



Meat Grading & Certification Branch

**INTERNAL REVIEW PROCEDURES OF THE
MEAT GRADING AND CERTIFICATION BRANCH**

PURPOSE

Meat Grading and Certification (MGC) Branch services play a significant role in the trading and marketing of meats and meat products. The impartial application of standards and specifications by Federal Meat Graders assures buyers and sellers of an equitable basis for trading. For these services to be meaningful and useful they must be accurately and uniformly applied.

The MGC Branch Internal Review (IR) Specialists monitor these services and issue reports which are used as a basis for evaluating the accuracy of grading and certification work. The IR Team will consist of two IR Specialists or one IR Specialist and one Supervisory Meat Grader who is not responsible for the plant being reviewed.

OBJECTIVES

- Evaluate in-plant grading and certification work. The IR Team performs review and assessment functions and is not supervisory in nature.
- Collect data and make observations which can be used to analyze trends and patterns in technical programs and to serve as a management tool for MGC Branch supervisors.
- Identify inaccuracies or deficiencies and make recommendations designed to improve the programs of the MGC Branch.
- Submit data and reports that can be used to strengthen technical uniformity and effectiveness of grading and certification.

A. IR Team Operations

1. The IR Team reports to the Assistant Chief.
2. Review sites are selected at random and approved by the Assistant Chief.
3. Review trips are unannounced and incorporate an evaluation of in-plant grading and certification procedures.

4. The IR Team uses standardized forms and uniform methods for data collection.
5. After completing all reviews within an area, an IR Specialist presents an oral summary of the review to the Assistant Chief.
6. A written report for each review will be submitted by the IR Specialist to the Assistant Chief no later than one week following the review.
7. An exit meeting will be held with the local supervisor, if present, to relay the preliminary results of the internal review.

B. In-Plant Procedures

1. The IR Team's function while in the plant is to observe procedures, make observations, and collect data in a manner that is non-disruptive to the graders and plant operations.
2. The IR Team members will discuss the appropriate and necessary procedures regarding data collection with plant personnel prior to starting the review.
3. Local supervisors may observe and assist the IR Team members. The IR Specialist will review all errors found with the local supervisor, if present, so that the supervisor can discuss any errors and make necessary corrections as needed with the grader(s). If the local supervisor is not present, the IR Specialist will give the grader(s) the opportunity to review any errors noted by the IR Team.
4. At review sites where more than one type of technical operation is being performed (e.g., both grading and certification), the IR Team will record data on each operation.
5. After an in-plant review, the IR Specialist will compile the data collected for the final report to the Assistant Chief. A copy of the final report will be sent to the local supervisor.

C. Carcass Data Collection Procedures

1. Traditional grading/certification
 - a. The IR Team members will position themselves on the chain at a location sufficiently distant from graders and plant personnel to avoid interfering with the operation. For rail grading, the IR Team members will conduct the review on the same rails that the grader made grade placements. IR Team members shall perform the review and not make comments regarding grading placements by the grader in a manner that disrupts the grader's attention in providing accurate grade determinations.

- b. Using a light meter, the light intensity at the grading chain and/or rail is determined and recorded.
- c. The total slaughter, chain speed, bloom time and chill time are determined and recorded.
- d. IR Team members will conduct an Acceptable Quality Level (AQL) on each grader by randomly selecting every fifth carcass on the grading chain or every third carcass on a rail, according to procedures established and approved by the Assistant Chief. Ungraded as well as quality and/or yield graded carcasses shall be included in the sample. Carcasses not yield graded will not be included in the yield grading accuracy data.
- e. Selected carcasses are identified using the U. S. Department of Agriculture (USDA) numbered blue tags. As an alternative, reviewers may use the orange USDA Product Control tags. On each carcass selected, the IR Team member records the carcass weight, and identification number to assure evaluation of the same carcass in the cooler.
- f. After carcass selection, the IR Team independently evaluates and records all quality and yield grade factors using all measuring instruments and visual aids issued by the MGC Branch. The final quality and yield grades assigned by the grader are also recorded.
- g. A quality or yield grade error is determined only when both IR Team members agree on the final quality and/or yield grade placement of the carcass. Should the IR Team members disagree on the final quality or yield grade, the carcass will not be included in determining overall accuracy for that factor.
- h. All identifying marks used by the IR Team will be removed from carcasses when the review is completed and the local supervisor and/or grader(s) have had the opportunity to review any errors noted by the IR Team.
- i. Carcasses identified and selected for evaluation on the chain and lost in the cooler will be eliminated from the review, and replacement carcasses will be tagged.
- j. If possible, selected carcasses will be evaluated under the same conditions that the grader performed the grading.
- k. IR Team members will also review carcasses certified for any of the applicable carcass schedules: (G1, G2, G7, G23, etc.). The number reviewed and the number and reason(s) for not meeting that schedule requirements shall be recorded.

1. A narrative and statistical report, Quality and Yield Grade Accuracy Summary (Exhibit A), detailing all areas evaluated; the number and type of carcasses reviewed on the chain, in the cooler, and regrade rails; the number of errors noted; and the extent of each error will be prepared by the IR Specialist.
2. Instrument grading systems
 - a. In those plants utilizing approved instrumentation systems for official quality and/or yield grade assessments, the IR Team shall:
 1. Review the Instrument-Cooler Operation Checklist form (Exhibit B) completed by the grader to determine process acceptability.
 2. Utilize MGC Instruction 515, Beef Carcass Instrument Grading Procedures, and perform an independent AQL at the “normal” verification level listed in the Instrument Grading Record form (Exhibit C).
 3. Record all other factors normally documented during traditional grading, i.e., light meter readings, chain speed, bloom time, chill time, total slaughter, etc.
 - b. Perform a second AQL by randomly selecting carcasses on the chain and recording the quality and/or yield grades assessed by the instrumentation. Independently determine quality and/or yield grades using traditional grading techniques. Complete the Instrumentation Accuracy form (Exhibit D) and provide written data comparing instrument results and traditional grading results.
 - c. Observe each grader on the chain for 30 minutes. Record the number of carcasses, if any, and reasons the grader made an over-ride of the instrument grade prediction. For example, the grader over-rides 3 carcasses for advanced maturity, dark cutting characteristics, bloodshot ribeye, etc. Indicate if the IR Team agrees or disagrees with the grader’s over-ride. Also record the number of carcasses, if any, and the reasons that the IR Team thinks the carcass should have been over-ridden by the grader. Record findings in the narrative report.
 - d. Audit the grader’s paperwork as applicable, i.e., Instrument –Cooler Operation Checklist, Instrument Grading Record, and MGC-5-4 Grading Worksheet (Traditional) form completion; quality plans; safety reviews; Schedule GLA monitoring; etc.

D. Meat and Meat Products Certification Data Collection Procedures

1. The IR Team members will review the certification of meat and meat products at processing facilities producing certified Institutional Meat Purchase Specification (IMPS) items, National School Lunch products, reprocessing of donated commodities, and any other meat and meat products requiring federal certification.
2. The IR Team members will conduct the review in a manner that does not interfere with plant operations or the grader's certification functions.
3. All applicable sections of the specific operational MGC Branch certification check list(s) will be reviewed.
4. Any deviations from specifications, contracts, MGC Instructions, etc., will be noted and discussed with the local supervisor and/or grader.
5. A narrative report detailing all areas evaluated and any discrepancies noted will be prepared by the IR Specialist.

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Exhibit A Quality and Yield Grade Accuracy Summary

Plant _____

Date _____

QUALITY GRADES

Graded As	Number Reviewed	Should Be Prime	Should Be Choice	Should Be Select	Accuracy
Prime					/
Choice					/
Select					/
Ungraded					/
Total	0	0	0	0	/

YIELD GRADES

Graded As	Number Reviewed	Should Be YG 1	Should Be YG 2	Should Be YG 3	Should Be YG 4	Should Be YG 5	Accuracy
Yield Grade 1							/
Yield Grade 2							/
Yield Grade 3							/
Yield Grade 4							/
Yield Grade 5							/
Total	0	0	0	0	0	0	/

REMARKS

Exhibit B

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURE MARKETING SERVICE INSTRUMENT - COOLER OPERATION CHECKLIST				PLANT:					APPLICANT NO:	
Date of Check	Time of Check	Grader Name	Shift	Start-up Procedures Followed	Instrument Operator/Technician Trained	Equipment ID on Approved Device List	All Equipment Component Numbers Match	Ribbed ≥ 10 Minutes Prior to Presentation	Process Acceptable?	
				(✓)	(✓)	(✓)	(✓)	(✓)	Yes (✓)	No (✓)
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Exhibit C

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE INSTRUMENT GRADING RECORD						Plant							Applicant Number			
Date	Shift	Verification Level (Normal, Tightened, or Reduced)	Sample Size	Grader Name	Carcass ID Number	Area Over Traced (in ²)		Area Under Traced (in ²)		Area of Debris (in ²)		Split (0, 1)	Ribbing (0, 1)	Correct Grade Stamp (0, 1)	Sharp/Clear Image (0, 1)	Proper Fat Thickness Tracing (0, 1)
						Side 1	Side 2	Side 1	Side 2	Side 1	Side 2					

INSTRUMENTATION ACCURACY

Exhibit D

LOCATION:
DATE:

% of Marbling Scores Greater Than 35 Units From Reviewer Average
 % Rib Eyes Greater than 1.0 Square Inches From Reviewer Average
 % of Yield Greater than 0.50 Error From Reviewer Average
 Quality Agreement Rate
 Yield Agreement Rate

Average Camera Marbling Score
 Average Reviewer Marbling Score
 Average Camera Rib Eye Size
 Average Reviewer Rib Eye Size
 Average Camera Yield Grade
 Average Reviewer Yield Grade

Carcass	Camera Calls	Reviewer One Calls	Reviewer Two Calls	Average Reviewers' Calls	Reviewers VS Camera	Absolute Value	Difference Greater Than 35	Camera Grade	Reviewer One Grade	Reviewer Two Grade	Agreement Y = 1	Camera REA	Reviewer One REA	Reviewer Two REA	Average Reviewers' REA	Reviewers VS Camera	Absolute Value	Greater Than 1.0 Inches	Camera YG	Reviewer One YG	Reviewer Two YG	Average Reviewers' YG	Reviewers VS Camera	Absolute Value	Greater Than 0.5 YG	Camera YG	Reviewer One YG	Reviewer Two YG	Agreement Y = 1
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