

*ANSI GELPP 0003-2002*

*ANSI GELPP 0003-2002*

# American National Standard

*Good Environmental Livestock Production Practices*

*Concentrated Livestock Operations –  
Outdoor Manure and Storm Water Storage*

## **BLANK PAGE**

This page is intentionally left blank.

**ANSI®  
GELPP 0003-2002**

**American National Standard for  
Good Environmental Livestock Production Practices**

**Concentrated Livestock Operations –  
Outdoor Manure and Storm Water Storage**

Secretariat  
**National Pork Producers Council**

**Approved February 20, 2002**



## **BLANK PAGE**

This page is intentionally left blank.

## American National Standard

Approval of an American National Standard requires verification by the American National Standards Institute (ANSI) that the requirements for due process, consensus, and other criteria for approval have been met by the standards developer.

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.

The use of American National Standards is completely voluntary; their existence does not in any respect preclude anyone, whether he has approved the standards or not, from manufacturing, marketing, purchasing, or using products, processes, or procedures not conforming to the standards.

ANSI does not develop standards and will in no circumstances give an interpretation of any American National Standard. Moreover, no person shall have the right or authority to issue an interpretation of an American National Standard in the name of ANSI. Requests for interpretations should be addressed to the secretariat or sponsor whose name appears on the title page of this standard.

**CAUTION NOTICE:** This American National Standard may be revised or withdrawn at any time. The procedures of ANSI require that action be taken periodically to reaffirm, revise, or withdraw this standard. Purchasers of American National Standards may receive current information on all standards by calling or writing ANSI.

Published by

**Environmental Management Solutions, LLC**  
7733 Douglas Avenue  
Urbandale, Iowa 50322

**Copyright ©2002 by NPPC**  
**All rights reserved.**

No part of this publication may be reproduced in any form, in an electronic retrieval system or otherwise, without prior written permission of the publisher.

Printed in the United States of America

<b>Contents</b>	<b>Page</b>
Foreword .....	ii
1 Introduction .....	1
1.1 Scope .....	1
2 Definitions .....	1
2.1 Animal Feeding Operation (AFO) .....	1
2.2 Earthen Dike/Embankment .....	1
2.3 Earthen Storage Basin .....	1
2.4 Facility .....	1
2.5 Flushing System .....	2
2.6 Formed Storage .....	2
2.7 Good Environmental Livestock Production Practice .....	2
2.8 Grass Filter .....	2
2.9 Ground Water .....	2
2.10 Holding Pond .....	2
2.11 Leachate .....	2
2.12 Liquid Manure (Slurry) .....	2
2.13 Manure .....	2
2.14 Manure Storage .....	2
2.15 Recycle Water .....	2
2.16 Run-off .....	2
2.17 Seepage .....	2
2.18 Solid Manure .....	3
2.19 Solid Manure Storage .....	3
2.20 Surface Water .....	3
3 Good Environmental Livestock Production Practices .....	3
3.1 Outdoor Liquid Storage Structures .....	3
3.2 Solid Manure Storage .....	4
4 Prohibitions .....	5
5 Inspections .....	5
5.1 Personnel Qualifications .....	5
5.2 Inspection Frequency .....	5
5.3 Specific Inspection Requirements .....	5
5.4 Observation .....	6
6 Record Keeping/Record Retention .....	6
<b>Annex</b>	
A Guidance – Use and Interpretation of GELPP Standard 0003-2002 .....	7

**FOREWORD (This foreword is not part of American National Standard Good Environmental Livestock Production Practices – Outdoor Manure and Storm Water Storage, GELPP 0003-2002)**

The Good Environmental Livestock Production Practices (GELPP) are compilations of best management practices (BMP) that are commonly applied throughout confined livestock production operations. There are separate GELPPs addressing each of the five fundamental concentrated livestock production risk areas: 1) General Site Conditions, 2) Production Areas, 3) Outdoor Manure and Storm Water Storage, 4) Manure Utilization, and 5) Mortality Management. The BMPs that have been incorporated in the GELPPs are considered to be the fundamental environmental management practices that are necessary for a livestock production operation to function in an environmentally sound and protective manner. The BMPs that make up the GELPPs are based on academic research, professional society publications, guidance from governmental agencies, and the findings from on-farm assessments conducted on concentrated livestock production operations throughout the United States.

The GELPPs aid the entire confined livestock production industry by presenting essential environmental management and protection practices in a consistent and objective format that can be applied across the United States. The GELPPs allow this broad application because they are designed as performance based standards.

There is one Annex in this standard. Annex A is informative and not considered part of this standard. This annex gives additional information and is intended to provide further explanation of certain specifications in this standard to avoid misinterpretations.

Suggestions for improvement of this standard are welcome. They should be sent to Environmental Management Solutions, LLC, Attention: GELPP Coordinator, 7733 Douglas Avenue, Urbandale, Iowa 50322.

Consensus for this standard was achieved by use of the Canvass Method.

The following organizations, recognized as having an interest in the standardization of environmental practices at confined livestock operations were contacted prior to the approval of this standard. Inclusion in this list does not necessarily imply that the organization concurred with the submittal of the proposed standard to the American National Standards Institute.

America's Clean Water Foundation  
American Society of Agricultural Engineers  
American Society of Agronomy  
Association of State and Interstate Water Control Administrators  
Determan Farm  
Farmland Industries  
Henry's Limited  
Hitch Enterprises  
Kansas State University  
National Council of Farmer Cooperatives  
National Turkey Federation  
Premium Standard Farms  
Prestige Farms  
Roper Farm  
Texas A&M University  
U.S. Department of Agriculture, Natural Resources  
Conservation Service  
U.S. Department of Agriculture, Agricultural  
Research Service  
University of Nebraska  
Uphoff Ham & Bacon Farm  
Utah State University  
Wenger Feeds

## **BLANK PAGE**

This page is intentionally left blank.

## American National Standard Good Environmental Livestock Production Practices

# Concentrated Livestock Operations – Outdoor Manure and Storm Water Storage

### 1. Introduction

Recognition of the importance of environmental management at livestock production operations in the U.S. has dramatically increased in the past few years. This recognition has come about due to increased regulation, private litigation, and the desire of the livestock industry to continue, and to improve wherever practical, their environmental stewardship.

This standard is the third in a series that addresses environmental issues related to livestock production at animal feeding operations (AFO). This standard, as well as the other standards in the series, is referred to as a good environmental livestock production practice (GELPP). The GELPPs are a compilation of best management practices (BMP) obtained from various sources, including United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) publications, university publications, commodity groups, and other livestock industry experts. Until now, these GELPPs have not been compiled and applied consistently across the industry. These GELPPs are designed to minimize the potential for an AFO to negatively impact the environment (i.e., air, ground water, surface water, and soil).

By implementing these GELPPs, livestock producers should significantly reduce their potential to negatively impact the environment. In addition, application of the GELPPs will demonstrate the producers' commitment to environmental stewardship.

### 2.1 Scope

This standard presents GELPPs related to outdoor manure and storm water storage at AFOs. The GELPPs apply to all types of AFOs, including but not limited to those producing hogs, beef cattle, milk (dairies), meat birds and eggs (layers). **AFOs that are not included in any of the above species will utilize the most appropriate species' GELPPs.**

This standard is applicable to any AFO that wishes to:

- a) minimize its potential to generate negative environmental impacts;
- b) demonstrate good environmental stewardship; and,
- c) improve relationships with all parties directly or indirectly affected by the operation.

### 2. Definitions

#### 2.1 Animal Feeding Operation (AFO)

Any facility where animals have been, are or will be stabled or confined and fed or maintained for 45 days or more per year, and where crops, vegetation, forage, growth or post-harvest residues are not sustained in the normal growing season over any portion of the facility.

#### 2.2 Earthen Dike/Embankment

An elevated mound or dam constructed of compacted soil and used to contain water or manure.

#### 2.3 Earthen Storage Basin

Earthen storage unit intended for the long-term storage of liquid manure until it can be field-applied. May be entirely below ground or part in-ground and part above ground using earthen dikes or embankments.

#### 2.4 Facility

The physical location where livestock is housed, fed, and bred. The facility also includes the following: any storage or processing areas or buildings tied to the livestock production