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ASABE, 2950 Niles Road, St. Joseph, MI 49085-9659, USA, phone 269-429-0300, fax 269-429-3852, hq@asabe.org

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Safety for Farmstead Equipment

Proposed by the Farmstead Equipment Association of the Farm and Industrial Equipment Institute; approved by the ASAE Electric Power and Processing Division Standards Committee; adopted by ASAE as a Recommendation June 1972; revised and reclassified as a Standard April 1975; reaffirmed December 1979, December 1980, December 1981, December 1982; revised December 1983; reaffirmed December 1988; revised April 1990; revised editorially and reaffirmed December 1994; reaffirmed December 1995; revised December 1998, January 2006; approved as an American National Standard February 2006; revised editorially February 2009; reaffirmed February 2011, revised November 2016.

Keywords: Bale chopper, Barn cleaners, Equipment, Farmstead, Guarding, Manure auger elevator, Mills, Mixers, Safety, Safety signs, Shielding, Silo unloaders

1 Purpose and Scope

1.1 The purpose of this standard is to provide a reasonable degree of personal safety for operators and other persons during normal operation and servicing of farmstead equipment.

1.2 This standard applies to powered farmstead equipment as defined in paragraph 3.1. This standard does not apply to agricultural field equipment nor to self-propelled mobile equipment such as motor vehicles, all-terrain vehicles, and skid-steer loaders. In addition, it does not apply to farmstead equipment covered by other ASABE safety standards unless it is specifically referenced by these standards.

1.3 In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence, and proper training of personnel involved in the installation, operation, transport, maintenance, and storage of equipment or in the use and maintenance of facilities.

2 Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ANSI/ASAE S318.17, *Safety for Agricultural Field Equipment*

ANSI/ASABE AD3600:2015 APR2016, *Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Operator's manual — Content and presentation.*

ANSI/ASAE S390.5, *Definitions and Classifications of Agricultural Field Equipment*

ANSI/ASAE S466.2, *Nomenclature/Terminology for Livestock Manure Handling Equipment*

ANSI/ASAE S493.1, *Guarding for Agricultural Equipment*

ANSI/NFPA 70, *National Electric Code*

ANSI/ASABE AD11684:1995, *Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Safety signs and hazard pictorials — General principles*

3 Definitions

3.1 Farmstead Equipment: Equipment; other than agricultural field equipment, used in agricultural operations for the production of food and fiber (examples include livestock feeding systems, livestock watering and waste handling systems, crop dryers, milling systems, material handling equipment, etc.).

3.2 For other definitions see ANSI/ASAE S390, ANSI/ASAE S466, ANSI/ASAE S493 and ANSI/ASAE S318

4 Electrical Specifications

4.1 Electric controllers shall contain a positive, lockable electrical disconnect to prevent unintended application of electrical power to the equipment. An appropriate safety sign shall be affixed in close proximity to the controller and components of the controlled equipment that may require routine maintenance, instructing the operator to disconnect and lock out power before performing service or maintenance on the equipment.

4.2 For motors equipped with a manual reset type of overload protector, there shall be an appropriate safety sign, constructed per the requirements of clause 9, located near the reset. The sign shall instruct the operator to lock out power before resetting the overload.

4.3 Electric motors with automatic reset-type overload protection are allowable only in equipment applications where the motor is inaccessible and extreme difficulty would be encountered in the manual reset of the overload. In addition to the requirements of clause 9 of this standard, safety signs shall be affixed in close proximity to the motor and driven equipment (if located remotely), informing the operator and others of the potential for sudden, unanticipated start-up, and the measure(s) that should be taken to avoid potential hazards.

5 Guarding

5.1 All power driven rotating drive shafts, and implement input drivelines, shall conform to ASAE S207 and ANSI/S318.

5.2 **Guarding requirements.** Refer to ANSI/ASAE S493.

6 Service Access

6.1 Access shall be provided to equipment components requiring daily or routine maintenance, adjustment, lubrication, or inspection procedures. This access shall be so designed that these procedures can be readily carried out.

6.2 Access doors that must be opened for routine or daily service, inspection or cleaning shall:

6.2.1 Be easy to open and close.

6.2.2 Remain attached; for example, by means of a hinge, slide, linkage, tether, or other suitable means.

6.2.3 Include a convenient and effective means to keep them closed.

6.2.4 An interlock shall be provided if opening the access door exposes hazardous moving mechanisms.