity until after final carcass inspection).

- the red offal shall be suspended from the hook in such a way that the cranial ventral surface of the lungs will be facing towards the inspector. This means that the heart (pericardial sac incised), cranial ventral portions of the lungs, pleural surface of the diaphragm (skirt meat), and dorsal surface of the liver will be readily visible. Where the trachea has been mechanically damaged during carcass dressing the red offal may be suspended by placing the junction of the base of the heart with its attachment to the rest of the pluck in the cradle of the hook and oriented so the heart is leading. All portions must be visible for inspection without additional manipulation.
- the red offal including the liver must be suspended high enough or offset so that it does not contact the surface of the grey offal.

- no portion of the red offal shall be detached from the pluck before inspection.
- the red offal shall be close enough so that the inspector may easily manipulate it
  if necessary but not so close so as to impede the inspectors view of the grey offal.

# (2) Grey Offal Presentation (Pan):

Grey offal normally includes the gastrointestinal tract, spleen, uterus and bladder.

- the grey offal shall be presented in the pan in such a way that the mesenteric and portal lymph nodes and spleen are easily visible without normally having to perform any manipulation and can be found consistently in the same general region of the pan. The orientation in fig. 2 is accomplished by having the viscera arranged in such a way that the spleen is found in the upper right quadrant (at least 50% exposed), the hepatic lymph node in the lower right quadrant, and the majority of the mesenteric chain in the lower left quadrant of the pan. The mesenteric chain is fanned open for easy visualization. If the operator chooses to use an alternate orientation he may do so provided the VIC and Area Program Specialist are in agreement and it meets the criteria of allowing for effective organ visualization and hands free inspection. With full or gaseous gastrointestinal tracts, it may be necessary for the inspector to move the interfering cecum or colon.
- no portion of the grey offal shall be outside of the pan.

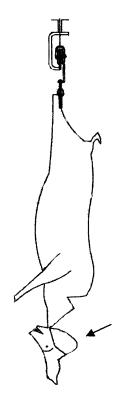


Fig. 1 Dorsal Presentation for mandibular I. node

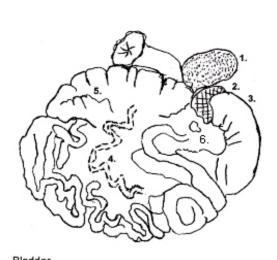


Fig. 2

Bladder
 Spleen
 Stomach
 Mesenteric Chain
 Caecum
 Hepatic I. node

Direction of travel

1. Larynx
2. Esophagus
3. Rt. apical lobe
4. Heart
5. Left lung
6. Diaphragm
7. Liver

4. 5.
6. 7.

#### 6.2a.4 CARCASS Presentation

The carcass shall be presented split and hanging vertically in the open position so that the pleural and peritoneal cavity surfaces and kidneys are facing the inspector and are easily visualized with minimal or no carcass manipulation. In addition the entire dorsal surface of the carcass must be visible to the inspector by means of a mirror as s/he stands in front of the passing carcass. See section 4.1(1).

### 6.2b PRESENTATION STANDARDS:- Sec 6.2b BEEF ONLY

#### 6.2b.1 Head Presentation:

#### TONGUE:

Tongue presentation may vary between establishments e.g. tongue in, tongue out, but must be consistent within an individual establishment. Prior to the inspector's examination of the tongue, an establishment employee is required to thoroughly palpate each tongue and notify the inspector if abnormalities were found. Notification to the inspector may be accomplished by directly signaling or by means of a marking system developed by the establishment and acceptable to the Veterinarian-in-Charge, such as ink, tags, cuts or other markings. There shall be no visible contamination from ingesta and there shall be no movement or sway of the tongue that would interfere/impede inspection activities.

The inspector shall visually inspect each tongue and palpate any tongue identified as abnormal by the establishment employee or appearing abnormal to the inspector.

#### LYMPH NODES:

The parotid lymph nodes may be presented in their natural location or cut free along with their accompanying parotid salivary gland during the process of incising the masseter muscles and be presented attached to the lowest portion of the incised masseter muscle. The presentation must be consistent at one location or the other. The medial and lateral retro pharyngeal and mandibular lymph nodes must be presented intact and in a consistent location. No more than 50% of any I. node shall be missing.

### HEAD:

The head may be presented nostrils facing upwards or downwards but must be consistent. Prior to the inspector's examination of the head, an establishment employee is required correctly trim and dress the head, incise both lateral and medial muscles of mastication (cheeks) to expose the muscles for inspection. These incisions are to be made between the muscle planes so that 75% or more of the muscle is exposed, with no more than 25% of the exposed tissue consisting of white connective tissue, and with no more than 10% of the muscle surface obscured by blood. The head shall not be approved if it bears visible contamination from ingesta. It shall be the operator's responsibility to ensure all heads are properly for CFIA inspection. Heads which are improperly prepared or display food safety dressing defects shall be so identified and controlled as inedible material by the operator.

NOTE: The seepage of blood onto the exposed muscle surfaces may be reduced by cutting the blood vessels (common carotid artery and the external maxillary vein) at the angle of the mandible. Cutting these vessels before the head enters the final head wash cabinet reduces the amount of blood found on the cheeks at inspection.

# **6.2b.2** Viscera Presentation: (see fig 1)

No red offal portion (heart, lungs, liver, kidney) shall be approved for edible use if visible food safety defects are present. The operator shall ensure that such portions are identified and appropriately controlled when they are the result of a dressing procedure.

#### **HEART/LUNGS:**

An establishment employee shall open all chambers of the heart and incise the interventricular septum to fully expose the interior of the heart for examination for CFIA inspection.

#### KIDNEYS:

An establishment employee shall open the kidney capsule, separate the kidneys from the carcass and present the kidneys for inspection with the viscera at the viscera station.

#### STOMACH/INTESTINE:

Small and large intestines shall be presented in a consistent orientation with the mesenteric chain fully exposed.

NOTE: Spleens must be presented in full view to the viscera/carcass inspector in those establishments that do not separate spleen from the viscera.

#### ORIENTATION:

In each establishment the exact required placement of the various organs on the table is to be determined by the VIC in consultation with the Regional Program Specialist and establishment management. Schematic drawings of the approved viscera placement will be posted in the inspection office and in the establishment, where they can be readily viewed by inspection and production personnel.

### COMMON CONTACT:

There shall be no co-mingling or common contact of viscera units belonging to different carcasses. Overlapping or obscuring of viscera portions from the same carcass due to improper placement and orientation shall also be prevented.

#### DRAGGING/OVERHANG/PINCHING:

No portion shall be pinched, overhang the table edges or be dragged along

#### 6.2b.3 Carcass Presentation:

The establishment shall present the dressed carcass for inspection in a manner that will ensure good visualization of the external surfaces, thoracic and abdominal cavities, and cut surfaces of the carcass with the hocks spread apart on 6 foot minimum centers. There shall be no movement of the carcass. No remnant portions shall be left in the carcass. Those carcasses that cannot be properly eviscerated as the result of pathological (physiological or disease origin) complications shall not be scored.

### 6.3 TESTING AND SCORING PRESENTATION STANDARDS

#### 6.3.1 Test Procedures for Presentation Standards:

The presentation tests will be made at the following frequencies. Also refer to sec 6.1.1

Table 6.1			
Sampling Frequency For Presentation Standards Beef and Swine			
Facility Operator - Normal Mode	Every 30 minutes		
Facility Operator - Reduced Mode	Every 30 minutes.		
Facility Operator- Tightened Mode	Every 15 minutes		
CFIA	CFIA shall perform one randomly scheduled correlation test per half shift unless otherwise determined by the Veterinarian in Charge/delegate. See Sec 1.2		

CFIA will perform correlation tests in accordance with Table 6.1. CFIA will also perform periodic record monitoring activities to evaluate the entries made on presentation forms by establishment personnel. The frequency for such evaluations will be established by the Veterinarian-in-Charge. The inspector shall enter the date, time, and his/her initials at the bottom of each form evaluated, and if errors are found on the forms or they are not complete or timely, the inspector should describe the findings and actions taken on the bottom or back of the form. CFIA correlation test may also be recorded on the company form and will use a different colour of ink to distinguish CFIA information. Records of presentation tests shall be maintained for a period of one year.

# Line Speed Checks

An accurate digital line speed indicator for both the head chain and the carcass chain is required at a location readily accessible to the person performing presentation tests. A 1% margin of error shall be allowed for inherent variations in the system.

# 6.3.2a Scoring Presentation Errors Sec 6.3.2a SWINE ONLY

Scoring of presentation errors is based on the ISO attribute system using Sampling Plan 2859-1. In each of the three presentation categories; heads, carcass and viscera a list of defects or attributes has been established to ensure that a minimum standard of presentation is maintained in each. ISO switching rules for Reduced, Normal and Tightened modes apply to this standard. Any attribute (condition/defect) described under Heads, Carcass or Viscera shall be scored as a defect. The AQL's for each presentation category may vary depending on the complexity and number of attributes assigned to that procedure. Once determined these will be recorded in the company's written program and on the records document. All results are to be recorded on Form CFIA/HLIS 004A/B or C.

#### Note:

The presentation of any carcass or its parts which is adversely affected by the presence of a pathological/abnormal condition will not be scored for presentation. The next immediate trailing unit will be substituted in lieu and scored as part of the sample set.

Presentation Error Categories:

# (1) HEAD

# (a) Lymph Nodes

Mandibular lymph nodes must be presented intact (at least 50 per cent of each node) and consistently exposed in the area of the mandibular angle (ventral or dorsal approach). It must not be necessary to make an extra cut to expose the mandibular lymph node. Any procedure which leaves more than 1/2 of the lymph node in the neck area when using the dorsal presentation is considered to be a defect.

>½ of one or both lymph nodes in the wrong location (neck) = 1 defect/attribute.

>1/2 of one or both lymph nodes obscured from view = 1defect/attribute

# (b) Detached Head

Head (dorsal or ventral presentation) not attached or is only partially attached to carcass by normal skin attachment (regardless of whether reattached by other means). Head rotated >45 degrees = 1 defect.

(c) Excessive Movement (dorsal or ventral presentation)

Excessive head movement would be considered as any swinging or spinning motion that would interfere with or delay the inspector's hook placement prior to incising the mandibular lymph nodes. This needs to be judged before the centre line of the first inspection station.

#### (2) VISCERA - Hook and Pan Presentation

- (a) Red Offal (modified pluck includes larynx, trachea, esophagus, heart, liver and lungs)
  - i) rotated > 90 degrees 1 defect
  - ii) pluck not suspended at the base of the larynx (exception trachea damaged) 1 defect.
  - iii) part of red offal not attached on hook but present in pan -1 defect.
  - iv) entire organ(s) missing -1 defect.

# (b) Grey Offal

- i) rotated >45° left or right of standard position 1 defect.
- ii) grey offal (including spleen) is partially (greater than 50 per cent) or entirely missing 1 defect.
- iii) viscera/portions hanging outside pan/tray 1 defect.

- iv) not able to visualize at least 50 per cent of principle organs; spleen, hepatic lymph node, cecum, stomach, small intestine, rectum and mesenteric chain due to such things as improper presentation, dressing preparation, major contamination etc resulting in manipulation of organs. 1 defect.
- (c) Generalized Contamination

Whenever the red or grey offals are so contaminated that visualization is obscured and manual inspection through manipulation is required this shall be scored as 1 defect.

# (3) CARCASS

(a) Unsplit/sides not attached/rotated

Carcass not spread or presented to the inspector unsplit because of pathology do not count, the monitor skips this hog and continues selecting carcasses. Sides not attached in the pelvic and/or shoulder region (based on company's carcass preparation standard), or the carcass is coming towards the inspector more than 45 degrees from the perpendicular, shall be scored as 1defect.

- (b) Kidneys not exposed/missing
  - i) all kidneys shall be exposed. Each unexposed (i.e. the kidney is covered by more that 50% of the capsule/membrane) kidney shall be scored as 1 defect. This does not include kidneys with hydronephrosis.
  - ii) at least one complete intact kidney and one half of the remaining kidney shall be present. Each absent kidney or missing portion exceeding one half is scored as 1 defect.

### 6.3.2b Scoring Presentation Errors: Sec 6.3.2b BEEF ONLY

Presentation Error Categories:

- (1) HEAD
- (a) Tongue (if presented separately may be hung by the tip or root but is scored as part of head presentation)
  - i) visible GIT contamination present
  - ii) improper orientation, turned > 45 degrees from center position (hung backwards, sideways)
  - iii) no palpable/visual masses present
  - iv) loss of identification
  - v) portion missing
- (b) Head (may be suspended with head pointing up or down, tongue in or out)
  - i) visible GIT contamination present
  - ii) improper dressing (hide, eyelids, horns, lips, loose hairs)
  - iii) improper preparation of head (<75% cheek muscles exposed/not incised,</li>>25% blood obscuring surface, muscles not incised, tongue notpalpated/lesion undetected)
  - iv) loss of identification
  - v) portion missing (>50% of any I. node, tongue, medial/lateral masticatory muscle)

# (c) Kidneys

- i) visible GIT contamination present
- ii) improper position/orientation; incorrect schematic position, turned more than 45 degrees from normal center position.
- iii) improper preparation; > 25% covered by capsule
- iv) loss if identification, co-mingling, common contact with other carcass portions.
- v) portion missing; > 50% of organ missing
- (2) VISCERA (all viscera portions are scored collectively under this heading)

#### (a) Heart

- i) visible GIT contamination present
- ii) improper position/orientation; incorrect schematic position, turned more than 45 degrees from normal center position.
- iii) improper preparation; heart not adequately opened, >25% surface obscured
- iv) loss of identification, co-mingling common contact with other carcass portions.
- v) portion missing; > 50% of organ missing

#### (b) Liver

- i) visible GIT contamination present
- ii) improper position/orientation; incorrect schematic position, turned more than 45 degrees from normal center position, upside down etc.
- iii) loss if identification, co-mingling, common contact with other carcass portions.
- iv) portion missing; > 50% of organ missing, gall bladder, I. node

#### (c) GIT (gastro-intestinal tract)

- i) GIT internal spillage impeding inspection activities (inspector becomes contaminated, wash up, requires longer to perform duties etc)
- ii) improper position/orientation; incorrect schematic position, turned more than 45 degrees from normal center position.
- iii) loss if identification, co-mingling common contact with other carcass portions.
- iv) portion missing; > 50% of organ missing, gall bladder, I. node
- v) table overhang, dragging, pinching

# (d) Kidneys

- i) visible GIT contamination present
- ii) improper position/orientation; incorrect schematic position, turned more than 45 degrees from normal center position.
- iii) improper preparation; > 25% covered by capsule
- iv) loss if identification, co-mingling, common contact with other carcass portions.
- v) portion missing; > 50% of organ missing

# (3) CARCASS:

- i) generalized GIT contamination preventing inspection of carcass
- ii) improper orientation/position; hind legs not spread to specified distance for correct carcass exposure
- iii) improper dressing of carcass, remnant, unremoved organs/parts preventing final inspection

#### 6.4 CORRECTIVE ACTIONS FOR FAILED PRESENTATION TESTS:

Presentation checks shall be performed using ISO 2859-1 sample plan and the ISO switching rules between Reduced mode, Normal mode and Tightened mode shall apply. Sample size is based on the operator's production volume. All new facilities shall commence testing in Normal mode. The results and follow up actions of all presentation tests are recorded on Form CFIA/HLIS 004A/B or C for head, viscera or carcass presentation tests. All actions generated by presentation checks will be the establishment's responsibility and may be initiated by either Plant Production or Quality Control. Under normal circumstances Plant Production and QC shall manage their respective process action issues separately unless otherwise defined in the company's written program. If CFIA's presentation correlation test result fails to correlate with that of the Presentation Monitor an immediate retest shall be performed and QC will be notified. Two consecutive non matching correlation tests between the operator and CFIA will require that process action be initiated by the operator (if applicable) based on the results of the second CFIA test which shall be taken as the correct score. CFIA will monitor all Plant Production and QC corrective action activities to ensure program requirements are met. The discrepancy in scoring results shall be investigated and reconciled in consultation with the VIC after all required process actions have been implemented. Also see Product Testing Sec 1.2

#### **Normal Mode**

The operator must continue to successfully pass four out of five consecutive random tests to maintain Normal mode status. Should the operator fail two presentation tests within any window of five consecutive tests the testing mode shall be switched to Tightened, no other corrective action shall be initiated.

### **Tightened Mode**

Upon entering Tightened mode random testing shall be suspended and a presentation retest shall be conducted every 15 minutes until Normal mode is restored. Once returned to Normal mode random testing shall be resumed.

After any two consecutive failures in Tightened mode the VIC or designate shall be notified and consultation between the operator and CFIA shall take place to determine the cause of the presentation under performance. At the discretion of the VIC a 10% line speed reduction may be exercised if immediate improvement cannot be achieved in the subsequent retest score.

#### **Reduced Mode**

Ten consecutive successful test scores in Normal mode shall be achieved before switching may occur to Reduced Mode. Any single failure of a test score in Reduced mode will move the operator back to Normal mode. No other corrective actions shall be initiated.

#### **Excessive Line Speed**

If on any test the line speed is found to exceed the currently allowed rate as per table 5.1A, B or C an immediate line speed reduction to the allowed rate is required. After any line speed reduction the line speed shall be rechecked after 15 minutes. If the line speed is above the currently allowed rate after the retest the VIC/delegate must be notified and a 10% reduction from the current maximum allowed line speed will apply.

#### 7.0 FINISHED PRODUCT STANDARDS FOR CARCASSES:

It is critical in slaughter production environments to be able to perform periodic product evaluations on the finished product in order to validate effective hygienic manufacturing performance. Finished product standards are one of several tools designed to ensure that the procedures used in preparing and approving a dressed food animal carcass are in control and are producing a product that is in conformance with CFIA minimum Canadian regulatory standards. These evaluations are performed on randomly selected sets of carcasses/products selected throughout the production shift to validate the manufacturer's food safety and hygienic performance.

The establishment's Production personnel, Quality Control personnel, and CFIA's inspection staff each have a role to fulfill in applying the finished product standards. These responsibilities vary depending on the status of the process. In general, designated establishment personnel (Production or QC) are responsible for performing finished product standards tests as well as taking the appropriate action in response to the results of those tests. Designated CFIA inspectors are responsible for monitoring establishment tests and actions, performing correlation tests and performing periodic independent tests to verify the company's performance as deemed necessary by the VIC. The VIC or the designated EG 04 supervisor (or equivalent) shall perform all tests/evaluations related to carcass FPS for food safety.

# Note:

CFIA reserves the right to take regulatory corrective action including retention of product when it is determined by the VIC/delegate that the establishment has failed to properly and reasonably apply the HLIS program.

The approved carcass population is evaluated for two general categories of defects;

- 1. Food safety (FS) defects which include identifiable fecal material, identifiable ingesta material and food safety pathological conditions. FS defects shall be evaluated on the basis of colour, texture and consistency and must be clearly identifiable before being scored as such. Generally defects that are < 3.0 mm in their greatest dimension can be difficult to characterize with certainty when using only the naked eye. If the observer is not able to clearly identify a defect as being of FS origin it shall be classified as extraneous or foreign material and scored under the OCD category.</p>
- 2. Other Carcass Defects which are regarded as unsuitable for consumption or fail to meet regulatory requirements but do not pose a direct food safety risk as well as those defects that do not meet regulatory requirements and also in turn do not pose a significant food safety risk.

These two general categories of defects are evaluated on randomly selected sample sets of approved carcasses collected on the slaughter line at a point after all trimming is completed. In certain circumstances and with the approval of the VIC and the Area/National Program Specialists the sample evaluation may be performed on line provided satisfactory trial evaluation of this procedure has been conducted.

#### **Defect Classification:**

Each of the two general categories of defects noted above contain two specific types of defects:

1) Manufacturing/Dressing Defects (MD's):

These are defects that occur during transportation, live handling, stunning and dressing procedures and are to be distinguished from pathological defects or lesions referred to as Trimmable Pathological Conditions (TPC's). Refer to Table 7.1.

2) Designated Trimmable Pathological Conditions (TPC's):

Under the HLIS system the operator has full responsibility for the identification and removal of dressing/manufacturing and specified pathological defects as well as the removal of all designated trimmable pathological conditions. These trimmable pathological conditions fall into one of two categories identified as Category I or Category II TPC's, see Table 7.1. Category I TPC's are to be identified and removed by plant personnel on or off line and do not necessarily require direct CFIA supervision. Category II TPC's may also be removed on or off line by plant personnel but only after first being identified by CFIA inspectors. Any Category II food safety TPC encountered in a sample set scores as zero tolerance and will require sanitary removal of the defect and may result in the failure of the carcass sample set. Refer to Decision Tree Appendix C to determine next step ie. status of the associated lot and test mode status.

#### 7.1 Trimmable Pathological Conditions - TPC's:

- a) Category I TPC's are simple isolated resolved pathological or unacceptable anatomical conditions sometimes associated with dressing procedures but which do not affect the disposition of the entire carcass and are assigned to the industry accredited detectors and trimmers for identification and removal. TPC's include and are limited to bruising >2.5 cm, simple fractures, dry adhesions > 5.0 cm, single tarsal arthritis.
- b) Category II TPC's includes all other pathologies and these must first be identified by CFIA personnel and then trimmed by a accredited trimmer on or off line under CFIA supervision. The presence of a Category II TPC in any sample set will require correction for the condition prior to the carcass(es) being released followed by the appropriate corrective action for the lot if applicable.

The normal CFIA procedure for Category II TPC's shall be:

- i) the head inspection station, if applicable, will place an alert tag/equivalent marking system for further evaluation by viscera/carcass inspectors.
- ii) carcass/viscera inspector will further evaluate and either direct a designated employee to place a held tag for veterinary disposition, or will allow carcass to continue with alert tag in place.

iii) if the carcass is tagged HELD it is retained for Veterinary disposition. If not retained the carcass continues on line with the alert tag in place for removal of condition on line or on the retrim rail by an accredited trimmer.

# TABLE 7.1 TRIMMABLE PATHOLOGICAL CONDITIONS (TPC'S)

Category I TPC's;
Operator shall identify and trim

Category II TPC's; CFIA shall identify/ Operator shall trim and remove

All dry adhesions/scar tissue > 5.0 cm

All other pathologies

Fractures; simple

All bruising >2.5 cm unless humane treatment/transportation implications

Single Tarsal Arthritis

# 7.2 CARCASS EVALUATION FOR DEFECTS:

# 7.2.1 Carcass Evaluation For Food Safety (FS) Defects:

The carcass is evaluated for the presence of fecal, ingesta and food safety pathology defects based on ISO sampling plan 2859-1, S-1. The lot or batch size shall be the choice of the facility operator (see definitions) and agreed to by the VIC/Area Program Specialist but must remain within the facilities process control capability. Also included in this plan are associated switching rules which allows the operator to function in "Normal", "Tightened" or "Reduced" sampling mode based on test performance results. ISO switching rules apply. Scheduled random sampling is performed by the facility operator and monitored by CFIA. Refer Appendix C-Decision Tree for Food Safety Defects. Once a lot size category is selected by the operator it may not be switched spontaneously. A written request shall be submitted to the VIC and a mutually acceptable implementation date negotiated.

All carcass samples shall be selected at one time (consecutively) if the sample will be examined off line. When selecting carcasses from a moving line random selection principles are applied. Sample size is determined according to the Operator's ISO status under ISO sampling plan 2859-1 S1(this sample plan is only applicable if the Shewhart Control Chart is applied at the evisceration step) Record all nonconformances on Form CFIA/HLIS 003S

When the test is performed by CFIA and the same form for recording results is shared with the company a different ink colour shall be used to distinguish the CFIA results.

### **Normal Mode:**

Normal mode is maintained as long as the operator continues to pass at least four out of five consecutive carcass sample set tests. In each carcass sample set the carcasses are examined for food safety defects only. All carcasses shall be examined for food safety defects irrespective of how many defects are observed. Observation of one or more food safety defects will fail the sample set but not necessarily alter the classification of Normal test mode unless this is the second failure within five consecutive tests. See sec 7.2.2 Corrective Actions.

# **Tightened Mode:**

Tightened mode is maintained until the operator has passed five consecutive satisfactory tests. In each carcass sample set the carcasses are examined for food safety defects only and all carcasses in the set shall be examined irrespective of how many food safety defects are noted. Five consecutive satisfactory sample sets must be achieved before returning to Normal Mode. See Sec 7.2.2 Corrective Actions

#### Reduced Mode:

Reduced mode is presently an *elective* category and the operator may decline if s/he so chooses and is achieved after 10 consecutive satisfactory tests in Normal mode. The operator must perform without any defects being observed in any carcass sample sets while in Reduced mode or s/he shall return to Normal mode. All carcasses in the sample set shall be examined for food safety defects irrespective of the number of defects found. See Sec 7.2.2 Corrective Actions.

### 7.2.2 Corrective Actions for Food Safety Defects:

Refer Appendix C-Decision Tree for Food Safety Defects

# FS Action Limits: Single Site GIT (gastro-intestinal tract) Defect {BEEF ONLY}

{Carcasses in a stationary sample set which exhibit no more than1defect per carcass  $\le 5$  mm in its greatest dimension and originating from the GIT shall not be scored. The defect shall be removed sanitarily before the carcasses are released. Any carcasses displaying more than one such defect, irrespective of size, OR one or more defects of another FS category shall be scored in accordance with the HLS Program requirements and all process actions will apply. This action limit exemption does not apply to any carcasses that are evaluated and scored while on a moving carcass line.}

#### Normal Mode:

Under normal mode a lot failure occurs whenever there is a failure of more than one out of five consecutive carcass sample sets. When this occurs only the current production lot shall be detained and reworked for any food safety defects that caused the lot failure. The Operator shall then move into "Tightened" testing mode on the next sample test.

# **Tightened Mode:**

Under tightened mode five consecutive sample sets must pass to return to Normal mode. When entering Tightened mode if the first test fails the affected lot shall be detained and reworked as above. While in Tightened mode any test failure requires rework of the affected lot. (See Rework 7.4)

#### Reduced Mode:

A lot failure occurs in this mode upon the first failed test of a sample set and the associated lot is identified for rework. A reduction in status to Normal Mode also occurs at the next scheduled test.

# Note:

Any defects noted during the evaluation shall be sanitarily removed before the carcass is released. Particulate material < 3.0 mm in size that cannot be clearly or readily identified as GIT contamination using the normal criteria of texture, color and appearance will be treated as extraneous material.

#### 7.2.3 Carcass Evaluation For Other Carcass Defects (OCD):

The carcass is evaluated for other carcass defects which are defects that do not pose a direct food safety concern such as bruises, fractures, adhesions, hair, failed regulatory requirements such as presence of mammary tissue, untrimmed stick wound etc. When testing for these criteria generally about 1% of the carcass population is randomly sampled by the operator and monitored by CFIA. The carcass sample size shall be determined by the VIC and Area Program Specialist based on the above criteria. Refer Appendix B-Decision Tree for Carcass Non Food Safety Defects. Reduced testing frequencies may occur in this category based upon operator performance.

#### Regular Mode:

The operator shall perform carcass tests for other carcass defects on each production lot during each production shift. The choice of frequency will be correlated to the operator's defined lot size (1.0 hr of production or 0.5 hr of production). See Table 7.2. These tests shall be performed on a random basis and may be conducted at the same time as the food safety defect test.

#### **Relaxed Mode:**

After ten (10) consecutive successful test scores the operator may elect to move into Relaxed testing mode. The same number of carcasses shall be tested but at a lowered frequency. See Table 7.2. Any test failure will return the operator to Regular mode.

When taking samples all carcasses shall be selected at one time if the sample is to be examined off line. When selecting carcasses from a moving line random selection principles shall be used and consecutive sample units shall be collected. The nonconformance results for the sample units are to be recorded and scored on Form CFIA/HLIS 002S.

When the test is performed by CFIA and the same form is shared with the company a different ink colour shall be used to distinguish the CFIA results.

After performing a CFIA correlation test the inspector shall compare the test score with the establishment's results. If results are not in agreement an additional correlation test shall be performed. In the event of a second non matching score CFIA test results shall be officially recorded as the correct result and appropriate process actions initiated (if applicable) by the operator.

The VIC and the Operator shall collaborate to determine the reason for the non correlation. The CFIA inspector shall also evaluate appropriate plant records for timeliness, completeness, and accuracy at the preselected random times and correlate the results with the appropriate establishment representative.

#### 7.2.4 Corrective Actions for Other Carcass Defects:

Upon failing any FPS test for OC defects whether in Regular or Relaxed mode the operator shall immediately identify and hold for rework only the immediate production lot associated with the test failure. If the operator was in Relaxed testing mode he shall return to Regular testing mode. Ten consecutive successful test scores shall be achieved before returning to Relaxed mode. The affected lot shall be reworked for the defect(s) that were identified in the failed test score.

#### 7.2.5 CFIA/Operator Testing Frequency:

All correlation checks performed by the CFIA monitor will be selected on a random time basis. More than one check per shift or half shift may be performed if there is concern regarding test results. The VIC/delegate shall approve any additional testing.

	Table 7.2
Approved Carcass Testing F Non FS Defects	requency for Finished Product Standards: FS and
CFIA - FS and OCD's	once per half shift + spontaneous as req'd per VIC. See sec 1.2
Facility Operator FS Swine	once per ½ hour R, N, T
Facility Operator FS Beef	once per hour R, N, T
Facility Operator OCD's Swine	once per ½ hour Rg, once per hour Rx
Facility Operator OCD's Beef	once per hour Rg, once 2 hour Rx
R = reduced, N = normal, T = tig	htened, Rg = regular, Rx = relaxed

#### 7.3 SCORING CARCASS DEFECTS:

#### 7.3.1 Food Safety Defects

The following defects have a zero tolerance. For those defects that may be questionable as to origin and are < 3.0 mm in their greatest dimension please refer to sec 7.0 for additional criteria.

- identifiable fecal material
- identifiable ingested material
- food safety pathology (any lactation spillage shall be sanitarily removed by a trained employee at the time of hide removal)

All defects food safety defects that are observed while examining a sample set shall be sanitarily removed before the sample set is released. All findings shall be recorded on form CFIA/HLIS 003. Refer to Appendix C Decision Tree for Food Safety Defects.

#### 7.3.2a Other Carcass Defects: <u>SWINE ONLY</u> see Table 7.3:

#### i) STAINS:

Bile, oil etc; Minor defect  $\le$  4.0 cm, Major defect > 4.0 cm. Five minor defects accumulates to 1 major defect

#### ii) BLOOD CLOTS:

Clots  $\leq$  4.0 cm not scored. Minor defect includes blood clots >4.0 cm  $\leq$  15.0 cm. Major defect >15.0 cm. All measurements are taken across the greatest dimension (GD). Five minor defects accumulates to 1 major defect.

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#### iii) BRUISING:

Bruises  $\le 2.5$  cm. are not scored, Minor defects are >2.5 and  $\le 6.0$  cm greatest dimension and  $\le 2.5$  cm deep. Major defects are > 6.0 cm in greatest dimension and > 2.5 cm deep. Five minor defects accumulates to 1 major defect.

#### iv) EXTRANEOUS MATERIAL:

Minor defect;  $\le 10 \text{ cm}^2$  area of smear or dust specks or  $< 5 \text{ specks in an area} \le 50 \text{ cm}^2$ ; Major defect;  $> 10 \text{ cm}^2$  area of smear or dust specks or  $> 5 \text{ dust specks in an area} > 50 \text{ cm}^2$ : Insects 1 minor defect for each (flies, mosquitoes etc). The accumulation of five minors will equate to 1 major.

#### v) HAIR (scalded carcass)

Minor defect; obvious bristle/hair in an area  $\le 50$  cm<sup>2</sup>. Major defect obvious bristle/hair in an area > 50 cm<sup>2</sup>. The accumulation of five minors will equate to 1 major.

vi) MUTILATION (equipment/live handling related prior to evisceration)
Includes complete break in the skin: minor defect > 5.0 cm and ≤7.5 cm GD; major defect > 7.5 cm GD

#### vii) SCAR TISSUE/ADHESIONS:

Defects smaller or equal to 5.0 cm are not scored. Minor defect; > 5.0 cm and  $\leq 7.5$  cm GD. Major defect > 7.5 cm GD.

#### viii) IMPROPER TRIM / ORGAN REMNANTS

Defects  $\le$  5.0 cm not scored. Minor defect; > 5.0 cm and  $\le$  7.5 cm accumulated remnants. Major defect; > 7.5 cm

#### ix) TOE NAILS / INTERDIGITIAL GLANDS:

Minor defect; one toe nail/gland not removed. Major defect; > 1 toe nail/gland not removed

#### x) FRACTURES/Category I TPC:

Any recent fractures or fractures that have failed to heal and pose a consumer unsuitability condition or any unremoved Category I TPC. Major defect.

#### xi) STICK WOUNDS

Major defect: untrimmed in part or in whole.

#### xii) SKIN CONDITIONS

Unmarked skin defects (Urine burn, seedy belly etc.)

Minor defects; area of skin > 5 cm² and ≤10 cm², Major defect; area of skin >10 cm².

#### xiii) MAMMARY TISSUE - non lactating

Minor defect;  $\leq$  20.0 cm GD. Major defect; > 20.0 cm. non lactating mammary gland. Any lactating mammary tissue will be classified as a Category II TPC with a zero tolerance

#### Notes:

- All dry adhesions < 5.0 cm, localized hyperemic skin conditions, resolved scar tissue/fractures
  and small bone fragments/fractures created during dressing procedures are disregarded and not
  scored as a non-conformance and do not normally require trimming unless associated with
  unsuitable hemorrhage/bruising etc.</li>
- 2. Scoring Rules; for each major defect score 1, to convert minor to major X minor score by 0.2 (except mammary tissue, organ remnants, toenails which are multiplied by 0.5). Accept lot with a total of 2.9, reject lot with a score of 3.0 or greater. Do not round decimal values up or down while adding score.

Table 7.3	CFIA SPC Test: Other Carcass Defe	ect Chart (Swine)
NON CONFORMANCE	MINOR DEFECT DESCRIPTION	MAJOR DEFECT DESCRIPTION
Stains (eg bile or oil)	≤ 4cm	> 4 cm (GD*)
Blood Clots	>4 and < 15 cm (GD*)	> 15 cm (GD*)
Bruising	>2.5 and $\leq$ 6cm (GD*) and $\leq$ 2.5 cm deep	> 6 cm (GD*) and > 2.5 cm deep
Extraneous material	≤10 cm² area of smear or dust specks or ≤ 5 specks in an area ≤ 50cm². Insects-each 1 minor eg flies, mosquitoes	> 10 cm² area of smear or dust specks or > 5 dust specks in an area >50 cm²
Hair (scalded carcass)	any obvious hair/bristle in an area ≤50cm²	> any obvious hair/bristle in an area ≤50cm²
Mutilation (complete break in skin)	> 5cm and ≤ 7.5cm	> 7.5cm (GD*)
Scar tissue / adhesions	> 5cm and < 7.5cm (GD*)	> 7.5cm (GD*)
Organ remnant	> 5cm and $\leq$ 7.5cm (GD*) (Multiply by 0.5)	≥ 7.5 cm GD
Toenails / interdigital glands	1 toenail / Interdigital gland (Multiply by 0.5)	2 toenails / Interdigital glands
Skin condition	(unmarked) ≥ 5cm and ≤ 10 cm (Multiply by 0.5)	seedy belly, urine burn > 10 cm
Mammary tissue	( non lactating) ≤20cm GD (Multiply by 0.5)	> 20cm (GD*)
Fractures/Category I TPC	N/A	Any fresh fracture or TPC I not removed
Stick wounds	N/A	Any untrimmed or partially untrimmed stick wound

<sup>1.</sup> Multiply each minor nonconformance by 0.2 (except mammary tissue, organ remnants, toenails, multiply by 0.5).

- 2. Multiply each major nonconformance by 1. Add major and minor nonconformances. 1.
- 3. Accept lot with total of 2.9, reject lot with total of 3 or more.
- 4. If what is found is less than the minimum minor size or count listed, do not score.

<sup>\*</sup>GD = greatest dimension

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#### 7.3.2a Other Carcass Defects: BEEF ONLY see Table 7.4

#### i) STAINS:

Bile, oil etc; minor defect;  $\leq$  4.0 cm, Major defect; > 4.0 cm. Five minor defects accumulates to 1 major defect

#### ii) BLOOD CLOTS:

Clots less than 4.0 cm not scored. Minor defect; > 4.0 cm and  $\le$  15.0 cm. Major defect; >15.0 cm. All measurements are taken across the greatest dimension (GD). Five minor defects accumulates to 1 major defect.

#### iii) BRUISING:

Bruises  $\le 2.5$  cm. are not scored, Minor defect >2.5 and  $\le 6.0$  cm greatest dimension and  $\le 2.5$  cm deep. Major defect; > 6.0 cm GD and > 2.5 cm deep. Five minor defects accumulates to 1 major defect.

#### iv) EXTRANEOUS MATERIAL:

Minor defect;  $\le 10 \text{ cm}^2$  area of smears or dust specks or  $< 5 \text{ specks in an area} \le 50 \text{ cm}^2$ ; Major defect;  $> 10 \text{ cm}^2$  area of smear or dust specks or  $> 5 \text{ dust specks in an area} > 50 \text{ cm}^2$ : The accumulation of five minors will equate to 1 major.

#### v) PARASITES/INSECTS:

Minor defect; each insect, warble etc. 5 minors accumulate to one major.

#### vi) FRACTURES/CATEGORY I TPC

Any recent fractures or fractures that have failed to heal and pose a consumer unsuitability condition or unremoved Category I TPC. Major defect

#### vii) HAIR

Minor defect; 5-10 strands in a single 50 cm<sup>2</sup> area. Major defect; >10 strands in a 50 cm<sup>2</sup> area. Five minors accumulate to 1 major.

#### viii) HIDE

Minor defect; < 10.0 cm GD. Major defect > 10.0 cm GD

### ix) MAMMARY TISSUE - non lactating (see note below). Minor defect; ≤20 cm.(each minor defect = 0.5 major), Major defect; > 20.0 cm

## x) ORGAN REMNANT/IMPROPER TRIM (see note below) Less than 5.0 cm not scored. Minor defect >5 cm and ≤7.5 cm. Major defect 1 or

# more remnants >7.5 cm xi) SCAR TISSUE/ADHESIONS

≤ 5.0 cm not scored. Minor defect; > 5.0 cm and ≤7.5 cm. Major defect; > 7.5 cm

#### xii) STICK WOUNDS

Major defect: untrimmed in part or in whole.

**Note:** For each major defect score 1, to convert minor defects to major defects, # minors x 0.2 (except mammary and organ remnants are multiplied by 0.5). Accept a lot with total of 6.9, reject with a total score of 7 or greater. Any lactating mammary tissue will be classified as a Category II TPC with a zero tolerance.

Table 7.4	CFIA SPC Test: Other Carcass Defe	ects Chart (Beef)
NON CONFORMANCE	MINOR DEFECT DESCRIPTION	MAJOR DEFECT DESCRIPTION
Stains (eg bile, oil, etc)	≤ 4.0 cm	> 4.0 cm (GD*)
Blood Clots:	>4cm and ≤15 cm (GD*)	> 15 cm (GD*)
Bruising	>2.5 and $\leq$ 6cm (GD*) and $\leq$ 2.5 cm deep	> 6 cm (GD*) and > 2.5 cm deep
Extraneous material	≤10 cm² area of smear or dust specks or ≤ 5 specks in an area ≤ 50cm². Insects-each 1 minor eg flies, mosquitoes	> 10 cm² area of smear or dust specks or > 5 dust specks in an area >50 cm²
Parasites/Insects:	Each warble, fly etc.	(Accumulated minor defects)
Hair	5 to 10 strands in a single 50 cm <sup>2</sup> area	>10 strands in a single 50 cm <sup>2</sup> area
Hide	<pre>&lt; 10 cm (GD*)</pre>	> 10 cm (GD*)
Scar Tissue/adhesions	>5 cm and < 7.5 cm (GD*)	> 7.5 cm (GD*)
Mammary Tissue (non lact.)	≤20 cm (GD*) (Multiply by 0.5)	> 20 cm (GD*)
Organ Remnant	>5 and ≤7.5cm. (Multiply by 0.5)	>7.5 cm (GD*)
Fractures, Category I TPC:	N/A	Any fresh fracture or TPC I not removed
Stick Wounds	N/A	Any untrimmed or partially untrimmed stick wound

#### Note:

- 1. Multiply each minor nonconformance by 0.2 (except mammary tissue and organ remnants multiply by 0.5).

  2. Multiply each major nonconformance by 1. Add major and minor nonconformances.
- 3. Accept a lot with total of 6.9 or less and reject with a total score of 7or greater.
- 4. If what is found is less than the minimum minor size or count listed, do not score.
- \*GD = greatest dimension

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#### 7.4 REWORK OF FAILED LOT(S)

#### i) Establishment Responsibilities and Actions:

Specific lots of product retained for rework may, at the discretion of the establishment, be reworked as the original lot(s) or be subdivided into smaller lots of carcasses. Once the specified lot has been reworked for the appropriate defects one standard sample set of three (3) carcasses will be randomly selected for each 100 carcass lot reworked. A lot of less than 100 carcasses shall have a minimum sample size of three (3) carcasses with a minimum lot size of 25. Lots exceeding 100 carcasses shall have their sample numbers prorated according to their lot size, eg. 150 carcasses would require a minimum of 4 carcasses, 175 would require 5 carcasses, 200 would require 6 carcasses etc. Samples of reworked product that are presented for re-inspection must be randomly selected from the lot's declared population. Refer to Appendix E Decision Tree for Carcass Rework.

The establishment shall randomly select a sample set from throughout the lot and achieve a satisfactory test result before releasing it for further processing. If the lot was detained for rework because of an FS defect the sample set shall be examined for those FS defects only (ANY other encountered defect, FS or OCD, shall be sanitarily removed). The lot shall be released if no FS defects are found in any of the sample units. The lot shall be detained and reworked again if any of the FS defect(s) that failed the lot are found.

If the lot was detained for rework for other carcass defects, the lot shall be examined and corrected for the specific non-conformance(s) which initiated the process control action. Once the lot is reworked it shall be sampled and evaluated as described above and released or reworked in accordance with the sample findings.

#### ii) CFIA Responsibilities and Actions:

- Rework testing frequency by CFIA shall be discretionary. CFIA will periodically
  monitor the rework procedure to ensure that the establishment is meeting the
  requirements of the program
- The VIC/delegate shall be informed whenever a process action is taken on a failed rework lot.

#### 7.4.1 Voluntary Rework Under Extra Ordinary Circumstances

Due to extra ordinary circumstances beyond the operator's immediate control certain groups of carcasses may be presented with conditions on the evisceration floor that significantly bias that group towards failure of the performance standards for Finished Product Testing. In such circumstances and at the discretion of the VIC, the operator may request that such a group of affected carcasses be exempted from Finished Product Standards Testing provided that the operator agrees to properly identify and retain the affected group for rework as described in section 7.4 and the exempted group of carcasses poses no food safety concerns and an approved written procedure has been established for the handling of such hogs in the company's written program and/or HACCP plan.

# Inspection Procedures HLIS - Beef and Swine Appendix A

#### **Shewhart SPC Decision Tree**

#### #1 Green Zone:

- A) Current score under random testing remains in green zone, no action, continue random sampling
- B) If green zone score is the result of a retest, increase line speed (if applicable) in 10% increments until normal line speed restored and resume random testing after first green zone score at normal line speed or after 2 consecutive green zone scores as applicable.
- \*all results to be recorded on Form HLIS 001S/B

## # 2 Yellow Zone:

Suspend random sampling, initiate immediate corrective action and perform retest within 15 minutes. If green zone score is the result of the 1st retest go to #1B

- 1<sup>st</sup> retest results in yellow zone score go to #3
- 1st retest results in red zone score go to #5

#### #3 Yellow Zone 1st Retest:

Retest results in yellow score, immediate 10% line speed reduction, immediate corrective action, notify CFIA, retest within 15 min.

- -If second retest results are in green zone go to #1B
- If second retest results are in a yellow or red zone score, repeat above, notify CFIA, go to #6.

#### # 4 Red Zone:

Suspend random sampling, immediate 10% line speed reduction, initiate corrective action, notify CFIA and perform retest within 15 minutes.

- 1st retest results in green zone score go to #1B
- 1<sup>st</sup> retest results in yellow zone score go to #3
- 1st retest results in red zone go to #5

#### # 5 Red Zone 1st Retest:

Further 10% line speed reduction, initiate corrective action, notify CFIA and retest within 15 minutes.

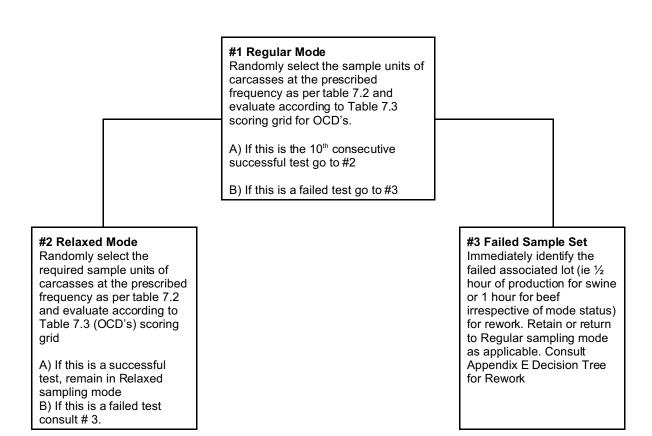
2<sup>nd</sup> retest results in green zone go to #1B 2<sup>nd</sup> retest results in yellow zone go to # 6 2<sup>nd</sup> retest results in red zone go to # 6

#### # 6 Any Three Consecutive Test Failures:

Three consecutive test failures indicates that the process is not operating under adequate control. Consultation with the VIC/delegate and the operator will determine the next course of action which may include temporary halting of the stunning and slaughter operation, further line speed reductions etc. A clear determination of the problem and its resolution is to be agreed upon before operations are allowed to proceed.

# Inspection Procedures HLIS - Beef and Swine Appendix B

### Decision Tree CFIA SPC Test: Other Carcass Defects

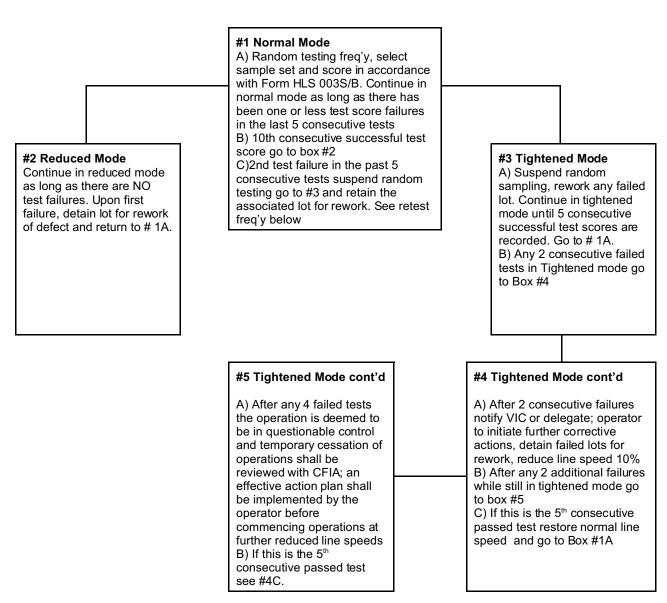


#### Rules:

- 1. Regular mode shall be used to start
- 2. Regardless of which inspection mode is being used, all defects are removed from the sample before it is released and all units in the sample are examined
- 3. Irrespective of mode, Regular or Relaxed, only the immediate associated lot shall be reworked when a failure occurs ie. ½ hour of production for swine and 1 hour of production for beef.

# Inspection Procedures HLIS - Beef and Swine Appendix C

### Decision Tree ISO SPC Test: Carcass Food Safety Defects



#### Rules

- 1. Normal mode shall be used to start
- 2. Normal, tightened or reduced modes shall continue unchanged except where indicated by the decision tree above;
- 3. Regardless of which inspection mode is being used, all carcass defects shall be removed from the sample set before it is released and ALL carcass units in the sample are examined.
- 4. Retests shall be performed every 15 or 30 minutes as per operator's written program

#2 Reduced Inspection Mode

the following situation applies:

and switch to the Normal

Inspection mode (Box # 1)

Continue in reduced mode unless

If a reduced inspection mode test

fails, implement corrective action(s)

# Inspection Procedures HLIS - Beef and Swine Appendix D

#### Decision Tree for Swine and Beef Presentation

#### **#1 Normal Inspection Mode**

Continue in normal mode unless one of the following situations apply:

A. If this is the 10th consecutive passed test, **switch to the reduced** inspection mode (Box #2)

B. If this is the 2nd rejected test in the last 5 tests, implement corrective action, notify CFIA and **switch to the tightened** inspection mode (Box #3)

Record results on Form CFIA/HLIS 004/005 as applicable.

#### #3 Tightened Inspection Mode

Suspend random testing and implement corrective action(s). Continue in tightened mode unless one of the following situations apply:

A. If this is the 5th consecutive passed tightened test, **switch to the normal** inspection mode and resume random testing (Box #1).

B. If this is the 2nd consecutive rejected tightened test go to Box #4.

#### #5 Tightened Inspection Mode cont'd

If the retest passes, return to Box #3 (if a 10 % line speed reduction was applied this shall be reversed by the same amount) if the retest is rejected, implement corrective action, reduce the line speed.

Continue to a maximum of 4 consecutive or 4 non-consecutive tightened mode failures. If this occurs, this indicates process control failure, refer to policy and notify the V.I.C.

### #4 Tightened Inspection Mode (continued):

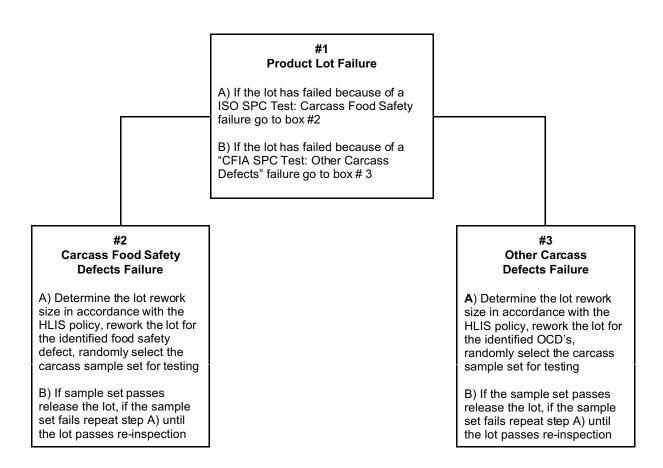
CFIA / Plant consultation due to process in questionable control. Please see HLIS policy for further information. After consultation and corrective action(s), retest in 15 minutes. If retest is successful, go to Box #3.

#### Rules:

- Testing in normal, tightened or reduced modes shall continue unchanged except where indicated by the decision tree.
- 2. A sample unit (viscera, head or carcass) fails if one or more attributes are scored.
- 3. There is a maximum of one failure per sample unit.
- 4. There shall be no more than one process control step under a line speed reduction at any given time.

# Inspection Procedures HLIS - Beef and Swine Appendix E

### DECISION TREE for Beef and Swine Carcass Product Rework



#### Rules:

- All encountered defects, Food Safety or Other Carcass Defects shall be sanitarily removed from all carcasses in the sample.
- 2. The failed lot shall be reworked for all contributing defects if encountered in the failed score.
- 3. Unless otherwise specified a lot consists of ( ½ hour of production for swine and 1 hour of production for beef), irrespective of the mode category.
- 4. The operator may select sub lots for purposes of rework as per the HLIS policy.

*	Canadiar Inspectio	n Food on Agency	Agence cana d'inspection	dienne des aliments		She		Control C	hart		
						Red	Zone	Unsat'y			
	()					Red	Zone	Unsat'y			
Defective Carcasses						Yellow	Zone	Fair			
ective C						Green	Zone	Satis'y			
Def	$\bar{\times} =$					Green	Zone	Satis'y			
	()										
		0	1		3	4 σ = standa	5 ard deviation	6 7 on		8	9
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Γest Locatio	on: (chec	k one)	Swine Evi	sceration 🗅		Beef Evisc	eration 🗅	Ве	ef hide re	moval 🗅	

Sample #	Time	Score	Comments	CFIA Inital	Est. Initial

CFIA/HLIS 001S/B Amended 01/03/04

Important: If further corrective action is required, record it on the back of this form or on an attached or referenced document.

DATE:	EST#								SH	IFT:													PA	GE		OF		
Time / CFIA or Plant initial	S																											
Test # / Starting sequence	or ID#	Te	st 1						Tes	st 2						Tes	t 3						Tes	st 4				
Minor Nonconformances (# x 0.2 or 0.5) <b>See Rules</b>	Major Nonconformances (M) (Multiply by 1.0) See Rules	1	2	3	4	5	6	Т	1	2	3	4	5	6	Т	1	2	3	4	5	6	T	1	2	3	4	5	6
Stains (eg bile, oil etc) - ≤ 4cm	>4 cm (GD)																											
Blood Clots -> 4 and ≤ 15 cm GD)	>15cm (GD)																											
Bruising 2.5 to 6cm (GD) and 1.3 to 2.5 cm deep	>6cm GD and >2.5cm deep																											
Extraneous material - <10 cm smears/dust specks and or <5 dust specks per area <50 cm <sup>2</sup>	>10cm smears or dust specks and or >5 dust specks per area >50 cm²																											
Parasite/Insects - Each Warble	Accumulated minors																											
<b>Hair</b> - 5 to 10 strands in a single 50 cm <sup>2</sup> area	>10 strands in a 50 cm <sup>2</sup> area																											
Hide ≤10cm (GD)	>10cm (GD)																											
Scar tissue / adhesions > 5cm and ≤ 7.5 cm (GD)	>7.5cm (GD)																											
Mammary tissue ( non lact) ≤20cm * Multiply by 0.5 *	>20cm (GD)																											
Organ remnant >5 and ≤ 7.5 cm (GD) * Multiply by 0.5*	>7.5cm (GD)																											
Fractures	Any fresh fracture or Category I TPC not removed																											
Stick wound	Completely or partially untrimmed stick wound																											

1. Multiply each minor nonconformance by 0.2 (except mammary tissue and organ remnants multiply by 0.5). Multiply each major nonconformance by 1. Add major and minor nonconformances

#### CFIA/HLIS 002B Amended 01/03/04

Important: If further corrective action is required, record it on the back of this form or on an attached or referenced document. G.D. = Greatest Dimension

<sup>2. 3.</sup> Accept lot with total of 6.9, reject lot with total of 7 or more.

<sup>4.</sup> If what is found is less than the minimum minor size or count listed, do not score.

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Time / CFIA or Plant initials																									
Test # / Starting sequence or ID #		Tes	st 1					Te	st 2					Te	st 3					Те	st 4				
Minor Non Conformances (multiply by 0.2 or 0.5) see Rules	Major Non Conformances (Multiply by 1) see Rules	1	2	3	4	5	Т	1	2	3	4	5	Т	1	2	3	4	5	Т	1	2	3	4	5	7
Stains (eg bile, oil, etc) - $\leq$ 4cm (GD)	>4 cm (GD)																								
Blood Clots - >4 and ≤ 15 cm GD)	>15cm (GD)																								
<b>Bruising</b> >2.5 and $\leq$ 6cm (GD) and $\leq$ 2.5 cm deep	>6cm GD and >2.5cm deep																								
Extraneous material - ≤10 cm smears/dust specks and or ≤5 dust specks per area ≤50 cm², each insect eg flies, mosquitoes etc	>10cm smears or dust specks and or >5 dust specks per area >50 cm <sup>2</sup>																								
Hair -obvious bristle/hair ≤50 cm²	obvious bristle/hair >50 cm² area																								
Mutilation -(complete break in skin-) > 5cm, ≤ 7.5cm (GD)	>7.5cm (GD)																								
Scar tissue / adhesions > 5cm and $\leq 7.5$ cm (GD)	>7.5cm (GD)																								
Organ remnant >5 and≤ 7.5 cm (GD)	≥7.5cm (GD)																								
Toenails / interdigital glands - 1	2 Toenails or 2 Interdigital glands																								
Skin Cond.(unmarked) >5 and ≤10cm GD	>10cm Urine burns, seedy belly																								
Mam tissue (non lact) ≤20cm GD	>20cm (GD)																								
Fracture/Category I TPC	Any fresh fracture or category 1 TPC not removed																								
Stick wound	Completely or partially untrimmed stick wound																								

1. Multiply each minor nonconformance by 0.2 (except organ remnants, toenails, skin conditions and mammary tissue multiply by 0.5). 2. Multiply each major nonconformance by 1. Add major and minor nonconformances. 3. Accept lot with total of 2.9, reject lot with total of 3 or more. 4. If what is found is less than the minimum minor size or count listed, do not score.

CFIA/HLS 002S 01/03/04 Important: If further corrective action is required, record it on the back of this form or on an attached or referenced document. G.D. = Greatest Dimension

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Test # / Starting sequence or ID #	Т	est #	ŧ 1				Т	est #	ŧ 2				Te	est #	3				Te	est#	4				Te	est#	5			
CFIA Initials / Time																														
Plant Employee Initials / Time																														
Carcass / side number	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
1st GIT defect ≤ 5mm*																														
Fecal / Ingesta Material																														
Spinal Cord Material **																														
Food Safety Pathology (FSP)																														
Accept/Reject & Sample Mode	Ad	;	Re	R	N	Т	Ac	;	Re	R	N	Т	Ac		Re	R	N	Т	Ac	:	Re	R	N	Т	Ac		Re	R	N	Т
Test # / Starting sequence or ID #	Т	est #	ŧ 6				Т	est #	ŧ 7				Te	est #	8				Te	est#	9				Te	st#	10			
CFIA Initials/ Time																														
Plant Employee Initials/ Time																														
Carcass /side number	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
1st GIT defect ≤ 5mm*																														
Fecal / Ingesta Material																														
Spinal Cord Material **																												П		
Food Safety Pathology (FSP)																														
Accept/Reject & Sample Mode	Ad	;	Re	R	N	Т	Ac	;	Re	R	N	Т	Ac	;	Re	R	N	Т	Ac	,	Re	R	N	Т	Ac	:	Re	R	N	Т
	Attribut	es:	l = inç	gesta	, F =	fecal	, P =	path	ology	, (	Samp	ole M	ode	s:R	= red	duce	d, N	= no	rmal,	T =	tight	ened								

<sup>\*</sup> NOTE: For beef carcasses **ONLY**: there shall be an allowance of one GIT origin defect/carcass  $\leq$  **5 mm.** All additional defects shall be scored and <u>ALL</u> defects shall be sanitarily removed before releasing the sample set.

CFIA/HLIS 003S/B FPS(FS) Amended 01/03/04 Important: If further corrective action is required, record it on the back of this form or on an attached or referenced document.

<sup>\*\*</sup> Only for carcasses derived from cattle of 30 months of age or older.

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	Tes	t # 1	Test	t # 2	Test	# 3	Tes	# 4	Tes	t # 5	Test	# 6	Tes	t # 7	Test	# 8	Tes	t # 9
HEAD DEFECTS	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init
Improper dressing ( Hide, horns, eyelids,)																		
Any visible GIT contents on head																		
Portions missing (eg. Tongue, >50% l. node)																		
< 90% of cheek m. incised and < 3 / 1 ratio exposed muscle surface to connective tissue																		
Loss of I.D.																		
Mode/Score	TNR		TNR		TNR		TNR		TNR		TNR		TNR		TNR		TNR	
Accept / Reject	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re
Line Speed																		
	Test	# 10	Test	# 11	Test	# 12	Test	# 13	Test	# 14	Test	# 15	Test	# 16	Test	# 17	Test	# 18
HEAD DEFECTS	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init
Improper dressing ( Hide, horns, eyelids,)																		
Any visible GIT contents on head																		
Portions missing (eg. Tongue, >50% I. node)																		
< 90% of cheek m. incised and < 3 / 1 ratio exposed muscle surface to connective tissue																		
Loss of I.D.																		
Mode/Score	TNR		TNR		TNR		TNR		TNR		TNR		TNR		TNR		TNR	
Accept / Reject	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re
Line Speed																		

CFIA/HLS 004A Amended 01/03/04

Important: If further corrective action is required, record it on the back of this form or on an attached or referenced document.

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CFIA/HLS 004B Amended 01/03/04

Important: If further corrective action is required, record it on the back of this form or on an attached or referenced document.

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	Test	# 1	Test	t # 2	Test	# 3	Test	# 4	Tes	t # 5	Test	# 6	Test	# 7	Tes	t # 8	Tes	st # 9
CARCASS DEFECTS	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init
Improper orientation/exposure ( unspread or turned)																		
Generalized contamination impeding inspection																		
Improper dressing (Remnant portions obstructing inspection)																		
Mode/Score	TNR		TNR		TNR		TNR		TNR		TNR		TNR		TNR		TNR	
Accept / Reject	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re
Line Speed																		

	Test	# 10	Test	# 11	Test	# 12	Test	# 13	Test	# 14	Test	# 15	Test	# 16	Test	# 17	Tes	st # 18
CARCASS DEFECTS	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init
Improper orientation/exposure ( unspread or turned)																		
Generalized contamination impeding inspection																		
Improper dressing (Remnant portions obstructing inspection)																		
Mode/Score	TNR		TNR		TNR		TNR		TNR		TNR		TNR		TNR		TNR	
Accept / Reject	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re
Line Speed																		
	•			Γightene	d, N=Noi	mal, R=	Reduced	I, AC=A	ccept, RE	=Reject			•		•		•	

CFIA/HLS 004C Amended 01/03/04

Important: If further corrective action is required, record it on the back of this form or on an attached or referenced document.

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HEAD DEFECTS	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init
>½ of one or both mandibular I. node missing/ wrong location																		
>1/2 one/both mandibular I. node obscured view																		
One or both mandibular lymph node missing																		
Suspension / detached from carcass																		
Position / alignment / excess motion																		
Mode/Score	TNR		TNR		TNR		TNR		TNR		TNR		TNR		TNR		TNR	
Accept / Reject	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re
Line Speed																		

	Test	# 10	Test	# 11	Test	# 12	Test	# 13	Test	# 14	Test	# 15	Test	# 16	Test	# 17	Test	# 18
HEAD DEFECTS	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init
>½ of one or both mandibular I. node missing/ wrong location																		
>1/2 one/both mandibular I. node obscured view																		
One or both mandibular lymph node missing																		
Suspension / detached from carcass																		
Position / alignment / excess motion																		
Mode/Score	TNR		TNR		TNR		TNR		TNR		TNR		TNR		TNR		TNR	
Accept / Reject	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re
Line Speed																		
T=Tightened, N=Normal, R=Reduced, AC=Acce	ot. RF=R	eiect	-		-				-		-		-					

i – righterieu, ri–riorniai, ri–rioudeeu, Ao–Accopt, rii–riojet

CFIA/HLS 005A Amended 01/03/04

Important: If further corrective action is required, record it on the back of this form or on an attached or referenced document.

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OFFAL DEFECTS	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	lni
						REI	OFFAI	_										
> 45 Degree rotation from normal																		
> 50 % organ missing or absent																		
Wrong orientation																		
Sway / Suspension / grey offal contact																		
GIT Contamination																		
	<u> </u>				<u>. u </u>	GRE	Y OFFA	L										
Not in normal quadrant / 45 degrees																		
< 50% mesenteric chain visible																		
ANY viscera outside pan																		
< 50% Each inspected organ visible																		
Not possible to visualize due to contamination																		
> 50 % organ missing or absent																		
Mode/Score	TNR		TNR		TNR		TNR		TNR		TNR		TNR		TNR		TNR	
Accept / Reject	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re
Line Speed																		

CFIA/HLS 005B Amended 01/03/04

Important: If further corrective action is required, record it on the back of this form or on an attached or referenced document.

Canadian Food Agence canal Inspection Agency d'inspection of					IS	O SI	PC TE	EST:	SWII	NE C	ARC	ASS	PRE	SEN	ITATI	ON		
DATE:	EST#						SHIFT:						PAGE	OI	F			
	Test #	# 1	Test	t # 2	Test	t # 3	Test	# 4	Test	t # 5	Test	# 6	Test	# 7	Tes	t # 8	Te	st # 9
CARCASS DEFECTS	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init	Time	Init
																		<u> </u>
Inadequate spread / exposure																		
Unsplit																		
> 45deg rotation.																		
Kidneys absent / not exposed																		
Mode/Score	TNR		TNR		TNR		TNR		TNR		TNR		TNR		TNR		TNR	
Accept / Reject	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re
Line Speed																		

	Test # 10	Test # 11	Test # 12	Test # 13	Test # 14	Test # 15	Test # 16	Test # 17	Test # 18
CARCASS DEFECTS	Time Init	Time Init	Time Init	Time Init	Time Init	Time Init	Time Init	Time Init	Time Init
Inadequate spread/ exposure									
Unsplit									
> 45deg rotation.									
Kidneys absent / not exposed									
Mode/Score	TNR	TNR	TNR	TNR	TNR	TNR	TNR	TNR	TNR
Accept / Reject	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re	Ac Re
Line Speed									
	•	T=Tightene	d, N=Normal, R=	Reduced, AC=Ac	cept, RE=Reject	•	•	•	-

CFIA/HLS 005C Amended 01/03/04

Important: If further corrective action is required, record it on the back of this form or on an attached or referenced document.

Agence canadienne d'inspection des aliments

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					ASSESSMENT FORMATION				
Reference materials are the MI Act, MI Re	egs, MOI	, HLIS Beε	ef Policy and	d relevant Annexes	S				
Est. Name:				Date(s) of rev	view:				
Est. Registration #:		City:			Province:				
Proposed HIS Start date:			OR	HIS Start Dat	ie:				
HACCP recognition date:				FSEP Verifica	ation: Y N				
							Yes	No	
Letter of application to operate und	der HL	S on file a	and signe	d by a respons	ible company officer.				
Current letter of commitment on fill valid for one year or until signing o						Letter			
Baseline data has been collected	for FPS	3, Presen	tation and	d Shewhart app	olications. Results on	ı file.			
All By Products are covered in the	НАСС	P plan.							
No. of Slaughter Shifts:	Max.	Cow Line	e Speed =	<u> </u>	Max. Fat Cattle Lin	e Speed	i =		
No. of CFIA EG Stations =		Head =		Table =	Carcass =	Monito	lonitor =		
No. of CFIA VM Stations =		Total CF	FIA Inspe	ection Stations (	(EG + VM) =				
Today's Line Speed =	Class	of anima	al =		Harvest Edible Offa	al:			
Spray Chilling of Carcasses:				Average annu	ual Condemnation Ra	ate:			
Name of Reviewer(s)				Signature of	f Reviewer		Date		
Regional Veterinary Offic	cer			Signature o	of RVO		Date		
Name of Veterinarian in Ch		Sigr		Date					
Name of Company Represe	ntative		Signa	ature of Compa	ny Representative		Date		

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	BEEF PROGRAM : F eview/Assessment T		
Review/assessment type:	Acceptable	Not Acceptable	Conditionally Acceptable
Facility Review:			
Compliance/Verification:			
Items requiring follow-up or corresponsibility of the following veterinarian In Charge Regional Veterinary Corresponding Other(specify)	person(s) e/ Inspection Manager		w-up review is required, it 30 days and/or a long term oplicable.
If this review is a follow-up, pl	ease indicate the date of the p	revious review. Date:	
Items not available or deficier	nt at the time of the review:		

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	HLIS BEEF PROGRAM : FACILITY ASSESSMENT PART 2: HLIS BEEF FACILITY REVIEW		
2.1	Microbial Intervention Equipment/Processes	Yes	No
2.1.1	Carcass pasteurization equipment is present.		
2.1.2	Pre evisceration acid rinse system is in place.		
2.1.3	Post evisceration acid rinse system is in place.		
2.1.4	A post evisceration chlorine rinse system is in place.		
2.1.5	There are provisions for a potable water rinse after any acid or chlorine rinse.		
2.2	Evisceration Line	Yes	No
2.2.1	Establishment operates a single evisceration line.		
2.2.2	Moving table is a minimum of 1.5 meters (5 ft) wide. Measurement:		
2.2.3	Bung is contained with a plastic bag or equivalent when dropped.		
2.2.4	Carcass spacing is 183cm (6 feet) or greater. Actual spacing =		
2.2.5	Accurate line speed meter is present in an acceptable location.		
2.2.6	The rail travels over the middle of the moving table.		
2.2.7	The distance the carcass travels over the eviscerating table from commencing evisceration to where the carcass leaves the table =		
Commer	ats:		

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## **Inspection Procedures HLIS - Beef and Swine**

Canadian Food Inspection Agency

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2.3	Shewhart Control Chart Station - Prior to Pre-Evis. Wash (Rump)	Yes	No
2.3.1	The station provides a minimum width of 92cm (3ft.). Actual =		
2.3.2	Shewhart test station is located after the process step being evaluated and prior to other processing step that could alter the control chart findings.		
2.3.3	Station platform is positioned close enough to the carcass line to enable the carcass to be touched.		
2.3.4	Minimum of 1000 lux shadow free lighting with minimum 85 CRI.		
2.3.5	There is a convenient place to store the clipboard with the control chart.		
2.3.6	There is a switch to turn lactic acid off in case of significant untrimmed contamination.		
2.4	Shewhart Control Chart Station - Prior to Pre-Evis. Wash (Brisket & Shanks)	Yes	No
2.4.1	The station provides a minimum width of 92cm (3ft.). Actual =		
2.4.2	Shewhart test station is located after the process step being evaluated and prior to any other processing step that could alter the control chart findings.		
2.4.3	Station platform is positioned close enough to the carcass line to enable the carcass to be touched.		
2.4.4	Minimum of 1000 lux shadow free lighting with minimum 85 CRI.		
2.4.5	There is a convenient place to store the clipboard with the control chart.		
2.24.6	There is a switch to turn lactic acid off in case of significant untrimmed contamination.		
2.5	Shewhart Control Chart Station - Post-evisceration	Yes	No
2.5.1	The station provides a minimum width of 92cm (3ft.). Actual =		
2.5.2	Shewhart test station is located after the process step being evaluated and prior to any other processing step that could alter the control chart findings		
2.5.3	Station platform is positioned close enough to the carcass line to enable the carcass to be touched.		
2.5.4	Minimum of 1000 lux shadow free lighting with minimum 85 CRI.		
2.5.5	There is a convenient place to store the clipboard with the control chart.		
Comme	nts:		

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2.6	Head Dresentation, Orientation (shapes are arrive)		
2.6	Head Presentation: Orientation (choose one only)		1
2.6.1	Head presented with head up tongue out		
2.6.2	Head presented with head down tongue out.		
2.6.3	Head presented with head up tongue in.		
2.7	Head Presentation Testing Station	Yes	No
2.7.1	Minimum 1000 lux shadow free lighting with minimum 85 CRI.		
2.7.2	Minimum line space of 92cm (3ft.). Actual =		
2.7.3	Presentation testing station is located prior to CFIA head inspection station.		
2.7.4	There is a convenient place to store the clipboard with the presentation report.		
2.8	CFIA Head Inspection Station(s)	Yes	No
2.8.1	Minimum 1000 lux shadow free with minimum 85 CRI.		
2.8.2	Each CFIA Head inspection station equipped with sanitizer, hand wash facilities and towels.		
2.8.3	CFIA Head Inspection Station Minimum Space (confirm as appropriate)		
2.8.3.1	Line speed 140-180/hr Min. of 1.52 meters (5 ft) total line space (one inspector)		
2.8.3.2	Line speed 181-310/hr Min. of 3.05 meters (10ft) total line space (two inspectors)		
2.8.3.3	Line speed >310 /hr Min. of 5.70 meters (19ft) total line space (three inspectors)		
Comme	nts:		

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2.9	Viscera Presentation Testing Station	Yes	No
2.9.1	Minimum 1000 lux shadow free lighting with minimum 85 CRI.		
2.9.2	Station provides a minimum width of 92cm (3ft.) line space. Actual =		
2.9.3	Presentation Testing Station is prior to CFIA viscera inspection station.		
2.9.4	There is a convenient place to store the clipboard with the presentation report.		
2.10	CFIA Viscera Inspection Station	Yes	No
2.10.1	CFIA inspection stations equipped with sanitizer, hand wash facilities and towels.		
2.10.2	Minimum 1000 lux shadow free lighting with minimum 85 CRI.		
2.10.3	CFIA Viscera Inspection Station Minimum Space (confirm as appropriate)		
2.10.3.1	Line speed < 251 cph - 4.88meters (16ft) minimum total line space.(2 inspectors). Actual =		
2.10.3.2	Line speed > 250 cph - 9.76 meters (32ft) minimum total line space.(4 inspectors). Actual =		
Comme	nts:		

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# Inspection Procedures HLIS - Beef and Swine

Canadian Food Inspection Agency

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2.11	Carcass Presentation Testing Station	Yes	No
2.11.1	Minimum 1000 lux shadow free lighting with minimum 85 CRI.		
2.11.2	Station provides a minimum width of 92cm (3ft.) line space. Actual =		
2.11.3	Presentation Testing Station is prior to CFIA carcass inspection station.		
2.11.4	There is a convenient place to store the clipboard with the presentation report.		
2.12	CFIA Carcass Inspection Station	Yes	No
2.12.1	CFIA inspection stations equipped with sanitizer and complete handwash facilities.		
2.12.2	Minimum 1000 lux shadow free lighting with minimum 85 CRI.( at level of shoulder) Front and back.		
2.12.3	Minimum 1000 lux directional lighting with minimum 85 CRI. for carcass cavity (measured at the level of the kidney).		
2.12.4	Each CFIA inspection station - minimum of 183cm (6ft) X .75 meters (2 ft). Actual =		
2.12.5	Each station is equipped with a distortion free mirror.		
2.12.6	Mirrors are properly oriented.		
2.12.7	Platform located opposite the mirror prior to splitting saw, allowing viewing of viscera table.		
2.12.8	Platform located opposite the mirror prior to splitting saw, allowing communication with viscera inspectors.		
2.12.9	Unhampered access to & from platform is provided.		
2.12.10	Platform has back rail and a foot bumper.		
2.12.11	Platform allows viewing of all parts of the hanging carcass.		
Commen	ts:		

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2.13	Company Defect Detection & Trimming Station Requirements	Yes	No
2.13.1	Company employees perform joint detection and trimming functions		
2.13.2	Stations have ready access to a sanitizer, hand wash facilities and towels.		
2.13.3	Minimum 1000 lux shadow free lighting with minimum 85 CRI at the level of the carcass for which the employee is responsible.		
2.13.4	Establishment final online detection & trimming stations are after CFIA carcass inspector.		
2.13.5	All parts of the hanging carcass are evaluated by detector(s).		
Commen	ts:	·	

2.14	Carcass and Portions Control	Yes	No
2.14.1	Carcass and portions can be synchronized.		
2.14.2	There is an acceptable company tagging /ID system for portions or carcasses with dressing defects.		
2.14.3	There is an acceptable system in place to maintain carcass / portion identity.		
2.14.4	For young cattle, at the point where inside/outside is performed all portions can be retained for disposition.		
2.14.5	For mature cattle the point where the carcass is inspected, after splitting, all portions can be retained for disposition.		

Comments:

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2.15	Carcass Reinspection Station (FPS - FS and OCD)	Yes	No
2.15.1	Station is off the main line.		
2.15.2	The FPS off line rail is capable of holding the number of carcasses determined by ISO plan 2859-1.		
2.15.3	The station is located after all dressing and trimming procedures have been completed.		
2.15.4	The station is located after the final wash.		
2.15.5	Minimum 1000 lux shadow free lighting with minimum 85 CRI.		
2.15.6	The station consists of a permanent rapidly adjustable platform capable of holding 2 people.		
2.15.7	The station platform allows satisfactory visualization of all parts of the carcass.		
2.15.8	There is a clipboard holder at the station.		
2.15.9	There is a sink, soap, towels and a sanitizer at the station.		
2.15.10	The reinspection station is equipped with safety rails.		
Comments	s:		

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2.16	Carcass Cooler and Rework Station	Yes	No
2.16.1	Facility operates with adequate carcass cooler rail capacity.		
2.16.2	Operator has the capability and space to identify and isolate carcass lots for rework		
2.16.3	The operator has the capability and space to detain reworked lots for verification sampling.		
2.16.4	The operator has the capability of reworking an entire rework lot at one time.		
2.16.5	The operator will need to do the rework lot in subgroups.		
2.17	Rework Trim Station	Yes	No
2.17.1	Minimum 1000 lux shadow free lighting with minimum 85 CRI.		
2.17.2	Station is in a satisfactory area and provides access to all parts of the carcasses.		
2.17.3	Station is satisfactorily located for rework.		
2.17.4	There is ready access to a sanitizer and hand wash facility and towels at the station.		
2.18	Rework Verification ( If not done at the same place as the rework trim station)	Yes	No
2.18.1	Minimum 1000 lux shadow free lighting with minimum 85 CRI.		
2.18.2	Station is in a satisfactory area and provides access to all parts of the carcasses.		
Comme	nts:		

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3.1	Company Trainers	Yes	Partial	No
3.1.1	Company trainers are fully accredited for all of the following positions: Carcass Defect Detector/Trimmer, Finished Products Standards (FPS) Monitor, Presentation Standards Monitor and Shewhart Monitor.			
3.1.2	Company trainers work from a written training program and an accreditation program which has been approved by the VIC.			
3.1.3	Each accredited trainer, supervisor & employee has an Employee Record completed and updated by a company trainer which indicates the activities the employee is accredited for.			
3.1.4	Company trainers have completed the requisite training forms for each employee as follows:			
3.1.5	Carcass Defect Detector			
3.1.6	Theoretical Training Evaluation			
3.1.7	Practical Training Evaluation			
3.1.8	Carcass Defect Detector Employee Record			
3.1.9	FPS Monitor Employee Record			
3.1.10	Presentation Standards Monitor Record			
3.1.11	Shewhart Monitor Record			
3.1.12	Company trainers ensure that any accredited employee that has not functioned in HLS activities for 6 months or longer is re-accredited before being allowed to resume any HLS activities.			
3.1.13	The Veterinarian in Charge has access to a current list of HLS-accredited employees.			
3.2	Company Supervisors			
3.2.1	Immediate Supervisors are fully accredited if they supervise company employees in the following positions: Carcass Defect Detector/Trimmer, Finished Products Standards (FPS) Monitor, Presentation Standards Monitor and Shewhart Monitor.			
Comme	ents:			

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# Inspection Procedures HLIS - Beef and Swine

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3.3	Training & Accreditation of Company Employees	Yes	Partial	No
3.3.1	All employees working as <b>Shewhart Monitors</b> are accredited as Shewhart Monitors by the company trainer(s).			
3.3.2	All employees working as <b>Carcass Defect Detector/Trimmers</b> are accredited as Carcass Defect Detector/Trimmers by the company trainer(s).			
3.3.3	All employees working as <b>Finished Products Standards (FPS - FS &amp; OCD) Monitors</b> are accredited by the company trainer(s).			
3.3.4	All employees working as <b>Presentation Standards Monitors</b> are accredited by the company trainer(s).			
Comn	nents:			

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3.4	Live Receiving / Ante-mortem	Yes	Partial	No
3.4.1	The company performs screening of incoming lots.			
3.4.2	The company employees performing antemortem screening of incoming animals are on the list of employees trained & accredited for this task.			
3.4.3	Operator uses lot sheet information to initiate post-slaughter adjustments and/or corrective actions. (Mud scoring or similar type of evaluation)			
3.4.4	Animals with CNS signs are withheld from slaughter.			
3.5	Dehiding			
3.5.1	Hide removal is done in a manner to minimize cross contamination in the following areas:	Yes	Partial	No
3.5.2	Leading hind leg			
3.5.3	Trailing hind leg			
3.5.4	Rump area			
3.5.5	Midline			
3.5.6	Leading shank			
3.5.7	Trailing shank			
3.5.8	Carcass contamination is dealt with before the pre-evisc. wash (if present) and / or before any further dressing activities.			
3.5.9	Proper sanitation of knives is maintained during dressing procedures.			
3.5.10	Dehiding is evaluated prior to any further dressing/intervention step using the Shewhart chart.			
3.5.11	Pre evisceration organic acid wash is used.			
3.5.12	Operator controls pre-evisceration wash such that only visibly clean carcasses are treated.			
3.5.13	Bung is bagged and tied prior to evisceration.			
3.5.14	Shewhart corrective actions steps are documented by the company in their written program and they are approved by VIC.			
			1	

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3.6	Opening and Evisceration Operations	Yes	Partial	No
3.6.1	Where carcass contact with equipment surfaces occurs, the equipment surfaces are maintained in a clean and sanitary state during operations.			
3.6.2	Evisceration performance is evaluated using the Shewhart chart.			
3.6.3	Shewhart corrective action steps are documented in the company's written program and they are approved by VIC.			
3.6.4	Shewhart corrective actions are documented and followed.			
3.6.5	Mirrors are maintained in satisfactory condition.			
3.7	Presentation Standards Control Program	Yes	Partial	No
3.7.1	Operator uses the written Presentation Standard which is part of the companies HIS system.			
3.7.2	Accredited employees perform presentation tests correctly.			
3.8.3	Presentation test results are recorded correctly.			
3.7.4	Test result records are retained for one year.			
3.8	Company Final Carcass / Held Rail	V	Partial	No
0.0	Company I mai Carcass / Held Kan	Yes	Faitiai	
3.8.1	1,000 lux lighting, sanitizer, and hand wash facilities, are present, and there is adequate space for the volume of operations.	Yes	Fartial	
	1,000 lux lighting, sanitizer, and hand wash facilities, are present, and	Yes	raitiai	
3.8.1	1,000 lux lighting, sanitizer, and hand wash facilities, are present, and there is adequate space for the volume of operations.  Cross contamination of carcasses is minimized while being moved to or	Yes	raitiai	
3.8.1	1,000 lux lighting, sanitizer, and hand wash facilities, are present, and there is adequate space for the volume of operations.  Cross contamination of carcasses is minimized while being moved to or on company rework rails.	Yes	raitiai	
3.8.1 3.8.2 3.8.3	1,000 lux lighting, sanitizer, and hand wash facilities, are present, and there is adequate space for the volume of operations.  Cross contamination of carcasses is minimized while being moved to or on company rework rails.  Hygienic procedures, including handling of carcasses are followed.  All identified contamination (e.g. fecal, ingesta, bile, milk and urine) is sanitarily removed from carcasses. (Urine and milk are removed	Yes	raitiai	

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3.9	CFIA Vet / Held Rail	Yes	Partial	No
3.9.1	1,000 lux lighting, sanitizer, and hand wash facilities, are present, and there is adequate space for the volume of operations.			
3.9.2	Cross contamination of carcasses is minimized while being moved to or on Vet rail.			
3.9.3	Hygienic procedures, including handling of carcasses are followed.			
3.9.4	All identified contamination (e.g. fecal, ingesta, bile, milk and urine) is sanitarily removed from carcasses. (Urine and milk are removed immediately after occurring).			
3.9.5	All pathological lesions are sanitarily removed from carcasses.			
3.10	Finished Products Standards Program (FPS)	Yes	Partial	No
3.10.1	FPS testing procedures (FS and NFS) are done according to the HIS policy.			
3.10.2	FPS test results (FS and NFS) are recorded correctly and on the appropriate form.			
3.10.3	When indicated, appropriate corrective actions are initiated by the operator and recorded on the appropriate form (Rework or on line corrections).			
3.10.4	Records are kept for at least 1 year			
Comme	ents:			<del>.</del>
3.11	Pathogen Reduction - Microbial Intervention Steps	Yes	Partial	No
3.11.1	An organic acid rinse system is present and operational $\underline{\text{before}}$ the pasteurizer. Type of acid used =			
3.11.2	Carcass pasteurization equipment is present and operational.			
3.11.3	An organic acid rinse system is in place and operational $\underline{\text{after}}$ the pasteurizer. Type of acid used =			
3.11.4	Chlorine rinse system is in place and functional.			
3.11.5	Acid and/or chlorine rinse is followed by a potable water rinse.			
Comme	ents:			

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#### **HLIS BEEF PROGRAM: FACILITY ASSESSMENT** PART 4: Review of CFIA Inspection Duties and Responsibilities (For Internal CFIA Use Only) 4.1 Yes **Partial** Certification for HLIS No 4.1.1 The Veterinarian-in-Charge or acting VIC is certified for HLIS Other veterinarian(s) assigned to the establishment (e.g. 2<sup>nd</sup> shift) are certified 4.1.2 for HLIS Replacement veterinarian(s) assigned to the establishment are certified for 4.1.3 HLIS or are restricted to non-HLIS activities. All indeterminate and term employees over 6 months inspectors assigned to 4.1.4 the establishment are fully certified for HLIS activities. All temporary inspectors assigned to the establishment are certified in HLIS 4.1.5 for antemortem and postmortem activities and these are the only activities they 4.1.6 A list of all CFIA employees certified in HLIS is maintained in the CFIA offices. 4.2 Inventory of Training Material for HLIS **Partial** Yes Nο The CFIA Inspection office contains the most recent hard copy versions of: 4.2.1 **HLIS Policy Beef** 4.2.2 Module A-40: Postmortem Inspection for High Line Speed Beef 4.2.3 Module A-45: High Line Speed Process Controls (for Beef and Swine) 4.2.4 Module A-45 - Annex 1: Tables and Forms 4.2.5 Module A-45 - Annex 2: Exercises 4.2.6 Module A-46: Introduction to Statistics Comments:

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4.3.	CFIA Staffing Standards and Inspection Activities	Yes	Partial	No
4.3.1	Number of veterinarians & inspectors conforms to staffing guidelines in the HLIS Policy.			
4.3.2	The VIC has approved the operator's written training program and is in possession of or has immediate access to a current list of accredited plant employees.			
4.3.3	The VIC maintains a current list of all certified CFIA employees			
4.3.4	There is a posted diagram in the CFIA office depicting the reference standard for viscera presentation scoring?			
4.3.5	Post mortem procedures and activities conform to policy requirements;			
	Heads			
	Viscera			
	Carcasses			
4.3.6	The floor monitor station is staffed by a HLIS fully certified CFIA employee			
4.4	CFIA Monitoring and Oversight Activities	Yes	Partial	No
4.4.1	Correlation tests are performed at the appropriate frequency by CFIA personnel.			
4.4.2	Correlation tests are performed correctly by CFIA personnel			
4.4.3	When matching or similar correlation test results are not achieved, CFIA ensures that the policy guidelines for subsequent action are followed.			
4.4.4	The test results, pertinent information and comments are recorded correctly on the appropriate forms.			
4.4.5	When test results are not satisfactory, corrective actions are taken by plant personnel and CFIA /operator results and comments are both recorded on the appropriate forms. (Shewhart, Presentation, FPS (Food Safety & Other Carcass Defects))			
4.4.6	Effective compliance action is taken by CFIA when indicated under the terms and conditions stated in the HLIS policy.			
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Part 1: Est. Information & Decision Part 2: Facility Review Part 3: Compliance and Verification Review Part 4: Review of CFIA

Responsibilities

# Inspection Procedures HLIS - Beef and Swine

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HLIS SWINE PROGRAM : FACILITY ASSESSMENT PART 1.1: ESTABLISHMENT INFORMATION														
Reference materia	Reference materials are the MI Act, MI Regs, MOP, HLS Swine Policy and relevant annexes													
Est. Name:						Date(s) of r	review	:						
Est. Registratio	n #:			City:				Prov	ince:					
Proposed HLS	Start da	te:			<u>OR</u>	HLIS Start	Date:							
HACCP recogn	ition dat	e:				FSEP Verif	ficatio	n: Y	N					
Letter of applic	ation on	file	signe	ed by a responsible	compan	y officer.							Yes	No
				file signed by a respessionsible, whiches			fficer (	Letter	valid f	or one	year	or	Yes	No
Baseline data h	as been	coll	ected	I for FPS, Presenta	tion and	Shewhart a	pplica	tions.	Result	s on f	ile.		Yes	No
No. of Shifts	1	2		No. of Slaught	ter Insp.	Stations:	1	2	3	4	5	6	7	8
Hogs -Speed		Sows-Speed Today's Speed					Clas	s of A	nima					
Harvest Edible	Offal:	Yes		No		Chilling of	Carca	sses:	Air	Wate	r(Spra	ay)		
Average annua	l Conde	n na	tion F	Rate:	%									
Type of Review	Team		CFI	A HLIS Review Te	am				Com	oany I	HLIS F	Revie	w Team	
												_		
Nan	ne of Le	ad F	Revie	wer		Signature	of Le	ad Re	viewer	•			Date	
Name of Area Program Specialist Signature of Area Program Specialist					Date									
· ————————————————————————————————————														
Name of Veterinarian in Charge Signature of Veterinarian in Charge					Date									
Name of Company Representtive Signature of Company Representtive					Date									

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Part 1: Est. Information & Decision Part 2: Facility Review Part 3: Compliance and Verification Review Part 4: Review of CFIA Responsibilities

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Part 1.2: Review/Assessment Team Decision and Comments							
Review/assessment type:	Acceptable	Not acceptable	Conditionally acceptable				
Facility Review:							
Compliance/Verification:							
Items requiring follow-up or or responsibility of the following - Veterinarian In Charge/ Ins - Regional Veterinary Officer - Other(specify)	person(s) pection Manager	If a reassessment or follow-up completed within 30 days and/on file as applicable.					
If this review is a follow-up, p	please indicate the date of the	previous review. Date:					
Comments:							

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HLIS SWINE PROGRAM : FACILITY ASSESSMEN PART 2: HLIS SWINE FACILITY REVIEW	T		
2.1 Microbial Intervention Equipment/Processes	Yes	Partial	No
2.1.1. An organic acid rinse is present and operational after the final polisher.  Type of acid used =			
2.1.2 Carcass pasteurization equipment is present.			
2.1.3 A post evisceration chlorine rinse system is in place			
2.1.4 Snap (blast) system is in place.			
2.1.5 There is a potable water rinse after any acid or chlorine rinse.			
2.2 Evisceration Line	Yes	Partial	No
2.2.1 Establishment operates a single evisceration line.			
2.2.2 Bung is contained with a plastic bag or equivalent when dropped.			
2.2.3 Viscera and pluck presented on a hook and tray system- red grey offal.			
2.2.4 Viscera and pluck presented on a divided tray system- traditional method.			
2.2.5 Carcass spacing is 61cm (2 feet) or greater. Actual spacing =			
2.2.6 Accurate line speed meter is present in an acceptable location.			
Comments:			

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## **Inspection Procedures HLIS - Beef and Swine**

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2.3 Shewhart Control Chart Station (dehiding only)	Yes	Partial	No
2.3.1 The station provides a minimum width of 92cm (3ft.). Actual =			
2.3.2 Shewhart test station is located after the process step being evaluated and prior to any other processing/intervention step that could alter the control chart findings.			
2.3.3 Station platform is positioned close enough to the carcass line to enable the carcass to be touched.			
2.3.4 Minimum of 1000 lux shadow free lighting with minimum 85 CRI.			
2.3.5 There is a convenient place to store the clipboard with the control chart.			
2.4 Shewhart Control Chart Station (post- evisceration)	Yes	Partial	No
2.4.1 The station provides a minimum width of 92cm (3ft.). Actual =			
2.4.2 Shewhart test station is located after the process step being evaluated and prior to any other processing/intervention step that could alter the control chart findings.			
2.4.3 Station platform is positioned close enough to the carcass line to enable the carcass to be touched.			
2.4.4 Minimum of 1000 lux shadow free lighting with minimum 85 CRI.			
2.4.5 There is a convenient place to store the clipboard with the control chart.			
Comments:			

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Yes	Partial	No
Yes	Partial	No

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		Est.#	
2.7 Viscera Presentation Station	Yes	Partial	No
2.7.1 Station provides a minimum width of 92cm (3ft.) line space. Actual =			
2.7.2.Presentation Station is prior to CFIA Viscera Presentation Testing station.			
2.8 Viscera Presentation Testing Station	Yes	Partial	No
2.8.1 Station provides a minimum width of 92cm (3ft.) line space. Actual =			
2.8.2.Presentation Testing Station is prior to CFIA viscera inspection station.			
2.8.3 There is a convenient place to store the clipboard with the presentation report.			
2.9 CFIA Viscera Inspection Station	Yes	Partial	No
2.9.1 CFIA inspection stations equipped with sanitizer, hand wash facilities and towels.			
2.9.2 Minimum 1000 lux shadow free lighting with minimum 85 CRI.			
2.9.3 Each CFIA inspection station - 185cm (6ft)minimum line space. Actual=			
2.9.4 MIRRORS (optional)			
2.9.4(i) The mirrors are distortion free.			
2.9.4(ii)The mirrors are properly oriented.			
2.9.4(iii) It is possible to visualize the back side of the viscera (pluck).			
Comments:			

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Part 4: Review of CFIA Responsibilities Part 1: Est. Information & Decision Part 2: Facility Review Part 3: Compliance and Verification Review

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		Est.	
2.10 Carcass Presentation Testing Station	Yes	Partial	No
2.10.1 Station provides a minimum width of 92cm (3ft.) line space. Actual =			
2.10.2 Presentation testing station is located prior to CFIA final carcass inspection station			
2.10.3 There is a convenient place to store the clipboard with the presentation report.			
2.11 CFIA Carcass Inspection Station	Yes	Partial	No
2.11.1 CFIA inspection stations equipped with sanitizer, hand wash facilities and paper towels.			
2.11.2 Minimum 1000 lux shadow free lighting with minimum 85 CRI.( at level of shoulder) Front and back.			
2.11.3 Minimum 1000 lux directional lighting with minimum 85 CRI. for thoracic cavity.			
2.11.4 Each CFIA inspection station -minimum of 183cm (6ft) X .75 meters (2 ft). Actual =			
2.11.5 Each station is equipped with a distortion free mirror(s).			
2.11.6 Mirrors are a minimum of 1.00 meters X 2.25 meters. Actual =			
2.11.7 Mirrors are properly oriented.			
2.11.8 Mirror is one piece.			
2.11.9 Mirrors are two piece.			
2.11.10 It is possible to visualize both dorsal and posterior surfaces of the carcass.			
2.12 Company Defect Detection Station(s)	Yes	Partial	No
2.12.1 Stations have ready access to hand wash facilities and towels.			
2.12.2 Minimum 1000 lux shadow free lighting with minimum 85 CRI.( at level of shoulder) Front and back.			
2.12.3 Minimum 1000 lux directional lighting with minimum 85 CRI. at thoracic cavity			
2.12.4 Each station -185cm (6ft) minimum width or carcass line space Actual =			
2.12.5 Company defect detector's only function is to detect and mark defects.			
2.12.6 Establishment online detector station is after CFIA carcass inspector.			
2.12.7 Each station is equipped with a distortion free mirror(s).			
2.12.8 Mirrors are a minimum of 1.00 meters X 2.25 meters. Actual =			
2.12.9 Mirrors are properly oriented.			
2.12.10 Mirror is one piece.			
2.12.11 Mirrors are two piece.			
2.12.12 Both dorsal and posterior parts of the carcass are evaluated by detector(s).			

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2.13 Carcass and Portion Control	Yes	Partial	No
2.13.1 Carcass and portions can be synchronized.			
2.13.2 There is an acceptable tagging /ID system for held / inedible portions or carcasses.			
2.13.3 There is an acceptable system in place to maintain carcass / portion identity.			
2.14 Plant On Line Trimmer Station	Yes	Partial	No
2.14.1 Minimum 1000 lux shadow free lighting with minimum 85 CRI.			
2.14.2 Establishment online trimmer station is located after the CFIA final carcass station and establishment detector station.			
2.14.3 Space has been allocated for online trimmers.			
Comments:			

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2.15 Carcass Reinspection Station (FPS - FS and NFS)	Yes	Partial	No
2.15.1 Station is off the main line.			
2.15.2 The FPS off line rail is capable of holding the number of carcasses determined by ISO plan 2859-1.			
2.15.3 The station is located after all dressing and trimming procedures have been completed.			
2.15.4 The station is located before the final wash.			
2.15.5 Minimum 1000 lux shadow free lighting with minimum 85 CRI allowing full view of all carcasses			
2.15.6 The station consists of a permanent platform(s) capable of holding 2 people.			
2.15.7 The station platform allows satisfactory visualization of all parts of the carcass.			
2.15.8 There is a clipboard holder at the station.			
2.15.9 There is a sink, soap, towels and a sanitizer at the station.			
2.15.10 The reinspection station is equipped with safety rails.			

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Part 4: Review of CFIA Responsibilities Part 1: Est. Information & Decision Part 2: Facility Review Part 3: Compliance and Verification Review

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2.16 Carcass Cooler and Rework Station	Yes	Partial	No
2.16.1 Facility operates with adequate carcass cooler rail capacity.			
2.16.2 Operator has the capability and space to identify and isolate carcass lots for rework.			
2.16.3 The operator has the capability and space to detain reworked lots for verification sampling.			
2.16.4 The operator has the capability of reworking an entire rework lot at one time.			
2.16.5 The operator will need to do the rework lot in subgroups.			
2.17 Rework Trim Station	Yes	Partial	No
2.17.1 Minimum 1000 lux shadow free lighting with minimum 85 CRI.			
2.17.2 Station is in a satisfactory area and provides access to all parts of the carcasses.			
2.17.3 Station is satisfactorily located for rework.			
2.17.4 There is a sanitizer and hand wash facility at the station.			
2.18 Rework Verification( If not done at the same place as the rework trim station)			
2.18.1 Minimum 1000 lux shadow free lighting with minimum 85 CRI.			
2.18.2 Station is in a satisfactory area and provides access to all parts of the carcasses.			
Comments:			

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	HLIS SWINE PROGRAM : FACILITY ASSESSMENT PART 3: COMPLIANCE AND VERIFICATION CHECKLIS	ST.		
3.1	Company Trainers	Yes	Partial	No
3.1.1	Company company trainers work from a written training and accreditation program which has been approved by the VIC.			
3.1.2 I	Company trainers are fully accredited for all of the following positions: Carcass Defect Detector , FPS monitor, presentation standards monitor and Shewhart monitor.			
3.1.3	Each employee accredited as a Carcass Defect Detector (if applicable), FPS monitor, Presentation Standards monitor, or Shewhart monitor has an Employee Record completed and updated by a company trainer.			
3.1.4	Any accredited employee that has not functioned in HLIS activities for 6 months or longer has been reaccredited before being allowed to resume any HLIS activities			
3.1.5	Company trainers have completed the requisite training forms for each employee as follows:			
	Carcass Defect Detector Theoretical Training Evaluation Practical Training Evaluation Carcass Defect Detector Employee Record FPS Monitor Employee Record Presentation Standards Monitor Record Shewhart monitor Record			
3.2	Company Employees	Yes	Partial	No
3.2.1	Immediate supervisors for Shewhart Monitors, Presentation Standards Monitors,			
	Carcass Defect Detectors / Trimmers (if applicable), and Finished Products Standards (FPS) testers(NFS and FS) are accredited.			
3.2.2	Carcass Defect Detectors / Trimmers (if applicable), and Finished Products			
3.2.2	Carcass Defect Detectors / Trimmers (if applicable), and Finished Products Standards (FPS) testers(NFS and FS) are accredited.  All employees working as Shewhart Monitors are accredited as Shewhart			
	Carcass Defect Detectors / Trimmers (if applicable), and Finished Products Standards (FPS) testers(NFS and FS) are accredited.  All employees working as Shewhart Monitors are accredited as Shewhart Monitors by the company trainer(s).  Employees performing presentation tests are accredited by company trainers for the			
3.2.3	Carcass Defect Detectors / Trimmers (if applicable), and Finished Products Standards (FPS) testers(NFS and FS) are accredited.  All employees working as Shewhart Monitors are accredited as Shewhart Monitors by the company trainer(s).  Employees performing presentation tests are accredited by company trainers for the Presentation Standards control program.  All employees working as Carcass Defect Detector/Trimmers, are accredited as			
3.2.3	Carcass Defect Detectors / Trimmers (if applicable), and Finished Products Standards (FPS) testers(NFS and FS) are accredited.  All employees working as Shewhart Monitors are accredited as Shewhart Monitors by the company trainer(s).  Employees performing presentation tests are accredited by company trainers for the Presentation Standards control program.  All employees working as Carcass Defect Detector/Trimmers, are accredited as Carcass Defect Detector/Trimmers by the company trainer(s)(if applicable).  Employees performing Finished Products Standards (FPS) tests (NFS and FS) are accredited by company trainers for the FPS program.			
3.2.3 3.2.4 3.2.5	Carcass Defect Detectors / Trimmers (if applicable), and Finished Products Standards (FPS) testers(NFS and FS) are accredited.  All employees working as Shewhart Monitors are accredited as Shewhart Monitors by the company trainer(s).  Employees performing presentation tests are accredited by company trainers for the Presentation Standards control program.  All employees working as Carcass Defect Detector/Trimmers, are accredited as Carcass Defect Detector/Trimmers by the company trainer(s)(if applicable).  Employees performing Finished Products Standards (FPS) tests (NFS and FS) are accredited by company trainers for the FPS program.  The Veterinarian in Charge has a current list of accredited employees that is			

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3.3	Live Receiving / Ante mortem	Yes	Partial	No
3.3.1	The company performs screening of incoming lots.			
3.3.2	The company employees performing antemortem screening of incoming animals are on the list of employees trained & accredited for this task.			
3.3.3	Operator uses lot sheet information to initiate post-slaughter adjustments and/or corrective actions.			
3.3.4	Animals with CNS signs are withheld from slaughter.			
3.4	Dehiding / Scalding / Dehairing	Yes	Partial	No
3.4.1	Hide removal is done in a manner to minimize cross contamination.			
	Leading hind leg Trailing hind leg Rump area Midline Leading shank Trailing shank			
3.4.2	There is a potable water rinse after the dehairer.			
3.4.3	There is a process in place to reduce microbial loads in polishing equipment.			
3.4.4	There is one singer used.			
3.4.5	There are two singers used.			
3.4.6	Proper sanitation of knives is maintained during dressing procedures.			
3.4.7	Dehiding is evaluated prior to further dressing activities using the Shewhart chart.			
3.4.8	Shewhart corrective actions steps are documented by the company in their written program and they are approved by VIC.			
3.4.9	Shewhart corrective actions steps are followed when indicated.			
Comm	ents:			

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3.5	Opening and Evisceration Operations	Yes	Partial	No
3.5.1	Carcass contact with equipment surfaces are maintained in a clean and sanitary state during operations.			
3.5.2	Evisceration performance is evaluated using the Shewhart chart.			
	Shewhart corrective action steps are documented in the company's written program and they are approved by VIC.			
3.5.4	Shewhart corrective actions are documented and followed.			
3.5.5	Mirrors are maintained in satisfactory condition.			
3.6	Presentation Standards Control Program	Yes	Partial	No
3.6.1	Operator uses the written Presentation Standard which is part of the companies HLIS system.			
3.6.2	1,000 lux lighting is present at presentation test sites.			
3.6.3	Accredited employees perform presentation tests correctly.			
3.6.4	Presentation test results are recorded correctly.			
3.6.5	Test result records are retained for one year.			
3.7	Company Final Carcass/ Held Rail	Yes	Partial	No
3.7.1	1,000 lux lighting, sanitizer, and hand wash facilities, are present, and there is adequate space for the volume of operations.			
3.7.2 rewor	Cross contamination of carcasses is minimized while being moved to or on company crails.			
3.7.3	Hygienic procedures, including handling of carcasses are followed.			
	All Identified contamination (e.g. fecal, ingesta, bile, milk and urine) is sanitarily red from carcasses. (Urine and milk are removed immediately after occurring)			
3.7.5	All identified pathological lesions are sanitarily removed from carcasses.			
3.7.6	When indicated, appropriate corrective action is taken by the operator.			
3.8	CFIA/Vet/HeId Rail	Yes	Partial	No
3.8.1	1,000 lux lighting, sanitizer, and hand wash facilities, are present, and there is adequate space for the volume of operations			
3.8.2	Cross contamination of carcasses is minimized while being moved to or on Vet rail.			
3.8.3	Hygienic procedures, including handling of carcasses are followed.			
	All identified contamination (e.g. fecal, ingesta, bile, milk and urine) is sanitarily noved from carcasses. ( Urine and milk are removed immediately after occurring).			
3.8.5	All identified pathological lesions are sanitarily removed from carcasses.			

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### **Inspection Procedures HLIS - Beef and Swine**

*	Canadian Food Agence canadienne Inspection Agency d'inspection des aliments		Est. # _	
3.9	Finished Products Standards Program (FPS)	Yes	Partial	No
3.9.1.	FPS testing procedures (FS and NFS) are done according to the HLIS policy.			
3.9.2.	FPS test results (FS and NFS) are recorded correctly and on the appropriate form.			
3.9.3	When indicated, appropriate corrective actions are initiated by the operator and recorded on the appropriate form.( Rework or on line corrections).			
3.9.4	Records are kept for at least 1 year.			
3.10	Microbial Intervention Steps	Yes	Partial	No
	An organic acid rinse is present and operational after the final polisher.  Type of acid used =			
3.10.2	Carcass pasteurization equipment is present and operational.			

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Comments:

3.10.3 Chlorine rinse system is in place and functional.

3.10.4 Chlorine or acid rinse is followed by a potable water rinse.

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#### **HLIS SWINE PROGRAM: FACILITY ASSESSMENT** PART 4: Review of CFIA Inspection Duties and Responsibilities (For Internal CFIA Use Only)

	(For internal CFIA Use Only)	_		
4.1.	Certification for HLIS	Yes	Partial	No
4.1.1	The Veterinarian-in-Charge or acting VIC is certified for HLIS.			
4.1.2	Other veterinarian(s) assigned to the establishment (e.g. 2 <sup>nd</sup> shift) are certified for HLIS.			
4.1.3	Replacement veterinarian(s) assigned to the establishment are certified for HLIS or are restricted to non HLIS activities.			
4.1.4	All indeterminate and term employees over 6 months inspectors assigned to the establishment are fully certified for HLIS activities.			
4.1.5	All temporary inspectors assigned to the establishment are certified in HLIS for antemortem and postmortem activities and these are the only activities they do.			
4.1.6	A list of all CFIA employees certified in HLIS is maintained in the CFIA offices.			
4.2	Inventory of Training Material for HLIS	Yes	Partial	No
4.2.1	Inspection office contains the most recent hard copy versions of:			
	1) HLIS Policy Swine 2) Module A-44: Postmortem Inspection for HLIS Swine 3) Module A-45: High Line Speed Process Controls 4) Module A-45 - Annex 1: Tables and Forms 5) Module A-45 - Annex 2: Exercises 6) Module A-46: Introduction to Statistics			
4.3	CFIA Staffing Standards and Inspection Activities	Yes	Partial	No
4.3.1	Number of veterinarians & inspectors conforms to staffing guidelines in the HLIS Policy.			
	The VIC has approved the operator's written training program and is in possession of simmediate access to a current list of accredited plant employees.			
4.3.3	The VIC maintains a current list of all certified CFIA employees			
	There is a posted diagram in the CFIA office depicting the reference standard for a presentation scoring?			
4.3.5	Post mortem procedures and activities conform to policy requirements;			
	Heads			
	Viscera			
	Carcasses			
<b>—</b>		+	1	

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4.4	CFIA Monitoring and Oversight Activities	Yes	Partial	No
4.4.1	Correlation tests are performed correctly and at appropriate frequency by CFIA personnel.			
4.4.2	When matching or similar correlation test results are not achieved, CFIA ensures that the policy guidelines for subsequent action are followed.			
4.4.3	The test results, pertinent information and comments are recorded correctly on the appropriate forms.			
4.4.4	When test results are not satisfactory, corrective actions are taken by plant personnel and CFIA /operator results and comments are both recorded on the appropriate forms. (Shewhart, Presentation, FPS (Food Safety & Other Carcass Defects))			
4.4.5	Effective compliance action is taken by CFIA when indicated under the terms and conditions stated in the HLIS policy.			
4.4.6	1,000 lux lighting and adequate space for CFIA at FPS station.			

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