

ILLINOIS POLLUTION CONTROL BOARD

March 20, 1997

IN THE MATTER OF: )  
 )  
LIVESTOCK WASTE REGULATIONS ) R97-15 (A) & (B)  
35 ILL. ADM. CODE 506 ) (Rulemaking - Land)

Proposed Rule. Second Notice.

OPINION AND ORDER OF THE BOARD (by C.A. Manning):

This matter comes before the Board upon a petition for rulemaking filed by the Illinois Department of Agriculture (Department of Agriculture) on November 21, 1996. The Department of Agriculture requests that the Board adopt regulations to implement the Livestock Management Facilities Act (LMFAct) (510 ILCS 77/1 *et seq.*; adopted as P.A. 89-456, eff. May 21, 1996). The Board today adopts such regulations for second notice.<sup>1</sup>

BACKGROUND

The LMFAct sets forth an outline for the proper design, construction, operation, and management of livestock management facilities and associated waste handling structures. It further provides for education and certification of livestock managers, research, proper disposal of livestock waste, and financial responsibility for closure of lagoons. While many provisions of the LMFAct require no further regulatory implementation, the legislature recognized that some of the provisions would need regulatory implementation. To accomplish this, the LMFAct sets forth a participative rulemaking process to provide the State, the agricultural community, environmental associations, and interested citizens, a public forum for the development of standards and rules implementing the LMFAct.

In this regard, the LMFAct established a Livestock Management Facilities Advisory Committee (Advisory Committee), comprised of the Directors of the Department of Agriculture, Illinois Department of Natural Resources (IDNR), Illinois Department of Public Health (IDPH), and the Illinois Environmental Protection Agency (IEPA). The LMFAct also directed the Department of Agriculture to seek input from the Advisory Committee and, based upon the recommendations from the Advisory Committee, propose rules to the Board for the implementation of the LMFAct.

On November 21, 1996 the Department of Agriculture submitted proposed rules to the Board, as required, within six (6) months of the effective date of the LMFAct.<sup>2</sup> Pursuant to

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<sup>1</sup> "Second notice" is a term used in State administrative proceedings to designate the period of time in which the Joint Committee on Administrative Rules (JCAR) reviews the proposed rule, pursuant to Section 5-40(c) of the Illinois Administrative Procedure Act (APAct) (5 ILCS 100/1-1 *et seq.* (1994)).

<sup>2</sup> Before the Department of Agriculture filed the instant proposal, the Department of

the LMFAct, the Board is required to adopt rules for the implementation of the LMFAct within six (6) months after the Department of Agriculture filed the proposed rules with the Board. Due to the stringent time-limitations for completing this rulemaking, the Board on December 5, 1996 sent the proposed rules to first notice without commenting on the merits of the proposal.

Since that time, the Board has held five public hearings on the Department of Agriculture's proposal. Each public hearing was different in character, but was informative in providing insight into the impact, effect, deficiencies, and advantages of the proposed rules. The hearings were held in Jacksonville on January 14, 1997, in DeKalb on January 27, 1997, in Galesburg on January 29, 1997, in Mt. Vernon on January 31, 1997, and in Urbana on February 7, 1997<sup>3</sup> before Board hearing officer Audrey Lozuk-Lawless. In addition to the testimony and exhibits received at these hearings, the Board has also received 80 written public comments.<sup>4</sup> The Board is grateful to all the participants in this proceeding for the time and effort expended in attending the hearings, testifying, and submitting written comments. The Board also commends the various State agencies who participated in this proceeding for their valuable input. The testimony, public comments, and exhibits received collectively constitute the record upon which the Board today bases its decision in this matter.<sup>5</sup>

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Agriculture proposed to the Board emergency rules related to the LMFAct on October 15, 1996. On October 29, 1996 the Board adopted emergency rules that immediately implemented certain provisions of the LMFAct. (In the Matter of: Emergency Rulemaking: Livestock Waste Regulations 35 Ill. Adm. Code 505, R97-14, Opinion and Order, October 29, 1996, published at 20 Ill. Reg. 14903, effective October 31, 1996.) Pursuant to Section 5-45 of the APAct (5 ILCS 100/5-45), however, the emergency rules are only effective "for a period not longer than 150 days." To avoid a gap between the expiration of the emergency rules and the promulgation of the final rules, the Board today by separate order readopts the emergency rules. (See Pub. Act 89-0714, eff. February 21, 1997 (amending Section 5-45 of the APAct); see also In the Matter of: Emergency Rulemaking: Repromulgation of Livestock Waste Regulations 35 Ill. Adm. Code 506, R97-14, Opinion and Order, March 20, 1997.)

<sup>3</sup> Due to inclement weather, the Urbana hearing, originally set for January 16, 1997, was rescheduled to February 7, 1997.

<sup>4</sup> The record of the five hearings are cited herein in the sequence that the hearings occurred, respectively as Tr1. through Tr5. The exhibits (Exh.) are cited in numerical order, as entered into the record. The public comments (PC) are cited in numerical order, as received by the Board.

<sup>5</sup> On February 18, 1997 the Department of Agriculture filed a motion to incorporate into the instant record two documents, entitled Illinois Agronomy Handbook, UIUC Circular 1333 and Livestock Waste Facilities Handbook, Midwest Plan Service MWPS-18, that were initially filed with the Board in the emergency rule docket, R97-14. The motion to incorporate is hereby granted. On February 24, 1997 IDPH filed a motion to file its final comment instanter. (PC 77.) Also on February 24, 1997 IDNR filed a motion to file a response comment instanter. (PC 78.) Both motions are hereby granted. As a final matter, a number of public comments were filed within the two weeks following the February 14, 1997 deadline for submission of public comments, the Board on its own motion hereby accepts all public

With certain specific and important modifications which are explained in detail in this opinion and which are drawn from the information gathered in the record of this proceeding,<sup>6</sup> the Board today adopts for second notice the Department of Agriculture's original proposal. In today's action, the Board is cognizant, as we were in adopting the emergency rules, of the legislative declarations set forth in the LMFAct, specifically that the livestock industry is vital to Illinois' economy and that it is the policy of Illinois, pursuant to the LMFAct, to maintain an economically viable livestock industry. (510 ILCS 77/5(b).) The Board also greatly appreciates that Illinois farmers have played, and continue to play, a vital role in Illinois' culture, tradition, and history and that the farm industry represents a major economic activity in Illinois (510 ILCS 77/5(a)(3)).

Moreover, the Board is aware that the livestock industry is experiencing rapid changes as a result of "increased sophistication of production technology, increased demand for capital to maintain or expand operations and changing consumer demands for a quality product." (510 ILCS 77/5(a)(2).) Because of the trend in the livestock industry for larger concentrations of animals at a livestock management facility, there is a potential for greater impacts on the immediate area. (510 ILCS 77/5(a)(4), (6).) In passing the LMFAct, the legislature recognized that enhancements to the current regulations dealing with livestock production facilities were needed for today's industry and that livestock waste lagoons must be constructed according to standards to maintain structural integrity and to protect Illinois' groundwater. (510 ILCS 77/5(a)(7).) Moreover, as the legislature stated in the LMFAct, "[s]ince a majority of odor complaints result from manure application, livestock producers must be provided with an educational program that will enhance neighbor awareness and their environmental management skills, with emphasis on management of livestock waste." (510 ILCS 77/5(a)(8).)

The Board believes that the regulations it adopts for second notice today are an important step forward in protecting the quality of Illinois' air, land, and water. Within the specific context of the LMFAct, the regulations are environmentally protective as well as economically reasonable and technologically feasible. Moreover, the Board emphasizes that the LMFAct does not supplant the Environmental Protection Act (EPAct) (415 ILCS 5/1 *et seq.* (1994)) or rules promulgated thereunder. The EPAct prohibits the discharge or emission of any pollutant into Illinois air, water, or land by any person, business, or industry in a way that adversely impacts the environment or unreasonably interferes with a citizen's enjoyment of life or property. (See 415 ILCS 5/9, 5/12, 5/21.) A salient principal under the EPAct is that any Illinois industry that generates waste assumes the risk, responsibility, and accountability for any pollution caused by that waste. Thus, livestock facilities that violate the provisions of the EPAct have always been and will continue to be responsible for any violations of the EPAct or rules promulgated thereunder.<sup>7</sup>

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comments filed on or before February 28, 1997.

<sup>6</sup> All modifications made today relative to the first notice proposal are shown in the attached order in standard editing format (i.e., strikethroughs show deleted text; underlining shows added text).

<sup>7</sup> The Board has current regulations which are specific to livestock waste management facilities

Nonetheless, the Board recognizes, as did the legislature in adopting the LMFAct, that the public interest and good public policy require that pollution of our environment be averted prior to its generation.<sup>8</sup> The LMFAct and these rules, accordingly, take a preventative approach to pollution. Through setback distances, education, waste management plans, and requirements for the registration, design, construction, operation, and maintenance of lagoons and livestock waste handling facilities, the Board believes that any risk to Illinois' environment from livestock facilities is greatly diminished.

In this rulemaking, the Board has attempted to provide a framework for the administration and implementation of the LMFAct and Board rules. It is the intent of this Board that the rules be clear, flexible, easily complied with, and administered in a fair and impartial manner. Accordingly, new sections have been created that provide for the workability of the rules. Primarily, these new sections set forth administrative requirements such as standards and procedures that the Department of Agriculture must follow in making various administrative determinations under these rules. A new provision has also been added that mandates that records be kept of all determinations and that such records be subject to public inspection.

Regarding setbacks, the regulations require that new livestock management and livestock waste handling facilities provide notification to the Department of Agriculture of their intent to build prior to construction. Further, the Board rules provide a process that is designed to ensure that all statutory setback distances are adhered to and that notice is given to all owners of property located within the setback areas. Where ambiguities exist in the statutory setback language, the Board, based upon the testimony and arguments made at the hearings and the legislative intent of the LMFAct, has provided clarity. The Department of Agriculture is also required to certify that the applicable setback distances have been complied with before construction begins. Where the LMFAct allows for the Department of Agriculture to provide for a decrease of the statutory setbacks if innovative designs are incorporated into the facility, the Board rules require that the owner or operator attach to the request for decrease a certification by a Licensed Professional Engineer that the innovative designs incorporated into the facility will achieve a greater amount of odor protection than the waived setbacks.

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(see 35 Ill. Adm. Code 501 through 507:Subtitle E). However, the Board acknowledges that these regulations were promulgated long before the current agricultural changes and trends found by the legislature in adopting the LMFAct. Accordingly, the Board and a number of participants in the instant rulemaking have observed that the adoption of the proposed rules under Part 506 may be inconsistent with existing regulations under Subtitle E. The Board agrees that any inconsistencies between the Part 506 rules and existing regulations should be rectified. Accordingly, we will consider whether to open a new rulemaking to address these inconsistencies at the appropriate time.

<sup>8</sup> See 89th Ill. Gen. Assem., Senate Proceedings, May 2, 1996, at 21 (statements by Senator Donahue); 89<sup>th</sup> Ill. Gen. Assem., House Proceedings, April 19, 1996, at 1 (statements by Representative Myers).

The rules also substantially mirror the provisions of the LMFAct and provide that setbacks may be decreased when waivers are obtained from owners of occupied residences, non-farm businesses, and common places of assembly that are located within the setback area. The request for a setback decrease must be in writing, and the owner or operator seeking the decrease must attach to the request, copies of the written and notarized waivers from the owner(s) of the property located within the setback area. The rules further provide that the Department of Agriculture must notify the owner or operator in writing of the setback decrease within 30 days after receipt of the request for decrease.

Regarding design of lagoons, these rules require specific design standards for livestock waste lagoons which are in accord with established engineering practices. Specifically, the rules require that the owner or operator of a new or modified lagoon register that lagoon with the Department and hire a Licensed Professional Engineer or Licensed Professional Geologist to perform a site investigation prior to construction. The site investigation requires soil borings to determine the distance of the lagoon bottom to any aquifer material. Depending on the proximity of such material, liners and/or groundwater monitoring will be required. Construction can only begin after proper licensed professional certification is made to the Department of Agriculture. The regulations also allow the Department of Agriculture to require changes in design that might be necessary to protect the groundwater. Moreover, the rules direct the Department of Agriculture, as a condition of the issuance of a livestock waste lagoon registration, to conduct periodic site inspections to assess the degree of compliance with the requirements of the LMFAct.

Regarding the management of livestock management facilities, the rules provide that waste management plans be prepared by certain facilities that meet the statutory threshold animal unit requirement and further set forth provisions concerning application of livestock waste to the land. Moreover, the rules establish that a livestock waste handling facility that serves a certain number of animal units be managed by a certified livestock manager. The rules presume, as did the legislature in passing the LMFAct, that the good management practices required by these rules and the plans which must be developed will considerably reduce potential odor problems.<sup>9</sup>

Regarding penalties, the rules provide that the Department of Agriculture may issue cease and desist orders, and otherwise order necessary penalties, for the violation of any of these rules. Regarding financial assurance and requirements for closure, the rules recite the statutory language. Moreover, the Board herein opens a Docket B (discussed in a later section of this opinion) for the purpose of receiving a proposal from interested parties, including the Department of Agriculture, on this subject as required by the LMFAct. Finally, where the LMFAct allows the Department of Agriculture to grant an alternative, modification, or waiver of these rules, the Board rules set forth a specific process to ensure that any such alternatives, modifications, or waivers are environmentally protective.

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<sup>9</sup> 89<sup>th</sup> Ill. Gen. Assem., House Proceedings, April 19, 1996, at 4 (statements by Representative Myers).

Regarding odor, the Board believes that the rules proposed today do everything that can be done within the context of the LMFAct to effectively deal with the odor issue. For example, besides prescribing setback distances, the rules also contain provisions regarding design standards for lagoons, waste management plans, livestock waste application on land, and certified livestock managers. The Board anticipates that these provisions will dissipate the odor problems associated with livestock facilities.

### LEGISLATIVE ISSUES

The Board only has the authority granted to it by the legislature, and in this rulemaking, we are exercising the authority granted to us by the LMFAct. While the Board has somewhat broader environmental rulemaking authority pursuant to its authorities under the EPAct, its authority in this immediate rulemaking is to adopt rules that implement the LMFAct. While the Board believes that the regulations are a major step forward in protecting Illinois' environment, the Board acknowledges that the proposed rules do not resolve all the potential problems and issues with regard to livestock waste handling and livestock management facilities. During the hearings the Board conducted around the State in January and February, the Board received testimony and comments regarding various issues related to the problems publicly associated with livestock management and livestock waste handling operations. The following section identifies those issues which are above and beyond the statutory mandate of the Board in this proceeding.

#### Applicability and Size Distinctions: Mega-hog Farms v. Family Farms

Throughout these proceedings, citizens who were most alarmed about the increase in livestock management and livestock handling operations voiced concern regarding the influx of large hog management facilities, especially by out-of-state corporations (Tr5. at 278-279, 282-283). Specifically, the Board heard testimony and received public comments on the need for banning out-of-state corporations from building livestock facilities in Illinois and also the desire for a moratorium on building hog production facilities altogether in Illinois. The LMFAct, however, does not contain such prohibitions, but rather attempts to promote the growth of these facilities in an environmentally responsible manner. The Board is without authority to provide for these requested restrictions by rule. The Board also notes that specifically banning out-of-state corporations from building facilities in Illinois may have constitutional implications far beyond anything discussed on the record in this rulemaking.

A related issue is whether the regulations should apply solely to "large scale livestock operations" and not "family farms." During the hearings, there was considerable discussion as to what constitutes a "large scale livestock operation" and a "family farm." There was little agreement on a definition of these concepts. (Tr1. at 176, 181, 186-187; Tr3. at 213-214, 242-245; 273-274; Tr5. at 276-277.) In the LMFAct, the legislature has taken a comprehensive approach to the regulation and registration of lagoons and has provided that anyone who builds a new or modified lagoon shall submit to the registration and construction requirements that flow from the LMFAct. Moreover, any new livestock management or

livestock handling facility must comply with the statutory setback distances. Indeed, from an environmental standpoint, the environmental considerations are often the same, regardless of who owns the lagoon or livestock management facility. In any event, the Board lacks authority to change the comprehensive focus of the LMFAct and require that it apply only to out-of-state or mega-hog confinement operations.

Additionally, several participants commented that the Board's regulations regarding lagoons should be based on the number of animal units at a livestock management facility. (e.g., PC 46.) The commentors expressed concern that the expense small farmers would incur with the new regulations would be too great. They also believed that the intent of the LMFAct was that the regulations apply to large facilities, where the threat to the environment was greater. (PC 46.) The Board points out that certain portions of the LMFAct and these rules do draw distinctions regarding size (510 ILCS 77/20(c), (d); 510 ILCS 77/30(a); Sections 506.302, 506.401). However, the LMFAct requires that the registration and design criteria of lagoons apply to new or modified lagoons. (PC 29.) It does not make a distinction for size. While the emergency rules limited registration of lagoons and the application of the design criteria to lagoons with a design criteria for 300 or more animal units, the justification for this threshold was based on the emergency nature of the rulemaking. In this permanent rule, the Board recognizes that lagoons constructed with a design criteria for less than 300 animal units that are constructed, operated, and/or maintained in an irresponsible manner may be as dangerous to the environment as those with a design criteria for 300 or more animal units. (PC 42.) Where the legislature has not provided for a distinction based upon size, the Board will not in this proceeding.

#### Local Input Into the Siting and Regulation of Livestock Management Facilities

Throughout the Board's proceeding, local interest in the siting of these facilities was evident. (Tr3. at 195; Tr4. at 120-121, 122-124; Tr.5 at 280-283) Several citizens of communities where hog facilities are being planned commented on the need for local siting control. While these are important issues, the LMFAct does not contain provisions granting local siting control or provide for any prohibitions regarding the siting of facilities, except for those within identified statutory setback distances. Any grant of authority to the communities here must be done legislatively. The Board is without authority to give to the communities what the LMFAct does not.

#### Increased Setbacks

The Board has received numerous comments and heard testimony regarding the appropriate distances for setbacks and the need for increased setbacks. (Tr3. at 72-73, 195, 223-227; Tr5. at 185, 186-188; PC 10, 24, 27, 36, 47, 49.) In this rule, the Board has provided a process for the determination of the statutory setbacks which involves notice to owners of property located within the setback area. Further, the Board has attempted to resolve any ambiguities in the statutory definitions. Where there is no ambiguity, however, like the statutory distance requirements of  $\frac{1}{4}$  mile and  $\frac{1}{2}$  mile, the Board is without authority to change or extend the statutory setback distances. Similarly, while the Board recognizes the

concerns of those who argued against a distinction between “farm” and “non-farm” residence in determining the appropriate setback distance, the LMFAct is clear on what constitutes a “farm” and a “non-farm” residence and that, for facilities serving between 50 and 1,000 animal units, only a non-farm residence enjoys a setback. The Board is without authority to change this and other specific legislative declarations regarding setbacks. The Board can only provide clarity where it is lacking in the LMFAct. We have attempted to do so in this rule.

### Banning of Lagoons and Mandating of Alternative Technologies

During our process, the Board heard testimony regarding the availability and feasibility of new technologies for the elimination, storage, and treatment of livestock waste from confinement operations which may provide more environmental safeguards than lagoons. Indeed, many citizens who objected to the idea of lagoons referred to them as “cess-pools.” Others, who accepted the idea of lagoons, believed treatment similar to that provided for with human waste was necessary. While the Board recognizes that a variety of effective odor controlling technologies are available for the management and treatment of livestock waste, the Board also recognizes that the LMFAct focuses, almost entirely, on anaerobic lagoons as the acceptable method for handling livestock waste. Further, the LMFAct is based upon the basic presumption that such lagoons are a technically recognized and well-accepted method of dealing with animal waste. Thus, the Board is not free in this proceeding to exclude the use of lagoons and mandate or regulate other technologies.

### Permitting and Enforcement

Several participants in this matter also suggested that livestock facilities be subject to a permitting process through IEPA as is the situation with other Illinois industries. While the Board acknowledges that most other states’ regulations concerning confined livestock facilities provide for permitting and enforcement by the state’s environmental agency, the Board recognizes that the Illinois legislature has chosen to regulate the construction, operation, and maintenance of these facilities through the expertise of the State’s agricultural agency, rather than by subjecting these facilities to a permitting process within the purview of the State’s environmental agency. Thus, the Board cannot in this proceeding mandate a permitting process as it is generally known in the environmental field.

Several commentors in this rulemaking also expressed concerns regarding the enforcement of these regulations. Specifically, concerns were raised regarding the Department of Agriculture’s dual role as both the regulatory agency charged with the enforcement of the LMFAct and the development agency charged with the promotion of Illinois agriculture and the livestock industry in Illinois. (See, *e.g.*, Tr3. at 295-296.) Concerns were also raised regarding the adequacy of funding, staffing, and training for the implementation and enforcement of these rules. (See, *e.g.*, Tr3. at 295-296.) These are not matters within the purview of the Board. If these matters are to be addressed, they need to be addressed by the Illinois legislature as the Board has no role in these State policy issues.



In the following portions of this opinion, the Board reviews each of the various provisions contained in today's proposal and discusses our reasoning for adopting particular alternatives. The Board further notes that the majority of comments received support the proposal in total or in major part. Therefore, the fact that our discussion focuses on testimony and comment that disagreed with the proposal should not be viewed as lack of support for the proposal, but rather as our attempt to resolve a few disputed issues.

### GENERAL ISSUES

Today's rulemaking presents the Board with a number of general policy issues. Prior to looking at individual provisions of today's proposal, we address these policy issues.

#### Level of Financial Surety Rulemaking

Section 17 of the LMFAct (510 ILCS 77/17) provides that owners of new or modified lagoons establish and maintain evidence of financial responsibility to provide for the closure of lagoons and for the proper disposal of their contents. Section 17 further states that the level of surety required "shall be determined by rule" and be based upon the volumetric capacity of the lagoon. Section 55 requires the Department of Agriculture to file with the Board rules implementing the LMFAct. Read together, we find that these two sections of the LMFAct require that financial surety rules be adopted as Board rules.

The Department of Agriculture has not proposed rules establishing the level of surety in this proceeding. Rather, the Department of Agriculture requests at proposed Section 506.603(b) that it be allowed to adopt the necessary rules. However, the Board believes that this action is contrary to the plain reading of the LMFAct which requires that the surety rules be adopted by the Board. Therefore, the Board today severs the docket into Dockets (A) and (B). Docket (A), which will be adopted as a final rule after JCAR review, will contain all the general provisions and the provisions contained in the Board's order today, concerning standards for livestock waste lagoons, waste management plans, certified livestock managers, penalties, setbacks, and the statutory language and general provisions regarding financial responsibility. Docket (B) will contain the specific procedures and criteria necessary to determine the level of financial surety required pursuant to the LMFAct. Accordingly, the Board deletes the language in Section 506.603(b) and requests that all interested parties, including the Department of Agriculture, submit a proposal to the Board on or before July 1, 1997 which proposes the procedures and criteria necessary to implement the level of surety requirements of Section 17 of the LMFAct.<sup>10</sup>

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<sup>10</sup> The Board today adopts the majority of rules needed to implement the LMFAct. The only rules that we have not adopted concern the level of financial surety, and as explained, the Board is unable to do so at this time because we did not receive any proposal on this issue. The Board believes that by adopting all of the rules necessary to implement the LMFAct, except the financial surety rules, the Board has met its statutory mandate to adopt rules implementing the LMFAct within six (6) months after the Department of Agriculture submitted proposed rules to the Board. (510 ILCS 77/55(c).) The Board has in the past

## Department of Agriculture Rulemaking

In addition to requesting that it be allowed to develop rules on financial surety requirements at a later date, the Department of Agriculture asks that there be included at various places in the instant rules (Sections 506.306, 506.308, 506.309, 506.402, 506.502, and 506.702(c)) the following, or similar, statement:

In addition to the procedures specifically required under this Subpart, the Department may adopt and promulgate by rule all procedures reasonably necessary to perform its duties and responsibilities under this Subpart.

In proposing these provisions, the Department of Agriculture argues that further rulemaking may be necessary to fully implement the LMFAct. The Department of Agriculture believes it can do so, within its own authorities at a later date, consistent with the LMFAct. While we agree that further rulemaking may be necessary to effectuate the full intent of the LMFAct and these rules, we believe that the LMFAct clearly and solely designates the Board as the authority to adopt rules which implement the LMFAct. The Department of Agriculture, as a State agency, has authority to implement its discretionary power by rule (5 ILCS 110/5-20). While the Department of Agriculture can therefore adopt internal administrative rules on such subjects as recordkeeping and hearing requirements, any rulemaking which purports to implement the LMFAct must be done through this Board. As this is a rulemaking to implement the LMFAct, the Board deletes all references to further Department of Agriculture rulemaking. Since the Board, as explained above, will open a new docket (R97-15(B)) to promulgate financial surety requirements, the Department of Agriculture may include, in its proposal in that docket, any additional rules necessary to implement specific provisions of the LMFAct.

### Explicit Reliance on 35 Ill. Adm. Code 560

The Illinois Pork Producers, Illinois Beef Association, and the Illinois Farm Bureau (collectively, the Farm Group) recommend that at various places in today's rules there be an explicit statement that 35 Ill. Adm. Code 560<sup>11</sup> applies to the waste management plans required under Section 20 of the LMFAct (510 ILCS 77/20) and implemented within Subpart C of today's proposed regulations.

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severed a docket to allow more time for the development of certain aspects of a rule, even when under a statutory mandate to adopt final rules. See In the Matter of: Regulation of Petroleum Leaking Underground Storage Tanks: 35 Ill. Adm. Code 732, (August 11, 1994) R94-2(A); In the Matter of: Regulation of Petroleum Leaking Underground Storage Tanks: 35 Ill. Adm. Code 732, (August 11, 1994) R94-2(B).

<sup>11</sup> Part 560, entitled "Design criteria for field application of livestock waste," contains nine sections, dealing with subjects including nutrient loading, method of application, proximity to water, flooding, waterways, frozen or snow-covered ground, rainfall, and odors. Part 560 is contained within 35 Ill. Adm. Code: Subtitle E.

Despite IEPA's characterization of 35 Ill. Adm. Code 560 as "guidelines," the Board recognizes that these are duly promulgated administrative rules which accordingly should be followed. Therefore, the Board sees no need to specifically reference 35 Ill. Adm. Code 560 in these rules.

### SUBPART A: GENERAL PROVISIONS

Subpart A contains provisions necessary for all of Part 506. Included within this subpart is an overall applicability statement, a severability statement, definitions common to the entire Part 506, and a list of materials that are incorporated by reference. Subpart A also includes two new sections regarding recordkeeping and requests for alternatives, modifications, and waivers.

#### Applicability (Section 506.101) and Severability (Section 506.102)

The applicability and severability sections found at Sections 506.101 and 506.102 are standard features of regulations. The particular applicability statement found in Section 506.101 notes that the provisions of Subpart A apply to all of Part 506 and that each of the remaining subparts has its own applicability statement.

#### Definitions (Section 506.103)

Section 506.103 contains definitions that apply to Part 506. Many of the definitions contained in this section are definitions that are found in the LMFAct. The Department of Agriculture recommends, and the Board agrees, that inclusion of the LMFAct definitions within Part 506 is necessary for a complete reading of Part 506. Those definitions that come from the LMFAct are identified by the use of capitalization in the rules.<sup>12</sup>

Most of the definitions that are proposed within the instant rule have generated no discussion either at hearing or in public comments. Based thereupon, and upon the Board's own review of the definitions, the Board today adopts most of the definitions in form identical to the form proposed at first notice.

Among definitions which have generated discussion at hearing and in public comment are the definitions of "aquifer material," "animal unit," "lagoon," "livestock pasture operation," and "populated area." There have also been proposals to add definitions for "licensed professional geologist" and "occupied residence."

Animal Unit. The definition of "animal unit" proposed at first notice is the statutory definition that is found in the LMFAct (510 ILCS 77/10.10). Animal unit is defined for specified types of animals as a measurement calculated by applying a multiplier to the number

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<sup>12</sup> As a general construct, any language used in today's proposal that is statutory is shown in capitalization.

of animals. The IEPA testified that the term originated in federal regulations, with Illinois regulations adding some types of animals over the years. (Tr5. at 52-56.)

Several participants in this proceeding discussed perceived shortcomings in the definition of “animal unit.” (Tr2. at 189-196; Tr4. at 165; Tr5. at 118-119; PC 1 at 1; PC 58 at 5.) Participants either suggested that the Board expand the definition of animal unit, add particular types of animals, or change the multipliers. For example, David Thompson, interim president of the Illinois Poultry Council, testified that the proposed definition excludes most poultry operations in Illinois, since to his knowledge there are no Illinois facilities that use either continuous overflow watering or liquid manure handling systems. (Tr5. at 195.) Mr. Thompson therefore recommended deleting the exclusion for facilities using either continuous overflow watering or liquid manure handling systems and adding multipliers for laying hens and pullets. (Tr5. at 196-198.) The Department of Agriculture also suggested adding a laying hens multiplier to the definition of animal unit, at a slightly different value than that suggested by Mr. Thompson. (PC 58 at 5.) Moreover, veterinarian Dr. Kenneth Walker proposed that the number of horses per animal unit should be equal to or higher than that of beef cattle because of diet and space requirements. (PC 1 at 1.)

While the Board acknowledges the various shortcomings of the definition of “animal unit,” the Board notes that the “animal unit” definition is statutory. Second, the Board recognizes the limitations of the present animal unit definition in determining precisely the amount of manure and therefore potential environmental problems for different types of livestock (see Tr4. at 165; Tr5. at 52-56, 118-119). However, the numbers retain historical value in a regulatory context for determining such thresholds as different setback distances. Finally, the record in this proceeding does not contain enough information to add animal types or change the multipliers already defined, nor do we find sufficient industry hardship or potential environmental harm to make the requested changes.

Aquifer Material. IDNR notes that the intent of the definition of “aquifer material” “is to provide consistent, appropriate identification of the kinds of geologic materials that allow rapid transport of water and dissolved solids” (Tr1. at 131-132). The Board recognizes that use of “aquifer material,” as opposed to “aquifer,” as the identifier of earth materials sensitive to groundwater contamination is something of a departure from practice in other Board regulations. The rationale is provided by IDNR:

“Aquifer materials” are defined and used in this proposed rule rather than “aquifers” because when chemicals leak from a source like a livestock waste lagoon, their rates of travel through unsaturated aquifer materials are very similar to those through saturated aquifer materials. A lagoon leaking livestock waste into a deposit of aquifer material could contaminate a very large volume of the subsurface, regardless of whether the materials were saturated or not.” (Tr1. at 132.)

The Board accepts the proposed definition of “aquifer material.”

Lagoon. The distinction between a “waste lagoon” and a holding pond was also questioned. (Tr4. at 181-198.) Lagoon is defined in the LMFAct as a structure designed for the biological stabilization and storage of livestock wastes. (510 ILCS 77/10.25; at Section 506.103.) According to testimony, a holding pond is distinguishable because it is designed for storage of livestock wastes only. (Tr4. at 185-186.) The Farm Group maintains that since holding ponds are (1) not covered by the LMFAct, (2) not designed to biologically treat waste, and (3) not mentioned in the regulations, they are not subject to the design criteria of waste lagoons under the proposed regulations. (PC 60 at 4.) The Board agrees that holding ponds are not covered by today’s regulations, but notes that they continue to be regulated pursuant to the EAct and to other parts of Subtitle E.

Licensed Professional Geologist. The Board noted at hearing that the original proposal used the term “professional geologist” without defining it. The Department of Agriculture responded with a recommendation that the term be added to the definitions. (Tr5. at 32.; Exh. 52.) The Board accepts that recommendation and today adds the definition as suggested by the Department of Agriculture, based on the definition found in the Illinois Professional Geologist Licensing Act (224 ILCS 745/1 *et seq.* (1994)). To provide consistency with this definition the Board today, at three places in the proposal,<sup>13</sup> also replaces the proposed term “Registered Professional Geologist” with the term “Licensed Professional Geologist.”

Livestock Pasture Operation. The Farm Group recommends that the definition proposed for “livestock pasture operation” be deleted. (PC 60 at 3.) The Farm Group contends that traditional livestock pasture operations cover more types of operations than the ones defined in the proposed definition. (Tr5. at 253.) Since livestock pasture operations are explicitly excluded from regulation under the LMFAct (see 510 ILCS 77/10.30), the Farm Group contends that the proposed definition would cause more pasturing activities to be included in the instant regulations than is intended pursuant to the LMFAct. The Board agrees and today deletes the definition of “livestock pasture operation.”

Occupied Residence. The Farm Group also suggests that the Board include a definition of “occupied residence” in the regulations. Because “occupied residence” is mentioned several times in the rules, the Board agrees that it would be wise to include a definition of this term in the regulations. The definition we propose today builds on the definition of “residence” and adds to it qualifiers, as recommended by the Farm Group (PC 60 at 5-6), that the residence be “suitable for human occupancy 50% or more of the year.” The Board also adds to the definition of “occupied residence” that the phrase “suitable for human occupancy” means that the residence provides water and sanitation.

The Board has deleted from the Farm Group’s proposed definition that the residence must meet “applicable human dwelling ordinances or state laws” The Board believes that this phrase is unnecessary and that the definition will be interpreted and applied more consistently without reference to county ordinances or other State laws. The Board has also deleted the reference in the proposed definition that the residence provide electricity and that the residence

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<sup>13</sup> Twice at Section 506.202(e) and once at Section 506.203(b)(7).

be suitable for human occupancy “on a weekly basis.”

Populated Area/Common Place of Assembly. As a final definitional matter, the definition of “populated area” was extensively discussed at the hearings with particular emphasis on IDNR’s suggested modifications to the definition. As noted earlier, the LMFAcT establishes setback distances for new livestock management and livestock waste handling facilities which are tied to the distance from these facilities to the nearest occupied non-farm residence, populated area, or occupied residence. Under the LMFAcT, these setbacks distances are determined by measuring from the “nearest corner of the residence or place of common assembly to the nearest corner of the earthen waste lagoon or livestock management facility, whichever is closer.” (510 ILCS 77/35.)

With regard to the term “populated area,” the LMFAcT defines “populated area” as “any area where at least 10 inhabited non-farm residences are located or where at least 50 persons frequent a common place of assembly or a non-farm business at least once per week.” (510 ILCS 77/10.60.) In its proposal, the Department of Agriculture added the following language to the LMFAcT’s definition of “populated area” which clarifies the “at least once per week” phraseology as it applies to seasonal operations:

The existence of a populated area shall be determined by identifying the area around the livestock management or livestock waste handling facility delineated by a distance equal to the applicable setback distance; identifying the number of residences or the existence of a non-farm business or the existence of a common place of assembly; and comparing the appropriate number of respective units determined to be present within the setback distance. The provision that qualifies a common place of assembly or a non-farm business based on 50 persons or more frequenting the said place once per week shall include places that operate less than 52 weeks per year, such as schools with seasonal vacation periods and businesses or other places which experience seasonal shutdowns.”

No one raised any objections to the language added by the Department of Agriculture. The Board believes that the additional language to the LMFAcT’s definition of “populated area” is in accord with the legislative intent in enacting the LMFAcT. The Board therefore accepts the Department of Agriculture’s definition of “populated area.”<sup>14</sup>

Through extensive testimony at the Board hearings, representatives of IDNR argued that the Department of Agriculture’s above definition needed further refinement, in particular as it relates to land utilized for conservation and recreational purposes. Specifically, IDNR argues that the statutory language is ambiguous in this regard and has proposed modifying the definition of “populated area” contained in the Department of Agriculture’s proposal as follows:

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<sup>14</sup> The Board notes that it has slightly modified the Department of Agriculture’s proposed definition in the rules to make the definition more clear and to correspond with changes proposed by IDNR.

“Populated Area” means any area where at least 10 inhabited non-farm residences are located or where at least 50 persons frequent a common place of assembly or a non-farm business at least once per week. The existence of a populated area shall be determined by identifying the area around the livestock or livestock waste handling facility delineated by a distance equal to the applicable setback distance; identifying the number of residences or the existence of a non-farm business or the existence of a common place of assembly; and, comparing the appropriate number of respective units determined to be present within the setback distance. **For the purposes of setback requirements, places of common assembly or non-farm business include but are not limited to churches, hospitals, schools, day care centers, manufacturing companies, land managed for recreational or conservation purposes, museums, camps, parks, retail and wholesale facilities, and shopping centers.** The provision that qualifies a common place of assembly or a non-farm business based on 50 persons or more frequenting the said place once per week shall include places that operate less than 52 weeks per year, such as schools with seasonal vacation periods, businesses or other places which experience seasonal shutdowns, **and parks, camps and recreational areas experiencing seasonal shutdowns or reduced attendance during a portion of the calendar year as long as at least 50 persons per week visit during the prime season. When the primary use is an outdoor activity, the legal property lines of common places of assembly and non-farm businesses shall be the measuring point to delineate the setback distances for the livestock management or waste handling facility.**

(Exh. 5)

The first modification addresses the concept of “common place of assembly.” (Tr1. at 125.) Although the definition of “populated area” refers to a “common place of assembly,” this phrase is not defined in either the LMFAAct or the Department of Agriculture’s proposed rules. The IDNR contends that the definition of “populated area” should include examples of “common places of assembly” and “non-farm businesses” to provide guidance to livestock management and livestock waste handling facilities owners about the type of area which constitutes a common place of assembly. The proposed language also makes clear that a populated area includes more than a building or structure, provided that the requisite number of people visit the place each week. (Tr1. at 126-27.)

As to IDNR’s first amendment, the Board accepts this modification without change. The Board agrees that the phrase “common place of assembly” as it is used in the definition of “populated area” is ambiguous. Because we find the phrase vague, we believe that providing examples of places that fall within the definition helpful in determining what are “common places of assembly.” Moreover, the Board finds that the phrase “common place of assembly” should be construed to include land used for recreational and conservation purposes. The legislative intent behind enactment of the LMFAAct, and especially the setback provisions, was

to protect Illinois citizens from odors that emanate from livestock management and livestock handling facilities. If the phrase “common place of assembly” was interpreted to only encompass buildings or structures, we believe that the legislative intent behind passage of this act would not be fully implemented. Thus, the Board concludes “common place of assembly” includes recreational and conservation areas like baseball diamonds, soccer fields, campgrounds, and hiking trails. Accordingly, the Board accepts IDNR’s proposed change.

The second change advocated by IDNR extends the concept of seasonal shutdowns to parks, camps, and recreational areas. (Tr1. at 127-128, 146.) This change is intended to ensure that parks, camps, and recreational areas with seasonably reduced attendance also qualify as “common places of assembly.” As to this proposed second change to the Department of Agriculture’s definition of populated area, the Board believes that by including parks, camps, and recreational areas the Board is adhering to the legislative intent of the LMFAct. The Board thereby accepts IDNR’s proposed second change to the Department of Agriculture’s definition of “populated area.” The Board does, however, modify IDNR’s proposed change to reflect that parks, camps, and recreational areas that experience seasonal shutdowns or reduced attendance during a portion of the calendar year qualify as a “common place of assembly,” provided “that such places are frequented by at least 50 persons at least once per week during the portions of the year when seasonal shutdowns or reductions in attendance do not occur.”

The final change urged by IDNR, which generated the most discussion at hearing, concerns how setback distances are measured when the primary use of a common place of assembly or non-farm business is an outdoor activity. The IDNR’s proposed change recognizes that a “common place of assembly” can cover a large area rather than a specific point like a building or structure. For example, IDNR suggests that within a park, attendance is not limited solely to buildings or picnic areas. Rather, people use the entire designated area for recreational activities. Because of the way these recreational areas are used, IDNR proposes that the property lines of recreational and conservation areas serve as the measuring point for determining setback distances when the primary use of the “common place of assembly” and non-farm business is an outdoor activity. (PC 68; Tr1. at 128-29; 146-49; 150-56.) Similarly, IDNR proposes that the legal property lines of a place of common assembly serve as the measuring points when determining setback distances at areas used primarily for outdoor activities. (Tr5. at 303-14.)

The IDNR gave various reasons in support of this proposed amendment. One of the reasons is IDNR’s belief that livestock waste odor is incompatible with outdoor activities that Illinois citizens enjoy when visiting IDNR facilities and that declining attendance due to odor problems would reduce the economic benefits to local economies that gain benefit from the attendance at IDNR facilities. (Tr1. at 243, 271; Tr3. at 291.) IDNR is also concerned that livestock facilities would locate near IDNR sites so as to use those sites as buffers to avoid existing and future residential developments. (Tr1. at 270.) The IDNR is additionally concerned that nearby livestock facilities would adversely impact natural resources on IDNR properties. (Tr1. at 230, 232.) The Illinois Stewardship Alliance filed a comment supporting IDNR’s proposal. (PC 46.)



The Farm Group opposes IDNR's proposal. The Farm Group maintains that IDNR's proposal should be rejected because it is contrary to the provisions of the LMFAct. The Farm Group explains that the setbacks for livestock waste lagoons are from "occupied non-farm residences," "occupied residences," and "populated areas." Thus, the Farm Group contends that the intent of the setbacks is to keep waste lagoons away from people and to conclude that all IDNR property qualifies as "populated areas" goes beyond the legislative intent of the setbacks. (PC 60 at 7-8.) The Farm Group also argues that IDNR's claimed difficulty in delineation of a "populated area" within a State park is without merit. (PC 60 at 9.) Rather, the Farm Group alleges that the setback distances should be measured "from the nearest point of the facilities which attract the public to congregate and remain in the area for significant periods of time." (PC 60 at 9.) The Farm Group also maintains that the proposal is not warranted since much of the property which this provision protects is already covered by the statutory setback distances. For these reasons, the Farm Group contends that that IDNR's proposal should be rejected. The Department of Agriculture also opposes IDNR's proposed change for similar reasons.

As noted previously, the LMFAct establishes that setback distances are to be measured "from the nearest corner of the residence or common place of assembly to the nearest corner of the earthen waste lagoon or livestock management facility." Although the LMFAct sets forth how the setback distances are to be measured, the measurement is based on the distance from the livestock management facility or lagoon to the nearest corner of the residence or a common place of assembly. With regard to IDNR's proposal that the legal property lines of a common place of assembly serve as the measuring point when determining setback distances if areas are used primarily for outdoor activities, the Board, after much deliberation, accepts this proposed change for the following reasons.

As we already stated, the Board believes that the phrase "common place of assembly" is vague as it relates to places of primary outdoor activity. Obviously, the phrase would include more than mere buildings or structures; it would also include open lands where, during the portions of the year when seasonal shutdowns or reduction in attendance do not occur, at least 50 people a week congregate for the common purpose of enjoying outdoor activities or Illinois' natural resources and environment. Yet, in most of these places of primary outdoor use (such as a State or local park) there may not be any identifiable structure for which there is a specific "corner" from which to measure the distance to the lagoon or livestock facility exists, or there may be more than one. Accordingly, IDNR proposed that in those specific instances the measurement be from the open property's boundaries.

Indeed, it would be extremely difficult, if not impossible, for the entity charged with administering these rules, the Department of Agriculture, to ascertain any specific "point" of common assembly for measurement in these circumstances. The Farm Group's statement that the setback distances should be measured "from the nearest point of the facilities which attract the public to congregate and remain in the area for significant periods of time" illustrates the problem. The Board believes that it would be difficult for anyone to ascertain with any clear consensus which specific area in a park would be "facilities which attract the public to

congregate and remain in the area for significant periods of time.” The Farm Group’s argument could include everything from a picnic table or shelter to a lake. Accordingly, we agree with IDNR and find that using the property lines of a common place of assembly and non-farm business when the primary use of these places is an outdoor activity, is appropriate and provides clear guidance for determining setback distances. In so doing, the Board is attempting to provide clear guidance so that the rules can be easily complied with. We believe that measuring the setbacks from the “nearest corner” of the property line when the primary use of the common place of assembly or non-farm business is an outdoor activity, is in keeping with the legislative intent of the LMFAct.

While the Board accepts the concept presented by IDNR, the Board modifies the suggested language. First, although IDNR presented the concept of measuring setback distances for common places of assembly and non-farm businesses from the property lines when the primary use of the area is an outdoor activity by modifying the definition of “populated area,” the Board believes that the method for measuring setback distances should be contained in the section regarding setbacks. Therefore, the Board modifies Section 506.702 to include this concept of measuring setback distances. Moreover, the Board adds language to Section 506.702 to make clear that measuring setback distances from the property lines of common places of assembly and non-farm businesses occurs only when the primary activity at a common place of assembly or non-farm business is an outdoor activity. When the primary use at a common place of assembly or non-farm business is an indoor activity, the Board rules provide that the setback distances shall be measured from the nearest corner of the structure where the indoor activity takes place.

Some have argued that the measuring point for determining the distance of farm or non-farm residence to the lagoon or livestock management facility in the Board rules should also be the property line of the residence’s property. However, we cannot so provide. Unlike the situation concerning “common place of assembly,” there is no ambiguity inherent in the definition of “residence,” as stated in the LMFAct. A residence is a structure. That structure has a definite corner from which to measure distance. Therefore, there is a definitive mark from which to measure setback distances, as opposed to “common place of assembly” where the “nearest corner” to measure setback distances is quite ambiguous. Thus, we believe that the legislation is clear on this point and to require measurements from the property line of the residence would not be consistent with the clear language of the LMFAct.

The determination we reach herein was not made lightly. We cannot agree with views that this decision is not in keeping with the legislative intent. Nor can we agree that it prohibits traditional farms from expanding or constructing within the setbacks. The LMFAct provides that setbacks may be decreased when waivers are obtained from owners of residences that are occupied and located in the setback area. (510 ILCS 77/35(g).) The Board rules make clear, as discussed more thoroughly later, that waivers may also be obtained from the owners of non-farm businesses and common places of assembly that are located within the setback area. (Section 506.702(g).) Thus, IDNR could provide a waiver for any of its property located in the setback area. The Board believes that this opportunity to obtain waivers from owners of residences, non-farm businesses, and common places of assembly that

are located within the setback area balances any effect of accepting IDNR's argument regarding determining setback distances from common places of assembly. We also expect that IDNR will provide such waivers when it determines that the decrease in setbacks will have little or no effect on Illinois citizens' enjoyment of the outdoors.

#### Incorporations by Reference (Section 506.104)

Section 506.104 lists materials that are referenced within the body of Part 506. Four of the listed items are the same items recommended in the Department of Agriculture's proposal. Two of the references support the water quality analysis requirements of the proposal, and two of the references support the provisions for livestock waste lagoon design.

At various parts of the record there are recommendations that the Board add items to the incorporations by reference list dealing with alternative design standards for livestock lagoons. (e.g., Tr3. at 168-169.) The Board believes that most of the recommended incorporations are unnecessary. As the Department of Agriculture observes (PC 58 at 4), the two lagoon design documents cited in the LMFAct as the basis for lagoon design,<sup>15</sup> the ASAE's EP403.1 and the USDA-NRCS' waste treatment lagoon document, include within them internal references to most of the additional literature. For example, ASAE EP403.1 includes internal reference to ASAE EP379, Control of Manure Odors. The Department of Agriculture contends (PC 58 at 4), and the Board agrees, that this circumstance already provides for reliance on the internally referenced documents and that they do not need to be further or separately listed in the instant regulations. Moreover, as the Department of Agriculture also points out (PC 58 at 4), the LMFAct at Section 15(a), as well as today's proposed Section 506.204(h), allows for the use of any alternative lagoon design standards upon approval of the Department of Agriculture.

The Board does today make one addition to the incorporations by reference. The Board adds the document ASAE EP403.2, titled "Design of Anaerobic Lagoons for Animal Waste Management." This document in part updates ASAE EP403.1, and it is incorporated today for that purpose.

#### Recordkeeping (Section 506.105)

The Board has created a new Section 506.105 to specify the recordkeeping duties of the Department of Agriculture, necessitated by these new rules implementing the LMFAct. In general, the Department of Agriculture will need to maintain a file on each facility registered,

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<sup>15</sup> The LMFAct at Section 15(a) (510 ILCS 77/15(a)) specifies that "any livestock lagoon subject to registration shall be constructed or modified in accordance with 'Design or Anaerobic Lagoons for Animal Waste Management' promulgated by the American Society of Agricultural Engineers and designated (ASAE EP403.1) or the national guidelines as published by the United States Department of Agriculture Natural Resources Conservation Service in Illinois and titled Waste Treatment Lagoon." This statutory language is repeated in the instant proposal at Section 506.204(a).

or otherwise filing documents, with the Department of Agriculture, under the LMFAct and Board rules. Such file shall contain all registration materials, record of the Department of Agriculture's certifications and determinations, along with supporting data and justifications, groundwater monitoring results (if required), waste management plans (if required), correspondence, and any other information submitted by a facility owner or operator as required under these rules. Copies of such material shall be made available for public inspection. The Board finds that mandating the creation and maintenance of such files and making them available for public inspection is necessary for proper implementation of the LMFAct. Moreover, the Board is being responsive to comments that it is necessary that files be maintained on each facility for public inspection. (See PC 17.) The requirements contained in this section are similar to a State agency's recordkeeping requirements under the Freedom of Information Act (5 ILCS 140/1 *et seq.* (1994)).

#### Alternatives, Modifications, and Waivers (Section 506.106)

The Board has added a new Section 506.106 to the Department of Agriculture's proposed regulations, relating to alternatives, modifications and waivers from the regulations. Sections 506.202(d), 506.204(h), 506.205(f), 506.206(j), and 506.209(a)(2) of the rules provide that an owner or operator of a livestock waste lagoon may request an alternative, modification, or waiver from the established standards as they relate to soil borings, lagoon design, liner, and groundwater monitoring requirements to meet site specific objectives, and closure requirements that permit the lagoon to be used for an alternative purpose, respectively. The source for the alternatives, modifications and waivers in the regulations are Sections 15(a) and (e) of the LMFAct which specifically provide for such alternatives, modifications, and waivers. (See 510 ILCS 77/15(a), (e).)

New Section 506.106 mandates that all requests for alternatives, modifications, or waivers of the rules be made in writing and filed with the Department of Agriculture. Moreover, the regulations specify that construction cannot begin or continue until a determination has been made by the Department of Agriculture concerning the request. Additionally, each request must contain a certification from a Licensed Professional Engineer or Licensed Professional Geologist, as relevant, that the modification is at least as protective of the groundwater, surface water, and the structural integrity of the livestock waste management facility as were the stated requirements, or, in the case of requests for alternatives or waivers, that the grant of the alternative or waiver is at least as protective as the stated requirement. Moreover, the new provisions require that the Department of Agriculture, within 30 days after receipt of the request, notify the applicant in writing of its decision to grant or deny the request. To grant the requested alternative, modification, or waiver, the Department of Agriculture must determine that the alternative or waiver will be at least as protective as the stated requirement and that the modification is at least as protective of the groundwater, surface water and the structural integrity of the livestock waste management facility as the stated requirements.

The Board believes that these specific regulations concerning waivers are necessary to ensure that the quality of Illinois' air, water, and land is protected. We further find that

specific regulations pertaining to alternatives, modifications, and waivers are necessary to clearly set forth a process that must be followed and a standard that must be met to grant an alternative modification or waiver. The Board emphasizes that the LMFAct already provides for these alternatives, modifications, and waivers. Therefore, Section 506.106 merely provides a standard and procedure for the Department of Agriculture to determine whether the request for an alternative, modification, or waiver should be granted. Setting forth such a standard and procedure also clearly informs affected persons what standard must be met and the procedure that must be followed to receive the requested alternative, modification, or waiver. The Board also believes that we are aiding the Department of Agriculture by setting forth these standards and procedure and are also being responsive to articulated fears that the rules will not be properly enforced due to the Department of Agriculture's dual role as the enforcer of these rules and also the agency responsible for promoting agriculture in Illinois. (See, e.g., Tr3. at 295-296.)

### SUBPART B: STANDARDS FOR LIVESTOCK WASTE LAGOONS

Subpart B sets out various provisions that are related to the design, registration, construction, and certification of earthen livestock waste lagoons. Livestock waste lagoons are singled out in the findings of the General Assembly as a livestock waste management unit that "must be constructed according to standards to maintain structural integrity and to protect groundwater" (LMFAct at 510 ILCS 77/5(a)(7)). This Subpart accordingly focuses on the structural integrity and groundwater protection aspects of livestock waste lagoons.

#### Applicability (Section 506.201)

Section 506.201 sets out the applicability of Subpart B to all new or modified livestock lagoons not placed in service as of the effective date of Part 506. This proposal differs from the emergency regulations which only apply to lagoons serving a livestock management facility with a design capacity of 300 animal units or more. Therefore, a new or modified livestock lagoon serving 300 or more animal units has already been subject to the emergency regulations since October 31, 1996 if placed in service after that date, and those same facilities will also become subject to today's permanent regulations as of the effective date of these regulations. However, as required by the LMFAct, a new or modified livestock lagoon designed for less than 300 animal units will for the first time become subject to today's permanent regulations.

#### Site Investigation (Section 506.202)

The siting of every new or modified lagoon requires investigation of the ground beneath the lagoon to determine whether the site is underlain by materials that provide an opportunity for pollution of groundwater beneath or around the site. The procedures for the site investigation are laid out at Section 506.202.

The proposal requires that at least one soil boring be conducted to a depth of at least 50 feet below the proposed lagoon bottom. The soil boring is to be conducted in such manner as to allow identification of any aquifer material that underlies the site. Further, a Licensed

Professional Engineer or a Licensed Professional Geologist shall certify the contents of the soil boring and that the boring was conducted in conformance with Section 506.202.

The proposal also provides for possible alternatives to the soil boring with prior approval from the Department of Agriculture. The Department of Agriculture proposes this provision to accommodate circumstances where there may already be information sufficient to determine the presence of aquifer material, *e.g.*, “where other site subsurface investigations may have been conducted as part of the installation of a site water supply well or other facility planning process” (Tr1. at 42-43). An alternative to the soil boring is acceptable only if it provides information that will result in a site investigation that will be at least as protective of human health and the environment as the data provided by a soil boring.

The IEPA contends that the Department of Agriculture needs flexibility to require additional borings (Tr1. at 112); the Illinois Stewardship Alliance supports giving the Department of Agriculture the discretion to require more, but not fewer, soil borings (Tr1. at 164). As an example of when the Department of Agriculture would need discretion to require additional soil borings, IEPA cites the situation where disturbed or mined land may have altered hydrology and soil conditions, or routes to groundwater via abandoned shafts, as circumstances where flexibility is required. (Tr1. at 112.) The Board agrees that the Department of Agriculture needs flexibility to require additional soil borings when it determines “that additional soil borings are necessary to ensure the protection of the groundwater, surface water and the structural integrity of the livestock waste management facility.” Accordingly, the Board today adds language at proposed 506.202(c) that gives the Department of Agriculture this flexibility.

Finally, the Board today adds the phrase “to ensure that no gaps occur in the sample column” at Section 506.202(b)(3). It is the Board’s experience that the term “continuous sampling” has sometimes been a source of confusion and that the language we add today can alleviate that confusion.

### Registration (Section 506.203)

The LMFAct requires that all newly constructed or modified earthen livestock lagoons be registered with the Department of Agriculture; older lagoons may be registered at the owner or operator’s request. (510 ILCS 77/15(b).) Section 506.203 sets out requirements for the registration process.

Many of the details of the registration process are statutory. These include lists of information that must be provided by the owner or operator on the registration form (Section 506.203(b)) and the timeframes within which the Department of Agriculture must respond to a registration request (Section 506.203(c)). Specifically at 506.203(c) the Department of Agriculture is required to notify the person filing the registration, within 15 working days of receipt, that registration is complete or that additional information is necessary. Further, no later than 10 days after the receipt of the clarifying information, the Department of Agriculture must notify the owner or operator that registration is complete or that additional clarifying

information is needed. The Farm Group recommends adding language which would deem the registration complete if the Department of Agriculture does not timely notify the owner within 10 working days after it has received the requested clarification. The Board rejects this suggestion because it believes instead that if the Department of Agriculture does not timely notify the person filing the registration as required in Section 506.203(c), the registration is incomplete.

Non-statutory provisions include additional information that the owner or operator must provide. This information includes the location and associated distances to potential routes of groundwater contamination (*e.g.*, abandoned or plugged wells, drainage wells, injection wells, or subsurface drainage lines), a copy of the site investigation certification required pursuant to proposed Section 506.202(d), and information regarding any synthetic liner that may be used at the lagoon.

Section 506.203(d) provides the Department of Agriculture with authority to conduct site investigations of a livestock lagoon to assess the compliance status of the lagoon. Section 15 of the LMFAAct at Section 15 (510 ILCS 77/15(b)) requires that the Department of Agriculture inspect lagoons during at least one of the following phases: preconstruction, construction, and post-construction. Although the LMFAAct mandates no further site visits, the Department of Agriculture contends that under some circumstances follow-up visits may be necessary, “especially in the case of facilities required to utilize liners where periodic maintenance is required or where monitoring wells are periodically sampled” (Tr1. at 45). The Board agrees and therefore retains this provision in today’s rules.

The Illinois Stewardship Alliance recommends that the rules require follow-up visits and that operators and the public be alerted when the follow-up visits would occur. (Tr1. at 164.) The Board believes that it is appropriate to allow the Department of Agriculture to exercise its professional judgment, on a site-by-site and circumstance-by-circumstance basis, as to whether follow-up visits are needed or whether advance notification should be given to the owner or operator of the follow-up visits.

Finally at Section 506.203(e), the Board has added the statutory language from Section 15(b) of the LMFAAct in an effort to clarify to owners and operators that construction may not begin until 30 days after the registration form has been submitted by certified mail to the Department of Agriculture.

#### Lagoon Design Standards (Section 506.204)

Section 506.204 contains the standards for the design of earthen livestock waste lagoons. The design requirements in today’s proposal are of two types: (a) those explicitly required in the LMFAAct and (b) those specific and necessary for the protection of Illinois’ groundwater as determined by the Board in this proceeding.

The LMFAAct requires that any subject livestock waste lagoon be constructed or modified in accordance with two standard engineering practice guidelines: “Design of

Anaerobic Lagoons for Animal Waste Management” an American Society of Agricultural Engineers’ (ASAE) publication, and “Waste Treatment Lagoon” a publication of the United States Department of Agriculture - Natural Resources Conservation Service<sup>16</sup> (USDA-NRCS). The language of the LMFact that establishes this requirement is set out in today’s proposal at Section 506.204(a).

Two of the most important design features are requirements for use of a lagoon liner and for conducting groundwater monitoring at locations where site-specific analysis indicates a potential for groundwater contamination. (See Section 506.204(d).) The criterion used to determine where a potential for groundwater contamination exists is the presence of aquifer material at a depth of 50 or fewer feet beneath the lagoon floor. In particular, if aquifer material occurs within the top 20 feet, both a liner and groundwater monitoring are required. If the topmost aquifer material occurs within the range of 20 to 50 feet, only a liner is required. If there is no aquifer material within the entire 50-foot column, neither a liner nor groundwater monitoring is required. Sections 506.205 and 506.206, discussed later, detail the nature of the liner and the groundwater monitoring requirements.

The IDNR notes that the 50-foot evaluation limit is based on a study of rural private water quality conducted by the Illinois State Geological Survey and Illinois State Water Survey, with the assistance of the IDPH and the Department of Agriculture. (Tr1. at 135.) The study found that agricultural chemicals were occasionally present in well water when the top of the uppermost aquifer was within 50 feet of the land surface, but that the greater the thickness of non-aquifer material between a contaminant source and an aquifer, the less likely the contaminants were to reach an underlying aquifer. (Tr1. at 135-136.) The IDNR thereby concludes that the 50-foot evaluation depth is appropriate, particularly given “the relatively innocuous and immobile nature of the primary contaminants in livestock waste.” (Tr1. At 135-136.)

The design requirements contained in Section 506.204(g) include requirements that are both unique to the instant proposal and are needed to remove any potential ambiguity that would arise if the ASAE and USDA documents noted above constituted the sole engineering design criteria. As the Department of Agriculture notes, the two “documents, in many cases, provide ranges of acceptable design values which may be in conflict with each other if some components of a design are allowed to be based on one reference while other components of the same design are based on the second document” (Tr1. at 46-47). Among requirements intended to remove ambiguities are the berm-top requirement, the wall slope requirements, and the lagoon volume requirements found at Section 506.204(g)(1) through (g)(3), respectively.

The IEPA recommends that the Board add a prohibition against the use of outlet piping through the lagoon berm, unless the piping discharges to a second lagoon. (Tr1. at 113-114). The IEPA cites to an example where erosion adjacent to piping was related to failure of the berm. (Tr1. at 113-114.) The Board believes that IEPA’s recommendation is necessary for

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<sup>16</sup> These documents are included in the incorporations by reference section of the instant proposal at Section 506.104.



protection against the catastrophic failure of a lagoon berm. Accordingly, the proposed prohibition, as qualified, is contained in Section 506.204(g)(1)(B).

The IEPA also recommends that all lagoons have an engineered emergency spillway (Tr1. at 114). The purpose of this spillway would be to channel water that may overtop the berm through an erosion-resistant discharge point, thereby averting possible catastrophic failure of the berm. The Department of Agriculture contends that an engineered spillway is not necessary for all lagoons because the freeboard requirements at 506.204(g)(4) already protect against overtopping by requiring that lagoons have the capacity to accommodate even extraordinarily large rainfall events. (Tr5. at 38; Exh. 57.)

The Board agrees that engineered spillways should not be required of all lagoons, although an engineered spillway might be prudent in the design of some lagoons. The Board agrees that the freeboard requirements already provide the necessary safeguards against catastrophic overtopping of most lagoons. Accordingly, the Board finds that the cost of an emergency spillway (\$10,000 to \$35,000) (Tr4. at 288.) is not justified in other than the unusual case.

Professor Ted L. Funk of the University of Illinois testified at an early hearing that the interior berm slope be allowed to be steeper than provided in the original Department of Agriculture proposal. (Tr1. at 170.) The Department of Agriculture subsequently recommended that the Board accept Professor Funk's recommendation for interior berm slopes below the elevation where liquids would be present during most of the year. (Tr5. at 40-41; Exh. 58.) The Department of Agriculture notes that this modification would greatly reduce the necessary size of the lagoon surface area, while not adversely impacting the stability of the lagoon berm. (Tr5. at 40-41; Exh. 58.) The Board today adopts these recommendations at Section 506.204(g)(2) with a few modifications. The Board modifies the Department of Agriculture's suggested language to set forth the slope limitations that would be applicable to the submerged portion of the interior berm if an owner or operator does not opt to use the alternative steeper slope requirement.

The rules also incorporate at Section 506.204(g)(4) a freeboard requirement with two options dependent on the size and configuration of the specific lagoon. A one-foot freeboard beyond the elevation of the total design volume fluid surface level is required for lagoons that serve less than 300 animal units and do not collect runoff from areas other than the lagoon surface. A two-foot freeboard beyond the elevation of the total design volume fluid level is required for all other lagoons. The Department of Agriculture notes that this provision is somewhat more restrictive than the ASAE guidance for the 300 plus animal unit lagoons. (Tr1. at 49.) The Department of Agriculture nevertheless proposes the more restrictive provision based upon advice from the Advisory Committee that size should be a factor which we accept in determining minimum freeboard. (Tr1. at 50.)

At Section 506.204(g)(5), the rules also provide for the removal of subsurface drainage lines. This is a requirement that subsurface drainage lines (*e.g.*, field tile) be removed from within 50 feet of the outermost extent of the lagoon. The Department of Agriculture notes that

much of Illinois is underlain with drainage lines (Tr1. at 50), which, if allowed to remain in the vicinity of a lagoon, might provide an unwanted conduit from the lagoon to surface water or groundwater. (Tr1. at 50.) The proposed 50-foot separation distance is based on one-half of a typical value for drainage tubing lateral spacing which is used in drainage system design. (Tr1. at 50-51.)

Similarly, to ensure groundwater protection, Section 506.204(g)(6) has been included to require that there be at least a 100-foot separation between the outermost extent of the lagoon and any potential route of groundwater contamination, as identified in the EPA<sup>17</sup> (see 415 ILCS 5/3.58), as well as any non-potable well, abandoned or plugged well, drainage well, or injection well.

Section 506.204(g)(7) requires that a lagoon liquid level board or staff gauge be included in the design of lagoons. The Department of Agriculture recommends this provision to “assist the livestock lagoon operator . . . in the maintenance of freeboard by indicating when design capacities are becoming short and lagoon unloading should therefore commence” (Tr1. at 51-52). The Department of Agriculture further observes that this provision “should play a positive role in the reduction of odors by indicating when the removal of waste should be discontinued to ensure adequate dilution volumes remain present within the lagoon” (Tr1. at 52).

The final two design requirements of Section 506.204(g) are (1) that during any new startup of a lagoon, the lagoon be pre-charged to at least 60% of its capacity prior to receiving any livestock wastes (Section 506.204(g)(8)) and (2) that the design recognize the setback requirements of the LMFA<sup>17</sup> and the EPA<sup>17</sup> (Section 506.204(g)(9)). The purpose of the pre-charge requirement is to decrease the potential odor during the initial operations of a lagoon by ensuring that dilution volumes are present. (Tr1. at 52.)

In the Department of Agriculture’s proposal, Section 506.204(g)(8) requires that a lagoon be precharged to at least 60% of its design depth prior to receiving any livestock waste. The Board received testimony from agricultural engineers, Terry Feldmann and Dr. Michael Veenhuizen, that prefilling the waste lagoon will substantially reduce potential odors. (Tr5. at 122, 222.) Dr. Veenhuizen also recommended that the prefilling be based on design “volume” rather than “depth.” Since the regulations will state that the interior walls of the berm below the liquid line can have variable slopes as long as they are not steeper than 2 to 1 “horizontal to vertical,” the Board agrees that volume is a more appropriate measuring point to

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<sup>17</sup> In the Department of Agriculture’s original proposal and in the proposal as adopted by the Board at first notice it was indicated that “potential routes of groundwater contamination” are defined in the Illinois Groundwater Protection Act, 415 ILCS 55/1 et seq. Instead, the definition occurs in the EPA<sup>17</sup>, and today’s proposal is corrected accordingly. A potential route includes abandoned and improperly plugged wells of all kinds, drainage wells, all injection wells, including closed loop heat pump wells, and any excavation for the discovery, development, or production of stone, sand, or gravel. (415 ILCS 5/3.58.)

assure an appropriate precharge level. We have, therefore, changed the language in Section 506.204(g)(8) to require precharging to at least 60% of design volume.

The final provision of Section 506.204 is a subsection that identifies that the Department of Agriculture may, under statutory authority provided in the LMFAct, approve modifications from the Section 506.204 lagoon design standards. The Department of Agriculture proposes that today's regulations specify that "deviations" would be allowed only when the lagoon owner or operator demonstrates that the deviation would be at least as protective of the groundwater, surface water, and the structural integrity of the livestock lagoon as are the requirements of Part 506. The Board accepts this proposal, but changes the words "deviation" to "modify or exceed" and "deviations" to "modifications" which is the language used in the LMFAct. The Board makes the same change in the Department of Agriculture's proposal dealing with liner standards and groundwater monitoring.

#### Liner Standards (Section 506.205)

Section 506.205 sets out standards that must be complied with whenever a lagoon is required to have a liner (see Section 506.204(d) for the conditions that cause a liner to be required). The standards differ depending upon whether the liner is constructed from natural earth materials (in-situ soils, borrowed clay, or clay/bentonite mixture) or of synthetic material.

The Board has received a variety of suggestions concerning the nature of allowable liners, including suggestions for allowing liners composed of different materials (*e.g.*, PC 44), liners of greater or lesser thicknesses (*e.g.*, Tr3. at 166; Tr5. at 122-123), and liners of differing physical properties, including hydrologic conductivity (*e.g.*, Tr3. at 166). The Board has reviewed these suggestions and concludes that the requirements as initially proposed by the Department of Agriculture remain the most appropriate set of requirements.

The final provision of Section 506.205 has the same form and purpose as does the final provision of 506.204. That is, it identifies that an owner or operator may, with the Department of Agriculture's approval, modify or exceed the prescribed standards in Section 506.205, with the qualification that modifications would only be allowed when the lagoon owner or operator demonstrates that the modification would be at least as protective of the groundwater, surface water, and the structural integrity of the livestock lagoon as are the requirements of Part 506.

#### Groundwater Monitoring (Section 506.206)

Section 506.206 sets out standards that must be complied with whenever groundwater monitoring is required (see Section 506.204(d) for the conditions that cause groundwater monitoring to be required). The section is proposed today with some minor modifications to improve clarity.

The rules provide that a minimum of three (3) groundwater monitoring wells must be installed within 20 feet of the outermost extent of the lagoon, with at least two (2) of the wells installed downgradient of the groundwater flow direction (Section 506.206(b)). The purpose of these wells is to identify the local, shallow groundwater gradient at the site, and to allow the collection of groundwater samples for identifying background chemical concentrations and monitoring for evidence of leaks in the liner. (Tr1. at 140.) The 20-foot distance is intended to ensure that the wells will provide an early detection of contaminants leaking from the lagoon. (Tr1. at 54.)

The wells must be constructed according to standard procedures for monitoring wells, as specified at Section 506.206(c). These provisions are designed to ensure that the wells are safe and that they will produce consistent sampling results. (Tr1. at 140.)

Section 506.206(e), along with other matters, sets out the requirement that each monitoring well must be sampled once prior to placing the lagoon in service and quarterly thereafter. Today's proposal contains slightly altered wording to clarify that each well must be sampled and that it is the responsibility of the owner or operator of the lagoon to conduct the sampling (Tr4. at 36).

Section 506.206(e) also contains a list of analytes that must be measured during each sampling event. The Department of Agriculture proposed the list based on consultations with the Advisory Committee. (Tr1. at 54-55.)

The record indicates that there is agreement on the need for and utility of measurement of the four inorganic analytes (nitrate-nitrogen, phosphate-phosphorus, chloride, and sulfate), but some disagreement over the need for inclusion of the two bacterial analytes (*Escherichia coli* or fecal coliform and Fecal Streptococcus) as urged by IDPH. (Tr1. at 55.) The Illinois Stewardship Alliance agrees that the inclusion of bacterial analytes is critical. We are persuaded to retain the two bacterial analytes in the regulations, in principal part by the strong urging of IDPH and IDPH's observations that the bacterial analyses are both relatively inexpensive and of utility in identifying threats of waterborne illness. (Tr1. at 120.)

Section 506.206(f)<sup>18</sup> provides that the Department of Agriculture may also sample the monitoring wells at its discretion. The Department of Agriculture must provide notice to the owner or operator of intent to sample, and must comply with reasonable animal health protection procedures as requested by the owner or operator. The Department of Agriculture shall pay for the collecting and analyzing of the samples and split samples.

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<sup>18</sup> This provision was included within Section 506.205(e) of the Department of Agriculture's original proposal. It is renumbered (and subsequent subsections are also accordingly renumbered) into its own subsection for the purpose of clarity. The Board today similarly renumbers Section 506.205(i), which was included within Section 506.205(h) of the Department of Agriculture's original proposal.

Sections 506.206(g) and (h) outline the methodology to be used in reporting analytical results, the interpretation of those results, and the development of appropriate response actions in the event a liner failure is suspected. If impacts to groundwater are suspected, the owner or operator is also to propose possible response actions necessary to mitigate potential impacts to groundwater. The Department of Agriculture is then required to review the submittal and advise the owner or operator of the appropriateness of the proposed response actions. As a result of the review, the Department of Agriculture has the authority to make changes in sampling frequency or analyte list, and ultimately require changes to the design, construction, or operation of the lagoon or management facility.

Section 506.206(i) clarifies that an owner or operator who fails to submit the information required pursuant to subsection (g) of this Section, or fails to implement a response action approved by the Department of Agriculture, is subject to the penalties.

The final provision of Section 506.206 has the same form and purpose as does the final provisions of Sections 506.204 and 506.205. That is, it identifies that the Department of Agriculture may, under statutory authority, approve modifications from the Section 506.206 groundwater monitoring requirements, with the qualification that the modifications would be allowed only when the lagoon owner or operator demonstrates that the deviation would be at least as protective of the groundwater, surface water, and the structural integrity of the livestock lagoon as are the requirements of Part 506.

#### Certification of Construction (Section 506.207)

Section 506.207 contains the various certification-related requirements for earthen livestock lagoons. Three of these are statutory. They are the requirements that the Department of Agriculture inspect an earthen lagoon at least once, that the lagoon owner or operator certify to the Department of Agriculture that the lagoon has been constructed according to standards, and that the lagoon may not be placed in service until 10 working days after the certification has been submitted to the Department of Agriculture. The fourth certification-related requirement is that, if a liner is required, a Licensed Professional Engineer must certify that the liner meets all requirements of Section 506.205.

#### Failure to Register or Construct in Accordance with Standards (Section 506.208)

Section 506.208 sets out statutory language regarding failure to register or construct a lagoon in accordance with the standards contained in the LMFAct and the proposed rules. If the owner or operator fails to register the lagoon as required, the Department of Agriculture will give written notice to the owner or operator to register and certify the lagoon within 10 working days. If the owner or operator fails to comply with the notice, the Department may issue a cease and desist order. If the violations occur during the lagoon construction, a cease and desist to stop construction may be issued; if the violations occur after the completion of the lagoon, an operational cease and desist may be issued.

The Board has renumbered what was originally proposed in substantial part by the Department of Agriculture as part of Subpart E, Section 506.503(a) and (b), as Section 506.208(a) and (b). The changes made by the Board in these subsections address notification. As initially proposed, Section 506.503(a) and (b) did not require the Department of Agriculture to give written notice to the owner or operator, nor allow 10 working days for the owner or operator to register and certify the lagoon before the cease and desist orders may be issued. (510 ILCS 77/15(f).) The Board believes that proper notice was intended in the LMFAct before such measures would be taken by the Department of Agriculture and accordingly requires such notification in Section 506.208(a) and (b).

#### Lagoon Closure and Ownership Transfer (Section 506.209)

The final section of Subpart B deals with possible lagoon closure and ownership transfers. The lagoon closure provisions (proposed 506.209(a)) fulfill the statutory requirement at Section 15(e) of the LMFAct that “appropriate closure procedures . . . be . . . determined by rule” (510 ILCS 77/15(e)). The ownership transfer provision (proposed 506.209(b)) is essentially a reiteration of the ownership transfer language found in the LMFAct.

The Board adopts in whole the Department of Agriculture’s proposed lagoon closure provisions, found at Section 506.209(a)(1)(A), (B), (C), (D), (E), and (F) and 506.209(a)(2) and (3), which the Department at hearing described as follows:

The Department is proposing that a closure plan be developed by the owner or operator of the livestock waste handling facility and submitted to the Department for review and approval.

The plan shall include the sampling, analysis and reporting of nutrient content of all waste, sludge, and a six inch thickness of soil from the lagoon interior; plans for the removal and land application at agronomic rates of these materials, plans for the removal of all waste conveyances associated with the operation of the lagoon; plans for the proper management of any impounded precipitation collected during the closure process; plans for the proper abandonment of monitoring wells associated with the lagoon; and a proposed time frame for the closure activity.

Upon approval of the closure plan by the Department, the owner or operator is allowed to complete the closure activities. The Department is then required to make a site inspection and notify the owner or operator in writing whether the closure is deemed complete or whether additional activities are needed to complete closure. In addition, the Department is given the authority within the Livestock Management Facilities Act to consider requests for the use of the lagoon for other purposes and to grant waivers to any of the closure requirements to allow for that alternative use.

(Tr1. at 58-59.)

The Department of Agriculture may provide waivers of the closure requirements to allow an alternative use of the lagoon, where the alternative use is protective of the groundwater, surface water, and the structural integrity of the previous livestock waste management facility.

### SUBPART C: WASTE MANAGEMENT PLAN

Section 20 of the LMFAct sets out a variety of statutory requirements for the “(h)andling, storing and disposing of livestock waste.” (510 ILCS 77/20.) A principal feature of Section 20 is a requirement for the development of a waste management plan by all livestock management facilities of 1,000 animal units or greater. (510 ILCS 77/20(c) and (d).)

Waste management plans are not a new concept; they have been produced for livestock operations for many years and are required by regulation in other states. (Tr1. at 63.) In general, they promote the successful recycling of livestock waste by providing for the field application of wastes at agronomic rates, as well as the management of the wastes to reduce risk of water, air, and land pollution. Subpart C of today’s proposal sets out the regulatory framework for required livestock waste management plans.

#### Purpose (Section 506.301)

The Department of Agriculture’s original proposal contained, at Section 506.301, a statement characterized as a “purpose” statement. The Board accepts Section 506.301 as proposed.

#### Scope and Applicability (Section 560.302)

Pursuant to the scheme set out in the LMFAct, requirements for waste management plans differ depending on the size of the waste management facility. In particular, no plan is required for a facility of 1,000 animal units or less. (510 ILCS 77/20(b).) A facility ranging in size between 1,000 and 7,000 animal units is required to prepare, maintain, and implement a waste management plan. (510 ILCS 77/20(c).) A facility of size greater than 7,000 animal units must prepare, maintain, and implement a waste management plan, and in addition file that plan with the Department of Agriculture. (510 ILCS 77/20 (d).) These three size-based statutory requirements are reiterated in the proposed regulations at Section 506.302(b), (c), and (d), respectively.

The Department of Agriculture’s proposal at Section 506.302(e) employs the phrase “optimum crop yield.” The Farm Group requests that the Board replace this phrase throughout Subpart C because it believes that the phrase constitutes an unfortunate choice of language. (Tr4. at 254-256; PC 60 at 16.) The Farm Group recommends that the phrase “targeted crop yield” or “targeted crop yield goal” be used in the alternative. A situation in which the Farm Group believes would be helped by this change is the situation where crop

yield on a particular field can be made to exceed historical yields through the application of new practices. (Tr4. at 254-256; PC 60 at 16.) The Board accepts this change in Section 506.302(e), as well as at Sections 506.303(j), 506.303(m)(5), 506.307(a) and (b), 506.311(a)(1), and 506.312(a), (b), and (c).

Today's proposal also provides that a facility owner or operator who prepared a waste management plan pursuant to the emergency rules shall be deemed to have prepared a waste management plan pursuant to these rules. This provision is included to assure that an owner or operator who prepared a plan in compliance with the emergency rules need not undertake that effort a second time when the instant rules become effective.

#### Waste Management Plan Contents (Section 506.303)

Section 506.303 lists the information that must be included in a livestock waste management plan. The livestock waste management plan must include names and addresses of the owner(s) of the livestock facility, types of waste storage for the facility, species and sizes of the animals, number of animal units, maps and aerial photos of the fields available for waste application, waste application agreements, cropping schedules for the application fields, targeted crop yield goals for each crop in each application field, waste application methods, amount of waste to be disposed of annually, and the nutrient content of the livestock waste.

With regard to the information enumerated above, the Farm Group recommends two other word changes, in addition to the changes already noted regarding use of the term "optimum crop yields." The Farm Group recommends the insertion of the phrase "anticipated crops for" twice within Subsection (i), and the addition of the word "estimated" at the beginning of subsection (k). The Board accepts these recommendations. The reason for inserting the "anticipated crop" language is to provide flexibility for the circumstance where weather, disease, crop price, or other factors affect the actual crops grown. (Tr4. at 254.) The reason for adding the word "estimated" is to acknowledge that, because analyses of livestock waste content are to be done annually (see Section 506.305(b)), information on nutrient content of masses of livestock wastes are necessarily estimates. (Tr4. at 256.)

Section 506.303(m) also sets out various calculations that must be undertaken as part of the waste management planning process. As the Department of Agriculture observes:

The basic plan involves determining the amount of nitrogen available for application, determining the nutrient content of the waste, adjusting the nitrogen content for losses due to method of application and conversion of organic forms to available forms, determining ... the crop nitrogen requirements, and determining any nitrogen credits from previous manure applications or legume crops. From these figures the total amount of nitrogen available for application can be determined. A waste application rate can then be calculated for each field based on the crop needs and the nitrogen credits. (Tr1. at 71.)



The Illinois Stewardship Alliance recommends that the Board require that crop phosphorus requirements, rather than nitrogen requirements, be used as the basis for determining allowable amounts of waste application (Tr. 3 at 305-308); the Illinois Environmental Council recommends that plans should be based on nitrogen and phosphorus (PC 61). The Board is unable to accept either of these suggestions. The LMFAct clearly addresses this issue, specifically mandating that “it will be considered acceptable . . . to prepare and implement a waste management plan based on the nitrogen rate” (510 ILCS 77/20(f)).

Section 506.303 also defines various restrictions associated with the livestock waste management plan. These include restrictions on where and when livestock wastes may be field applied (subsections (o) through (s) and subsection (u)) and an operational restriction in subsection (t).

The restrictions relative to where and when livestock wastes may be field applied involve limits on waste application with respect to adjacent residences; surface waters; potable water supply wells; the 10-year floodplain; waterways; frozen, snow-covered or saturated ground; rainfall event; high water tables; and thin overburden. With the exception of subsection (u), the remainder of the provisions regarding where and when livestock waste may be field applied are contained in the LMFAct. While not contained in the LMFAct or in the Department of Agriculture’s proposal, the restriction in subsection (u) that limits field application during rainfall events, on saturated ground, and in areas of high water table or thin overburden, exist within current rules relating to agriculture related pollution at 35 Ill. Adm. Code 560. The Advisory Committee, through the Department of Agriculture, contends that it would be appropriate to also include them in the instant rules (Tr1. at 83-84); the Board agrees and accordingly adds them at subsection (u).

An additional departure from the first notice language occurs within subsection (r). The Department of Agriculture observes that an absolute prohibition against applying waste via irrigation into grassed watercourses is unnecessarily restrictive. (Tr1. at 82.) In its initial proposal the Department of Agriculture proposed language to define circumstances in which irrigation would be permissible. The Department of Agriculture subsequently has recommended two modifications of the initial language (Tr1. at 83; Tr5. at 35; Exh. 12 and 54), both of which the Board incorporates into today’s proposal. The first is principally a grammatical clarification. The second change, which is also recommended by the Advisory Committee (Tr1. at 83), provides that irrigation may not occur in grassed watercourses where the distance to a non-potable well, an abandoned or plugged well, a drainage well, or an injection well is greater than 100 feet. This is in keeping with similar language at Section 506.204(g).

Section 506.303(u) as contained in the Department of Agriculture’s original proposal provided that the livestock waste handler “shall consider” the addition of zinc and copper to the analyte list for soil sampling of fields where the livestock waste will be applied. The Department of Agriculture added this provision after concerns were raised by members of the Advisory Committee that copper and zinc toxicity in sheep has been reported where sheep

have grazed on land fertilized with livestock waste. (Tr1. at 85.) The Department of Agriculture maintained that soil sampling for copper and zinc could be used in conjunction with the copper and zinc levels determined by manure testing requirements at proposed Section 306.305(d) to determine if there were potential copper or zinc problems in the soil. (Tr1. at 85-86.)

Copper and zinc are sometimes added to poultry and swine feed at levels that increase their concentration in manure. (Exh. 6 at 28.) These supplements stimulate growth and prevent disease. (Exh. 6 at 28.) In PC 34, Dr. Robert Jacobs submitted a newspaper article citing a concern raised by some soil scientists in North Carolina that copper and zinc are building up in North Carolina soils where swine manure is spread (PC 34, "Metals present a new concern for livestock producers," The News and Observer, September 17, 1995).

The Farm Group opposes the requirement that livestock manure be tested for copper and zinc. (PC 60 at 3, Attachment 4; Tr4. at 272-275.) The Farm Group cites several scientific studies showing no long-term problems of copper and zinc buildup from manure application, including studies showing no copper toxicity in sheep grazing on fields fertilized with manure. (PC 60, Attachment 4 at 2.) Professor Funk also testified that it would be an unnecessary economic burden on the industry to require copper and zinc testing of the manure. (Tr1. at 171-172.) Professor Funk cited to Exh. 6 (see p. 28-29) as support for his position that there is no evidence to suggest any concern about copper and zinc buildup in the soil due to manure application.

After review of the record, the Board strikes the provisions at Section 506.303(u) that the livestock handler shall consider soil testing for copper and zinc. The Board agrees that, at this time, scientific evidence does not support a finding that buildup of copper and zinc in soils is a threat to the Illinois environment, necessitating the expense of copper and zinc testing of manure by livestock producers. Accordingly, the Board deletes this provision. Although the Department of Agriculture has phrased this provision in terms of a request to consider, the Board finds it to be unnecessary. The Board, however, notes that this decision still allows an owner or operator of a livestock waste handling facility who wishes to obtain this information to test the soil samples for zinc and copper. For similar reasons, we also strike a related provision at 506.305(d) that copper and zinc be required analytes in laboratory analysis of livestock manure (see discussion of at Section 506.305 below).

#### Livestock Waste Volumes (Section 506.304)

Section 506.304 provides that the volume of livestock waste available for application must be determined by site-specific measurement of the waste storage structure. It further provides that the calculation and description of the volume determination must be included in the waste management plan.

The Department of Agriculture contends that book values for the volumes of waste produced by various types of livestock and livestock operations are too variable to provide accurate measures of waste volumes. (Tr1. at 73.) Accordingly, the Department of

Agriculture recommends, and today's rule requires, that waste volume determinations must be made by actual measurements of the storage structure.

#### Nutrient Content of Livestock Waste (Section 506.305)

Section 506.305 sets out procedures that are to be used to determine the nutrient content of livestock waste. The nutrient content of the waste is one of the elements of the livestock management plan required under Section 506.303.

The principle tenet of Section 506.305 is that the nutrient content must be determined by laboratory analysis of actual samples of the waste from the waste storage facility. The only exception is for new facilities or facilities preparing their first waste management plan. These facilities may use published estimated values in their initial plan preparation, although actual analysis values must be obtained prior to actual waste application. (Tr1. at 73-74.)

The record contains discussion regarding details of how the on-site sampling of waste is to be best conducted. (e.g. Tr1. at 74-77; Tr4. at 255-256, 275-279.) We add in today's proposal at 506.305(b) language that has been recommended collectively by the Department of Agriculture and by the Farm Group that provides flexibility for a variety of situations that may be encountered.

The Board also today deletes copper and zinc from the list of required analytes listed at subsection (d). As discussed above, there is insufficient scientific evidence at this time to support a finding that buildup of copper and zinc in soils is a threat to the Illinois environment necessitating the expense of copper and zinc testing of manure by livestock producers. Accordingly, the Board deletes this requirement. The Board notes, however, that this decision still allows for copper and zinc analyses where the owner or operator may wish to obtain this information.

#### Adjustments to Nitrogen Availability (Section 506.306)

Section 506.306 specifies that adjustments to nitrogen availability shall be made to account for nitrogen losses due to method of applicability, and to account for conversion of organic nitrogen into plant-available form. The Department of Agriculture notes, for example, that nitrogen losses to the air for non-incorporated wastes may be as high as 40%. (Tr1. at 77.)

As initially proposed by the Department of Agriculture, this section also specified that the Department of Agriculture had authority to adopt criteria setting forth adjustments to the nitrogen availability. In keeping with the Board's determination that the Department of Agriculture's authority to conduct rulemakings can not be established by Board order, the Board today deletes that provision.

#### Targeted Crop Yield Goal (Section 506.307)

The purpose of Section 506.307 is to provide a definition for the term “targeted crop yield goal,” as used in other portions of Subpart C. As we noted in our discussion of Section 506.302, we are today adopting the term “targeted crop yield goal” instead of the Department of Agriculture’s original proposed term “optimum crop yields.” The changes to Section 506.307 are largely to conform the section to this change in terminology and concept.

#### Crop Nitrogen Requirements (Section 506.308)

As originally proposed by the Department of Agriculture, this section had the sole purpose of asserting that the Department of Agriculture had authority to adopt criteria setting forth values for crop nitrogen requirements. In keeping with the Board’s earlier determination regarding the Department of Agriculture’s authority to conduct rulemakings, the Board today deletes that provision, and accordingly the entire section.

#### Nitrogen Credits (Section 506.309)

Section 506.309 provides that credits to the amount of nitrogen for application shall be calculated for any nitrogen-producing crops grown the previous year, for any other sources of nitrogen applied for the growing season, and for mineralized organic nitrogen from livestock waste applied during the previous three years.

The Department of Agriculture’s original Section 506.309 contained language asserting that the Department of Agriculture had authority to adopt criteria setting forth values for nitrogen credits from previous crops. As was the case with similar language in Sections 506.306 and 506.308, and in keeping with the Board’s earlier determination regarding the Department of Agriculture’s authority to conduct rulemakings, the Board today deletes Section 506.309( c).

The Farm Group also suggested various other changes to this section. (See PC 60.) The record contains little, if any, information on these changes. We therefore do not accept these proposed changes.

#### Records of Waste Disposal (Section 506.310)

Section 506.310 establishes the contents of livestock waste disposal records. These records must include the dates and fields where livestock waste application was made, how application was made, the rate of application, the number of acres receiving waste, and the amount of livestock waste applied. Pursuant to Sections 506.302(c)(3) and 506.302(d)(3), these records shall be kept on file at the facility for a period of three (3) years and shall be available for inspection by the Department of Agriculture during normal business hours.

#### Approval of Waste Management Plans (Section 506.311)

Pursuant to Section 20(d) of the LMFAAct (510 ILCS 77/20(d)) and these rules at Section 506.302(d), facilities with 7,000 or greater animal units are required to obtain the Department of Agriculture's approval of their livestock waste management plans. Section 506.311 sets out the factors that the Department of Agriculture must consider in granting approval, as well as the timeframe within which the Department of Agriculture must make its decision. Today, this section is adopted without substantive modification, except for change of the term "optimum crop yield" to "targeted crop yield goal," in keeping with the prior discussion of Section 506.307.

#### Sludge Removal (Section 506.312)

Section 506.312 establishes testing requirements for the removal of sludge from livestock storage structures. This section is today adopted without substantive modification, except for change of the term "optimum crop yield" to "targeted crop yield goal," in keeping with the previous discussion of Section 506.307.

#### Plan Updates (Section 506.313)

Waste management plans must be reviewed annually by the owner or operator. The plan must also be updated, if needed, based upon laboratory analyses of the waste. The plan must be updated as well if there are changes in the amount of land area available or needed for disposal, change in the method of disposal or application, and change in the cropping sequence.

#### Penalties (Section 506.314)

Section 506.314 sets out the penalty provision for failure to comply with the waste management plan requirements. Most of the language is statutory.

Subsections 506.314(b), (c), and (d) were part of the Department of Agriculture's original proposal, but were proposed instead as part of Subpart E, Section 506.505. Today the Board moves these provisions to Section 506.314. They deal solely with failure to comply with the waste management provisions of today's rules, and the Board believes that it will be easier for persons using these rules if the provisions are placed within Subpart C. (See also discussion of Subpart E, below.)

The Farm Group has recommended certain additions to the language we today include as Section 506.314(b). (See PC 60, attachment 1 at 26.) The Board believes that by including the material of subsection (b) within Section 506.314 we have addressed the Farm Group's concerns.

### SUBPART D: CERTIFIED LIVESTOCK MANAGER

The LMFAct requires at Section 30 that the Department of Agriculture “establish a Certified Livestock Manager Program in conjunction with the livestock industry that will enhance management skills in critical areas, such as environmental awareness, safety concerns, odor control techniques and technology, neighbor awareness, current best management practices, and the development and implementing of manure management plans.” (510 ILCS 77/30.) Subpart D sets up the regulatory framework for the certified livestock manager program, as far as the Board’s regulations are concerned.

The Department of Agriculture notes that it has convened an *ad hoc* committee of livestock industry representatives, University of Illinois Cooperative Extension Service educators, and Department of Agriculture representatives to refine an educational curriculum for the certified livestock operator program. (Tr1. at 91.) The Department of Agriculture further notes that it anticipates that the first training and testing clinics under the certification program will be held during the current month, March 1997. (Tr1. at 91.)

The Board today adds Section 506.401(e) which incorporates the statutory language found in the LMFAct regarding certified livestock manager penalties (510 ILCS 77/30(g)) and the language originally proposed by the Department of Agriculture as 506.504. The Board believes that any owner or operator interested in researching the penalties in this Part pertaining to the certified livestock manager requirements should be able to find those penalties within Subpart D, Certified Livestock Manager. (See also discussion of Subpart E, below.)

Currently Subpart D has only a single section. At first notice, Subpart D contained a proposed second section titled “procedure” that asserted that the Department of Agriculture may adopt and promulgate all procedures necessary to perform its duties regarding the certified livestock manager program. In keeping with the Board’s earlier determination regarding the Department of Agriculture’s authority to conduct rulemakings, the Board today deletes that provision.

#### SUBPART E: PENALTIES

The LMFAct provides for various penalties for failure to comply with the provisions of the LMFAct and regulations promulgated pursuant to the LMFAct. In the Department of Agriculture’s original proposal, language setting out the nature of the possible penalties was included within this subpart, as well as within at least three additional proposed sections, Section 506.208 (violation of lagoon registration and certification requirements), Section 506.314 (violation of livestock waste management plan provisions), and Section 506.703 (violation of setback requirements). In some cases the language proposed for this Subpart E and for the three additional penalty sections was repetitious or even potentially in conflict. This matter needs to be resolved. We believe it best to retain the structure of having penalty information contained within the same subpart that contains the provisions that might be violated. Accordingly, we move the pertinent elements from proposed Subpart E into their respective subparts.

#### SUBPART F: FINANCIAL RESPONSIBILITY

### Applicability (Section 506.601)

The LMFAct at Section 17 (510 ILCS 77/17) provides that owners of new or modified lagoons establish and maintain evidence of financial responsibility to provide for the closure of the lagoons and for the proper disposal of their contents. Section 506.601 repeats this applicability statement. The LMFAct requires closure to be completed within two years from the date of cessation of operation unless the lagoon is maintained or serviced. (510 ILCS 77/15(e).)

### Evidence of Financial Responsibility (Section 506.602)

The LMFAct at Section 17 (510 ILCS 77/17) further identifies the several types of surety instruments that may evidence financial responsibility. Section 506.602 lists these statutorily identified instruments. Also noted in Section 506.602 is that, in the event of a transfer of ownership, the new owner is required to establish and maintain evidence of financial responsibility at the same level of surety as the previous owner.

### Level of Surety (Section 506.603)

The LMFAct also provides in Section 17 (510 ILCS 77/17) that the level of surety that is required be determined by rule and be based on the volumetric capacity of the lagoon. These statutory provisions are presented in Section 506.603.

At first notice, proposed Section 506.603(b) provided that the Department of Agriculture may adopt and promulgate all procedures and criteria necessary to perform its duties and responsibilities regarding financial responsibility. The Board today deletes that subsection as unnecessary. The Board further notes that, as previously discussed, the Board has divided this rulemaking into two dockets to further flush out the level of surety required for the closure of lagoons and the proper disposal of their contents.

## SUBPART G: SETBACKS

In Subpart G, today's proposal contains various provisions related to setbacks. As the Board has previously noted in its discussion of the legislative issues regarding setbacks, setbacks are an integral element in maintaining environmental quality in the vicinity of livestock waste facilities. This is recognized in the LMFAct, one of the major features of which is the establishment of statutory setbacks for livestock waste handling facilities. (See 510 ILCS 77/35.) Much of today's Subpart G consists of these statutory provisions. Additionally, new provisions have been added regarding application of the setback requirements to facilities and residences that have been rebuilt following destruction by natural causes. New provisions have also been added that establish a process for an initial determination regarding compliance with setback requirements prior to construction and a definitive time in which the setback distances become applicable and cannot be altered by subsequent events.

### Applicability (Section 506.701)

Section 506.701 establishes that all new livestock management or livestock waste handling facilities must comply with the setback requirements. It also contains a new provision regarding the reconstruction of a facility or residence destroyed by natural causes. Specifically, in response to questions, the Department of Agriculture amended their original proposal to include the following language (Tr4. at 88-89, 93; Tr5. at 33-34):

Commencement of operations at a facility reconstructed after partial or total destruction due to natural causes such as tornado, fire, flood, or earthquake shall not be considered the location of a new livestock management or waste handling facility for setback purposes. Likewise, a residence partially or totally destroyed due to natural causes, such as tornado, fire, flood, or earthquake, shall retain its original setback for a period of no greater than two years, to allow for reconstruction of said residence.

(Exh. 53.)

The Board accepts this proposed amendment with one modification. The Board agrees that this provision is necessary and needs to be included in the rules. However, the Board notes that a time limitation is placed on the reconstruction of a residence destroyed due to natural causes, but a similar time limitation is not provided for the reconstruction of a livestock facility destroyed by natural causes. Without such a time restriction placed on the reconstruction of a livestock facility, a livestock facility could potentially be built 20 years after one had been destroyed, even if a subdivision of single-family residences had thereafter been built directly adjacent to the site. Therefore, the Board accepts the proposed amendment by the Department of Agriculture, but modifies it slightly to include a time limitations for purposes of measuring the setback distances for the reconstruction of a livestock facility destroyed by natural causes.

### Procedures (Section 506.702)

In the Department of Agriculture's original proposal, Section 506.702 listed just two of the LMFAct's several setback provisions. The Board believes, and the Department of Agriculture accedes (Tr4. at 90), that including all of the statutory setback provisions within Section 506.702 would assist users of today's rules in more readily comprehending the full scope of the statutory setback provisions. Accordingly, the Board today has added the entirety of the statutory language from the LMFAct regarding setbacks.

Section 506.702 as proposed by the Department of Agriculture also contained at proposed subsection (c) a statement that the Department of Agriculture may adopt and promulgate all procedures necessary to perform its duties under Subpart G. As the Board has discussed above, we today delete all constructions of this type.



Besides the issues already discussed with regard to setbacks, several other issues have also been raised that will be addressed in this section. First, as noted earlier, the Board received several comments regarding the need for increased setbacks. However, as previously explained, the LMFAct has specifically set forth the minimum setback distances, and these cannot be changed by the Board.

As discussed earlier, the Board today includes in this section provisions on measuring the setback distances from common places of assembly and non-farm businesses when the primary use of these places is an outdoor activity and when the primary use is an indoor activity.

Finally, with regard to this section, the Board includes provisions regarding standards to be applied by the Department of Agriculture for approving decreases in setback distances. The LMFAct and Board rules include provisions that establish that setbacks may be decreased when innovative designs are approved by the Department of Agriculture and are incorporated into the facility (510 ILCS 77/35(e)) and when waivers are obtained from owners of residences that are occupied and located within the setback area (510 ILCS 77/35(g)). The new provisions added today provide that waivers based on innovative designs must be submitted to the Department of Agriculture in writing prior to construction and contain a certification by a Licensed Professional Engineer that the innovative designs incorporated into the facility will provide more odor protection than the original setbacks. Within 30 days after receipt of the request, the Department of Agriculture shall inform the owner or operator of its determination. To approve the request, the Department of Agriculture must find that the innovative designs incorporated into the facility will achieve more odor protection than would the original setbacks. The rules also provide that if a decrease in setbacks is granted, the Department of Agriculture must maintain a file that includes all supporting data and justification which it relied upon to make this determination. The rules also make clear that the files are subject to public inspection.

Additionally, the rules contain provisions establishing that setbacks may also be decreased when waivers are obtained from owners of residences that are occupied and located in the setback area. The Board has additionally added to the rules that setbacks may also be decreased when waivers are obtained from owners of non-farm businesses or common places of assembly that are located in the setback area. The Board believes that by adding this provision to the rules we are being consistent with the legislative intent of the LMFAct and also providing for internal consistency of the rules. It only makes sense that if setback distances are measured from common places of assembly, non-farm businesses, and occupied residences, that any and all of those three places that fall within the setback distances be able to provide an owner or operator of a livestock facility a waiver of the setback distances. Moreover, we find support for our decision in the Department of Agriculture's testimony. In response to questions, the Department of Agriculture stated that, if the concept of common places of assembly and non-farm businesses were extended to include properties owned and operated by IDNR, waivers could be negotiated between IDNR and the owner or operator wishing to construct a livestock facility. (Tr1. at 248-252.) Therefore, in the Department of

Agriculture's view, common places of assembly and non-farm businesses should also be allowed to provide waivers of the setback distances.

Other provisions regarding decreases in the setback distances where waivers have been obtained from all owners of residences, non-farm businesses, or common places of assembly that are located in the setback area require that the request for a decrease be in writing prior to construction. Moreover, the owner or operator must attach to the request copies of the written and notarized waivers from all owners of properties within the setback area. The rules also establish that the Department of Agriculture must notify the owner or operator requesting the decrease in writing of the setback decrease within 30 days after receipt of the request for decrease.

The Board finds that these additional provisions regarding decreases in setbacks are necessary to establish the procedure and standards required for obtaining such decreases in setbacks. By setting forth the required procedure and standards, persons affected by these provisions will be informed of the requirements that need to be met to receive such decrease in setbacks. These provisions further ensure that requests for decreases in setbacks will be consistently and appropriately addressed after final adoption of these rules.

#### Initial Determination of Setbacks (Section 506.703)

During the hearings on the proposed regulations, an issue arose as to when setbacks become applicable and cannot be altered by subsequent events. For instance, the Board heard testimony regarding a livestock management facility that purchased land and began construction of a livestock facility and lagoon. Later, a trailer, that had been placed on land directly adjacent to the facility site and within the projected setback distance, was claimed to qualify as a residence in order to defeat the setback distance. (PC 17; Tr3. at 169.) To ensure that these types of situations do not reoccur, participants urged that the Board adopt some formal mechanism to preserve the rights of both the neighboring land owner and the livestock producer.

The Department of Agriculture originally suggested that the applicability of the setback distances could be tied to the Department of Agriculture's receipt of a lagoon registration request. (Tr1. at 36.) Upon further consideration, the Department of Agriculture suggests an alternative approach. The Department of Agriculture recommends that the proposed rules be amended to include a provision for the owner or operator of a proposed facility to submit to the department a "Notice of Intent to Construct a Livestock Management Facility." (PC 58.) This notice would include "information regarding the proposed facility such as the proposed ownership of the facility, the location of the facility, and the proposed capacity of the facility." (PC 58 at 3.) The Department of Agriculture explained that once it received the notice, the setback distances applicable at that time would be "frozen" for a period of not more than 60 days. If the facility did not initiate construction or submit a lagoon registration form within this 60-day period, the notice would be deemed expired and changes to the setback affecting the subject land could take place. (PC 58 at 3.)

The Farm Group suggests a similar amendment to the proposed rules. However, the Farm Group believes that the pre-construction notice should be voluntary. (PC 60 at 6.) Although the system would be voluntary, the Farm Group asserts that the protection of the setbacks would only occur if the notice was filed. Thus, the Farm Group states that those producers that decide not to file a notice prior to construction run the risk of having a residence built within the setback distance. (PC 60 at 6.) On the other hand, if the producer owns the land around the site, the producer may choose not to file a notice. (PC 60 at 6.) Specifically, the Farm Group's recommendation provides:

Setback distances shall be determined at the start of construction of the facility unless the owner or operator has previously filed a notification of intent to construct with the Department showing the proposed location of the facility and compliance with the applicable setbacks. If the notification is filed with the Department and a continuous program of development, including, but limited to, engineering, design, soil testing and construction is followed, the setbacks shall be determined as of the date of the notification is filed.

(PC 60 at 28-29.)

The Board agrees with the Department of Agriculture that the setback distances should be tied to the filing of a "Notice of Intent to Construct a Livestock Management Facility." While tying applicability of the setbacks to registration is logical, this would only resolve the problem as to those facilities which intended to construct or modify a livestock waste lagoon. This solution, however, would not be helpful in those situations where a new livestock management or livestock waste handling facility did not intend to construct a lagoon.

While the Farm Group's proposal is similar to the Department of Agriculture's, the Farm Group's proposal does not contain a specific time limitation upon which the notice would expire, which the Board believes is necessary. Moreover, the Board finds that the filing of a notice of intent should be mandatory for all new livestock management or livestock waste handling facilities. The Board believes that it is important that there be a determination of whether the setback distances are complied with so that the rights of both the livestock producer and neighbor are protected. Moreover, this process ensures that citizens potentially affected by the new livestock management or livestock waste handling facility receive notification of the proposed facility.

While the Board agrees with the Department of Agriculture's proposal, the Board believes that it would be fruitless to simply have the facilities file a pre-construction notice without having the Department of Agriculture verify that the appropriate setback distances have been met. Therefore, the Board has added a new section to the regulations that establish a process for the initial determination of setback distances and notification to those potentially affected by the proposed construction of a livestock facility in their community. These provisions do not apply to new livestock management or livestock waste handling facilities serving less than 50 animal units, since the statutory setbacks do not so apply.

The new provisions provide that an owner or operator of a new livestock management or livestock waste handling facility must file a notice of intent to construct with the Department of Agriculture prior to construction to establish an initial determination of setbacks. The notice must include a legal description of the land on which the livestock facility will be constructed; the name(s) and address(es) of the owner(s) or operator(s) of the facility; the type of facility intended to be built; the name(s) and address(es) of the owner(s), which includes local, State and federal governments, of any property within the setback area; the distance to the nearest populated area, residence, and place of common assembly; the size of the facility and animal units anticipated to serve; a map or sketch designating the location of the proposed facility and the setbacks; and a statement identifying whether a request for decrease in the setbacks has been sought and whether the request was granted or denied. The owner or operator of the facility must also mail the notice of intent to construct to the owner(s) of the property within the setback distances.

Within 30 days after receipt of the notice of intent to construct, the Department of Agriculture must notify the owner or operator in writing whether the setback distance has been met. The provisions also make clear that the date the notice is filed with the Department of Agriculture is the date upon which the setback distances are determined. Events that occur subsequent to the filing of this notification will not defeat the setback distances unless construction of the facility has not begun or a lagoon registration form has not been filed within one (1) year after receipt of the Department of Agriculture's determination regarding compliance with the setbacks. The Department of Agriculture must notify the owner or operator in writing whether the setback distance have been met. If the Department of Agriculture determines that the owner or operator has complied with the setback requirements, later-constructed or erected residences or places of common assembly cannot operate to alter the setback as initially determined. The provisions further provide that a file be kept by the Department of Agriculture which is subject to public inspection.

The Board believes that the above described provisions are necessary to ensure that the setback distances are complied with and that citizens are protected from odors emanating from livestock waste facilities. Because the Department of Agriculture must make an affirmative determination regarding the setback distances, it is important that the setbacks are easily measured. This is another reason that supports the concept that the property lines of common places of assembly should be used to determine setback distances. Further, the Board believes that these provisions are responsive to comments received during this proceeding and provide protection to the public, neighbors, and owners and operators of livestock facilities alike.

#### Penalties (Section 506.704)

The Farm Group proposes to strike the Department of Agriculture's proposal regarding penalties for violating the statutory setback distances and replace it with the following language:

The Department may investigate a complaint of a possible violation of the setback distance requirements, and after such investigation shall issue a notice

of findings to the owner or operator of the livestock management or waste handling facility and the complainant. All actions of the Department of Agriculture are subject to the Illinois Administrative Procedure Act which provides for administrative hearing procedures and further adjudicative action. [510 ILCS 77/15]

While the LMFAct is silent with regard to the penalty for violating the setback distances, the Board finds that it is consistent with the remaining provisions of the LMFAct for the Department of Agriculture to have the authority to issue a cease and desist order for violating the setback provisions. While the Farm Group's proposed language is more general in nature, we find that the specific language of the Department of Agriculture's proposal is more in line with the language and intent of the LMFAct.

### Complaint and Appellate Procedures

Although the Board's rules do not contain a procedure that citizens may use to raise complaints regarding livestock facilities, the Board notes that the LMFAct sets forth a complaint process. Section 15(c) of the LMFAct (510 ILCS 77/15(c)) provides that any person "having a complaint concerning an earthen livestock waste lagoon may file a complaint with the [IEPA]." If IEPA determines that the groundwater has been negatively impacted because of structural problems with the lagoon, IEPA is directed to notify the Department of Agriculture that modifications to the lagoon are needed. If an investigation reveals that groundwater has been negatively impacted, the Department of Agriculture and IEPA are instructed to cooperate with the owner or operator of the lagoon to provide a reasonable solution to protect the groundwater. Moreover, this complaint procedure applies to not only new or modified lagoons, but also lagoons placed in service prior to the effective date of the Board's rules. (510 ILCS 55/15(c).) The Board also notes that the LMFAct makes clear that this complaint procedure does not limit IEPA's authority under the EAct to "investigate and respond to violations of the [EAct]." (510 ILCS 55/15(c).) Finally, the Board also notes that these provisions do not limit a citizen's ability to file an enforcement action under the EAct.

The Board observes that the complaint procedure outlined in the LMFAct is an important aspect of the LMFAct. The LMFAct and Board rules provide various standards that must be complied with when building or modifying a lagoon. The complaint procedure, however, completes the process by providing citizens a mechanism to use to ensure that the LMFAct and Board rules are being complied with and enforced. It also ensures that any negative impact that the livestock lagoons have on Illinois' groundwater is greatly diminished.

The Board also notes that the LMFAct provides a mechanism for owners and operators of livestock management and livestock handling facilities to have decisions made by the Department of Agriculture reviewed. Section 15(f) of the LMFAct (510 ILCS 77/15(f)) states that "[a]ll actions of the Department of Agriculture are subject to the Illinois Administrative Procedure Act." The AAct sets forth requirements for the conduct of administrative hearings, including agency rules on hearings, standard of proof, the record, and the decision of

the agency. The Department of Agriculture has promulgated rules concerning the conduct of administrative hearings and may wish to update those rules for LMFAct-related appeals. (See 8 Ill. Adm. Code 1.10 *et seq.*)

The LMFAct and the Board rules contain a number of administrative determinations that are required to be made by the Department of Agriculture. For instance, the Department of Agriculture may determine that additional soil borings are necessary; it may approve alternative information sources to evaluate a proposed site; it may require changes in the design, construction or operation of the lagoon; it may require additional groundwater monitoring; and it may grant decreases in setbacks based on innovative designs incorporated into the facility. While this list is not intended to be exhaustive, it does illustrate that the Department of Agriculture has various determinations that it can make. Such actions taken by the Department of Agriculture would be covered by the APAct and the Department of Agriculture's rules on administrative hearings.

### Economic Reasonableness and Technological Feasibility

Section 55 of the LMFAct requires that any rules the Board develops be "technologically feasible and economically reasonable." (510 ILCS 77/55(c).) Various participants throughout these proceedings have commented on the economic impact of these rules on livestock management and livestock waste handling facilities. Specifically, the Farm Group presented witnesses who testified on the economic effect that these rules will generally have on livestock management and livestock waste handling facilities (Tr1. at 130-136) and the economic value of the swine industry to Illinois' economy. (Tr3. at 94-161). The Board also received testimony regarding the cost of alternative waste management technologies. (PC 64.)

After viewing all the evidence regarding the economic impact of these rules, the Board determines that these rules are economically reasonable. Where additional requirements were asked to be adopted, the Board has weighed the cost effectiveness of any such request. The Board's decisions regarding these matters are found throughout the opinion. The Board also heard testimony regarding the technical aspects of these rules. Virtually all engineering and technical experts that testified indicated their overall feasibility.

Based on all the evidence presented, the Board concludes that the rules adopted for second notice today are technologically feasible as well as economically reasonable. In sum, the Board believes that the cost to the environment and the cost of liability for polluting the environment would be far greater to Illinois farmers without the rules that we adopt today for second notice.

### CONCLUSION

The Board today adopts regulations to implement the LMFAct for second notice. The Board finds that the LMFAct and the regulations adopted here ensure that livestock facilities will be constructed, operated, and maintained in a manner that is both fiscally and

environmentally responsible. Moreover, the Board believes that these rules are a positive step in establishing consistent and responsible operations of livestock facilities in Illinois.

### ORDER

The Board hereby directs that the following proposed regulations be submitted to the Joint Committee on Administrative Rules for the purposes of second notice.

TITLE 35: ENVIRONMENTAL PROTECTION  
SUBTITLE E: AGRICULTURE RELATED POLLUTION  
CHAPTER I: POLLUTION CONTROL BOARD

PART 506  
LIVESTOCK WASTE REGULATIONS

SUBPART A: GENERAL PROVISIONS

Section	
506.101	Applicability
506.102	Severability
506.103	Definitions
506.104	Incorporations by Reference
<a href="#">506.105</a>	<a href="#">Recordkeeping</a>
<a href="#">506.106</a>	<a href="#">Alternatives, Modifications, and Waivers</a>

SUBPART B: STANDARDS FOR LIVESTOCK WASTE LAGOONS

Section	
506.201	Applicability
506.202	Site Investigation
506.203	Registration
506.204	Lagoon Design Standards
506.205	Liner Standards
506.206	Groundwater Monitoring
506.207	Certification of Construction
506.208	Failure to Register or Construct in Accordance with Standards
506.209	Lagoon Closure and Ownership Transfer

SUBPART C: WASTE MANAGEMENT PLAN

Section	
506.301	Purpose
506.302	Scope and Applicability
506.303	Waste Management Plan Contents

506.304	Livestock Waste Volumes
506.305	Nutrient Content of Livestock Waste
506.306	Adjustments to Nitrogen Availability
506.307	<a href="#">Targeted Optimum Crop Yields Goal</a>
<del>506.308</del>	<del><a href="#">Crop Nitrogen Requirements</a></del>
506.309	Nitrogen Credits
506.310	Records of Waste Disposal
506.311	Approval of Waste Management Plans
506.312	Sludge Removal
506.313	Plan Updates
506.314	Penalties

#### SUBPART D: CERTIFIED LIVESTOCK MANAGER

Section	
506.401	Applicability
<del>506.402</del>	<del><a href="#">Procedures</a></del>

#### SUBPART E: PENALTIES

Section	
506.501	General
<del>506.502</del>	<del><a href="#">Cease and Desist Order Procedures</a></del>
<del>506.503</del>	<del><a href="#">Lagoon Registration and Certification Violations</a></del>
<del>506.504</del>	<del><a href="#">Certified Livestock Manager Violations</a></del>
<del>506.505</del>	<del><a href="#">Waste Management Plan Violations</a></del>

#### SUBPART F: FINANCIAL RESPONSIBILITY

Section	
506.601	Applicability
506.602	Evidence of Financial Responsibility
506.603	Level of Surety

#### SUBPART G: SETBACKS

Section	
506.701	Applicability
506.702	Procedures
506.703	<del>Penalties</del> <a href="#">Initial Determination of Setbacks</a>
<del>506.704</del>	<del>Penalties</del>

AUTHORITY: Authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/27] and Section 55 of the Livestock Management Facilities Act and implementing the Livestock Management Facilities Act [P.A. 89-456, effective May 21, 1996, 510 ILCS 77/1].



SOURCE: Adopted in R97-15 at \_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.

NOTE: Capitalization denotes statutory language.

#### SUBPART A: GENERAL PROVISIONS

##### Section 506.101      Applicability

This Subpart applies to 35 Ill. Adm. Code 506. The applicability of Subpart B, Standards for Livestock Waste Lagoons, is set forth at Section 506.201 of this Part. The applicability of Subpart C, Waste Management Plans, is set forth at Section 506.302 of this Part. The applicability of Subpart D, Certified Livestock Manager, is set forth at Section 506.401 of this Part. The applicability of Subpart F, Financial Responsibility, is set forth at Section 506.601 of this Part. The applicability of Subpart G, Setbacks, is set forth at Section 506.701 of this Part.

##### Section 506.102      Severability

If any provision of this Part or its application to any person or under any other circumstances is adjudged invalid, such adjudication does not affect the validity of this Part as a whole or of any portion not adjudged invalid.

##### Section 506.103      Definitions

Except as stated in this Section, or unless a different meaning of a word or term is clear from the context, the definition of words or terms in this Part shall be the same as that applied to the same words or terms in the Environmental Protection Act [415 ILCS 5] or the Livestock Management Facilities Act [510 ILCS 77]. For the purposes of this Part, the terms included herein shall have their associated meaning as follows:

“AGENCY” MEANS THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY. [510 ILCS 77/10.5]

“ANIMAL FEEDING OPERATION” MEANS A FEEDING OPERATION AS DEFINED IN THE ILLINOIS ENVIRONMENTAL PROTECTION ACT AND THE RULES PROMULGATED UNDER THAT ACT CONCERNING AGRICULTURE RELATED POLLUTION. [510 ILCS 77/10.7]

“ANIMAL UNIT” MEANS A UNIT OF MEASUREMENT FOR ANY ANIMAL FEEDING OPERATION CALCULATED AS FOLLOWS:

- a) BROOD COWS AND SLAUGHTER AND FEEDER CATTLE MULTIPLIED BY 1.0.

- b) MILKING DAIRY COWS MULTIPLIED BY 1.4.
- c) YOUNG DAIRY STOCK MULTIPLIED BY 0.6.
- d) SWINE WEIGHING OVER 55 POUNDS MULTIPLIED BY 0.4.
- e) SWINE WEIGHING UNDER 55 POUNDS MULTIPLIED BY 0.03.
- f) SHEEP, LAMBS, OR GOATS MULTIPLIED BY 0.1.
- g) HORSES MULTIPLIED BY 2.0.
- h) TURKEYS MULTIPLIED BY 0.02.
- i) LAYING HENS OR BROILERS MULTIPLIED BY 0.01 (IF THE FACILITY HAS CONTINUOUS OVERFLOW WATERING).
- j) LAYING HENS OR BROILERS MULTIPLIED BY 0.03 (IF THE FACILITY HAS A LIQUID MANURE HANDLING SYSTEM).
- k) DUCKS MULTIPLIED BY 0.02. [510 ILCS 77/10.10]

“Aquifer material” means sandstone which is five feet or more in thickness, or fractured carbonate which is ten feet or more in thickness; or, sand, gravel, or sand and gravel, as defined herein, such that there is at least two feet or more present within any five foot section of a soil boring performed in accordance with Section 506.202 of this Part.

“CERTIFIED LIVESTOCK MANAGER” MEANS A PERSON THAT HAS BEEN DULY CERTIFIED BY THE DEPARTMENT AS AN OPERATOR OF A LIVESTOCK WASTE HANDLING FACILITY. [510 ILCS 77/10.15]

“DEPARTMENT” MEANS THE ILLINOIS DEPARTMENT OF AGRICULTURE. [510 ILCS 77/10.20]

“FARM RESIDENCE” MEANS ANY RESIDENCE ON A FARM OWNED OR OCCUPIED BY THE FARM OWNERS, OPERATORS, TENANTS, OR SEASONAL OR YEAR-ROUND HIRED WORKERS. FOR PURPOSES OF THIS DEFINITION, A “FARM” IS THE LAND, BUILDINGS, AND MACHINERY USED IN THE COMMERCIAL PRODUCTION OF FARM PRODUCTS, AND "FARM PRODUCTS" ARE THOSE PLANTS AND ANIMALS AND THEIR PRODUCTS WHICH ARE PRODUCED OR RAISED FOR COMMERCIAL PURPOSES AND INCLUDE BUT ARE NOT LIMITED TO FORAGES AND SOD CROPS, GRAINS AND FEED CROPS, DAIRY AND DAIRY PRODUCTS, POULTRY AND POULTRY PRODUCTS, LIVESTOCK, FRUITS, VEGETABLES, FLOWERS,

SEEDS, GRASSES, TREES, FISH, HONEY AND OTHER SIMILAR PRODUCTS, OR ANY OTHER PLANT, ANIMAL, OR PLANT OR ANIMAL PRODUCT WHICH SUPPLIES PEOPLE WITH FOOD, FEED, FIBER, OR FUR. [510 ILCS 77/10.23]

“Gravel” or “Sand and gravel” means unconsolidated materials that contain a matrix (particles of two millimeters or less) that is consistent with the definition of “sand” and particles larger than two millimeters in size.

“LAGOON” or “Earthen livestock waste lagoon” MEANS ANY EXCAVATED, DIKED, OR WALLED STRUCTURE OR COMBINATION OF STRUCTURES DESIGNED FOR BIOLOGICAL STABILIZATION AND STORAGE OF LIVESTOCK WASTES. A LAGOON DOES NOT INCLUDE STRUCTURES SUCH AS MANUFACTURED SLURRY STORAGE STRUCTURES OR PITS UNDER BUILDINGS AS DEFINED IN RULES UNDER THE ENVIRONMENTAL PROTECTION ACT CONCERNING AGRICULTURE RELATED POLLUTION. [510 ILCS 77/10.25]

“LICENSED PROFESSIONAL ENGINEER” MEANS A PERSON, CORPORATION OR PARTNERSHIP LICENSED UNDER THE LAWS OF THE STATE OF ILLINOIS TO PRACTICE PROFESSIONAL ENGINEERING. [415 ILCS 5/57.2]

“LICENSED PROFESSIONAL GEOLOGIST” MEANS AN INDIVIDUAL WHO IS LICENSED UNDER the laws of the State of Illinois TO ENGAGE IN THE PRACTICE OF PROFESSIONAL GEOLOGY IN ILLINOIS. [225 ILCS 745/15]

“LIVESTOCK MANAGEMENT FACILITY” MEANS ANY ANIMAL FEEDING OPERATION, LIVESTOCK SHELTER, OR ON-FARM MILKING AND ACCOMPANYING MILK-HANDLING AREA. TWO OR MORE LIVESTOCK MANAGEMENT FACILITIES UNDER COMMON OWNERSHIP, WHERE THE FACILITIES ARE NOT SEPARATED BY A MINIMUM DISTANCE OF 1/4 MILE, AND THAT SHARE A COMMON LIVESTOCK WASTE HANDLING FACILITY SHALL BE CONSIDERED A SINGLE LIVESTOCK MANAGEMENT FACILITY. A LIVESTOCK MANAGEMENT FACILITY AT EDUCATIONAL INSTITUTIONS, LIVESTOCK PASTURE OPERATIONS, WHERE ANIMALS ARE HOUSED ON A TEMPORARY BASIS SUCH AS COUNTY AND STATE FAIRS, LIVESTOCK SHOWS, RACE TRACKS, AND HORSE BREEDING AND FOALING FARMS, AND MARKET HOLDING FACILITIES ARE NOT SUBJECT TO THE Livestock Management Facility Act or the requirements of this Part. [510 ILCS 77/10.30]

~~“Livestock pasture operation” means a lot or facility (other than an aquatic animal production facility) where:~~

- ~~a) Crops, vegetation, forage growth, or post harvest residues that are grown in place are sustained in the normal growing season over a~~

~~substantial portion of the lot or facility; and,~~

- b) ~~Animals are not continuously confined or enclosed in a covered structure.~~

“LIVESTOCK WASTE” MEANS LIVESTOCK EXCRETA AND ASSOCIATED LOSSES, BEDDING, WASH WATERS, SPRINKLING WATERS FROM LIVESTOCK COOLING, PRECIPITATION POLLUTED BY FALLING ON OR FLOWING ONTO AN ANIMAL FEEDING OPERATION, AND OTHER MATERIALS POLLUTED BY LIVESTOCK. [510 ILCS 77/10.35]

“LIVESTOCK WASTE HANDLING FACILITY” MEANS INDIVIDUALLY OR COLLECTIVELY THOSE IMMOVABLE CONSTRUCTIONS OR DEVICES, EXCEPT SEWERS, USED FOR COLLECTING, PUMPING, TREATING, OR DISPOSING OF LIVESTOCK WASTE OR FOR THE RECOVERY OF BY-PRODUCTS FROM THE LIVESTOCK WASTE. TWO OR MORE LIVESTOCK WASTE HANDLING FACILITIES UNDER COMMON OWNERSHIP AND WHERE THE FACILITIES ARE NOT SEPARATED BY A MINIMUM DISTANCE OF 1/4 MILE SHALL BE CONSIDERED A SINGLE LIVESTOCK WASTE HANDLING FACILITY. [510 ILCS 77/10.40]

“MODIFIED” MEANS STRUCTURAL CHANGES TO A LAGOON THAT INCREASE ITS VOLUMETRIC CAPACITY. [510 ILCS 77/10.43]

“NEW FACILITY” MEANS A LIVESTOCK MANAGEMENT FACILITY OR A LIVESTOCK WASTE HANDLING FACILITY THE CONSTRUCTION OR EXPANSION OF WHICH IS COMMENCED ON OR AFTER THE EFFECTIVE DATE OF THE Livestock Management Facility~~ies~~ ACT. EXPANDING A FACILITY WHERE THE FIXED CAPITAL COST OF THE NEW COMPONENTS CONSTRUCTED WITHIN A 2-YEAR PERIOD DOES NOT EXCEED 50% OF THE FIXED CAPITAL COST OF A COMPARABLE ENTIRELY NEW FACILITY SHALL NOT BE DEEMED A NEW FACILITY AS USED IN THE Livestock Management Facility~~ies~~ ACT. [510 ILCS 77/10.45]

“NON-FARM RESIDENCE” MEANS ANY RESIDENCE WHICH IS NOT A FARM RESIDENCE. [510 ILCS 77/10.47]

“Occupied residence” means a residence that is suitable for human occupancy 50% or more of the year and is currently occupied or has been occupied in the last five years. For the purposes of this definition, “suitable for human occupancy” means the residence provides for water and sanitation.

“OWNER OR OPERATOR” MEANS ANY PERSON WHO OWNS, LEASES, CONTROLS, OR SUPERVISES A LIVESTOCK MANAGEMENT FACILITY OR LIVESTOCK WASTE-HANDLING FACILITY. [510 ILCS 77/10.50]

“PERSON” MEANS ANY INDIVIDUAL, PARTNERSHIP, CO-PARTNERSHIP, FIRM, COMPANY, CORPORATION, ASSOCIATION, JOINT STOCK COMPANY, TRUST, ESTATE, POLITICAL SUBDIVISION, STATE AGENCY, OR ANY OTHER LEGAL ENTITY OR THEIR LEGAL REPRESENTATIVE, AGENT, OR ASSIGNS. [510 ILCS 77/10.55]

“Placed in service” means the placement of livestock waste in a livestock waste lagoon upon the completion of construction or modification in accordance with the requirements of this Part.

“POPULATED AREA” MEANS ANY AREA WHERE AT LEAST 10 INHABITED NON-FARM RESIDENCES ARE LOCATED OR WHERE AT LEAST 50 PERSONS FREQUENT A COMMON PLACE OF ASSEMBLY OR A NON-FARM BUSINESS AT LEAST ONCE PER WEEK. The existence of a populated area shall be determined by identifying the area around the livestock management or livestock waste handling facility delineated by a distance equal to the applicable setback distance and; identifying the number of residences or the existence of a non-farm business or the existence of a common place of assembly within that area; ~~and comparing the appropriate number of respective units determined to be present within the setback distance.~~ For the purpose of setback requirements, common places of assembly or non-farm businesses include but are not limited to churches, hospitals, schools, day care centers, manufacturing companies, land managed for recreational or conservation purposes, museums, camps, parks, retail and wholesale facilities, and shopping centers. ~~The provisions that qualifies a~~ common place of assembly or a non-farm business ~~based on 50 persons or more frequently the said place once per week shall~~ includes places that operate less than 52 weeks per year, such as schools with seasonal vacation periods and businesses or other places which experience seasonal shutdowns, and parks, camps, and recreational areas which experience seasonal shutdowns or reduced attendance during a portion of the calendar year, provided that such places are frequented by at least 50 persons at least once per week during the portions of the year when seasonal shutdowns or reductions in attendance do not occur. [510 ILCS 77/10.60]

“Residence” means a house or other structure, including all attachments to the house or structure, which is used as a place of human habitation.

“Sand” means unconsolidated materials, where 70% or more of the particles are of size 0.06 millimeters to 2.00 millimeters, and which according to the USDA soil texture classification scheme includes soil textures of sand, and loamy sand, and portions of sandy loam and sandy clay loam.

#### Section 506.104 Incorporations by Reference

- a) The Board incorporates the following materials by reference:

- 1) APHA. American Public Health Association, 1015 Fifteenth Street, NW, Washington, DC 20005, (202) 789-5600, "Standard Methods for the Examination of Water and Wastewater", 19th Edition, 1995.
  - 2) ASAE. American Society of Agricultural Engineers, 2950 Niles Road, St. Joseph, MI 49085-9659, (616) 429-5585, "Design of Anaerobic Lagoons for Animal Waste Management", ASAE Standards 1992, ASAE EP403.1, 1992, pp. 498-500.
  - 3) [ASAE. American Society of Agricultural Engineers, 2950 Niles Road, St. Joseph, MI 49085-9659, \(616\) 429-5585, "Design of Anaerobic Lagoons for Animal Waste Management", ASAE Standards 1993, ASAE EP403.2, 1993, pp. 543-546.](#)
  - 34) NTIS. National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161, (703) 487-4600, "Methods for the Determination of Inorganic Substances in Environmental Samples", EPA Publication No. EPA-600/R-93/100 (August 1993), Doc. No. PB 94-120821.
  - 45) USDA-NRCS. United States Department of Agriculture - Natural Resources Conservation Service, 1902 Fox Drive, Champaign, IL 61820, "Waste Treatment Lagoon", Illinois Field Office Technical Guide, Section IV, IL359, [p. 5p, June 1992.](#)
- b) This Section incorporates no later amendments or editions.

#### Section 506.105 Recordkeeping

- a) [The Department shall maintain a file for all facilities registering or otherwise filing documents with the Department under these regulations.](#)
- b) [The file shall contain all registration materials, along with all supporting data and justifications, records of Department certification and determinations, groundwater monitoring results \(if required\), waste management plans \(if required\), and any other information submitted to the Department by the owner or operator of a facility.](#)
- c) [Copies of materials in the file for a registered facility shall be available for public inspection.](#)

#### Section 506.106 Alternatives, Modifications, and Waivers

- a) [All requests for alternatives, modifications, and waivers to these regulations, where allowed by the Act \(510 ILCS 77/15\(a\),\(e\)\) or this Part \(Section](#)

506.202(d), 506.204(h), 506.205(f), 506.206(j), 506.209(a)(2)) shall be made in writing to the Department. Construction may not begin or continue until the request for alternative, modification, or waiver is granted.

- b) Each request for an alternative, modification, or waiver shall contain a certification from a Licensed Professional Engineer or Licensed Professional Geologist, as relevant, that the grant of the modification is at least as protective of the groundwater, surface water and the structural integrity of the livestock waste management facility as the stated requirements or that the alternative or waiver is at least as protective as the stated requirements.
- c) The Department shall notify the applicant in writing of its determination within thirty (30) days after receipt of the request for an alternative, modification, or waiver. To grant the requested alternative, modification, or waiver, the Department must determine that the modification is at least as protective of the groundwater, surface water and the structural integrity of the livestock waste management facility as the stated requirements or that the alternative or waiver is at least as protective as the stated requirements.

## SUBPART B: STANDARDS FOR LIVESTOCK WASTE LAGOONS

### Section 506.201      Applicability

- a) This Subpart applies to any lagoon that is new or modified and has not been placed in service as of the effective date of this Part.
- b) For the purposes of this Subpart the number of animal units at a livestock management facility is the maximum design capacity of the livestock management facility.
- c) In addition, a lagoon registered and certified pursuant to the emergency rules adopted in R97-14 at 20 Ill. Reg. 14903, effective October 31, 1996 and the emergency rules adopted in R97-14 at 21 Ill. Reg. xxxxx, effective April x, 1997, shall be considered as registered and certified pursuant to this Subpart.

### Section 506.202      Site Investigation

- a) The owner or operator of a new or modified livestock waste lagoon shall conduct a site investigation in accordance with the requirements of this Section to determine if aquifer material is present (or not present) within 50 feet of the planned bottom of the lagoon.
- b) The owner or operator shall perform one or more soil borings which shall be located within the final lagoon area or within 20 feet of the final exterior berm

toe. The boring shall be performed to determine the presence of aquifer material as follows:

- 1) The soil boring shall extend to a depth that includes 50 feet from the bottom of lagoon native soil or to bedrock;
- 2) If bedrock is encountered, additional soil borings may be necessary to verify the presence of aquifer material;
- 3) Continuous samples shall be recovered from each soil boring to ensure that no gaps occur in the sample column; and
- 4) Upon completion, the boring(s) shall be properly abandoned and sealed pursuant to the Illinois Water Well Construction Code at 77 Ill. Adm. Code 920.120.

c) If the Department determines that additional soil borings are necessary to ensure the protection of the groundwater, surface water and the structural integrity of the livestock waste management facility, the Department shall require additional soil borings.

ed) As an alternative to performing the soil boring(s) required under subsection (b) or (c) of this Section, the owner or operator of a livestock waste lagoon may propose to the Department to utilize alternative information sources. The Department shall evaluate the proposal; shall determine whether the alternative information source will result in a site investigation that will be at least as protective of the groundwater, surface water and the structural integrity of the livestock waste management facility as would have resulted from data resulting from soil borings; and shall notify the owner or operator of the Department's finding.

de) The site investigation in accordance with subsections (b), ~~or (c)~~ or (d) of this Section shall be conducted under the direction of a Licensed Professional Engineer or ~~Licensed~~ Registered Professional Geologist. Upon completion of the site investigation as required under subsections (b), ~~or (c)~~ or (d) of this Section, the supervising Licensed Professional Engineer or ~~Licensed~~ Registered Professional Geologist shall certify that the site investigation meets all the applicable requirements of this Section, and whether aquifer material shall be considered present (or not present) within 50 feet of the planned bottom of the lagoon in accordance with Section 506.203 of this Part. Such certification shall include all supporting data and justification.

#### Section 506.203 Registration

- a) Prior to new construction or modification of ANY EARTHEN LIVESTOCK



WASTE LAGOON AFTER THE EFFECTIVE DATE OF this Part, such earthen livestock waste lagoon SHALL BE REGISTERED BY THE OWNER OR OPERATOR WITH THE DEPARTMENT ON A FORM PROVIDED BY THE DEPARTMENT in accordance with the requirements of this Section. LAGOONS CONSTRUCTED PRIOR TO THE EFFECTIVE DATE OF this Part MAY REGISTER WITH THE DEPARTMENT AT NO CHARGE. [510 ILCS 77/15-(b)]

- b) The registration form, accompanied by a \$50 fee, shall include the following:
- 1) NAME(S) AND ADDRESS(ES) OF THE OWNER AND OPERATOR WHO ARE RESPONSIBLE FOR THE LIVESTOCK WASTE LAGOON;
  - 2) GENERAL LOCATION OF LAGOON;
  - 3) DESIGN CONSTRUCTION PLANS AND SPECIFICATIONS (including a lagoon plot plan with dimensions and elevations);
  - 4) SPECIFIC LOCATION INFORMATION (noted on a facility site map or the lagoon plot plan):
    - A) The location and DISTANCE TO the nearest ~~THE NEAREST~~ PRIVATE OR PUBLIC POTABLE WELL;
    - B) The location and DISTANCE TO THE CLOSEST ~~NEAREST~~ OCCUPIED PRIVATE RESIDENCE (OTHER THAN ANY OCCUPIED BY the ~~THE~~-OWNER OR OPERATOR);
    - C) The location and DISTANCE TO THE NEAREST STREAM;
    - D) The location and DISTANCE TO THE NEAREST POPULATED AREA;
    - E) The location and ~~associated~~ distance to the nearest abandoned or plugged well, drainage well or injection well; and
    - F) The location of any subsurface drainage lines within 100 feet of the lagoon;
  - 5) ANTICIPATED BEGINNING AND ENDING DATES OF LAGOON CONSTRUCTION;
  - 6) TYPE OF LIVESTOCK AND NUMBER OF ANIMAL UNITS;

- 7) A certification by the supervising Licensed Professional Engineer or ~~Licensed~~Registered Professional Geologist, accompanied by supporting justification and data, certifying that the site investigation meets all the applicable requirements of Section 506.202 of this Part, whether aquifer material is considered present (or not present) within 50 feet of the planned bottom of the lagoon; and
- 8) Where applicable, a copy of the synthetic liner manufacturer's compatibility statement and liner maintenance guidelines. [510 ILCS 77/15-(b)]
- c) THE DEPARTMENT UPON RECEIPT OF A LIVESTOCK WASTE LAGOON REGISTRATION FORM SHALL REVIEW THE FORM TO DETERMINE THAT ALL REQUIRED INFORMATION HAS BEEN PROVIDED. THE PERSON FILING THE REGISTRATION SHALL BE NOTIFIED WITHIN 15 WORKING DAYS of receipt by the Department THAT REGISTRATION IS COMPLETE OR THAT CLARIFICATION INFORMATION IS NEEDED. NO LATER THAN 10 WORKING DAYS AFTER THE RECEIPT OF THE CLARIFICATION INFORMATION, THE DEPARTMENT SHALL NOTIFY THE OWNER OR OPERATOR THAT REGISTRATION IS COMPLETE or that additional clarification information is needed. [510 ILCS 77/15-(b)]
- d) The Department may, as a condition of the issuance of a livestock waste lagoon registration, conduct periodic site inspections of a livestock waste lagoon to assess its degree of compliance with the requirements of the Livestock Management Facilities Act [510 ILCS 77] and the requirements of this Part. THE PERSON MAKING ANY INSPECTION SHALL COMPLY WITH REASONABLE ANIMAL HEALTH PROTECTION PROCEDURES AS REQUESTED BY THE OWNER OR OPERATOR. [510 ILCS 77/15-(b)]
- e) CONSTRUCTION SHALL NOT BEGIN UNTIL 30 DAYS AFTER SUBMITTAL OF A REGISTRATION FORM BY CERTIFIED MAIL TO THE DEPARTMENT. [510 ILCS 77/15(b)]

Section 506.204 Lagoon Design Standards

- a) The owner or operator of ANY LIVESTOCK WASTE LAGOON SUBJECT TO this Part SHALL CONSTRUCT OR MODIFY the lagoon IN ACCORDANCE WITH:
- 1) "DESIGN OF ANAEROBIC LAGOONS FOR ANIMAL WASTE MANAGEMENT", ASAE ENGINEERING PRACTICE 403.1, as updated by ASAE Engineering Practice 403.2; OR THE GUIDELINES

PUBLISHED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE'S NATURAL RESOURCE CONSERVATION SERVICE TITLED "WASTE TREATMENT LAGOON", which are incorporated by reference in 35 Ill. Adm. Code 506.104; and

- 2) The additional design standards specified in subsections (c) through (h) of this Section. [510 ILCS 77/15-(a)]
- b) THE DEPARTMENT MAY REQUIRE CHANGES IN DESIGN OR ADDITIONAL REQUIREMENTS TO PROTECT GROUNDWATER, SUCH AS EXTRA LINER DEPTH OR SYNTHETIC LINERS, WHEN IT APPEARS GROUNDWATER COULD BE IMPACTED. [510 ILCS 77/15-(a)]
- c) The owner or operator shall conduct site investigation in accordance with Section 506.202 of this Part to determine if aquifer material is present (or not present) within 50 feet of the planned bottom of the lagoon.
- d) The owner or operator shall, as a part of the lagoon design, include the use of a liner and implement groundwater monitoring in accordance with following conditions:
  - 1) If the upper-most aquifer material is located above or within 20 feet of the lowest point of the planned lagoon bottom (as measured from the top of any proposed liner), then the lagoon design shall include both a liner and groundwater monitoring.
  - 2) If the uppermost aquifer material is located between 20 to 50 feet from the lowest point of the planned lagoon (as measured from the top of any proposed liner), then the lagoon design shall include a liner, but no groundwater monitoring is required.
  - 3) If no aquifer material is located within 50 feet from the lowest point of the planned lagoon (as measured from the top of any proposed liner), then the lagoon design shall require neither a liner nor groundwater monitoring.
- e) If the owner or operator determines that a liner is required for the lagoon pursuant to this Section, the design of the lagoon shall include an in-situ soil liner, a borrowed clay, or clay/bentonite mixture, or a synthetic liner meeting the requirements of Section 506.205 of this Part.
- f) If the owner or operator determines that groundwater monitoring is required for the lagoon pursuant to this Section, the design of lagoon shall include the implementation of a groundwater monitoring program in accordance with Section 506.206 of this Part.

- g) Any livestock waste lagoon subject to the provisions of this Part shall meet or exceed the following:
- 1) Berm:
    - A) The minimum berm top width shall be 8 feet;
    - B) The berm may contain no outlet piping that extends through the berm unless the piping discharges to another lagoon;
  - 2) Berm slope:
    - A) ~~Interior and e~~Exterior and normally exposed interior (above the liquid level elevation corresponding to the summation of the sludge volumes and minimum design volume) earthen walls shall have side slopes not steeper than a 3 to 1 ratio of horizontal to vertical and a vegetative cover shall be established on any exposed berm areas and kept mowed or otherwise maintained to eliminate erosion or other berm deterioration;
    - B) Interior berm earthen walls below the liquid level elevation corresponding to the summation of the sludge volumes and minimum design volume shall have side slopes not steeper than a 3 to 1 ratio of horizontal to vertical; or a 2 to 1 ratio of horizontal to vertical if designed by a Licensed Professional Engineer and maintained to eliminate berm deterioration;
  - 3) The lagoon's total design volume shall be not less than the volume calculated as the summation of the following:
    - A) A minimum design volume, as calculated pursuant to subsection 45.4.1.1, ASAE EP 403.12, ASAE Standards 19923, p. 498, 499543-545;
    - B) A livestock waste volume, which shall be sufficient to store the waste generated by the facility for a period not less than 270 days as determined from Table 1, in accordance with ASAE EP 403.12, ASAE Standards 19923, p. 498543;
    - C) Runoff and wash down volumes, based on a 6-inch rainfall covering the lagoon surface and any other areas such as open lots, roofs or other surfaces where collected precipitation is directed into the lagoon plus the volume of any wash down liquids utilized within the facility which are also directed into the

lagoon; and

D) A sludge accumulation volume, as calculated pursuant to subsection 45.4.1.4, ASAE EP 403.12, ASAE Standards 19923, p. 499545;

- 4) In addition to the lagoon's total design volume, a freeboard shall be provided as follows:
  - A) For lagoons serving a livestock management facility with a maximum design capacity of less than 300 animal units and the lagoon does not collect runoff from areas other than the exposed surface of the lagoon (including associated interior berm slopes and flat berm top areas), the top of the settled embankment shall be not less than 1 foot above the fluid surface level of the lagoon total design volume; or
  - B) For all other lagoons, the top of the settled embankment shall be not less than 2 feet above the fluid surface level of the lagoon total design volume;
- 5) Subsurface drainage lines in the immediate area of the livestock waste lagoon shall be removed or relocated to provide for a minimum separation distance of not less than 50 feet between the outermost extent of the lagoon (exterior toe of the berm) and the subsurface drainage line;
- 6) The minimum separation distance between the outermost extent of a lagoon (exterior toe of the berm) and any potential route of groundwater contamination, as defined in the Illinois ~~Groundwater Protection Act [415 ILCS 55]~~ Environmental Protection Act [415 ILCS 55] shall be not less than 100 feet. In addition, the minimum separation distance between the outermost extent of a lagoon (exterior toe of the berm) and a non-potable well, an abandoned or plugged well, drainage well or injection well shall be not less than 100 feet;
- 7) The design and construction of the lagoon shall include the installation of a lagoon liquid level board or staff gauge within the interior of the liquid storage volume. The liquid level board or staff gauge shall include a mark at the liquid level elevation corresponding to the summation of the sludge volume and minimum design volume and shall be designated as the "STOP PUMPING" elevation. The liquid level board or staff gauge shall also be marked at the liquid level elevation corresponding to the summation of the sludge volume, minimum design volume, and livestock waste volume and shall be designated as the "START PUMPING" elevation;

- 8) Water shall be added to a newly constructed or modified lagoon to a ~~depth of~~ at least 60% of the design ~~depth~~volume prior to the initial addition of waste; and
- 9) The location of the lagoon and the associated livestock management facility shall be in compliance with all setback provisions of the Illinois Environmental Protection Act [415 ILCS 5], the Livestock Management Facilities Act [510 ILCS 77], and the rules promulgated thereunder.
- h) THE OWNER OR OPERATOR OF THE EARTHEN LIVESTOCK LAGOON MAY, upon written request and WITH written APPROVAL FROM THE DEPARTMENT, ~~deviate from~~MODIFY OR EXCEED THESE STANDARDS IN ORDER TO MEET SITE SPECIFIC OBJECTIVES. The owner or operator shall demonstrate that such ~~deviation~~modification shall be at least as protective of the groundwater, surface water and the structural integrity of the livestock waste management facility as the requirements of this Part. [510 ILCS 77/15 (a)]

#### Section 506.205 Liner Standards

- a) The design of a liner constructed from in-situ soils, borrowed clay or a clay/bentonite mixture, or a synthetic liner pursuant to Section 506.204-(d) of this Part shall comply with the requirements of this Section.
- b) A liner constructed using in-situ soil or borrowed clay or clay/bentonite mixtures shall meet the following standards:
  - 1) The minimum liner thickness shall be 2 feet;
  - 2) The liner shall be constructed in lifts not to exceed 6 inches in thickness;
  - 3) The liner shall be compacted to achieve a hydraulic conductivity equal to or less than  $1 \times 10^{-7}$  centimeters/second; and
  - 4) The construction and compaction of the liner shall be carried out to reduce void spaces and allow the liner to support the loadings imposed by the waste disposal operation without settling.
- c) Any synthetic liner used in the construction of a livestock waste lagoon shall meet the following standards:
  - 1) The liner shall be designed to perform equivalent to or better than a liner that conforms to subsection (b) of this Section;

- 2) The liner manufacturer shall provide to the owner or operator the liner maintenance guidelines and shall certify that the liner is chemically compatible with:
    - A) The livestock waste being stored; and
    - B) The supporting soil materials;
  - 3) The liner shall be supported by a compacted base free from sharp objects;
  - 4) The liner shall have sufficient strength and durability to function at the site for the design period under the maximum expected loadings imposed by the waste and equipment and stresses imposed by settlement, temperature, construction and operation;
  - 5) The liner seams shall be made in the field according to the manufacturer's specifications. All sections shall be arranged so that the use of field seams is minimized and seams are oriented in the direction subject to the least amount of stress; and
  - 6) The owner or operator shall maintain a copy of the manufacturer's compatibility statement and liner installation and maintenance guidelines at the facility.
- d) The design, construction and installation of the liner in accordance with this Section shall be conducted under the direction of a Licensed Professional Engineer. Upon completion of construction or installation of the liner, the supervising Licensed Professional Engineer shall certify that the liner meets all the applicable requirements of this Section. Such certification shall include all supporting justification and data.
  - e) The owner or operator of a livestock waste lagoon shall submit to the Department a copy of the Licensed Professional Engineer's Certification prior to placing the lagoon in service in accordance with Section 506.207 of this Part.
  - f) THE OWNER OR OPERATOR OF THE EARTHEN LIVESTOCK LAGOON MAY, upon written request and WITH written APPROVAL FROM THE DEPARTMENT, ~~deviate from~~ **MODIFY OR EXCEED** THESE STANDARDS IN ORDER TO MEET SITE SPECIFIC OBJECTIVES. The owner or operator shall demonstrate that such ~~deviation~~ **modification** shall be at least as protective of the groundwater, surface water and the structural integrity of the livestock waste management facility as the requirements of this Part. [510 ILCS 77/15 (a)]

## Section 506.206 Groundwater Monitoring

- a) The owner or operator of any livestock waste lagoon required to implement groundwater monitoring pursuant to Section 506.204-(d) of this Part shall implement a monitoring program which meets the requirements of this Section.
- b) The groundwater monitoring network shall consist of a minimum of three monitoring wells on the basis of local groundwater conditions within 20 feet of the exterior toe of the berm with at least two wells down gradient of the lagoon. For the purposes of groundwater monitoring network design, multiple cell lagoons shall be considered as a single lagoon.
- c) The monitoring wells shall be installed in accordance with the following:
  - 1) The requirements of Illinois Water Well Construction Code at 77 Ill. Adm. Code 920.170;
  - 2) The top of the well screen shall be set at the estimated seasonal low water table elevation;
  - 3) Monitoring wells shall utilize a five foot screened interval; and
  - 4) The screen shall be set in a sand pack of no less than five feet and no greater than seven feet.
- d) Prior to placing the lagoon in service, water level measurements shall be made at each monitoring well to establish the local groundwater gradient at the lagoon site.
- e) ~~Monitoring wells shall be sampled~~The owner or operator shall sample each monitoring well at least once prior to placing the lagoon in service and at least quarterly thereafter. The samples shall be collected and analyzed consistent with the methods specified in Section 506.104(a)(1) and (4) of this Part for each of the following:
  - 1) Nitrate-nitrogen;
  - 2) Phosphate-phosphorous;
  - 3) Chloride;
  - 4) Sulfate;
  - 5) Ammonia-nitrogen;



- 6) Escherichia coli or fecal coliform; and
- 7) Fecal Streptococcus.

f) The Department may collect and analyze samples or split samples from monitoring wells installed pursuant to this Section at the Department's discretion. The Department shall provide notice to the owner or operator of the livestock waste lagoon of such activity and SHALL COMPLY WITH REASONABLE ANIMAL HEALTH PROTECTION PROCEDURES AS REQUESTED BY THE OWNER OR OPERATOR. [510 ILCS 77/15-(b)]

fg) Analytical results as determined in subsection (e) of this Section shall be submitted to the Department within 45 days after sample collection and shall include a discussion relative to the significance of the results. Such discussion of significance shall include:

- 1) A comparison of the results to the initial sampling made prior to the lagoon being placed in service; and
- 2) A description of any proposed response action necessary to mitigate potential impacts to groundwater.

gh) The Department shall review the submittal provided pursuant to subsection (gf) of this Section, evaluate the proposed response action, and provide a time frame for the correction of any identified deficiencies. As a result of the evaluation, the Department may approve or modify the monitoring program or response action including, but not limited to, the following:

- 1) Increase or decrease the monitoring well sampling frequency;
- 2) Add or delete items from the list of sample analytes; or
- 3) Require changes to the design, construction or operation of the lagoon or changes in the operation of the livestock management facility which shall be implemented by the owner or operator within the time frame established by the Department.

i) Failure of the owner or operator to submit the information required pursuant to subsection (gf) of this Section or to implement the response action approved or modified by the Department shall be considered ~~as~~ a failure to construct a lagoon in accordance with the requirements of this Part and shall subject the owner or operator to penalties set forth in this Part and the Livestock Management Facilities Act [510 ILCS 77].

hj) THE OWNER OR OPERATOR OF THE EARTHEN LIVESTOCK LAGOON

MAY, upon written request and WITH written APPROVAL FROM THE DEPARTMENT, ~~deviate from~~ MODIFY OR EXCEED THESE STANDARDS IN ORDER TO MEET SITE SPECIFIC OBJECTIVES. The owner or operator shall demonstrate that such ~~deviation~~ modification shall be at least as protective of the groundwater, surface water and the structural integrity of the livestock waste management facility as the requirements of this Part. [510 ILCS 77/15 (a)]

Section 506.207 Certification of Construction

- a) THE DEPARTMENT SHALL INSPECT AN EARTHEN LIVESTOCK WASTE LAGOON AT LEAST ONCE DURING THE PRE-CONSTRUCTION, CONSTRUCTION ~~OR~~ or POST-CONSTRUCTION PHASE and SHALL REQUIRE MODIFICATIONS WHEN NECESSARY to ensure the project will be in compliance with the requirements of this Part. [510 ILCS 77/15-(b)]
- b) Upon completion of construction or installation of a liner, the supervising Licensed Professional Engineer shall certify that the liner meets all the applicable requirements of Section 506.205 of this Part. Such certification shall be submitted to the Department prior to placing the lagoon in service and shall include supporting data and justification.
- c) UPON COMPLETION OF THE CONSTRUCTION OR MODIFICATION, BUT PRIOR TO PLACING THE LAGOON IN SERVICE, THE OWNER OR OPERATOR OF THE LIVESTOCK WASTE LAGOON SHALL CERTIFY ON A FORM PROVIDED BY THE DEPARTMENT THAT THE LAGOON HAS BEEN CONSTRUCTED OR MODIFIED IN ACCORDANCE WITH THE STANDARDS SET FORTH IN SUBSECTION ~~(a)~~ (aA) OF SECTION 15 of the Livestock Management Facilities Act [510 ILCS 77] and the requirements of this Part AND THAT THE INFORMATION PROVIDED ON THE REGISTRATION FORM and other supporting documents as required by this Part IS CORRECT. THE CERTIFICATION NOTICE TO THE DEPARTMENT SHALL INCLUDE A CERTIFICATION STATEMENT AND SIGNATURE. [510 ILCS 77/15-(b)]
- d) THE OWNER OR OPERATOR OF THE LAGOON MAY PROCEED TO PLACE THE LAGOON IN SERVICE NO EARLIER THAN 10 WORKING DAYS AFTER SUBMITTING TO THE DEPARTMENT A CERTIFICATION OF COMPLIANCE STATEMENT. [510 ILCS 77/15-(b)]

Section 506.208 Failure to Register or Construct in Accordance with Standards

- a) THE OWNER OR OPERATOR OF ANY EARTHEN LIVESTOCK WASTE LAGOON SUBJECT TO REGISTRATION THAT HAS NOT BEEN

REGISTERED OR CONSTRUCTED IN ACCORDANCE WITH STANDARDS SET FORTH IN SUBSECTION (aA) OF SECTION 15 of the Livestock Management Facilities Act [510 ILCS 77] and in this Part SHALL, UPON BEING IDENTIFIED AS SUCH BY THE DEPARTMENT, BE GIVEN WRITTEN NOTICE BY THE DEPARTMENT TO REGISTER AND CERTIFY THE LAGOON WITHIN 10 WORKING DAYS OF RECEIPT OF THE NOTICE. THE DEPARTMENT MAY INSPECT SUCH LAGOON AND REQUIRE COMPLIANCE IN ACCORDANCE WITH SUBSECTIONS (aA) AND (bB) of the Livestock Management Facilities Act [510 ILCS 77] and this Part. IF THE OWNER OR OPERATOR OF THE LIVESTOCK WASTE LAGOON THAT IS SUBJECT TO REGISTRATION FAILS TO COMPLY WITH THE NOTICE, THE DEPARTMENT MAY ISSUE A CEASE AND DESIST ORDER UNTIL SUCH TIME AS COMPLIANCE IS OBTAINED WITH THE REQUIREMENTS OF the Livestock Management Facilities Act [510 ILCS 77] and this Part. FAILURE TO CONSTRUCT THE LAGOON IN ACCORDANCE WITH THE CONSTRUCTION PLAN AND DEPARTMENT RECOMMENDATIONS IS A BUSINESS OFFENSE PUNISHABLE BY A FINE OF NOT MORE THAN \$5,000. [510 ILCS 77/15-(f)]

- b) If the owner or operator of the livestock waste lagoon that is subject to registration fails to comply with the notice which addresses violations occurring during lagoon construction, a cease and desist order to stop construction may be issued by the Department. Changes shall be made to the lagoon by the owner or operator to ensure construction according to the provisions of the Livestock Management Facilities Act [510 ILCS 77] and this Part. The cease and desist order shall be canceled by the Department upon submission of the registration materials by the lagoon owner or operator to the Department, and after the Department's review of the construction plans and specifications and lagoon registration materials, and after determination of compliance with the Livestock Management Facilities Act [510 ILCS 77] and this Part by the Department.
- c) If the owner or operator of the livestock waste lagoon that is subject to registration fails to comply with the notice which addresses violations which occur after completion of lagoon construction, an operational cease and desist order may be issued by the Department. Any necessary changes shall be made to the lagoon by the lagoon owner or operator to comply with the Livestock Management Facilities Act [510 ILCS 77] and this Part. The operational cease and desist order shall be canceled by the Department after the Department determines compliance with the Livestock Management Facilities Act [510 ILCS 77] and this Part.

Section 506.209      Lagoon Closure and Ownership Transfer

- a) ~~Closure:~~ WHEN ANY EARTHEN LIVESTOCK WASTE LAGOON IS REMOVED FROM SERVICE, IT SHALL BE COMPLETELY EMPTIED.

APPROPRIATE CLOSURE PROCEDURES SHALL BE FOLLOWED AS DETERMINED BY the requirements of this Part. [510 ILCS 77/15-(e)]

- 1) In the event that any earthen livestock waste lagoon is to be removed from service, the requirements contained in Section 15 (e) of the Livestock Management Facilities Act [510 ILCS 77] shall be met and the owner or operator shall submit a lagoon closure plan to the Department for review and approval. The plan shall provide for the following:
  - A) The sampling, analysis and reporting of results ~~in the closure plan to the Department~~ of all remaining livestock waste, sludge and minimum six-inch thickness of soil from throughout the lagoon interior consistent with the requirements of Section 506.312 of this Part;
  - B) The removal of all remaining livestock waste including sludge, the removal of a minimum 6 inch thickness of soil from throughout the lagoon interior, and the application of these materials to crop land at agronomic rates consistent with the provisions of the site livestock waste management plan or their otherwise proper disposal;
  - C) The removal of all associated appurtenances, including but not limited to transfer lines, ramps, pumping ports and other waste conveyance structures;
  - D) The proper management of any impounded precipitation in the remaining excavation if it is not immediately filled and the area immediately returned to its pre-construction condition;
  - E) The proper abandonment of any monitoring wells installed pursuant to Section 506.206 of this Part which shall be conducted pursuant to the Illinois Water Well Construction Code at 77 Ill. Adm. Code 920.120; and
  - F) A proposed time frame for the completion of the closure activities which will be no greater than two years from the cessation of operation date unless the lagoon is maintained or serviced. [510 ILCS 77/15(e)]
- 2) The Department shall review and approve or request additional information relative to the lagoon closure plan. THE DEPARTMENT MAY also GRANT A WAIVER TO any of THE BEFORE-STATED CLOSURE REQUIREMENTS THAT WILL PERMIT THE LAGOON TO BE USED FOR AN ALTERNATIVE PURPOSE. [510 ILCS 77/15

(e)]

3) Upon completion of the lagoon closure activities as prescribed by the Department-approved closure plan, the owner or operator shall notify the Department to allow for post closure inspection. The Department shall conduct a site inspection and issue a written notification of closure completion or inform the owner or operator of any unresolved closure issues.

b) ~~Ownership Transfer:~~ UPON A CHANGE IN THE OWNERSHIP OF A REGISTERED EARTHEN LIVESTOCK WASTE LAGOON, THE new OWNER SHALL NOTIFY, in writing, THE DEPARTMENT OF THE CHANGE WITHIN 30 WORKING DAYS OF THE CLOSING OF THE TRANSACTION. [510 ILCS 77/15-(e)]

#### SUBPART C: WASTE MANAGEMENT PLAN

##### Section 506.301 Purpose

Livestock waste management plans shall be prepared by livestock management facility owners or operators to provide for adequate land area for the proper application of livestock waste at rates not to exceed the agronomic nitrogen requirement of the crop to be grown during that growing season.

##### Section 506.302 Scope and Applicability

- a) A waste management plan shall be prepared according to the requirements contained in Section 20 of the Livestock Management Facilities Act [510 ILCS 77] and in this Subpart. THE APPLICATION OF LIVESTOCK WASTE TO THE LAND IS AN ACCEPTABLE, RECOMMENDED, AND ESTABLISHED PRACTICE IN ILLINOIS. HOWEVER, WHEN LIVESTOCK WASTE IS NOT APPLIED IN A RESPONSIBLE MANNER, IT MAY CREATE POLLUTIONAL PROBLEMS. IT SHOULD BE RECOGNIZED THAT, IN MOST CASES, IF THE AGRONOMIC NITROGEN RATE IS MET, THE PHOSPHORUS APPLIED WILL EXCEED THE CROP REQUIREMENTS, BUT NOT ALL OF THE PHOSPHORUS MAY BE AVAILABLE FOR USE BY THE CROP. IT WILL BE CONSIDERED ACCEPTABLE, THEREFORE, TO PREPARE AND IMPLEMENT A WASTE MANAGEMENT PLAN BASED ON THE NITROGEN RATE. [510 ILCS 77/20(f)]
- b) THE LIVESTOCK MANAGEMENT FACILITY OWNER OR OPERATOR AT A FACILITY OF LESS THAN 1,000 ANIMAL UNITS SHALL NOT BE REQUIRED TO PREPARE AND MAINTAIN A WASTE MANAGEMENT PLAN. [510 ILCS 77/20(b)]

- c) THE LIVESTOCK MANAGEMENT FACILITY OWNER OR OPERATOR AT A FACILITY OF 1,000 OR GREATER ANIMAL UNITS BUT LESS THAN 7,000 ANIMAL UNITS SHALL PREPARE, maintain and implement a waste management plan and comply with the following: [510 ILCS 77/20(c)]
- 1) For facilities which commence operations or reach or exceed 1,000 animal units after the effective date of this Part, the owner or operator shall prepare, maintain, and implement a waste management plan within 60 working days ~~of~~after commencing operations or exceeding 1,000 animal units;
  - 2) Prior to the expiration of the waste management plan preparation period, the owner or operator shall submit to the Department a form certifying that a waste management plan has been prepared. The form shall also list the location of the plan;
  - 3) The waste management plan and records of livestock waste disposal shall be kept on file at the facility for a period of three years and shall be available for inspection by Department personnel during normal business hours; and
  - 4) NOT-WITHSTANDING ~~THE~~the above provisions, A LIVESTOCK MANAGEMENT FACILITY SUBJECT TO THIS SUBSECTION (c) MAY BE OPERATED ON AN INTERIM BASIS BUT NOT TO EXCEED ~~SIX~~6 MONTHS AFTER THE EFFECTIVE DATE OF ~~THE RULES PROMULGATED PURSUANT TO the Livestock Management Facilities Act [510 ILCS 77]~~this Part TO ALLOW FOR THE OWNER OR OPERATOR OF THE FACILITY TO DEVELOP A WASTE MANAGEMENT PLAN. [510 ILCS 77/20(c)]
- d) ~~The owner or operator of a livestock management facility with 7,000 or greater animal units shall prepare, maintain, implement, and submit to the Department the waste management plan for approval~~THE LIVESTOCK MANAGEMENT FACILITY OWNER OR OPERATOR AT A FACILITY OF 7,000 OR GREATER ANIMAL UNITS SHALL PREPARE, MAINTAIN, implement, AND SUBMIT TO THE DEPARTMENT THE WASTE MANAGEMENT PLAN FOR APPROVAL [510 ILCS 77/20(d)] and comply with the following:
- 1) For facilities which commence operations after the effective date of this Part, the owner or operator shall submit a waste management plan to the Department. The facility shall not commence operation before the Department approves the plan;
  - 2) For existing facilities that reach or exceed 7,000 animal units through

expansion, the owner or operator shall submit to the Department a waste management plan within 60 working days after reaching or exceeding 7,000 animal units for approval by the Department; and

- 3) The waste management plan and records of livestock waste disposal shall be kept on file at the facility for a period of three years and shall be available for inspection by Department personnel during normal business hours.
- e) A separate waste management plan shall be developed for each livestock waste handling facility. Livestock waste from each different type of livestock waste storage structure or system shall be accounted for in separate waste management plans or as separate sections of one plan. Waste from different types of storage structures may be applied to the same land provided that the nitrogen rate to obtain targeted optimum crop yields goals is not exceeded.
- f) Notwithstanding the above provisions, a facility owner or operator who prepared a waste management plan pursuant to the emergency amendment adopted in R97-14 at 20 Ill. Reg. 14903, effective October 31, 1996, shall be deemed to have prepared a waste management plan pursuant to this Subpart.
- g) For the purposes of this Subpart, the number of animal units served by a livestock waste handling facility shall be determined as the maximum design capacity of the livestock management facility which is being served by the livestock waste handling facility.

#### Section 506.303 Waste Management Plan Contents

The Livestock Waste Management Plan shall contain the following items:

- a) Name, address, and phone number of the owner(s) of the livestock facility;
- b) Name, address, and phone number of the manager or operator if different than the owner(s);
- c) Address, phone number, and plat location of the facility, and directions from nearest post office;
- d) Type of waste storage for the facility;
- e) Species, general size, number of animals, and number of animal units at the facility;
- f) Aerial photos and maps outlining fields available and intended for livestock waste applications with available acreage listed and with residences, non-farm

businesses, common places of assembly, streams, wells, waterways, lakes, ponds, rivers, drainage ditches, and other water sources indicated;

- g) For application fields not owned or rented, copies of waste application agreements between the owner or operator of the livestock facility and the owner of the land where livestock waste will be applied;
- h) AN ESTIMATE OF THE VOLUME OF WASTE TO BE DISPOSED OF ANNUALLY; [510 ILCS 77/20(f)(1)]
- i) Cropping schedule for each field for the past year, anticipated crops for the current year, and anticipated crops for the next two years after the current year;
- j) ~~TargetedOptimum~~ crop yields goal for each crop in each field, ~~verified by yield history, if available~~;
- k) Estimated nNutrient content of the livestock waste;
- l) Livestock waste application methods;
- m) Calculations showing the following:
  - 1) Amount of available livestock waste for application;
  - 2) Amount of nitrogen available for application;
  - 3) Nitrogen loss due to method of application;
  - 4) Amount of plant-available nitrogen including mineralization of organic nitrogen;
  - 5) Amount of nitrogen required by each crop in each field based on targetedoptimum crop yields goal;
  - 6) Nitrogen credits from previous crops, from other sources of fertilizer applied for the growing season, and from any manure applications during the previous three years for each application field;
  - 7) Livestock waste application rate based on nitrogen for each application field; and
  - 8) Land area required for application;
- n) A listing of fields and the planned livestock waste application amounts for each field;



- o) A PROVISION THAT LIVESTOCK WASTE APPLIED WITHIN 1/4 MILE OF ANY RESIDENCE NOT PART OF THE FACILITY SHALL BE INJECTED OR INCORPORATED ON THE DAY OF APPLICATION. HOWEVER, LIVESTOCK MANAGEMENT FACILITIES AND LIVESTOCK WASTE HANDLING FACILITIES THAT HAVE IRRIGATION SYSTEMS IN OPERATION PRIOR TO May 21, 1996, OR EXISTING FACILITIES APPLYING WASTE ON FROZEN GROUND ARE NOT SUBJECT TO THE PROVISIONS OF THIS subsection (o) ~~of this Section;~~ [510 ILCS 77/20(f)(5)];
- p) A PROVISION THAT LIVESTOCK WASTE MAY NOT BE APPLIED WITHIN 200 FEET OF SURFACE WATER UNLESS THE WATER IS UPGRADE OR THERE IS ADEQUATE DIKING AND WASTE WILL NOT BE APPLIED WITHIN 150 FEET OF POTABLE WATER SUPPLY WELLS; [510 ILCS 77/20(f)(6)];
- q) A PROVISION THAT LIVESTOCK WASTE MAY NOT BE APPLIED IN A 10-YEAR FLOOD PLAIN UNLESS THE INJECTION OR INCORPORATION METHOD OF APPLICATION IS USED; [510 ILCS 77/20(f)(7)];
- r) A PROVISION THAT LIVESTOCK WASTE MAY NOT BE APPLIED IN WATERWAYS. ~~For the purposes of this Part, a grassed area serving as a waterway may receive livestock waste through an irrigation system however livestock waste may be applied through irrigation systems onto grassed waterways~~ if there is no runoff, the distance from applied livestock waste to surface water is greater than 200 feet, the distance from applied livestock waste to potable water supply wells is greater than 150 feet; the distance from applied livestock waste to a non-potable well, an abandoned or plugged well, a drainage well, or an injection well is greater than 100 feet; and precipitation is not expected within 24 hours; ~~and~~ [510 ILCS 77/20(f)(8)];
- s) A PROVISION THAT IF WASTE IS SPREAD ON FROZEN OR SNOW-COVERED LAND, THE APPLICATION WILL BE LIMITED TO LAND AREAS ON WHICH:
- 1) LAND SLOPES ARE 5% OR LESS; OR
  - 2) ADEQUATE EROSION CONTROL PRACTICES EXIST. [510 ILCS 77/20(f)(9)];
- t) For livestock facilities utilizing an earthen lagoon or other earthen waste storage structure, a provision that the owner, operator, or certified livestock manager shall inspect all berm tops, exterior berm sides, and non-submerged interior berm sides for evidence of erosion, burrowing animal activity, and other

indications of berm degradation on a frequency of not less than once every two weeks; and

- u) ~~A provisions that the livestock waste handling facility owner, operator, or certified manager shall consider the addition of zinc and copper to the analyte list utilized for soil samples collected as part of the normal soil sampling and testing program for crop production from the land where livestock waste is applied. Such results shall become a part of the waste management plan and shall be available for inspection by Department personnel during normal business hours.~~
- u) A provision that livestock waste may not be applied during a rainfall or to saturated soil and that conservative waste loading rates will be used in the case of a high water table or shallow earth cover to fractured bedrock. Caution should be exercised in applying livestock wastes, particularly on porous soils, so as not to cause nitrate or bacteria contamination of groundwaters.

#### Section 506.304 Livestock Waste Volumes

The volume of available livestock waste for application, as required in Section 506.303(m)(1) of this Part, shall be determined from site specific measurements of the waste storage structure. Calculations and a description of the volume determination shall be included in the waste management plan.

#### Section 506.305 Nutrient Content of Livestock Waste

- a) For new facilities without a waste management plan or facilities where a waste management plan is being initially prepared pursuant to this Part, the owner or operator shall obtain the nitrogen content of the livestock waste, as required in Section 506.303(m)(2) of this Part, from the results of a laboratory analysis of livestock waste samples from the waste storage facility, or from estimated values provided by the University of Illinois Cooperative Extension Service or the Natural Resources Conservation Service of the United States Department of Agriculture.
- b) The livestock waste handling facility owner or operator shall annually obtain a laboratory analysis of the nutrient content of the livestock waste to be applied to land as provided within the waste management plan. Livestock waste shall be sampled ~~and analyzed within 60 working days prior to application of the waste during the application process.~~ Multiple subsamples shall be obtained and may be combined into one sample for analysis so that a representative sample is used for preparation of the waste management plan. A sample taken during waste application the previous year can be used as a representative sample of the waste to be applied the following year unless there has been a change in the waste management practices.

- c) Livestock waste sampling shall be performed under the direction of a certified livestock manager to ensure a representative sample from the livestock waste storage facility and to preserve the integrity of the sample.
- d) The laboratory analysis of the livestock waste sample shall include, but not be limited to, total nitrogen, ammonium nitrogen, total phosphorus, and total potassium, ~~copper, and zinc~~. Results of the analysis shall be included in the waste management plan.

#### Section 506.306 Adjustments to Nitrogen Availability

Adjustments shall be made to nitrogen availability to account for nitrogen loss from livestock waste due to method of application, as required in Section 506.303(m)(3), and to account for the conversion of organic nitrogen into a plant available form, as required in Section 506.303(m)(4) of this Part. ~~The Department may adopt criteria which set forth the adjustments to nitrogen availability.~~

#### Section 506.307 Targeted~~Optimum~~ Crop Yields Goal

- a) The targeted~~optimum~~ crop yield goal, as required in Section 506.303(m)(5) of this Part, shall be determined for each field where the livestock waste is to be applied. The targeted~~optimum~~ crop yield goal shall be determined by obtaining an average yield over a five-year period from the field where livestock waste is to be applied. The following ~~prioritized~~ listing of sources of data shall be utilized to determine the targeted crop yield goal ~~average yield~~. ~~The sources shall be utilized according to the prioritized order:~~
  - 1) Proven yields. The proven yield shall be determined by obtaining an average yield over a five-year period from the field where livestock waste is to be applied. The owner or operator shall indicate the method used to determine the proven yield. Data from years with crop disasters may be discarded. Proven yields shall be used unless there is a sound agronomic basis for predicting a different targeted crop yield goal;
  - 2) Crop insurance yields. A copy of the crop insurance yields shall be included in the plan; or
  - 3) Farm Service Agency - United States Department of Agriculture yields. A copy of the assigned crop yields shall be included in the plan.
- b) Soils based yield data from the Natural Resources Conservation Service of the United States Department of Agriculture shall be used if the owner or operator cannot obtain an optimum ~~targeted~~ crop yield goal pursuant to subsection (a) of this Section. A soil map of the application areas shall be included in the plan.

The ~~targeted optimum~~ crop yield goal shall be determined by a weighted average of the soil interpretation yield estimates for the areas that will receive livestock waste.

~~Section 506.308 — Crop Nitrogen Requirements~~

~~Unless otherwise provided for by Board regulations, the Department may adopt criteria setting forth values for crop nitrogen requirements. These values shall be used by the livestock facility owner or operator in the calculations required in Section 506.303(m)(5) of this Part.~~

Section 506.309 Nitrogen Credits

- a) Nitrogen credits shall be calculated by the livestock facility owner or operator, pursuant to Section 506.303(m)(6) of this Part, for nitrogen-producing crops grown the previous year, for other sources of nitrogen applied for the growing season, and for mineralized organic nitrogen in livestock waste applied during the previous three years.
- b) Nitrogen credits shall be calculated by the livestock facility owner or operator for the mineralized organic nitrogen in livestock waste applied during the previous three years at the rate of 50%, 25%, and 12.5%, respectively, of that mineralized during the first year.
- ~~c) Unless otherwise provided for by Board regulations, the Department may adopt criteria setting forth values for nitrogen credits from previous crops.~~

Section 506.310 Records of Waste Disposal

Records of the livestock waste disposal shall include the following items:

- a) Date of livestock waste application;
- b) The field where livestock waste application was made;
- c) Method of livestock waste application;
- d) Livestock waste application rate;
- e) Number of acres receiving waste; and
- f) Amount of livestock waste applied.

Section 506.311 Approval of Waste Management Plans

- a) Department approval of livestock waste management plans shall be based on the

following criteria:

- 1) Livestock waste application rate of nitrogen not to exceed the crop nitrogen requirements for targeted optimum crop yields goals;
  - 2) Demonstration of adequate land area for livestock waste application based on Section 506.303 of this Part; and
  - 3) Completeness and accuracy of plan contents as specified in Section 506.303 of this Part.
- b) The owner or operator of the livestock management facility shall be notified by the Department within 30 working days after receipt of the livestock waste management plan that the plan has been approved or that further information or changes are needed. The owner or operator shall provide the information or changes within 30 working days.

#### Section 506.312 Sludge Removal

- a) Within 60 days prior to periodic removal of sludge from a livestock waste storage structure, the livestock facility owner or operator shall test the sludge for nutrient content pursuant to Section 506.305(c) and (d) of this Subpart. Application of the sludge to the land shall not exceed the nitrogen requirement to obtain targeted optimum yields of the crop to be grown.
- b) Prior to the removal of the remaining livestock waste, soil, and sludge during a lagoon closure, the waste, soil, and sludge shall be tested for nutrient content pursuant to Section 506.305(c) and (d) of this Subpart. Application of the waste, soil, and sludge to the land shall not exceed the nitrogen requirement to obtain targeted optimum yields of the crop to be grown.
- c) Nitrogen requirements based on targeted optimum yields for the crop to be grown may be met but shall not be exceeded by any combination of the following:
  - 1) Livestock waste applications;
  - 2) Periodic sludge applications; or
  - 3) Remaining livestock waste, soil, or sludge applications during a waste storage structure closure.

#### Section 506.313 Plan Updates

- a) The waste management plan shall be reviewed annually by the livestock facility

owner or operator and updated, if necessary, after receipt by the owner or operator of the nutrient content results from the laboratory analysis of the livestock waste as required in Section 506.305-(b), (c), and (d) of this Subpart, but prior to the next application period of the livestock waste to the land. ~~The nitrogen content results from the most recent analysis shall be used when updating the plan.~~

- b) The waste management plan shall also be updated when at least one of the following occurs:
- 1) A change in the amount of land area needed to dispose of the livestock waste based upon a change in the waste volume to be disposed of, nitrogen content of the livestock waste, or other factors;
  - 2) A change in land that is available for livestock waste application if the land is not currently included in the waste management plan;
  - 3) Method of livestock waste disposal or application changes; or
  - 4) Cropping sequence changes which alter the amount of livestock waste to be applied.

Section 506.314 Penalties

- a) ANY PERSON WHO IS REQUIRED TO PREPARE, MAINTAIN, and implement A WASTE MANAGEMENT PLAN AND WHO FAILS TO DO SO SHALL BE ISSUED A WARNING LETTER BY THE DEPARTMENT FOR THE FIRST VIOLATION AND SHALL BE GIVEN 30 WORKING DAYS TO PREPARE A WASTE MANAGEMENT PLAN. FOR FAILURE TO PREPARE, MAINTAIN, and implement A WASTE MANAGEMENT PLAN, THE PERSON SHALL BE FINED AN ADMINISTRATIVE PENALTY OF UP TO \$500 BY THE DEPARTMENT AND SHALL BE REQUIRED TO ENTER INTO AN AGREEMENT OF COMPLIANCE TO PREPARE, MAINTAIN, and implement A WASTE MANAGEMENT PLAN WITHIN 30 WORKING DAYS. FOR FAILURE TO PREPARE, MAINTAIN, and implement A WASTE MANAGEMENT PLAN AFTER THE SECOND 30 DAY PERIOD OR FOR FAILURE TO ENTER INTO A COMPLIANCE AGREEMENT, THE DEPARTMENT MAY ISSUE AN OPERATIONAL CEASE AND DESIST ORDER UNTIL COMPLIANCE IS ATTAINED. [510 ILCS 77/20(g)]
- b) The operational cease and desist order procedures may be suspended by the Department upon submittal of a waste management plan by the owner or operator to the Department. The cease and desist order shall be canceled by the Department upon approval of the waste management plan by the Department.

- c) A waste management plan prepared as a result of a warning letter or compliance agreement shall be subject to approval by the Department.
- d) Penalties shall not be imposed for excessive nitrogen application for unplanned cropping changes due to weather or other unforeseeable circumstances.

#### SUBPART D: CERTIFIED LIVESTOCK MANAGER

##### Section 506.401 Applicability

- a) A LIVESTOCK WASTE HANDLING FACILITY SERVING 300 OR GREATER ANIMAL UNITS SHALL BE OPERATED ONLY UNDER THE SUPERVISION OF A CERTIFIED LIVESTOCK MANAGER. NOT WITHSTANDING THE BEFORE-STATED PROVISION, A LIVESTOCK WASTE HANDLING FACILITY MAY BE OPERATED ON AN INTERIM BASIS, BUT NOT TO EXCEED 6 MONTHS, TO ALLOW FOR THE OWNER OR OPERATOR OF THE FACILITY TO BECOME CERTIFIED. For the purposes of this sSubpart, being operated under the supervision of a certified livestock manager shall mean that the certified livestock manager shall be immediately available to the workers at a livestock waste handling facility either in person or via telecommunications and shall have the ability to be physically present at the livestock waste handling facility within one hour ~~o~~after notification. [510 ILCS 77/30(a)]
- b) Persons may become certified livestock managers by demonstrating an understanding of and competence for the operation of livestock waste handling facilities as established in Section 30 of the Livestock Management Facilities Act [510 ILCS 77] and further described in this Subpart. Livestock Managers shall establish or re-establish certification when required to do so in accordance with Section 30 of the Livestock Management Facilities Act [510 ILCS 77].
- c) A livestock manager certified pursuant to the emergency amendment adopted in R97-14 at 20 Ill. Reg. 14903, effective October 31, 1996 and the emergency rules adopted in R97-14 at 21 Ill. Reg. xxxxx, effective April x, 1997, shall be considered as certified pursuant to this Subpart.
- d) For the purposes of this Subpart, the number of animal units served by a livestock waste handling facility is the maximum design capacity of the livestock management facility which is being served by the livestock waste handling facility.
- e) For violations pertaining to the certified livestock manager requirements, the owner or operator SHALL BE ISSUED A WARNING LETTER FOR THE FIRST VIOLATION AND SHALL BE REQUIRED TO HAVE A CERTIFIED

MANAGER FOR THE LIVESTOCK WASTE HANDLING FACILITY WITHIN 30 WORKING DAYS. FOR FAILURE TO COMPLY WITH THE WARNING LETTER WITHIN THE 30 DAY PERIOD, THE PERSON SHALL BE FINED AN ADMINISTRATIVE PENALTY OF UP TO \$500 BY THE DEPARTMENT AND SHALL BE REQUIRED TO ENTER INTO AN AGREEMENT TO HAVE A CERTIFIED MANAGER FOR THE LIVESTOCK WASTE HANDLING FACILITY WITHIN 30 WORKING DAYS. FOR FAILURE TO COMPLY WITH THE AGREEMENT TO HAVE A CERTIFIED MANAGER FOR THE LIVESTOCK WASTE HANDLING FACILITY WITHIN THE 30 DAY PERIOD OR FOR FAILURE TO ENTER INTO A COMPLIANCE AGREEMENT, THE PERSON SHALL BE FINED UP TO \$1,000 BY THE DEPARTMENT AND SHALL BE REQUIRED TO ENTER INTO AN AGREEMENT TO HAVE A CERTIFIED MANAGER FOR THE LIVESTOCK WASTE HANDLING FACILITY WITH 30 WORKING DAYS. FOR CONTINUED FAILURE TO COMPLY, THE DEPARTMENT MAY ISSUE AN OPERATIONAL CEASE AND DESIST ORDER UNTIL COMPLIANCE IS ATTAINED. [510 ILCS 77/30(g)] The cease and desist order shall be canceled by the Department upon presentation to the Department of a valid certified livestock manager certificate issued in the name of the owner, operator, or current employee of the livestock facility.

~~Section 506.402 — Procedures~~

~~In addition to the procedures specifically required under this Subpart, the Department may adopt and promulgate all procedures reasonably necessary to perform its duties and responsibilities under this Subpart.~~

SUBPART E: PENALTIES

Section 506.501      General

The penalties for violations of the Livestock Management Facilities Act [510 ILCS 77] and this Part shall be those as identified in the Livestock Management Facilities Act ~~[510 ILCS 77]~~ and further described in this Part and Subpart. Warning letters and written notices from the Department shall be sent via certified mail to the livestock facility owner or operator.

~~Section 506.502 — Cease and Desist Order Procedures~~

~~In addition to the procedures specifically required under this Subpart, the Department may adopt and promulgate by rule all cease and desist order procedures reasonably necessary to perform its duties and responsibilities under this Subpart.~~

~~Section 506.503 — Lagoon Registration and Certification Violations~~

~~a) For violations of lagoon registration and certification requirements which occur~~



~~during lagoon construction, a cease and desist order to stop construction may be issued by the Department. Changes shall be made to the lagoon by the owner or operator to ensure construction according to the provisions of the Livestock Management Facilities Act [510 ILCS 77] and this Part. The cease and desist order shall be canceled by the Department upon submission of the registration materials by the lagoon owner or operator to the Department, and after the Department's review of the construction plans and specifications and lagoon registration materials, and after determination of compliance with the Livestock Management Facilities Act [510 ILCS 77] and this Part by the Department.~~

- ~~———— b) ——— For violations of lagoon registration and certification requirements which occur after completion of lagoon construction, an operational cease and desist order may be issued by the Department. Any necessary changes shall be made to the lagoon by the lagoon owner or operator to comply with the Livestock Management Facilities Act [510 ILCS 77] and this Part. The operational cease and desist order shall be canceled by the Department after the Department determines compliance with the Livestock Management Facilities Act [510 ILCS 77] and this Part.~~

#### ~~Section 506.504 ——— Certified Livestock Manager Violations~~

~~For violations pertaining to the certified livestock manager requirements, an operational cease and desist order may be issued by the Department. The operational cease and desist order shall be canceled by the Department upon presentation to the Department of a valid certified livestock manager certificate issued in the name of the owner, operator, or current employee of the livestock facility.~~

#### ~~Section 506.505 ——— Waste Management Plan Violations~~

- ~~———— a) ——— For violations pertaining to the waste management plan requirements, the Department may issue an operational cease and desist order. The operational cease and desist order procedures may be suspended by the Department upon submittal of a waste management plan by the owner or operator to the Department. The cease and desist order shall be canceled by the Department upon approval of the waste management plan by the Department.~~
- ~~———— b) ——— A waste management plan prepared as a result of a warning letter or compliance agreement shall be subject to approval by the Department.~~
- ~~———— c) ——— Penalties shall not be imposed for excessive nitrogen application for unplanned cropping changes due to weather or other unforeseeable circumstances.~~

### SUBPART F: FINANCIAL RESPONSIBILITY

#### Section 506.601      Applicability

OWNERS OF NEW OR MODIFIED LAGOONS REGISTERED UNDER THE PROVISIONS OF the Livestock Management Facilities Act [510 ILCS 77] SHALL ESTABLISH AND MAINTAIN EVIDENCE OF FINANCIAL RESPONSIBILITY TO PROVIDE FOR THE CLOSURE OF THE LAGOONS AND THE PROPER DISPOSAL OF THEIR CONTENTS WITHIN THE TIME PROVISIONS OUTLINED IN the Livestock Management Facilities Act. [510 ILCS 77/17]

Section 506.602 Evidence of Financial Responsibility

- a) FINANCIAL RESPONSIBILITY MAY BE EVIDENCED BY ANY COMBINATION OF THE FOLLOWING:
  - 1) COMMERCIAL OR PRIVATE INSURANCE;
  - 2) GUARANTEE;
  - 3) SURETY BOND;
  - 4) LETTER OF CREDIT; or
  - 5) CERTIFICATE OF DEPOSIT OR DESIGNATED SAVINGS ACCOUNT. [510 ILCS 77/17]
- b) Upon a change in the ownership of a livestock management facility or livestock waste handling facility involving a lagoon, the new owner shall establish and maintain evidence of financial responsibility at the same level of surety as the previous owner.

Section 506.603 Level of Surety

- a) THE LEVEL OF SURETY REQUIRED SHALL BE DETERMINED BY RULE AND BE BASED UPON THE VOLUMETRIC CAPACITY OF THE LAGOON. [510 ILCS 77/17]
- b) ~~Unless otherwise provided for by Board regulations, the Department may adopt and promulgate all procedures and criteria reasonably necessary to perform its duties and responsibilities under this Subpart.~~

SUBPART G: SETBACKS

Section 506.701 Applicability

- a) All new livestock management or livestock waste handling facilities shall comply with the setback distances as established in Section 35 of the Livestock

Management Facilities Act [510 ILCS 77] and with the provisions of this Subpart.

- b) Commencement of operations at a facility reconstructed within two years after partial or total destruction due to natural causes such as tornado, fire, flood, or earthquake, shall not be considered the location of a new livestock management or waste handling facility for setback purposes. Likewise, a residence partially or totally destroyed due to natural causes, such as tornado, fire, flood, or earthquake, shall retain its original setback for a period of no greater than two years, to allow for reconstruction of said residence.

Section 506.702      Procedures

- a) GRANDFATHER PROVISION; FACILITIES IN EXISTENCE PRIOR TO JULY 15, 1991. LIVESTOCK MANAGEMENT FACILITIES AND LIVESTOCK WASTE HANDLING FACILITIES IN EXISTENCE PRIOR TO JULY 15, 1991 SHALL COMPLY WITH SETBACKS IN EXISTENCE PRIOR TO JULY 15, 1991, AS SET FORTH IN THE ILLINOIS ENVIRONMENTAL PROTECTION ACT AND RULES PROMULGATED UNDER THE ACT. [510 ILCS 77/35(a)]
- b) GRANDFATHER PROVISION; FACILITIES IN EXISTENCE ON EFFECTIVE DATE AND AFTER JULY 15, 1991. LIVESTOCK MANAGEMENT FACILITIES AND LIVESTOCK WASTE HANDLING FACILITIES IN EXISTENCE ON THE EFFECTIVE DATE OF the Livestock Management Facilities ACT BUT AFTER JULY 15, 1991 SHALL COMPLY WITH SETBACKS IN EXISTENCE PRIOR TO THE EFFECTIVE DATE OF the Livestock Management Facilities ACT, AS SET FORTH IN THE ILLINOIS ENVIRONMENTAL PROTECTION ACT AND RULES PROMULGATED UNDER THAT ACT. [510 ILCS 77/35(b)]
- c) NEW LIVESTOCK MANAGEMENT OR LIVESTOCK WASTE HANDLING FACILITIES. ANY NEW FACILITY SHALL COMPLY WITH THE FOLLOWING SETBACKS: [510 ILCS 77/35(c)]
- 1) Residence and Non-Farm Residence: FOR PURPOSES OF DETERMINING SETBACK DISTANCES, MINIMUM DISTANCES SHALL BE MEASURED FROM THE NEAREST CORNER OF THE RESIDENCE OR PLACE OF COMMON ASSEMBLY TO THE NEAREST CORNER OF THE EARTHEN WASTE LAGOON OR LIVESTOCK MANAGEMENT FACILITY, WHICHEVER IS CLOSER.
  - 2) Common Place of Assembly or Non-Farm Business: For the purposes of determining setback distances between a common place of assembly

or non-farm business:

A) When the primary activity at a common place of assembly or non-farm business is an outdoor activity, minimum distances shall be measured from the nearest corner of the earthen waste lagoon or livestock management facility to the nearest point on the legal property line of the common places of assembly or non-farm business.

B) When the primary activity at a common place of assembly or non-farm business is not an outdoor activity and is an in-door activity, minimum distances shall be measured from the nearest corner of the earthen waste lagoon or livestock management facility to the nearest corner of the structure where the indoor activity takes place.

3) A LIVESTOCK MANAGEMENT FACILITY OR LIVESTOCK WASTE HANDLING FACILITY SERVING LESS THAN 50 ANIMAL UNITS SHALL BE EXEMPT FROM SETBACK DISTANCES AS SET FORTH IN [the Livestock Management Facilities Act](#) BUT SHALL BE SUBJECT TO RULES PROMULGATED UNDER THE ILLINOIS ENVIRONMENTAL PROTECTION ACT.

34) FOR A LIVESTOCK MANAGEMENT FACILITY OR WASTE HANDLING FACILITY SERVING 50 OR GREATER BUT LESS THAN 1,000 ANIMAL UNITS, THE MINIMUM SETBACK SHALL BE 1/4 MILE FROM THE NEAREST OCCUPIED NON-FARM RESIDENCE AND 1/2 MILE FROM THE NEAREST POPULATED AREA.

45) FOR A LIVESTOCK MANAGEMENT FACILITY OR LIVESTOCK WASTE HANDLING FACILITY SERVING 1,000 OR GREATER BUT LESS THAN 7,000 ANIMAL UNITS, THE SETBACK IS AS FOLLOWS:

A) FOR A POPULATED AREA, THE MINIMUM SETBACK SHALL BE INCREASED 440 FEET OVER THE MINIMUM SETBACK OF 1/2 MILE FOR EACH ADDITIONAL 1,000 ANIMAL UNITS OVER 1,000 ANIMAL UNITS.

B) FOR ANY OCCUPIED RESIDENCE, THE MINIMUM SETBACK SHALL BE INCREASED 220 FEET OVER THE MINIMUM SETBACK OF 1/4 MILE FOR EACH ADDITIONAL 1,000 ANIMAL UNITS OVER 1,000 ANIMAL UNITS.

56) FOR A LIVESTOCK MANAGEMENT FACILITY OR LIVESTOCK WASTE HANDLING FACILITY SERVING 7,000 OR GREATER ANIMAL UNITS, THE SETBACK IS AS FOLLOWS:

A) FOR A POPULATED AREA, THE MINIMUM SETBACK SHALL BE 1 MILE.

B) FOR ANY OCCUPIED RESIDENCE, THE MINIMUM SETBACK SHALL BE 1/2 MILE.

d) REQUIREMENTS GOVERNING THE LOCATION OF A NEW LIVESTOCK MANAGEMENT FACILITY AND NEW LIVESTOCK WASTE-HANDLING FACILITY AND CONDITIONS FOR EXEMPTIONS OR COMPLIANCE WITH THE MAXIMUM FEASIBLE LOCATION AS PROVIDED IN RULES ADOPTED PURSUANT TO THE ILLINOIS ENVIRONMENTAL PROTECTION ACT CONCERNING AGRICULTURE REGULATED POLLUTION SHALL APPLY TO THOSE FACILITIES IDENTIFIED IN SUBSECTIONS (b) AND (c) OF THIS SECTION. WITH REGARD TO THE MAXIMUM FEASIBLE LOCATION REQUIREMENTS, ANY REFERENCE TO A SETBACK DISTANCE IN THE RULES UNDER THE ILLINOIS ENVIRONMENTAL PROTECTION ACT SHALL MEAN THE APPROPRIATE DISTANCE AS SET FORTH IN THIS SECTION. [510 ILCS 77/35(d)]

ae) SETBACK CATEGORY SHALL BE DETERMINED BY THE DESIGN CAPACITY IN ANIMAL UNITS OF THE LIVESTOCK MANAGEMENT FACILITY. [510 ILCS 77/35(e)]

f) SETBACKS MAY BE DECREASED WHEN INNOVATIVE DESIGNS AS APPROVED BY THE DEPARTMENT ARE INCORPORATED INTO THE FACILITY. [510 ILCS 77/35(f)]

1) An owner or operator shall request a setback decrease in writing prior to construction.

2) An owner or operator shall attach to the request for decrease a certification by a Licensed Professional Engineer that in the professional judgment of the Licensed Professional Engineer the innovative designs incorporated into the facility will provide more odor protection than the original setbacks.

3) The Department shall notify the owner or operator of its determination within 30 days after the receipt of the request for decrease. In approving a reduction in setbacks due to innovative designs, the Department shall

specifically find that such use of an innovative design will provide more odor protection than the original setbacks.

- 4) Where the Department grants such a decrease from the setbacks, the Department must maintain a file which includes all supporting data and justification which it relied upon in making its determination. This file is subject to public inspection.

b)g) A SETBACK MAY BE DECREASED WHEN WAIVERS ARE OBTAINED FROM OWNERS OF RESIDENCES THAT ARE OCCUPIED AND LOCATED IN THE SETBACK AREA. [510 ILCS 77/35(g)] A setback also may be decreased when waivers are obtained from owners of non-farm businesses or common places of assembly that are located in the setback area.

- 1) An owner or operator request for a setback decrease shall be in writing and submitted to the Department prior to construction.
- 2) An owner or operator shall attach to the request copies of the written and notarized waivers from all the owner(s) of the residence(s), non-farm business(es), and common place(s) of assembly that are located within the setback area.
- 3) Within 30 days after receipt of the request and waivers, the Department shall notify the owner or operator in writing of the setback decrease.
- 4) When such a decrease from the setbacks is requested, the Department must maintain a file which includes all supporting data and justification concerning the setback decrease. This file is subject to public inspection.

e) ~~In addition to the procedures specifically required under this Subpart, the Department may adopt and promulgate all procedures reasonably necessary to perform its duties and responsibilities under this Subpart.~~

### Section 506.703 Initial Determination of Setbacks

The requirements of this section do not apply to new livestock management facilities or new livestock waste handling facilities serving less than 50 animal units.

- a) An owner or operator shall file a notice of intent to construct which meets the informational requirements of subsection (b) of this section for a new Livestock Management Facility or new Livestock Waste Handling Facility with the Department prior to construction to establish an initial determination of setbacks.

- b) The notice of intent to construct shall contain a legal description of the land on which the livestock facility will be constructed; the name(s) and addresses of the owner(s) or operator(s) of the facility; the type and size of the facility and number of animal units; the names and addresses of the owner(s), including local, State and Federal governments, of the property located within the setback area; the distance to the nearest populated area, residence, and common place of assembly; a map or sketch showing the proposed facility and setbacks; and a statement identifying whether a request for decrease in setbacks, pursuant to Section 506.702(f) or (g), has been sought and whether the request has been granted or denied.
- c) The owner or operator shall mail by certified mail the notice of intent to construct to the owner(s) of the property located within the setback distances.
- d) Within 30 days after receipt of the notice to construct, the Department shall notify the owner or operator in writing whether the setback distances have been met.
- e) The date the notice of intent to construct is filed with the Department establishes the base date for the determination of whether residences, non-farm businesses, or common places of assembly exist for setback purposes and shall remain the base date if construction begins within one year following receipt of the Department's determination or a lagoon registration form is filed with the Department within one year after receipt of the Department's determination of compliance with the setback distances.
- f) If the Department determines that the owner or operator has complied with the setback requirements, later constructed or erected residences, non-farm businesses, or common places of assembly cannot operate to alter the setback as initially determined, subject to the limitation in subsection (e).
- g) Where an intent to construct has been filed, the Department must maintain a file which includes all filings and supporting data and justification which it relied upon in making its determination regarding compliance with the setback distances. This file is subject to public inspection.

Section 506.704~~3~~ Penalties

- a) For violations of the setback distance requirements, the Department may issue one of the following to the owner or operator of the livestock management facility or livestock waste handling facility:
  - 1) If during construction, a cease and desist order which prohibits further construction of the livestock management facility or livestock waste

handling facility, prohibits entry of livestock into the livestock management facility, and prohibits use of the livestock waste handling facility; or

- 2) An operational cease and desist order.
- b) A cease and desist order issued by the Department pursuant to subsection (a) of this Section shall be canceled by the Department pursuant to the following:
- 1) Submission to the Department of a valid waiver as provided for in Section 506.702(bg) of this Subpart by the livestock management facility owner or operator or the livestock waste handling facility owner or operator; or
  - 2) Verification by the Department of compliance with the appropriate setback distances as described in Section 35 of the Livestock Management Facilities Act [510 ILCS 77/35]

IT IS SO ORDERED.

Board Members R.C. Flemal, G.T. Girard, and J. Theodore Meyer dissented.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion and order was adopted on the \_\_\_\_\_ day of March, 1997, by a vote of

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\_\_\_\_\_  
Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board