

Grain Inspection Advisory Committee

May 11-12, 1999

SUMMARY OF MEETING Hilton Hotel Airport in Kansas City, Missouri

Contents

INTRODUCTION	2
ACCEPTANCE OF MEETING MINUTES FROM NOVEMBER 3-4, 1998	4
REVIEW AND ACCEPTANCE OF AGENDA.....	4
GIPSA/FGIS UPDATES	4
CALIBRATION UPDATE PROCESS.....	5
GAC 2100 MOISTURE METER	6
DNA/GMO TESTING.....	8
PROJECTED IMPACT OF FUTURE MARKET TRENDS AND NEEDS ON THE	8
GRAIN GRADES AND STANDARDS.....	8
TOUR OF GIPSA'S TECHNICAL CENTER	10
UTILITY WHEAT CLASS	10
ELEVATOR SAFETY	10
RESOLUTIONS OF THE GRAIN INSPECTION ADVISORY COMMITTEE	12
ELECTION OF A VICE CHAIR PERSON	13
ADMINISTRATIVE MATTERS/NEXT MEETING.....	13
CONTACTS	13

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INTRODUCTION

Mr. James Baker, Administrator, Grain Inspection, Packers and Stockyards Administration (GIPSA) opened the meeting at 8:00 a.m. Mr. Baker thanked the new Chairperson, Bob Smigelski, and the members of the Committee for their time and advice which he highly regards. He also provided a brief update on GIPSA. As expressed by Mr. Baker, GIPSA's mission is to establish the standards for grain marketing and monitor the application of those standards. Through its programs and services, GIPSA protects the integrity of the marketing system. As evidence of GIPSA's important role in the marketing of U.S. grain, Mr. Baker indicated that this past year, foreign grain complaints dropped by 75 percent from the early 1990's. This performance measurement speaks well of what GIPSA does.

GIPSA has been diligently working to increase the efficiency of its programs and services. Through April 1999, the percentage of export grain inspected by GIPSA has increased by 9.5 percent compared to the same time period last fiscal year. At the same time, the Agency's financial position has improved. In Mr. Baker's estimation, the Agency's efforts to increase the efficiency of its programs and services are starting to pay off. Nonetheless, many challenges and opportunities await GIPSA and American agriculture.

In closing, Mr. Baker introduced and congratulated David Funk, Chief of GIPSA's Inspection Systems Engineering Branch, for being a recipient of the Secretary's 53rd Annual Honor Award. Mr. Funk is being recognized for his leadership in providing the national grain inspection system with more efficient and cost-effective procedures for standardizing official grain inspection equipment.

Attendees included:

	<u>Name</u>	<u>Affiliation</u>
Committee Members	Wilbur Benroth	Producer in Ottawa, Ohio
	Thomas Bressner	Assumption Cooperative Grain Company
	Mike Cassidy	Cassidy Grain Company
	Bert Farrish	Columbia Grain, Inc.
	Bonnie Fernandez	California Wheat Commission
	Gary Gilbert	Kansas Wheat Commission
	Robert Gore	WA State Department of Agriculture
	Diane Hanekamp	Corn Products International
	Arvid Hawk	Cargill, Inc.
	Bennie Lackey, Jr.	Riceland Foods, Inc.
	Israel Lopez	The Port of Corpus Christi
	Tom Miller	Farmers Cooperative Company
	Ronald Mitzel	Dakota Mill and Grain
Bob Smigelski, Chairperson	The Andersons (NGFA)	
Robert Williams	Producer in Conway, Arkansas	

	<u>Name</u>	<u>Affiliation</u>
GIPSA	Jim Baker	Office of the Administrator
	Tess Butler	Office of the Deputy Administrator
	Ken Critchfield	Wichita Field Office
	Bob Crook	Cedar Rapids Field Office
	Day Huguet	National Council of Federal Grain Inspection Locals
	David Funk	Technical Services Division
	John Giler	Office of the Deputy Administrator, Safety and Health Staff
	Paul Manol	Field Management Division, Standards and Procedures Branch
	Larry McDonald	Office of the Director, Technical Services Division
	Dave Orr	Field Management Division
	Diane Palecek	Kansas City Field Office
	Marianne Plaus	Office of the Deputy Administrator
	Dave Shipman	Office of the Deputy Administrator
	Phil Spinelli	Economic/Statistical Support
	Steve Tanner	Office of the Director, Technical Services Division
Other Attendees (represents attendees who signed the sign-in sheet)	Mary Auth	Illinois Soybean Association
	David Ayers	Champaign-Danville Grain Inspection
	Ted Bownik	A.D.M.
	David Botwinik	Pavia & Harcourt
	Gary Bothwell	Kansas Grain Inspection
	Frank Buerskens	Frank Beurskens Consulting, Inc.
	Robin Casper	USDA, Farm Service Agency
	Tom Dahl	Sioux City Grain Inspection
	Don Durandetta	Strategic Diagnostics
	Cassie Eigenmann	Dickey-john, Inc.
	Chuck Estes	Midland Fumigant
	Rich Flaugh	GSF/Dickey-john
	Carey Gillam	Reuters America, Inc.
	Greg Hoelck	Hastings Grain Inspection
	Tim Lawrence	Missouri Dept. of Agriculture
	Larry Kitchen	Missouri Dept. of Agriculture
	Austin Merrill	USDA, Farm Service Agency
	Tom Meyer	Kansas Grain Inspection
	Steve Metiff	USDA, Farm Service Agency
	W. Kirk Miller	North American Export Grain Association
Kim Nill	American Soybean Association	
Charles von Rosenberg, Jr.	Textron Systems	
Jim Voigt	A.D.M.	
Cliff Watson	Consultant	

ACCEPTANCE OF MEETING MINUTES FROM NOVEMBER 3-4, 1998

The Committee approved the meeting minutes from November 3-4, 1998, as written.

REVIEW AND ACCEPTANCE OF AGENDA

The Committee approved the agenda (agenda attached).

GIPSA/FGIS UPDATES

Mr. Dave Shipman, Deputy Administrator GIPSA/FGIS, provided an update of GIPSA/FGIS' financial status and reauthorization plan and the phosphine re-registration issue (presentation overheads attached).

Financial

The key points of Mr. Shipman's presentation were as follows:

- GIPSA's Fiscal Year 2000 Budget includes a 7.4 percent increase (i.e., \$795,000) in appropriated funding over Fiscal Year 1999. This includes increases of \$56,000 for standardization activities; \$74,000 for compliance activities; and \$665,000 for methods development.
- The \$665,000 slotted for methods development includes \$50,000 for mycotoxin testing; \$190,000 for variety identification; and \$425,000 for new grain tests. The additional funding for mycotoxin testing would enable GIPSA to develop automated mycotoxin testing procedures in an effort to improve reliability and efficiency. The \$190,000 for variety identification will allow the Agency to pursue specialized quality testing for crops tailored for specific end uses. Finally, the \$425,000 portion of the request will go to ascertaining market needs. GIPSA needs to identify emerging industry demands for quality information and then develop the measurement capabilities to meet those needs. The additional funds will be used to contract with other Federal agencies, universities, and/or other organizations to (a) determine what new grain quality standards are needed by end users and grain marketing firms, and (b) assess impacts of new quality standards on market structure and performance.
- Mr. Shipman also reviewed the financial statuses of the Grain Program's (a.k.a., FGIS) trust fund accounts. The largest of these, the Inspection and Weighing account, showed a increase in workload and revenue and a decline in cost for the first and second quarters of Fiscal Year 1999 as compared to the same time last year. Likewise, the Commodity Inspection account is in the black. The Rice Inspection account, however, is showing a negative profit/loss and account balance. The Agency is carefully reviewing this program and will take measures to correct the negative balance.

Reauthorization

The key points of Mr. Shipman's presentation were as follows:

- Every 5-7 years, the legislation authorizing FGIS' continued operation, the U.S. Grain Standards Act, comes before Congress for renewal or reauthorization. FGIS' current authorization expires on September 30, 2000.
- The Agency has been meeting with various industry groups and will consider all input, including that from the Grain Inspection Advisory Committee, as it finalizes its reauthorization package. The Agency will submit the package for internal Departmental clearance this June and then to Congress in October 1999. We anticipate hearings in the Spring of 2000.

Aluminum and Magnesium Phosphide Re-Registration

The key points of Mr. Shipman's presentation were as follows:

- The Environmental Protection Agency (EPA) proposed 15 risk mitigation measures for phosphine registration/application/handling. The EPA proposal created considerable concern and questions within the grain industry. In response to EPA's proposal, USDA established a task force of researchers from the USDA's Agricultural Research Service (ARS) and various universities to carefully review the issue of phosphine registration. The USDA Phosphine Task Force is supported by a working group consisting of other ARS researchers and representatives from GIPSA, the Agricultural Marketing Service, and the Animal and Plant Health Inspection Service.
- Mr. Shipman briefly reviewed the task force's proposed USDA alternative risk mitigation measures for use of aluminum and magnesium phosphide (attached).

CALIBRATION UPDATE PROCESS

Mr. Steven Tanner, Director GIPSA's Technical Services Division, provided an overview of calibration development and maintenance in the official inspection system. As explained by Mr. Tanner, GIPSA takes its calibration development and maintenance processes very seriously and, because of the scope of the inspection system, maintains a national perspective. The Agency establishes calibrations based on national sample sets obtained from market channels over multiple crop years. GIPSA optimizes calibration for distinguishable grain types and classes and for overall accuracy. Mr. Tanner's overheads, which provide an excellent overview of his presentation, are attached. During the question and answer portion of Mr. Tanner's presentation, the following points were made:

- Several of the Committee members inquired whether new calibrations could be obtained on disk from GIPSA. GIPSA provides each calibration to the appropriate instrument manufacturer. As a result, if requesting a calibration, customers should contact the instrument manufacturer directly or contact GIPSA who will forward their request to the manufacturer.

- At the start of each fiscal year, the Technical Services Division's management team meets to establish a list of which calibrations will be updated in the coming fiscal year. Generally, all of the major calibrations are reviewed annually.
- On May 1, 1999, the Agency implemented 18 new and/or updated calibrations. Of these, GIPSA rescinded the protein calibration for Hard Red Winter wheat (HRW) on May 5, 1999. The Agency also decided at that time to delay implementation of the Hard Red Spring wheat (HRS) calibration.
- GIPSA's decision to rescind the HRW calibration was based on considerable concern expressed by the Agency's own staff as well as by the industry. For unknown reasons, several field instruments were reading consistently lower than the master near-infrared instruments maintained at the Agency's Technical Center. The Agency is currently scrutinizing why the affected field instruments are reading lower than the master instrument. GIPSA will not implement an updated HRW calibration this year.
- The Agency will provide the market with more information about the delayed HRS calibration within several weeks.
- Mr. Tanner indicated that GIPSA will revise its calibration implementation process to include, when necessary, an extra step which would entail the pilot testing of NIRT calibrations at field locations prior to their implementation. This field-testing would give GIPSA the opportunity to better assess the impact of a calibration change. This new process will begin with the HRS calibration.

GAC 2100 MOISTURE METER

Ms. Cassie Eigenmann, Analytical Manager for the Dickey-john Corporation, Mr. Dave Orr, Director, GIPSA's Field Management Division, and Mr. Steve Tanner, Director, GIPSA's Technical Services Division, provided an overview and update on the GAC 2100 moisture meter.

Ms. Cassie Eigenmann: Ms. Eigenmann's presentation focused on an overview of the Dickeyjohn Corporation, including organizational structure, major product groups, sales, and corporate attributes and capabilities (presentation overheads attached). Mr. Rich Flaugh, GSF/Dickeyjohn, who attended the meeting, also offered a few comments. GSF/Dickey-john is the North America distributor for the GAC 21000 moisture meter. GSF is also charged with ensuring that calibrations are communicated to the end user. This is done through national publications, the GSF newsletter, the company web site, and by working with State Grain and Feed Associations. It's important to note that Dickey-john does participate with GIPSA in the development and updating of calibrations, but GIPSA is the final authority.

Mr. Dave Orr: Mr. Dave Orr's presentation focused on implementation and performance of the GAC 2100 moisture meter (presentation overheads attached). As indicated by Mr. Orr, the GAC 2100 was implemented for corn, soybeans, and sunflower seed on August 1, 1998. Based on considerable data and considerable industry concern that the GAC 2100 was not providing accurate readings on cold grain,

GIPSA implemented a calibration change on February 22, 1999. As provided in Mr. Orr's overheads, GIPSA has analyzed its quality assurance/quality control data and compared moisture results before and after the calibration change and compared GAC 2100 performance to Motomco performance the prior year. The results clearly demonstrate that for corn the GAC 2100 out performs the Motomco and has provided better results since the calibration was changed on February 22, 1999.

During the question and answer segment, several Committee members and meeting attendees expressed the sentiment that GIPSA should pilot test new and/or updated calibrations and any associated procedures at field locations. As expressed by the Committee Chairperson, "You can't beat field testing."

Mr. Steven Tanner: During his presentation, Mr. Steve Tanner provided information about cold grain moisture accuracy and the checktest process for the GAC 2100 moisture meter (presentation overheads attached). During the fall and winter months, the industry and GIPSA's own field operations began reporting cold grain problems when using the GAC 2100. In some cases, the GAC 2100 appeared to be reading two to three tenths high when grain samples were cold (30-40 degrees F). GIPSA's QA/QC, appeal sample, and special study data showed that the cold grain readings were slightly high. After further analysis, GIPSA developed a "rapid" grain warming procedure and improved temperature corrections for the GAC 2100. The new temperature corrections have resulted in improved accuracy for both cold and warm grain. As a result, on May 1, 1999, all of GIPSA's moisture calibrations included improved temperature corrections. Mr. Tanner emphasized that, when measuring grain moisture, GIPSA strongly recommends the following:

- Control sample temperature to 50-90 °F
- Control room temperature to 60-85 °F

Mr. Tanner also reviewed the checktesting process for moisture determinations. According to GIPSA data, the checktest pass rate for the GAC 2100 far exceeds that for the Motomco 919.

In summary, Mr. Tanner indicated that additional field-testing might have helped identify and correct the GAC 2100 temperature sensitivity problem. GIPSA has learned from this experience and will remain sensitive to the importance of more extensive field testing of equipment and calibrations prior to implementation when it is warranted. GIPSA is committed to providing accurate, repeatable, and timely inspection results.

DNA/GMO TESTING

Dr. Don Durandetta, Business Unit Manager for Strategic Diagnostics, Inc., provided his perspective on analytical technologies for transgenic crops and grains (presentation overheads attached). More specifically, Dr. Durandetta provided information about Strategic Diagnostics, Inc. and the company's work in the area of immunoassays. Toward the end of his presentation, Dr. Durandetta provided a demonstration of DNA/GMO testing using a Strategic Diagnostics test kit. In summary, Dr. Durandetta views analytical tests, such as the one he demonstrated, as having applicability in the following areas:

- Agricultural biotech research and development;
- Crop hybrid and variety development;
- Quality assurance of seed products;
- Compliance to European food labeling laws;
- Trait monitoring in distribution systems; and
- Identity preservation of high-value crop.

PROJECTED IMPACT OF FUTURE MARKET TRENDS AND NEEDS ON THE GRAIN GRADES AND STANDARDS

Mr. Frank Beurskens of Frank Beurskens Consulting, Inc., was the luncheon speaker who provided his perspective on the projected impact of future market trends and needs on the grain grades and standards. The key concepts of Mr. Beursken's presentation included the following:

- Value discovery versus price discovery
 - price reflects the container – value reflects the content (and content is what counts to the end user whether a poultry producer or a chicken)
 - capturing embedded value in the food system is maximized when producer variety selection is aligned with end-user requirements
 - a focus on value reduces, however, substitutability. For example, corn is not just corn. Or, not all corn is alike.
- Certification versus standardization

Current grain standards assume:

- all customers are identical
- physical characteristics are a proxy for end use quality

So, the big question becomes: What role can the Federal Grain Inspection Service (FGIS) play in improving value discovery and global competitiveness? Should FGIS continue to certify quality or focus on measurement certification?

Mr. Beurskens pointed out that within the U.S. Department of Agriculture (USDA), there are already examples of programs that are focusing on quality certification. For example, the Agricultural Marketing Service's (AMS) Livestock and Seed Program has several such certification programs and services: the USDA Process Verification Program; the Contract Verification Service; Meat Certification Services; and the Supplier Assessment Program.

- Process Verification Program: provides livestock and meat producers an opportunity to assure customers of their ability to provide consistent quality products by having their written manufacturing processes confirmed through independent, third party audits. USDA Process Verified suppliers are able to have marketing claims such as breed, feeding practices, or other raising claims verified by the USDA and marketed as "USDA Process Verified." The program uses the International Organization for Standardization's ISO 9000 series standards for documented quality management systems as a format for evaluating documentation to ensure consistent auditing practices and promote international recognition of audit results.
- Contract Verification Service: verifies that the producer meets the terms and conditions of meat purchase contracts by: (1) performing audits on the quality of delivered meat products, and (2) evaluating and documenting the vendor's or producer's manufacturing and quality assurance program.
- Meat Certification Services: provide assurance to large-quantity buyers such as hospitals, schools, restaurants, hotels, airlines, and the military that products comply with their requirements. Under the certifications service, meat graders review and certify livestock, meat, and meat products according to buyer specifications.
- Supplier Assessment Program: companies are rated by the USDA and are eligible to supply Institutional Meat Purchase Specification (IMPS) 136 Ground Beef and IMPS 1136 Ground Beef Patties for the U.S. Department of Justice, Federal Bureau of Prisons (BOP). Each company receives a Supplier Assessment Rating and Report evaluating their ability to meet production and quality control requirements specified in BOP contracts.

Mr. Beurskens challenged the Committee members, FGIS, and other meeting attendees to think about the grain marketing system - - from seed production to planting to end use - - and what role FGIS should take. He suggested that FGIS continue to concentrate on end item testing and consider other types of services similar to AMS' certification programs.

In summary, Mr. Beurskens offered the following observations:

- Current commodity markets fail to discover embedded value.
- Current grain standards fail to reflect value-influencing characteristics.
- Traditional market structures fail to provide the incentives, feedback, and information flow necessary for the United States to remain competitive in a global marketplace.

TOUR OF GIPSA'S TECHNICAL CENTER

Thanks to the hospitality of Steve Tanner and the staff of GIPSA's Technical Services Division, attendees toured the Agency's Technical Center located in Kansas City, Missouri. Attendees learned about the applied research being conducted at the Technical Center and gained first hand knowledge about the equipment and technology which serve in the standardization of objective testing factors within the official system. Likewise, attendees also visited the Board of Appeals and Review which is the ultimate authority within the official system with regard to subjective grading factors.

UTILITY WHEAT CLASS

Mr. Paul Manol, Marketing Specialist, GIPSA's Standards and Procedures Branch, provided an overview of the potential development of a utility/feed wheat class. A summary of this issue as prepared by Mr. Manol and his presentation overheads are attached. The following are the key points raised during the question and answer portion of Mr. Manol's presentation:

- Utility/feed wheat varieties are often considered to be "high yielding" while having "poor milling and baking qualities." Mr. Manol's estimation that some of these varieties can produce 70 to 90 bushels per acre.
- A quick and reliable means to better measure the end-use quality of wheat does not currently exist. GIPSA continues to work with USDA's Agricultural Research Service to develop a suitable test for measuring protein quality.
- The Philippines and Korea currently account for a large portion of the utility/feed wheat market and Japan may soon enter the market. Each country has their own specifications for feed wheat as no "international standard" has been established for this type of wheat.
- One Committee member indicated that Canada has three separate grades for cleanings.

He questioned whether the U.S. should establish a standard or standards for cleanings as an alternative approach to the utility/feed wheat issue. The Committee agreed that the low volume of trade in the U.S. for cleanings does not merit a separate standard or standards.

ELEVATOR SAFETY

Mr. John Giler, GIPSA's Acting Safety and Health Manager, provided an overview of elevator safety (presentation overheads attached). Mr. Giler's presentation focused on who does what when it comes to safety, GIPSA/FGIS' role, and current safety issues. With regard to elevator safety, three Federal agencies, the Occupational Safety and Health Administration (OSHA), USDA's Farm Service Agency (FSA), and GIPSA/FGIS all play a role in promoting elevator safety.

As the regulatory and enforcement agency responsible for setting safety standards for anyone who works, OSHA performs periodic reviews of worksites and issues citations and penalties if standards have been violated. The grain handling standard can be found in Title 29, Part 1910.272 of the Federal Code.

FSA examines each grain warehouse once per year. As of June 1998, FSA and OSHA have a mutual agreement whereby FSA representatives look for dust accumulation during the annual warehouse exams. If dust is found, FSA informs the responsible company that it will report the finding to OSHA. GIPSA/FGIS' safety and health objectives are to provide employees with a safe work environment, to protect the public from GIPSA operations, and to protect Agency property from damage, loss, and theft. At export, GIPSA inspectors conduct daily safety walk throughs of each facility at which employees are working. Approximately every 3 months, GIPSA and company representatives meet to address any safety concerns and to jointly come up with ways to address any potential problem areas. As part of this process, GIPSA/FGIS and the affected company also work out a timeline to get things fixed. If problems are not corrected within the agreed upon timeframe, GIPSA/FGIS withholds services from the affected facility.

Mr. Giler acknowledged that GIPSA/FGIS has and will continue to address other safety and health concerns, such as railcar fall protection, exposure to fumigants and laboratory chemicals, and the stress of working shifts and long hours.

RESOLUTIONS OF THE GRAIN INSPECTION ADVISORY COMMITTEE
May 11-12, 1999

1. Reauthorization Resolution: It is resolved that the Grain Inspection Advisory Committee supports GIPSA/FGIS' reauthorization plan.
2. Budget Resolution: For the Fiscal Year 2000 budget proposal, the Grain Inspection Advisory Committee does not support an increase in user fees to offset a shift in standardization funding.
3. Phosphine Resolution: The Grain Inspection Advisory Committee wishes to commend GIPSA for the work they did with the USDA Phosphine Task Force and encourages continuation of these efforts.
4. Equipment Testing Procedures Resolution: Prior to implementation, it is resolved that on a case-by-case basis, as deemed necessary by the Administrator, that GIPSA consider its equipment testing procedures to include more extensive field testing performing under the full range of environmental and operational conditions in the industry.
5. Moisture Resolution: The Grain Inspection Advisory Committee proposes that GIPSA develop recommended field testing procedures for cooling grain samples for the purpose of accurately measuring moisture.
6. Feed/Utility Wheat Resolution: The Grain Inspection Advisory Committee resolves that GIPSA continue its fact-finding discussions on feed/utility wheat and report those findings to the Committee. Based upon information available at this time, the Advisory Committee does not support this feed wheat concept.
7. End-Use Quality Resolution: The Grain Inspection Advisory Committee recommends that GIPSA continue to develop testing methodologies to measure end-use attributes of grain, specifically protein quality for wheat and extractable starch for corn.
8. GMO Resolution: The Grain Inspection Advisory Committee recommends that GIPSA communicate to the appropriate regulatory agencies to require seed companies to provide rapid, cost-effective test methods to identify finished grain produced from GMO germplasm as a requirement for sale of such seed in the U.S. beginning October 1, 1999.
9. Monitoring Grain Quality Resolution: In order to enhance the accuracy, consistency, and repeatability of official inspection results, the Grain Inspection Advisory Committee recommends that GIPSA undertake a study to explore the feasibility of monitoring quality determinations from a centralized location.

ELECTION OF A VICE CHAIR PERSON

The Committee elected Mr. Israel Lopez, The Port of Corpus Christi, as the new Vice Chairperson. Mr. Lopez will assume the role of Chairperson one year hence.

ADMINISTRATIVE MATTERS/NEXT MEETING

The Administrator suggested that presentations by a representative of the USDA's World Agricultural Outlook Board and a seed breeder may be appropriate for the next meeting or future meetings.

The Administrator proposed and the Committee agreed that the next meeting will be in early November in New Orleans.

CONTACTS

If you have any questions regarding the Committee and/or if you would like a hard copy of the minutes with attachments, please contact:

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