

CURRENT ASABE STANDARDS PROJECTS

April 1, 2026

The following projects to develop new ASABE standards and to revise existing ASABE standards are being undertaken by various ASABE committees shown below. Updates can be found at the following link:

<https://www.asabe.org/Publications-Standards/Standards-Develop-Standards/Standards-Updates>

*Projects to revise existing ASABE standard documents.

ASE-16, Engineering for Sustainability

x659 - Life Cycle Assessment Methodology for Agricultural Systems

- Agricultural Life Cycle Assessments (LCAs) evaluate the environmental impacts of agricultural products and processes across their entire lifecycle. They measure resource inputs (water, energy, land, fertilizers, and others), emissions (greenhouse gases, pollutants, and others) environmental impacts (climate change, acidification, eutrophication, and others), resource depletion, and waste generation. LCAs analyze impacts within systems boundaries, the most inclusive being from "cradle to grave" - from raw material extraction through production, use, and disposal. These LCAs are used to measure environmental impacts, compare processes and products, develop strategies for improvement, and identify areas of risks in agricultural systems (food, feed, fiber, fuel, timber, wood products, and other land-based production systems from the bioeconomy).

ES-210, Renewable Power Generation

x669 - Terminology and Definitions for Agrivoltaics

- Standard terminology and definitions are badly needed to help direct and focus research, development, and manufacturing for the emerging, quickly growing area of Agrivoltaics.

ES-310, Agricultural Lighting Group

x344.5 - Lighting Systems for Agricultural Facilities*

- Correction of recommendation that is leading to over lighting of dairy housing and vegetable sorting facilities.

x640.1 - Quantities and Units of Electromagnetic Radiation for Plants (Photosynthetic Organisms) *

- In the past five years of practice, new findings are identified. The update of this document is necessary to include these new findings.

MS-23/4, Tractors and US TAG for ISO/TC 23/SC 4

x338 - Field Equipment for Agriculture - Safety Chain for Towed Equipment*

- Addition of safety chain application for SSP and implement train. Update of normative references. Update of definitions.

X ISO 20383 – Tractors and machinery for agriculture and forestry — Speed Identification Sign (SIS)

- This project withdraws ASABE/ISO 20383:2017 OCT2019 (R2023) and replaces it with the identical adoption of the corrected ISO 20383:2025.

MS-23/6, Application Systems and US TAG for ISO/TC 23/SC 6

x327.5 – Terminology & Definitions for Application of Crop or Forestry Production & Protection Agents*

- Sections 3.22 and 3.23 are titled same but define two different concepts. The examples in 3.23 all happen to be ‘median’ droplet sizes, but this ‘0.5’ fraction is only one special instance of droplet diameter when defining cumulative distribution. S572 references Dv0.5, etc, but never uses the term Volume Median Diameter. Volume Median Diameter is a critical concept, frequently used as a shorthand for nozzle classification. It should have its own definition rather than being one example within another, miss-titled definition.

MS-23/6/1, Liquid Application

x471.1 – Procedure for Measuring Sprayer Nozzle Wear Rate*

- To align with ISO 5682-1

x665 – Crop Protection Equipment – Test methods for the evaluation of targeted spray application systems

- The scope of this work will define performance standard(s) for targeted spray application for row crop boom type sprayer configurations. These performance standard(s) will provide guidelines of plant protection product usage for registrants and regulators, e.g. EPA, when using this technology.

MS-23/6/2, Aerial Application

X641.1 – Droplet Size Classification of Aerial Application Nozzles*

- Nozzle and pressure settings need to be revised so that this standard harmonizes with the recent updates to S527.3, which significantly altered the boundaries of the coarsest droplet size categories. The focus will be only on adjusting the nozzle tips and pressures for the coarsest categories to bring the boundaries curves into alignment with those established by S527.3.

MS-23/7, Harvest and US TAG ISO/TC 23/SC 7

x673 - Safety for Boom Mounted Mowers

- Grass and/or brush cutting machinery with rotary, flail, or sickle bar cutting head mounted to a boom. For machines that combine the power unit and grass/brush cutter, the standard applies only to the grass/brush cutter attachment itself.

MS-49 Crop Production Systems, Machinery, and Logistics

x497.8 - Agricultural Machinery Management Data*

- Update coefficients for some machines in Tables 1-3.

x672 - Engineering Practices Standard Soil Compaction: Planning and Reporting of Soil Compaction Studies for Tractive Devices Design, Traffic Management, Soil Health and Crop Yield

- Standard for engineering practices on soil compaction with modern machines, traffic and soil and crop yield was identified as gap by ASABE MS-45 committed and international working group on soil compaction.

MS-54, Precision Agriculture

x579 - Yield Monitor Field Test Engineering Procedure*

- Standard lacks rigor in performing weight accuracy tests. For example: if minimum block length were used to perform weight accuracy tests, a total of about 20 bushels of corn would be harvested with a 12-row head at 200bu/acre. Unload cleanout and scale accuracy should be considered when performing weight accuracy tests. For weight accuracy tests on a combine, the minimum harvest should be somewhere around 1/3 grain tank.

NRES-23, Drainage Group

x302.5 - Design and Construction of Surface Drainage Systems on Agricultural Lands in Humid Areas*

- The scope will have to be determined by a committee. However, based on my assessment and feedback from stakeholders – main objective would be to remove inconsistencies between design process and design guidance given by the standard and those actually being used and suggested by technical service providers. For example:
- The current version of standard has charts and equations with poor readability and mixed units.
- Figure 1 could be much better than what is included in terms of legend, resolution etc.
- Some questions/concerns have been identified about Figure 2 and the labels used for each of the curves that need addressed by a committee of experts
- Other figures refer to NEH which has recently undergone a revision

x479.2 - Design and Operation of Controlled Drainage Systems in Humid Regions*

- Update normative references. EP480 and EP481 to be replaced by EP260.
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- Update other aspects of the standard, developed in 2013, to reflect newer concepts and terms. Add “Design” to the title because design is an integral part of the standard.

x511.1 - Drain Restoration After Utility Construction*

- This would be determined by committee, however below are the main items suggested. Some are revisions to out-of-date things in the current standard, and some are additions to the standard.
- Provide guidance for field wetness conditions suitable for construction.
- Update Table 2 to current materials
- Consider updates and additions to figures 10 & 11, to reflect current construction practices
- Addition of pipe bedding and backfill requirements, to protect the drain during construction and for years after.
- Include requirement of coordination and/or permitting with drainage district, where applicable.

NRES-244, Irrigation Management

x632-2 - Precision Agriculture Irrigation Language: Observations and Measurements*

- This (X632-2) part of the standard series presents an object model and reference XML serialization schema to represent observations and measurements of relevance to agriculture in general, and irrigation in particular; it is an agriculture-specific implementation of the ISO 19156 Standard. 560 / 680 space limit.

NRES-245, Microirrigation

x405.2 - Design and Installation of Microirrigation Systems*

- This standard needs to be reviewed for consistency/accuracy in definitions, updating current terminology and practice, and updating any standards applicable to the practice.

PAFS-20/4, Bulk Solids Handling and Storage

x636 - Physical Properties and Testing Methods for Bulk Materials

- To consolidate physical properties of bulk materials required for design of storage and handling facilities for bulk materials in one location.

PAFS-40, Facilities and Systems Group

x270.6 - Design of Ventilation Systems for Poultry and Livestock Shelters*

- Update heat and moisture production numbers and references in (current) Table 1; (2) Update the descriptions of ventilation system types for modern livestock production systems; (3) Demonstrate how Table 1 and specie-specific environmental needs influence the design for ventilation.

PAFS-403, Milk and Dairy Facilities

X444.2 - Terminology and Recommendations for Freestall Dairy Housing, Freestall, Feed Bunks, and Feeding Fences

- Review recent North American and Western European research and recommendations for dairy cattle freestalls (cubicles) and feeding areas and modify standard as appropriate.

PRS-701, Physiochemical Properties of Biological Products

x241.5 - Density, Specific Gravity, and Mass-Moisture Relationships of Grain for Storage*

- Data has become dated. Data presented, including figures and tables, needs to be updated.

x662 - Moisture Relationship Equations and Moisture Based Calculations

- Moisture relationships (or) moisture equations involved in handling agricultural materials along with web-based ready-to-use moisture calculators.

X667-2 - Moisture Relationship of Plant-based Agricultural Products - Part 2: Data for Major Grains and Oilseeds

- Provide data for corn, soy beans, rice, wheat

PRS-702, Crop and Feed Processing and Storage

x248.4 - Construction and Rating of Equipment for Drying Farm Crops*

- Update based on comments from maintenance reviews, also align with relevant ISO standards.

x657 - Measurement and Rating of Hermetic Storage Bags – Specifications of Gas Barrier Liners

- The focus of this standard development project is on specifying the key engineering properties that will be the basis for measuring and rating hermeticity and strength of gas barrier liners.