Department of Agriculture (USDA) Fiscal Year 2022 Agency Report

1. Please provide a summary of your agency's activities undertaken to carry out the provisions of OMB Circular A-119, "Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities" and the National Technology Transfer and Advance Act (NTTAA). The summary should contain a link to the agency's standards-specific website(s) where information about your agency's standards and conformity assessment related activities are available.

The Agricultural Marketing Service (AMS) provides grading services, and price and volume reporting for a range of commodities including cotton, dairy, fruits and vegetables, livestock, poultry, seed, tobacco, and grain. AMS supports these services by maintaining commodity quality standards on its website at https://www.ams.usda.gov/. The grade standards provide a common language of trade between buyers and sellers and are voluntarily used by the supply chain to promote orderly and efficient trade of agricultural products. AMS grading services certify products according to these standards or to contract terms. In addition, AMS purchases a variety of food products for Federal nutrition assistance and international food aid programs. These purchases provide food to those in need and help stabilize agricultural commodity prices by balancing supply and demand. Fresh and processed food purchased under these programs includes fruits and vegetables, beef and pork, poultry and egg products, fish, dairy products, grain products, and oilseed products. To support the procurement process, AMS maintains a series of purchase specifications on its website at https://www.ams.usda.gov/commodity-procurement that are used by contractors to produce and deliver food products and by graders and inspectors within the U.S. Department of Agriculture (USDA) to determine product acceptability. If purchase specifications require laboratory analyses, only official standard analytical methods are used.

USDA also offers voluntary, independent food safety audits of fruit and vegetable suppliers throughout the production and supply chain. USDA's Good Agricultural Practices (GAP) and Good Handling Practices (GHP) audits verify that fresh fruits and vegetables are produced, packed, handled, and stored in the safest manner possible to minimize risks of microbial food safety hazards. USDA GAP and GHP audits verify adherence to the recommendation in the U.S. Food and Drug Administration's (FDA) Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables and industry-recognized food safety practices. In FY 2022, USDA's Specialty Crops Program (SCP) and its licensed auditors performed 3,281 food safety audits (primarily GAP and GHP audits) on more than 100 different commodities in all 50 states, Puerto Rico and Canada.

Other USDA audit services focus on Good Manufacturing Practice (GMP), which verify adherence to FDA's GMP regulations: current (CFR Title 21 Part 110) and staggered effective dates from 2016 to 2018 (CFR Title 21 Part 117); Hazard Analysis Critical Control Points (HACCP), based on FDA's Guide to Minimize Microbial Food Safety Hazards of Fresh-cut Fruits and Vegetables and the HACCP principles established by the National Advisory Committee On Microbiological Criteria for Foods; food defense protocols, based on FDA's Food Producers, Processors, and Transporters: Food Security Preventive Measures Guidance; and traceability procedures.

The USDA Specialty Crops Program (SCP) serves as the United States representative on multiple Codex Alimentarius Commission (Codex) committees. Codex standards help ensure fair trade practices in the food trade and the trading of safe food internationally. SCP activities relating to CAC include:

- Committee on Processed Fruits and Vegetables (CCPFV): SCP chairs this committee. In FY 2022, though the CCPFV is adjourned, proposals were made to develop new standards and to review an existing one.
- Committee on Fresh Fruits and Vegetables (CCFFV): In FY 2022, SCP participated in the 22nd Session of the CCFFV at which three new standards were completed, one revised and proposals to develop two new CCFFV standards were agreed to. CCFFV accepted the Glossary of Terms Used in the Layout for Codex Standards for Fresh Fruits and Vegetables and Amendments to the CCFFV Standard Layout prepared by the delegations of the United States and Ghana.
- Codex Committee on Spices and Culinary Herbs (CCSCH): In FY 2022, SCP participated in the 6th Session of the CCSCH at which three new standards were completed, two undergoing development and three new ones approved for development.
- Codex International Outreach: SCP continuously undertakes outreach activities to maintain technical relationships on Codex standards and issues with foreign countries. In all three Codex commodity committees, SCP leads the working groups that select the priority commodities to be standardized.

SCP serves as the United States representative on multiple United Nations Economic Commission for Europe (UNECE) committees. UNECE is a voluntary international standards development organization. SCP activities relating to UNECE include:

- UNECE Specialized Section on Standardization of Fresh Fruits and Vegetables (SSSFFV): In FY 2022, SCP participated in the SSSFFV meeting where four existing standards and an explanatory brochure (inspection manual) were revised. Work commenced on two new standards.
- UNECE Specialized Section on Standardization of Dry and Dried Produce (SSSDDP): SCP chairs and heads the U.S. delegation to the annual meeting. In FY 2022, three new standards were completed, two new standards are being evaluated prior to final adoption, and two explanatory posters are ongoing development.
- UNECE Outreach: SCP conducted international outreach to government and industry officials to build support for U.S. positions related to fresh, dry, and dried produce standards being addressed by the UNECE.

The USDA National Organic Program (NOP) did not use any Government Unique Standards In lieu of Voluntary Consensus Standards in FY 2022. NOP also did not participate in any Voluntary Consensus Standards Activities during FY 2022.

The program continues to use the following Voluntary Consensus Standards. These are incorporated by reference in the USDA organic regulations 7 CFR Part 205.3:

1. ASTM D5988-12 (“ASTM D5988”), “Standard Test Method for Determining Aerobic Biodegradation of Plastic Materials in Soil,” approved May 1, 2012.
2. ASTM D6400-12 (“ASTM D6400”), “Standard Specification for Labeling of Plastics Designed to be Aerobically Composted in Municipal or Industrial Facilities,” approved May 15, 2012.
3. ASTM D6866-12 (“ASTM D6866”), “Standard Test Methods for Determining the Biobased Content of Solid, Liquid, and Gaseous Samples Using Radiocarbon Analysis,” approved April 1, 2012.
4. ASTM D6868-11 (“ASTM D6868”), “Standard Specification for Labeling of End Items that Incorporate Plastics and Polymers as Coatings or Additives with Paper and Other Substrates

Designed to be Aerobically Composted in Municipal or Industrial Facilities," approved February 1, 2011.

5. EN 13432:2000: E ("EN 13432"), September 2000, "Requirements for packaging recoverable through composting and biodegradation - Test scheme and evaluation criteria for the final acceptance of packaging."
6. EN 14995:2006: E ("EN 14995"), December 2006, "Plastics - Evaluation of compostability - Test scheme and specifications."
7. ISO 17088:2012(E), ("ISO 17088"), "Specifications for compostable plastics," June 1, 2012.
8. ISO 17556:2012(E) ("ISO 17556"), "Plastics—Determination of the ultimate aerobic biodegradability of plastic materials in soil by measuring the measuring the oxygen demand in a respirometer or the amount of carbon dioxide evolved," August 15, 2012.

USDA's Cotton & Tobacco Program utilizes ASTM environmental and laboratory cotton fiber testing standards to provide the methodology for the cotton classification process. In addition, physical and descriptive cotton classification standards for visual and instrument grading serve as the reference for all cotton classification measurements. The applicable websites are listed below:

https://www.astm.org/
https://www.ams.usda.gov/grades-standards/cotton
https://www.astm.org/get-involved/technical-committees/committee-d13/subcommittee-d13#

USDA's Dairy Program (DP) is accredited by the American National Standards Institute (ANSI) as Administrator of the U.S. Technical Advisory Group (TAG) to the International Organization for Standardization (ISO) Technical Committee 34, Subcommittee 5 for Milk and Milk Products (TC34/SC5). ANSI, the U.S. member body to ISO, relies on U.S. TAGs as national mirror committees to support the development of voluntary, consensus-based international standards used in the global marketplace. DP concurrently engages in and facilitates TC34/SC5 U.S. TAG activities to determine consensus positions from members representing all sectors of the U.S. dairy industry in the development, approval, reaffirmation, revision, and withdrawal of international ISO standards. Since the TAG was accredited in November 2019, it has provided the U.S. consensus position for approximately 120 voting events for ISO standards at various stages of development. DP as the TAG Administrator, organizes the U.S. delegation for ISO meeting attendance and oversees the nomination of experts to represent the U.S. on ISO technical committees. In November of 2022, members of the TAG representing the U.S. delegation participated in the 6th ISO TC34/SC5 meeting. Moreover, the TAG has nominated 11 U.S. experts to 11 technical working groups developing and/or revising ISO standards for the evaluation of milk and milk products.

Another part of DP's commitment to building and using voluntary consensus standards, is participation in U.S. TAGs associated with TC34/SC5, including the U.S. TAG for TC34 for Food Products and the U.S. TAG for TC34/SC9 for Microbiology. Participation and facilitation of U.S. TAG activities in support of international standards allows DP to have a direct role in the development and use of voluntary consensus standards.

Although the Codex Committee on Milk and Milk Products is adjourned *sine die*, DP was very engaged and active in participating in multiple Codex committees impacting the trade of milk and milk products including the following: Codex Committee on Fats and Oils (CCFO), Codex Committee on Food Import and Export Inspection and Certification Systems (CCFICS), Codex Committee on Food Additives (CCFA) and Codex Committee on Methods of Analysis and Sampling (CCMAS).

Relevant Websites:

- ISO: https://www.iso.org/about-us.html
- ANSI Accredited U.S. TAG Listing: https://www.ansi.org/iso/ansi-activities/us-tags
- ISO TC34/SC5 for Milk and Milk Products: https://www.iso.org/committee/47878.html
- ISO TC34 for Food Products: https://www.iso.org/committee/47858.html
- ISO TC34/SC9 for Microbiology: https://www.iso.org/committee/47920.html

USDA's Livestock and Poultry Program's (LP) mission ensures that accurate and precise information is generated and available for the producers of U.S. meat and poultry products with respect to quality grading and marketing standards in support of both domestic and international trade. LP continues to coordinate its conformity assessment activities between the public and private sector with participation in consensus standard development bodies. LP still consistently uses government unique standards for the USDA grading and conformity system but continues to expand these into the voluntary consensus space with involvement of U.S. and international standard development organizations to promote efficiency and competitiveness for American farmers, producers, processors, handlers, wholesalers, warehousing companies, and retailers. In the U.S. there are over 400 meat, poultry and egg plants relying on LP for quality assessment. LP maintains several hundred in-house standards for this purpose and for coordinated product certification. Some of them have been in use for more than seventy-five years. LP also maintains Commercial Item Descriptions for hundreds of products that are procured through federal commodity purchase programs.

In 2022, the U.S. delegation to the UNECE Working Party on Agricultural Quality Standards, Specialized Section on the Standardization of Meat was led by LP staff members. UNECE's Specialized Section on Meat is a voluntary international standards development organization that focuses on developing global standards for egg, meat, and poultry products. The 2022 meeting of the Specialized Section was held in both in-person and virtual formats to optimize participation and provide opportunities to strengthen relations. In attendance were delegations from Australia, Czech Republic, Germany, Mongolia, Morocco, Panama, Philippines, Poland, and the U.S., as well as representatives from non-government organizations. These proceedings covered topics of discussion on the fat content of meat, new technological developments for assessing marbling in beef, an update from the working group assigned to review the marbling requirements in the current version of the UN porcine standard, recent developments from research on the eating quality of meat, an update on capacity building and promotional activities, an outline of future work, and the election of officers. An AMS staff person was elected as the vice chairperson of this organization during the meeting session.

ISO technical committee 34 Food Products/subcommittee 16 Horizontal methods for molecular biomarker analysis (TC 34/SC 16) was established by the USDA AMS LP Agricultural Analytics Division with collaboration from the American Oil Chemist's Society (AOCS) in 2008 in anticipation of the need to support international regulatory requirements for the trade and marketing of bioengineered food products. LP provided collaborative agreement funding for the establishment of TC 34/SC 16 providing international standardization of biomolecular testing methods applied to foods, feeds, seeds and other propagules of food and feed crops, variety identification and detection of plant pathogens. Deliverables in the form of ISO standards, technical specifications and technical reports from this committee now provide methods, requirements, and specifications for GMO testing, including citations and recommendations in the U.S. National Bioengineered Food Disclosure Standard. AOCS, an ANSI member

took over funding of TC 34/SC 16 in 2013, however an LP staff person serves as the volunteer *pro bono* international executive committee manager and technical expert. The LP staff member leads all business operations for this committee. There are currently 8 working groups in TC 34/SC 16 covering meat speciation, subsampling of seeds and grains, rapid nucleic acid amplification methods, biobanking for agriculture and food production, molecular biomarkers of agricultural fibers, microarray detection, genetically engineered content detection and quantification, and single laboratory validation of qualitative real time PCR methods. The committee has published 34 international standards and with five under development. The committee is made up of delegations from 24 participating countries and 22 observing countries.

In 2022, TC 34/SC 16 published five new standards: ISO 16577:2022 Molecular biomarker analysis — Vocabulary for molecular biomarker analytical methods in agriculture and food production; ISO 22942-1:2022 Molecular biomarker analysis — Isothermal polymerase chain reaction (isoPCR) methods — Part 1: General requirements; ISO/TS 20224-8:2022 Molecular biomarker analysis — Detection of animal-derived materials in foodstuffs and feedstuffs by real-time PCR — Part 8: Turkey DNA detection method; ISO/TS 20224-9:2022 Molecular biomarker analysis — Detection of animal-derived materials in foodstuffs and feedstuffs by real-time PCR — Part 9: Goose DNA detection method; ISO 16578:2022 Molecular biomarker analysis — Requirements for microarray detection of specific nucleic acid sequences and ISO TS 21569-7 Horizontal methods for molecular biomarker analysis — Methods of analysis for the detection of genetically modified organisms and derived products — Part 7: Real-time PCR based methods for the detection of CaMV and Agrobacterium Ti-plasmid derived DNA sequences. Standards under development in ISO TC 34/SC 16 include ISO/NP 20224-10 Molecular biomarker analysis — Detection of animal-derived materials in foodstuffs and feedstuffs by real-time PCR — Part 10: Duck DNA detection method; ISO/NP 20224-11 Molecular biomarker analysis — Detection of animal-derived materials in foodstuffs and feedstuffs by real-time PCR — Part 11: Pigeon DNA detection method; ISO/NP TS 21569-8 Molecular biomarker analysis — Methods of analysis for the detection of genetically modified organisms and derived products — Part 8: DNA extraction from alfalfa seeds and real-time PCR based event-specific detection methods for genetically modified alfalfa lines J101, J163 and KK179; ISO/CD 5354-1 Molecular biomarkers — Detection of specific DNA sequences in textiles derived from cotton — Part 1: Extraction of DNA from cotton and cotton-derived textile materials; ISO/CD TS 5354-2 Molecular biomarkers — Detection of specific DNA sequences in textiles derived from cotton — Part 2: Overview of target sequences for use in PCR-based detection methods for cotton GM events; ISO/NP TS 21569-9 Molecular biomarker analysis — Methods of analysis for the detection of genetically modified organisms and derived products — Part 9: Construct-specific real-time PCR based screening method for the detection of the P-35S-nptII DNA—sequences; ISO/Approved Work Item (AWI) 16677-1 Biobanking — Biobanking genetic material for biodiversity and conservation of genetic material — Part 1: Agricultural animal species; ISO/WD 11781 CEN Foodstuffs — General guidelines for single-laboratory validation of qualitative real-time PCR methods and ISO/NP 17174 CEN Food authenticity — DNA barcoding of fish and fish products using defined mitochondrial cytochrome b and cytochrome c oxidase I gene segments.

LP served on the drafting committee for ISO 23418:2022 Microbiology of the food chain — Whole genome sequencing for typing and genomic characterization of bacteria — General requirements and guidance which was published in 2022 and provided a proposal at the ISO TC 34 Food Products/SC 9 Microbiology of the Food Chain plenary meeting in 2022 for the development of new work on a One

Health approach to the biomolecular identification of antimicrobial resistance in microbial pathogens. This work will be chaired by a member of the U.S. Food and Drug Administration. LP currently serves as a committee liaison for ISO committees in meat testing, dairy testing, health informatics, statistics, and genomic DNA data compression.

LP represents the USDA on the ISO Technical Management Board Strategic Advisory Group on Smart Farming (ISO TMB SAG SF). Smart farming refers to the modern use of information and communication technologies (ICT) in agriculture. According to ISO's overview of the SAG on smart farming, apart from the challenges of climate change and food security for the world's population, there are a range of technological challenges, foremost among which is the issue of interconnectivity across the entire value chain of the food industry. The ISO TMB SAG SF will provide a roadmap to potential ISO standardization in smart farming. The LP staff member currently chairs the ISO TMB SAG SF subgroup on semantics and terminology and is working on semantic and syntactic interoperability and capability development for the ISO TMB SAG SF which is due to be published in March of 2023.

LP continued to provide international expertise in each of the five ISO TC 276 Biotechnology working groups: WG 1 terminology; WG 2 biobanking, WG 3 analytical methods, WG 4 bioprocessing and as both an expert and the U.S. technical convener for ISO TC 276 Biotechnology/working group 5 Data programming and integration. LP served on the drafting committees and provided technical advice and input for the following standards that were published in 2022: ISO 20691:2022 Biotechnology — Requirements for data formatting and description in the life sciences; ISO/TR 3985:2021 — Data publication — Preliminary considerations and concepts; ISO 24088-1:2022 Biotechnology — Biobanking of microorganisms — Part 1: Bacteria and archaea.

LP was a member of the drafting committee for ISO 35001:2019 Biorisk management for laboratories and other related organizations produced by ISO/TC 212 Clinical laboratory testing and in vitro diagnostic test systems/ working group 5 Laboratory biorisk management. ISO 35001:2019 is currently used in the U.S. and throughout the world. LP continues to work in this working group on two other projects.

LP chaired the AOAC International Stakeholder Program on Agent Detection Assays (SPADA) Working Group (WG) III Next Generation DNA sequencing Standards for Validation Criteria for Databases and *in silico* Processes. In this capacity LP developed validation criteria and confidence parameters for reference genome databases. The SPADA partnership between the U.S. Department of Defense and the AOAC includes scientists from the U.S. Department of Defense, U.S. Environmental Protection Agency, U.S. Health and Human Services, U.S. Centers for Disease Control, U.S. Food and Drug Administration, the USDA, and others. The standard developed by LP entitled, Standard Requirements for Nucleotide Sequences used in Biothreat Agent Detection, Identification, and Quantification: Verified Next Generation Sequences (VNGS) is now ready for consensus balloting by the SPADA community and all who have a material interest in this work. It is expected to be published in 2023.

DP and LP staff represented the USDA at the two Interagency Committee on standards policy (ICSP) meetings and participated in the annual ANSI ISO Forum meetings.

USDA’s Fair Trade Practices Program (FTPP), Packers and Stockyards Division (PSD) participated in Voluntary Consensus Standards Activities during FY 2022.

PSD enforces regulation 201.71(a) promulgated under the Packers and Stockyards Act. The regulation includes Section 5.59, "Electronic Livestock, Meat, and Poultry Evaluation Systems and/or Devices," of the National Institute of Standards and Technology (NIST) Handbook 44 (2013). The rule became effective and enforceable on June 30, 2014. No amendments to the regulations have been made since this date.

Handbook 44 references consensus standards established by ASTM International Committee F10 on Livestock, Meat, and Poultry Evaluation Systems, a committee made up of members representing industry associations, packing companies, instrument manufacturers, academia and government agencies.

ASTM Committee F10 on Livestock, Meat and Poultry Evaluation was formed in 2001. The ASTM Committee, with a membership of approximately 50, currently has jurisdiction over five standards, published in the Annual Book of ASTM Standards, Volume 15.12. F10 has five technical subcommittees that maintain jurisdiction over these standards.

REFERENCE DOCUMENTS

1. Electronic Livestock, Meat, and Poultry Evaluation Systems and/or Devices Section 5.59. *Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices*. NIST Handbook 44, 2013.
2. Standard Practice for User Requirements for Livestock, Meat, and Poultry Evaluation Devices or Systems. American Society for Testing Materials (ASTM) International Standard F 2341.
3. Standard Specification for Design and Construction of Composition or Quality Constituent Measuring Devices or Systems. ASTM International Standard F 2342.
4. Standard Test Method for Livestock, Meat, and Poultry Evaluation Devices. ASTM International Standard F 2343.

NOTE: Standards can be obtained by contacting www.ASTM.org .

USDA AMS FTPP Food Disclosure and Labeling Division (FDLD) encourages regulated entities to comply with the National Bioengineered Food Disclosure Standard (the Standard). The program uses the following Voluntary Consensus Standards that are incorporated by reference as part of the 2020 Guidance Documents related to testing and validation of refinement processes of the Standard. These recommendations are:

1. ISO/TS 16393:2019, "Molecular biomarker analysis — Determination of the performance characteristics of qualitative measurement methods and validation of methods," published February 2019.
2. ISO/IEC 17025:2017, "Testing and Calibration Laboratories," corrected version published in March 2018.
3. ISO/ 24276:2006, "Foodstuffs — Methods of analysis for the detection of genetically modified organisms and derived products — General requirements and definitions," published in February 2006; last reviewed and confirmed in 2020.
4. ISO 21568:2003, "Foodstuffs — Methods of analysis for the detection of genetically modified organisms and derived products," published in February 2003.

5. ISO 21569:2005, “Foodstuffs — Methods of analysis for the detection of genetically modified organisms and derived products — Qualitative nucleic acid-based methods,” published June 2005; last reviewed and confirmed in 2020.
6. ISO 21570:2005, “Foodstuffs — Methods of analysis for the detection of genetically modified organisms and derived products — Qualitative nucleic acid-based methods,” published November 2005; last reviewed and confirmed in 2020.
7. ISO 21571:2005, “Foodstuffs — Methods of analysis for the detection of genetically modified organisms and derived products — Nucleic acid extraction,” published February 2005; last reviewed and confirmed in 2020.
8. CXG 74-2010, Codex Alimentarius, CAC/GL74-2010, “Guidelines on Performance Criteria and Validation of Methods for Detection, Identification and Quantification of Specific DNA Sequences and Specific Proteins in Foods”, adopted in 2011.
9. CGX 72-2009, Codex Alimentarius, CAC/GL 72-20009, Guidelines on Analytical Terminology, adopted in 2009.

The Federal Grain Inspection Service (FGIS) works in cooperation with National Conference of Weights and Measures (NCWM) by serving as the testing laboratory for grain analyzers seeking National Type Evaluation Program (NTEP) certification. The FGIS laboratory is located at the National Grain Center in Kansas City, Missouri and serves as the sole NTEP laboratory for evaluation of grain analyzer devices. These devices are evaluated for measurements of moisture, protein, oil, and test weight per bushel according to the requirements outlined in NCWM Publication 14. Other device types evaluated under the NTEP program include a range of weighing and measuring instruments that include, but are not limited to, scales, grain analyzers, liquid-measuring devices, dry volume containers, odometers, taximeters, and timing devices. Specifications, tolerances, and requirements for each device can be found in the NIST Handbook 44.

The NTEP is a verification program administered by the NCWM to ensure measurement devices are manufactured in accordance with U.S. standards. Standards, policies, and test procedures are developed by industry and technical experts who meet annually to maintain consensus. Devices maintaining an active NTEP Certificate of Conformance are deemed metrologically equivalent according to these standards and are authorized for establishing cost in commercial trade applications. Authorization is dependent on individual state laws and can vary across U.S. states.

Related Websites:

https://www.ncwm.com/ntep-about

https://www.ncwm.com/grain-sector

2. Please list the government-unique standards (GUS) your agency began using in lieu of voluntary consensus standards during FY 2022. Please note that GUS which are still in effect from previous years should continue to be listed, thus the total number in your agency's report will include all GUS currently in use (previous years and new as of this FY):

Current total GUS: 1

(1) Government Unique Standard
WILDLAND FIRE FOAM: GUS Number: 5100-307a; June 2007. Title: Specification for Fire Suppressant Foam for Wildland Firefighting (Class A Foam). [Incorporated: 2010]

Voluntary Standard
NFPA 1150 - Standard on Fire-Fighting Foam Chemicals for Class A Fuels in Rural, Suburban, and Vegetated Areas.

Rationale

Foam fire suppressants contain foaming and wetting agents. The foaming agents affect the accuracy of an aerial drop, how fast the water drains from the foam and how well the product clings to the fuel surfaces. The wetting agents increase the ability of the drained water to penetrate fuels. Foam fire suppressants are supplied as wet concentrates. This standard was developed with international cooperation for Class A Foam used in wildland fire suppression situations and equipment. Standard was created by the USDA Forest Service in cooperation with the Department of Interior (DOI), the State of California, Department of Forestry and Fire Protection and the Canadian Interagency Forest Fire Center. The Forest Service has not chosen to utilize NFPA 1150 as it is designed specifically for application by municipal fire agencies in the wildland-urban interface, utilizing apparatus and situations that they are likely to encounter. The Forest Service's GUS for foam products is specific to use by wildland fire equipment and situations that are unique, e.g. helicopter use of foams, remote storage situations, and varied quality of water sources in the wildland settings. The agency feels this standard more accurately reflects the needs and mission of the federal wildland fire suppression agencies.