

ANSI/ASABE EP585 DEC2015 (R2019)
Animal Mortality Composting



**American Society of
Agricultural and Biological Engineers**

**S
T
A
N
D
A
R
D**

ASABE is a professional and technical organization, of members worldwide, who are dedicated to advancement of engineering applicable to agricultural, food, and biological systems. ASABE Standards are consensus documents developed and adopted by the American Society of Agricultural and Biological Engineers to meet standardization needs within the scope of the Society; principally agricultural field equipment, farmstead equipment, structures, soil and water resource management, turf and landscape equipment, forest engineering, food and process engineering, electric power applications, plant and animal environment, and waste management.

NOTE: ASABE Standards, Engineering Practices, and Data are informational and advisory only. Their use by anyone engaged in industry or trade is entirely voluntary. The ASABE assumes no responsibility for results attributable to the application of ASABE Standards, Engineering Practices, and Data. Conformity does not ensure compliance with applicable ordinances, laws and regulations. Prospective users are responsible for protecting themselves against liability for infringement of patents.

ASABE Standards, Engineering Practices, and Data initially approved prior to the society name change in July of 2005 are designated as "ASAE", regardless of the revision approval date. Newly developed Standards, Engineering Practices and Data approved after July of 2005 are designated as "ASABE".

Standards designated as "ANSI" are American National Standards as are all ISO adoptions published by ASABE. Adoption as an American National Standard requires verification by ANSI that the requirements for due process, consensus, and other criteria for approval have been met by ASABE.

Consensus is established when, in the judgment of the ANSI Board of Standards Review, substantial agreement has been reached by directly and materially affected interests. Substantial agreement means much more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered, and that a concerted effort be made toward their resolution.

CAUTION NOTICE: ASABE and ANSI standards may be revised or withdrawn at any time. Additionally, procedures of ASABE require that action be taken periodically to reaffirm, revise, or withdraw each standard.

Copyright American Society of Agricultural and Biological Engineers. All rights reserved.

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

ANSI/ASABE EP585 DEC2015 (R2019)

Approved December 2015, Reaffirmed November 2019 as an American National Standard

Animal Mortality Composting

Developed by the Agricultural Byproduct and Animal Mortality Management System subcommittee using NRCS CPS Animal Mortality Facility Code 316. Approved by ASABE as an ASABE standard and approved as an American National Standard December 2015; reaffirmed and approved by ASABE and ANSI November 2019.

Keywords: Biosecurity, Carcass, Compost, Disposal, Mortality

1 Purpose and Scope

1.1 Purpose

This Engineering Practice provides guidelines for biosecure, environmentally acceptable, and economically sustainable disposal of livestock and poultry carcasses and carcass parts via composting.

1.2 Scope

This Engineering Practices covers planning, construction, operation, and maintenance of mortality composting operations using naturally ventilated, static pile bin or windrow systems of the type typically used for routine or emergency mortality management on farms or ranches. Guidelines for in-vessel or mechanically ventilated composting systems are not covered.

2 Normative References

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

NRCS Conservation Practice Standard 316 — Animal Mortality Facility

NRCS Conservation Practice Standard 317 — Composting Facility

NRCS National Engineering Handbook Part 637, Chapter 2 — Environmental Engineering, Composting

3 Definitions

3.1 aerobic: Pertaining to an organism or process that requires oxygen

3.2 ammonia (NH₃): A gaseous compound that has a pungent odor and is commonly formed from organic nitrogen compounds during composting

3.3 ammonium (NH₄⁺): An ion of nitrogen and hydrogen that is readily converted to and from ammonia depending on pH and moisture content of the compost pile

3.4 anaerobic: Pertaining to an organism or process that does not require air or free oxygen