USDA Lamb Carcass Grading  
Instrument and Establishment Employee Augmented Grading (IEEAG)  
Program

1 Purpose

This document provides the requirements for Establishments that wish to utilize the Instrument and Establishment Employee Augmented Grading (IEEAG) Program for applying the United States Standards for Grades of Lamb, Yearling Mutton, and Mutton Carcasses.

2 Scope

This document sets forth the requirements for monitoring plant personnel applying the USDA Grade Standards utilizing an approved instrument. Applicants desiring to participate in this program must submit a documented program to the Quality Assessment Division (QAD) that addresses all aspects and requirements set forth in this document to include documentation and procedures for corrective actions. Grading activities utilizing the grading instrument by the certified plant employee will be in accordance with the USDA Grade Standards. Application of the USDA Grade Standards will be monitored and verified by a QAD agent utilizing this document and the Applicant’s approved program.

3 References

USDA QAD Instrument Assessment Systems for Livestock Carcasses and Carcass Products

QAD 501 Procedure: Lamb, Yearling Mutton, and Mutton Grading Methods and Procedures

4 Applicant Program Procedural Manual

4.1 Procedural Manual

The applicant must establish and maintain a manual of procedures that include at a minimum:

a. A brief description of the establishment, including the names of the persons who control it;

b. The names of the senior management and other personnel responsible for management of the employee augmented grading program;

c. An organization chart showing lines of authority, responsibility and allocation of functions stemming from the senior management;

d. The policy and procedures for conducting management reviews;

e. Administrative procedures including document control;
f. The operational and functional duties pertaining to managing employee augmented grading, so that the extent and limits of each person's responsibility are known to all concerned;

g. The procedure for the recruitment, selection and training of plant instrument grading personnel and monitoring of their performance;

h. The procedures for handling nonconformities and for assuring the effectiveness of any corrective and preventive actions taken;

i. The procedures for evaluating products and implementing the employee augmented grading process, including:
   1. The conditions for issue, retention and withdrawal of carcass grades;
   2. Controls over the use and application of carcass grades;
   3. The policy and procedure for dealing complaints and disputes;

j. The procedures for conducting program audits.

5 Responsibilities

5.1 Plant Responsibilities

a. Ensuring proper validation of the instrument.

b. Daily documentation of validation parameters.

c. Ensuring that the QAD agent is notified when the instrument does not properly validate.

d. Ensuring that the instrument is not used until properly validated.

e. Validation of the instrument at the beginning of the shift.

f. Ensuring that the instrument operator applying the USDA Grade Standards has been certified by QAD to apply the grade standards.

g. Ensuring proper image capture.

h. Ensuring that carcasses not represented by images, when the instrument is properly functioning, are not assigned a quality and yield grade. All carcasses must be represented by retrievable images when the instrument is functioning.
i. Ensuring that preventative and corrective actions are taken when observations and findings indicate potential noncompliance.

j. Ensuring that a documented quality control system is in place to monitor and identify issues related to classing, adequate fat cover, or other presentation defects, on a continuous basis, throughout each shift. Quality Control documentation will be made available to the QAD agent upon request.

k. Assuring carcasses are adequately presented for instrument grading.

l. Ensuring that the instrument technology is operated in accordance with the manufacturer’s guidance.

m. Providing instrument assessment data and images (color or black and white) to the QAD agent monitoring the system as requested.

n. Ensure images are sharp and clear (properly focused and not blurred).

o. Assure carcasses have no more than 1.0 percent kidney and pelvic fat.

p. Retained carcasses shall not be graded without specific authorization from a Food Safety and Inspection Service (FSIS) employee.

q. Store images (both raw and processed) and corresponding information a minimum of 15 days. When requested by the QAD, provide images and information within 3-5 business days.

5.2 Quality Assessment Division Responsibilities

a. Plant employee designated to apply the USDA Grade Standards utilizing the instrument must at a minimum possess a four-year university degree, or one (1) year of meat related experience, and/or a combination of education and experience.

b. QAD will determine the examinations, correlations, etc., administered to the plant employee to ascertain knowledge of the USDA Grade Standards.

c. The QAD agent will review, understand and verify the Applicant’s approved QSA program.

d. Utilize the Program Monitoring Procedures noted below.

e. Verify, as applicable, that the instrument(s) is/are on an approved list via serial numbers, etc.

f. Daily completion of the QAD Ovine Grading Checklists (Exhibit A, B).
g. Conduct traditional grading, temporarily, as needed if the instrument fails to validate.

h. Carcasses will be eligible for visual (traditional) assessment after being graded by the instrument for the purpose of receiving a Choice or Prime grade as requested by the plant. If presented for traditional grading, graders will use traditional grading methods on chilled carcasses.

i. Using the applicable Instrument Monitoring Form, collect traditional grades for a minimum of 120 head of lamb per week (on chilled carcasses).

1. Weekly assessment – Ensure that the traditional grades are within the established acceptance criteria.

   a) Daily – Record quality and yield grades (to the nearest tenth for yield grade) on the applicable form.

   i. Quality Grade – If the final quality grade is the equivalent to that called by the instrument, a “pass” shall be indicated with a “1” (one) for correct.

      (Note: an instrument grade of “Choice or Above” is equivalent to either Choice or Prime as graded traditionally.)

   ii. Overall Yield Grade – If the final yield grade is .5 yield grade or more different than the instrument and results in a different grade then a “fail” shall be indicated with a “0” (zero) for incorrect.

   b) Ending of the week – total the recorded quality and yield grades.

      i. If 90% or more of the quality grades collected are a pass then the instrument passes for quality grade.

      ii. If 90% or more of the yield grades collected are a pass then the instrument passes for yield grade.

      iii. If the instrument fails for either the quality or yield grade then notify applicant management and discontinue use of the instrument until the instrument has undergone a documented service and recalibration by a certified technician, and the problem causing the non-compliance has been corrected.

      Applicant management may use traditional grading by the QAD grader until the corrective action is completed.
6  Program Requirements

6.1  Program Monitoring Procedures

Certified plant employees applying the grade standards based on instrument augmentation shall identify carcasses that comply for designated grades based on the USDA Grade Standards. The QAD agent shall record all defects observed throughout the entire number of samples required.

<table>
<thead>
<tr>
<th>Number of Graded Lambs per Shift</th>
<th>Sample Size (Number of carcasses)</th>
<th>Accept/Reject Criteria (Normal Level of Review)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 1000</td>
<td>80</td>
<td>5/6</td>
</tr>
<tr>
<td>1001 to 1600</td>
<td>120</td>
<td>7/8</td>
</tr>
<tr>
<td>1601 to 2200</td>
<td>160</td>
<td>9/10</td>
</tr>
<tr>
<td>Over 2200</td>
<td>200</td>
<td>11/12</td>
</tr>
</tbody>
</table>

Once the final grades have been determined, the QAD agent will randomly select the appropriate number of carcasses for review and record those that are not accurately identified per the USDA Grade Standards. Factors that may be the cause of an inaccurate grade designation include, but not limited to Maturity/Classing.

6.2  Changing Levels of Monitoring Activities

a. If during a single shift the QAD agent records inaccurately graded carcasses exceeding the acceptable level noted in Table I, the plant will be moved to tightened sampling for the next production day for that shift. Tightened sampling levels are in Table II.

b. Tightened sampling procedures will continue for three (3) consecutive days. If after three (3) consecutive days the plant demonstrates that they have taken corrective action they shall move back to normal sampling procedures. Corrective action may include re-evaluation of the plant employee, by QAD by means of a written correlation.

c. If the QAD agent observes/records more than the acceptable number of inaccurately graded carcasses while on tightened sampling the plant will go to traditional grading by QAD agents for a 1-week period of time.

d. After one-week of traditional grading by QAD agents, the plant may be allowed to return to utilizing license plant personnel to apply the grades, pending
adequate corrective and preventative actions have been taken. The program will resume with three (3) consecutive days of tightened monitoring, with acceptable results, prior to returning to normal sampling.

e. Reduced Sampling – If monitoring shows that grades are properly applied per Table I under Normal levels for 20 consecutive days, and then sampling frequency is reduced per Table III. Monitoring remains at the Reduced levels unless the maximum number of defects is exceeded. If this number is exceeded, monitoring switches to the Normal level.

Table II – Monitoring (Tightened)

<table>
<thead>
<tr>
<th>Number of Graded Lambs per Shift</th>
<th>Sample Size (Number of carcasses)</th>
<th>Accept/Reject Criteria (Tightened Level of Review)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 1000</td>
<td>80</td>
<td>3/4</td>
</tr>
<tr>
<td>1001 to 1600</td>
<td>120</td>
<td>5/6</td>
</tr>
<tr>
<td>1601 to 2200</td>
<td>160</td>
<td>7/8</td>
</tr>
<tr>
<td>Over 2200</td>
<td>200</td>
<td>9/10</td>
</tr>
</tbody>
</table>

Table III – Monitoring (Reduced)

<table>
<thead>
<tr>
<th>Number of Graded Lambs per Shift</th>
<th>Sample Size (Number of carcasses)</th>
<th>Accept/Reject Criteria (Reduced Level of Review)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 1000</td>
<td>50</td>
<td>3/4</td>
</tr>
<tr>
<td>1001 to 1600</td>
<td>80</td>
<td>5/6</td>
</tr>
<tr>
<td>1601 to 2200</td>
<td>120</td>
<td>7/8</td>
</tr>
<tr>
<td>Over 2200</td>
<td>160</td>
<td>9/10</td>
</tr>
</tbody>
</table>

6.3 Gross Non-Compliance

QAD management may suspend the approval of the plant’s application of USDA Grade Standards when significant numbers of obvious mis-graded carcasses occur, beyond those being monitored under reduced, normal or tightened monitoring procedures. Actions to identify and correct the non-conformance by the Applicant will be immediately addressed.

6.4 Non-Conformances (NC)

The QAD agent shall:
a. Issue NC’s (Exhibit B) for program deviations and/or deficiencies observed during monitoring activities outside of the designated monitoring/sampling noted in Table I, Table II, or Table III

b. Require a written response to each NC within one business day of receipt of the NC. The NC response shall include actions taken to correct as well as prevent reoccurrences of the nonconformance.

c. The QAD agent will retain copies of NC’s and applicant’s responses in the files. The QAD agent will provide copies of NC’s and applicant’s responses to the immediate QAD supervisor and the QAD Office.

Depending on the severity of the NC, failure to respond to NC’s and to take corrective actions, within the specified timeframe may cause suspension of the program.

6.5 Certifying Plant Employees

A QAD management team member will certify qualified plant employees responsible for program integrity and application of the USDA Grade Standards. This will be accomplished through a process that includes both a written exam and a carcass cooler correlation. The qualified plant employee must achieve a passing score on both the written and carcass correlation sections of the testing. (Note: Carcasses used in a correlation for the purpose of certifying plant employees must represent a full range of factors that will adequately demonstrate the individual’s knowledge, skills and ability to perform authorized duties.)

Upon satisfactory completion of training and testing, plant employees will be certified to perform authorization grading duties. Certification of plant employees will be required to be renewed every two years by appropriate QAD management. This will include both a written exam and carcass cooler correlation. In addition, a record designating that each certified employee has completed and passed the required tests, signed by the QAD Branch Chief and the certified plant employee, shall be issued and must be on file at the Applicant’s facility as well as the QAD headquarters office. When QAD is requested to assist in the training of the plants employee, the Applicant shall incur any additional costs, including travel costs associated with the training of their designated employees.

6.6 Continuing evaluation of certified plant employee

The certified plant employee will be evaluated and tested on a continuing basis to ensure adequate knowledge of the USDA Grade Standards. Evaluations will occur monthly, via written tests and/or written correlations. These correlations can be orally as well as written correlations. The certified plant employee is expected to maintain a high level of knowledge of the requirements for the position, and a high level of integrity in support of QAD programs.
6.7 QAD Equipment

Where applicable, USDA stamps used for identifying carcasses will be provided by the QAD. USDA stamps and roller brands or other identifying grade labels such as tags will be secured by USDA employees when not in use. Only trained plant employees or QAD agents are authorized to use this equipment. Misuse of issued equipment may cause suspension of the plants approved program.

6.8 Meetings

The integrity of QAD programs must be maintained at all times. The QAD agent will interact with the company and schedule meetings as needed to discuss issues and/or observations for promoting continuous improvement of the program. The applicant will record minutes detailing the issues discussed during the meetings. Copies of the minutes will be maintained for the files.

7 Applications

7.1 Submission of Program Procedural Manual

Prospective applicants are required to submit a written program which must be approved prior to the commencement of activities associated with this program. The program must address each required area and outline specific procedures used to ensure that these requirements are met. Each applicant shall submit their plant program to the National Meat Supervisor. Applicants may also send a hard copy of their program to:

USDA, AMS, L&P, Quality Assessment Division
Standardization Branch Chief
1400 Independence Avenue SW, RM 3932-S Stop 0258
Washington, DC 20250

The National Meat Supervisor will notify applicants of their program status within 20 working days of receipt.

7.2 Amendments to Programs

Amendments to approved programs shall be submitted to the QAD for review and approval prior to implementation. The National Meat Supervisor or designee shall notify the applicant of amendment status within 10 working days of receipt and shall issue a notice to the applicant indicating amendment approval or denial.
7.3 Charges for Providing Service

The applicable QAD commitment hourly fee shall be charged for the in-house QAD agent performing the monitoring activities. The non-commitment hourly fee and all travel costs incurred for additional agents, if needed, shall be borne by the applicant.

8. Change of Record

The following changes were made to the August 31, 2018 revision of this document:

a. Section 5.2 h. and i. added.

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Quality Assessment Division
Livestock and Poultry Program