

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:

AMENDMENTS TO LIVESTOCK

WASTE REGULATIONS

(35 ILL. ADM. CODE 506)

PCB No. R01-28

(Rulemaking-Land)

Proceedings held on April 30, 2001, at 10:00 a.m., at the
Illinois Pollution Control Board, 600 South Second Street, Suite
403, Springfield, Illinois, before Hearing Officer Carol Sudman.

Reported by: Darlene M. Niemeyer, CSR, RPR
CSR License No.: 084-003677

KEEFE REPORTING COMPANY
11 North 44th Street
Belleville, IL 62226
(618) 277-0190

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

A P P E A R A N C E S

Chairman Claire A. Manning
Board Member G. Tanner Girard, Ph.D.
Board Member Elena Z. Kezelis
Board Member Samuel T. Lawton, Jr.
Anand Rao, Senior Environmental Scientist

ILLINOIS DEPARTMENT OF AGRICULTURE
BY: Cynthia Ervin
State Fairgrounds
801 E. Sangamon Avenue
P.O. Box 19281
Springfield, Illinois 62794-9281
On behalf of the Illinois Department of
Agriculture.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
BY: Connie L. Tonsor
Associate Counsel
Division of Legal Counsel
1021 North Grand Avenue East
Springfield, Illinois 62794-9276
On behalf of the Illinois Environmental Protection
Agency.

KEEFE REPORTING COMPANY
1-800-244-0190

	I N D E X	
2	WITNESS	PAGE NUMBER
3		
4	WARREN D. GOETSCH, P.E.	8
5	(Question and answer format)	
6	DANIEL L. HEACOCK, P.E.	20
7		
8	PAM HANSEN	35
9		
10	JIM SCHEETZ	40
11		
12	KEN W. KOELKEBECK, Ph.D.	54
13		
14	SCOTT NALLY	68
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		

KEEFE REPORTING COMPANY
1-800-244-0190

1	E X H I B I T S		
2	NUMBER	MARKED FOR I.D.	ENTERED
3	Hearing Exhibit 1	20	20
4	Hearing Exhibit 2	35	35
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			

KEEFE REPORTING COMPANY
1-800-244-0190

1 P R O C E E D I N G S

2 (April 30, 2001; 10:00 a.m.)

3 HEARING OFFICER SUDMAN: Good morning, everyone. My name
4 is Carol Sudman. I am the Hearing Officer in this proceeding
5 entitled, In the Matter of: Amendments to Livestock Waste
6 Regulations, 35 Illinois Administrative Code 506, which the Board
7 references as Docket R01-28.

8 I would like to introduce Chairman Claire Manning.

9 CHAIRMAN MANNING: Good morning.

10 HEARING OFFICER SUDMAN: And Board Member Tanner Girard.

11 BOARD MEMBER GIRARD: Good morning.

12 HEARING OFFICER SUDMAN: And Sam Lawton.

13 BOARD MEMBER LAWTON: Good morning.

14 HEARING OFFICER SUDMAN: Elena Kezelis.

15 BOARD MEMBER KEZELIS: Good morning.

16 HEARING OFFICER SUDMAN: And the Board's Environmental
17 Scientist, Anand Rao.

18 MR. RAO: Good morning.

19 HEARING OFFICER SUDMAN: Chairman Manning, do you have any
20 comments you would like to make at this time?

21 CHAIRMAN MANNING: Just welcome everyone to this
22 proceeding. We look forward to a good presentation of evidence
23 and a good hearing. Thank you.

24 HEARING OFFICER SUDMAN: Do any other Board Members have

KEEFE REPORTING COMPANY
1-800-244-0190

1 any opening comments? Okay.

2 Today's hearing will proceed as follows. First, we will
3 hear the Department's response to the Board's questions issued by
4 Hearing Officer Order on April 9th. The Board and other
5 interested persons will then have an opportunity to ask the
6 Department any follow-up questions.

7 Second, we will hear from persons who prefiled testimony,
8 Mr. Dan Heacock, with the Illinois Environmental Protection
9 Agency, and Ms. Pam Hansen, from the Illinois Stewardship
10 Alliance.

11 Third, we will hear from persons who did not prefile
12 testimony but contacted me in advance, Mr. Roy Harsch and Mr. Ken
13 Koelkebeck.

14 Finally, as time permits, we will open the floor to other
15 members of the public. Anyone not having an opportunity to
16 testify today may submit written comment until May 14th.

17 We will now begin with the Department's testimony. We will
18 enter the answers that you filed into the record as if read. You
19 may summarize if you would like.

20 Would you please swear in the witnesses.

21 (Whereupon Warren D. Goetsch and Scott Frank were sworn by
22 the Notary Public.)

23 HEARING OFFICER SUDMAN: Would you like to summarize

24 anything or would you --

6

KEEFE REPORTING COMPANY
1-800-244-0190

1 MR. GOETSCH: I don't believe that it is necessary unless
2 you specifically have questions.

3 HEARING OFFICER SUDMAN: Do any of the Board Members have
4 any follow-up questions, or Anand?

5 MR. RAO: I have a few follow-up questions.

6 BOARD MEMBER KEZELIS: Would you identify yourselves so
7 that the record is clear --

8 HEARING OFFICER SUDMAN: Oh, I am sorry.

9 BOARD MEMBER KEZELIS: -- on who was sworn in. Thank you.

10 MS. ERVIN: Testifying today on behalf of the Department of
11 Agriculture is Warren Goetsch. Warren is the Division Chief of
12 the Division of Natural Resources for the Department. And Scott
13 Frank, who is the Bureau Chief of the Bureau of Environmental
14 Programs. The Bureau of Environmental Programs administers the
15 Livestock Management Facilities Act. Both gentlemen were
16 intimately involved in the drafting of the new amendments of the
17 Livestock Management Facilities Act as well as the rules proposed
18 to you today.

19 HEARING OFFICER SUDMAN: Thank you.

20 MR. RAO: I had a follow-up question to one of the
21 responses you had under Section 506.207, construction in a karst
22 area. In your response to question number two, which asks for a
23 rationale for requiring only a portion of the lagoon to meet the

24 design and construction standards instead of the whole lagoon,

7

KEEFE REPORTING COMPANY
1-800-244-0190

1 you had stated that anything that -- that in the construction for
2 the portion that was below grade would comply with the rigid
3 material standard and above grade you can use other materials.

4 Is it possible to construct a livestock waste handling
5 facility on the surface in karst areas where the lagoon bottom or
6 the livestock waste handling facility bottom is on the surface?
7 If so, you know, are there any other concerns that need to be
8 addressed?

9 MR. GOETSCH: Yes, it would be possible to construct a
10 livestock waste handling facility totally above grade. However,
11 the Department's thoughts were that it would be economically --
12 either not feasible or it would be severely expensive for someone
13 to construct such a structure. And that's the reason why we
14 believe that in these kinds of cases the facility would take the
15 most economical approach, which would have a considerable portion
16 of the facility below grade.

17 MR. RAO: So in case someone proposes to construct
18 something above grade, would the Department require them to have
19 a rigid material liner or a concrete structure to be constructed
20 instead of other materials?

21 MR. GOETSCH: I believe the way the proposal is currently
22 written, if a structure was to be built totally above grade it

23 would not require anything beyond the existing or the blanket
24 design standards. There would be no additional because it was

8

KEEFE REPORTING COMPANY
1-800-244-0190

1 in a karst area.

2 MR. RAO: So do you think it would be useful to clarify the
3 rules to require rigid construction material even if the
4 structure is above grade, considering the likelihood of these
5 structures being built above grade is very minimal, but just to
6 make sure that the rules are clear? In this regard, I would just
7 like to note that the IEPA has expressed similar concerns for the
8 rules.

9 MR. GOETSCH: I guess considering the costs we don't
10 believe that it would be necessary. However, that is certainly
11 something that you could consider.

12 MR. RAO: All right. Thank you. Under the same section in
13 response to question three, regarding existing facilities in
14 karst areas, you had indicated that you were not aware of any
15 existing livestock waste handling facilities located in karst
16 areas in Illinois. Because you indicated that these existing
17 facilities didn't have to let the Department know, you know,
18 prior to the Livestock Management Facilities Act where they were
19 located and do the site investigation to let you know whether
20 they were in karst areas or not, have you looked at the IDNR-ISGS
21 Map 8 to see if any of these facilities are in karst areas on the
22 map?

23 MR. GOETSCH: We have reviewed the map, and although there
24 have not been any facilities that we are aware of that have been

9

KEEFE REPORTING COMPANY
1-800-244-0190

1 proposed to the Department since the law went into effect in
2 1996, certainly, there is livestock production in those areas.
3 So it would be reasonable to believe that there are some
4 facilities certainly located in karst areas. But as you
5 mentioned, because there has never been a requirement for
6 reporting to the Department prior to the Act, we really don't
7 have any data regarding those facilities.

8 MR. RAO: I have one more question, mainly a clarification.
9 This is in response to a question under Section 506.210,
10 secondary containment. In response to another question you had
11 provided definitions of the terms "grass waterway," "filter
12 strip," and "terrace." I just wanted to know whether it would be
13 acceptable to the Department if we included these definitions in
14 the definition section?

15 MR. GOETSCH: Yes.

16 MR. RAO: Okay. That's all I had.

17 HEARING OFFICER SUDMAN: Do any of the Board Members have
18 any other follow-up questions for the Department?

19 CHAIRMAN MANNING: The only thing I would ask is whether
20 the Department has any comments they would like to offer at this
21 time to any of the prefiled testimony that we have received?

22 Obviously, you will have an opportunity at the end of this as
23 well. But is there anything that you need -- any comments you
24 need to make at this time regarding any of the prefiled

10

KEEFE REPORTING COMPANY
1-800-244-0190

1 testimony?

2 MR. GOETSCH: Yes, we would like to respond briefly to some
3 comments that were included in the Stewardship Alliance's
4 prefiled testimony. The Stewardship Alliance, in their comments,
5 referred to standards governing emergency or temporary lagoons.
6 And they suggested that the Department has approved of two
7 structures of that nature for a, quote, large-scale dairy in
8 Elmwood, Illinois, unquote. In their comments they questioned
9 under what authority did the Department approve such facilities
10 and to what construction standards were those facilities
11 approved.

12 The Department would like to clarify the situation
13 regarding these two structures and indicate that these structures
14 in question were approved under the authorities of the Livestock
15 Management Facilities Act using our normal process. The
16 structures were designed and built to the design standards
17 referred to in the Act. All required documents were submitted,
18 reviewed and approved, and all required site inspections by the
19 Department were conducted.

20 The only reason that they have been referred to as
21 temporary is because of the court order which directed the

22 facility to construct them and under that court order required
23 that those facilities be in place for a maximum of six months.
24 The process by which the Department reviewed and approved those

11

KEEFE REPORTING COMPANY
1-800-244-0190

1 structures were -- is consistent with the way we attack any
2 project. We just wanted to make that clarification known.

3 HEARING OFFICER SUDMAN: Thank you. If the Board Members
4 do not have any other questions for the Department, I would ask
5 the audience if there are any questions for the Department right
6 now? If so, please raise your hand.

7 Yes. Please stand and state your name and organization
8 that you represent, if any.

9 MR. HARSCH: May I sit at the end of the table?

10 HEARING OFFICER SUDMAN: Sure.

11 MR. HARSCH: Roy Harsch. I am here on behalf of the Pork
12 Producers, Beef Producers, and the Farm Bureau.

13 Just some general clarification questions, if I might ask a
14 few. As I understand it, the reference in the proposed
15 regulations to the site map that you have earlier talked to that
16 shows the karst areas, that reference to that map is not intended
17 to change in any way the way that the Department currently
18 handles applications to facilities that might be located in an
19 area that is identified as a possible karst region on that map;
20 is that correct?

21 MR. GOETSCH: I believe the purpose of the map is to
22 provide guidance to the engineers, the engineers' consultants or
23 the site owners and operators in determining what their site
24 investigation process will be. It is kind of the first step or

12

KEEFE REPORTING COMPANY
1-800-244-0190

1 the first phase in addressing the issues of karst.

2 MR. HARSCH: The actual determination of whether the
3 facility would be located in a karst area, as that term is
4 defined in the rules and the statute, would be dependent upon the
5 actual site investigation that is carried out; is that correct?

6 MR. GOETSCH: If the proposed facility location coincides
7 with an area that is suggested as being karst by the map, then
8 certain activities are required of the Department and certain
9 activities are required of the consultant in conducting their
10 site investigation.

11 MR. HARSCH: But it is the results of the site
12 investigation that controls whether or not the facility would be
13 actually constructed in a karst area and, obviously, the
14 Department's review of that site investigation?

15 MR. GOETSCH: That is correct. The results of the site
16 investigation and the Department's visual inspection would
17 ultimately determine the design that would be required of the
18 structure.

19 MR. HARSCH: So for a point of clarification, then, if you
20 had a facility that was proposed to be constructed in an area

21 that would be in a karst region on the map, but the site
22 investigation did not show that the area met the definition of a
23 karst area, then the extra requirements, the construction
24 standards for karst areas would not apply?

13

KEEFE REPORTING COMPANY
1-800-244-0190

1 MR. GOETSCH: That's correct. The scale on which the map
2 is presented is not an adequate scale to make on site final
3 determinations. That is the reason why it is used as guidance.
4 But that the ultimate decision as to whether the additional
5 requirements of karst are required of the facility would be based
6 on the actual site investigation of that site.

7 MR. HARSCH: Thank you for that clarification. Under
8 proposed Section 506.310(b)(1) and (2), additional design and
9 construction standards for construction in an area with shallow
10 aquifer material, the proposed rule is more stringent than the
11 current standards based on the various documents, is it not?
12 They require a minimum floor thickness of four inches and a
13 minimum wall thickness of six inches?

14 MR. GOETSCH: Yes.

15 MR. HARSCH: Is the Department aware of any failure of a
16 facility that was constructed in accordance with the Midwest Plan
17 documents that had a floor thickness of four inches and an
18 exterior wall thickness of six inches?

19 MR. GOETSCH: No, the Department is not.

20 MR. HARSCH: What is the basis, then, for proposing the
21 five and eight inch changes if there have not been any failures?

22 MR. GOETSCH: Well, first of all, I would suggest that
23 our -- that our knowledge of problems or potential problems with
24 such facilities is very, very limited, as was mentioned earlier.

14

KEEFE REPORTING COMPANY
1-800-244-0190

1 Our database of facilities really has only began with the
2 implementation of the Act in 1996. And that it is the
3 Department's belief that the amendments, the recent amendments of
4 the Act suggested enhancements should be required when facilities
5 are proposed in certain areas that were deemed sensitive. And
6 the floor thickness increase and the sidewall or exterior wall
7 thickness increases were an attempt to create enhancements to the
8 design for such sensitive areas.

9 MR. HARSCH: Apart from the reference in 506.305(a)(1),
10 construction joints and water stops, under Subparagraph C of that
11 rule, are there any requirements in your proposed rules that
12 require or specify construction joints or the distance apart for
13 construction joints or water stops other than a reference to the
14 MidWest Plan document?

15 MR. GOETSCH: Could you repeat the question?

16 MR. HARSCH: Other than the reference to the MidWest Plan
17 Service document requiring construction joints, in accordance
18 with that document and the water stops being placed where the
19 construction joints are required, are there any other

20 requirements that specify the distance for construction joints,
21 the distance apart for construction joints?

22 MR. GOETSCH: No, I don't believe that there is any further
23 guidance than the reference to the MidWest Plan Service Concrete
24 Manure Storages Handbook or for circular tanks the Technical

15

KEEFE REPORTING COMPANY
1-800-244-0190

1 Resource Number 9. I would, however, point out that there are
2 provisions in, I believe, each one of the sections which allows
3 the engineer or the consultant to propose an alternative if the
4 same -- okay. Can "modify or exceed these standards in order to
5 meet site specific objectives" if they so desire. And I believe
6 that we have had several cases since the amendments took effect
7 where consultants have exercised that option.

8 MR. HARSCH: And, therefore, the consultant taking into
9 consideration local factors to the design of the individual
10 facility might propose a continuous poured concrete floor, for
11 example?

12 MR. GOETSCH: That's correct.

13 MR. HARSCH: And you would rule on that when you processed
14 that application?

15 MR. GOETSCH: That's correct.

16 MR. HARSCH: Under Section 506.310 -- excuse me. That is
17 the wrong rule. Help me out. What is the section -- I am sorry.
18 506.310(d), which requires the perimeter drainage tubes, again,

19 is this -- do your present requirements that you process
20 facilities on have a requirement that mandate drainage tubes,
21 perimeter drainage tubing in areas where the shallow aquifer
22 material is present?

23 MR. GOETSCH: I don't believe that there is a specific
24 mandate. There are situations or designs where it is good

16

KEEFE REPORTING COMPANY
1-800-244-0190

1 engineering practice, but there is not a specific mandate that I
2 am aware of.

3 MR. HARSCH: Again, are you aware of any failures of
4 underground facilities that were constructed without perimeter
5 drain tubes?

6 MR. GOETSCH: Again, because of the limited data, I don't
7 know that -- well, let me start again and say that, no, we are
8 not aware of any failures. However, we have a limited database.

9 MR. HARSCH: Again, the consultant could propose a
10 modification to this requirement? He could demonstrate that it
11 was as protective?

12 MR. GOETSCH: Yes.

13 MR. HARSCH: Under Section 506.303, can you explain how one
14 determines the amount of waste generated that would have to be
15 held for 150 days?

16 MR. GOETSCH: A producer or a consultant would look at the
17 data included in the MidWest Plan Service documents or other
18 possible documents to determine the volume of manure that would

19 be created on a daily basis by the design -- or by the number of
20 animals equal to the design capacity of the facility and then
21 multiply by 150 days.

22 MR. HARSCH: And that would be -- I am looking at the
23 Livestock Waste Facility Handbook, that would be table 2-1,
24 manure production and characteristics produced?

17

KEEFE REPORTING COMPANY
1-800-244-0190

1 MR. GOETSCH: That would be one potential source of that
2 information, yes.

3 MR. HARSCH: Doesn't some of the ranges or the values
4 produced in here include volumes for wash down liquid? And if
5 so, can you explain what you meant to cover by (a)(2), additional
6 wash down liquid volumes?

7 MR. GOETSCH: I believe that our purpose in adding that or
8 adding (a)(2) was to ensure that if a particular facility was
9 being designed which would drastically deviate from the numbers
10 in a table, such as table 2.1, that those additional wash down
11 liquid volumes that might be, again, out of the range of those
12 included in this table, would be considered and would be
13 calculated into that 150 day storage volume.

14 MR. HARSCH: I am wondering if the Department would object
15 to a clarification point to further define the reference to
16 additional waste wash down liquid volumes to be consistent with
17 what you just stated?

18 MR. GOETSCH: I don't believe that we would have a problem
19 with that, depending upon, of course, the actual language.

20 MR. HARSCH: Thank you. I have, I guess, one follow-up
21 question regarding your statement on the reference to the two
22 lagoons that were permitted over in the Elmwood facility. Apart
23 from the court order there is nothing, then, that the
24 Department -- under the Department's rules, that would require

18

KEEFE REPORTING COMPANY
1-800-244-0190

1 the removal of those lagoons from service? In other words, as
2 far as the Department is concerned those are permitted for
3 continuous use?

4 MR. GOETSCH: That would be the case. The Department
5 processed those two structures like any other structure under the
6 Act, and as far as our position, they could remain there as long
7 as the facility has a need for them and that the judge agrees
8 that that is so.

9 MR. HARSCH: Thank you.

10 HEARING OFFICER SUDMAN: Thank you. At this time does
11 anybody else have any questions for the Department? Okay. Not
12 seeing any hands, I believe that we are done with the Department
13 for the moment.

14 CHAIRMAN MANNING: Thank you.

15 HEARING OFFICER SUDMAN: Thank you very much.

16 CHAIRMAN MANNING: Don't go away, though.

17 (Laughter.)

18 MS. ERVIN: We won't go away.

19 HEARING OFFICER SUDMAN: Okay. At this time I will call on
20 Mr. Dan Heacock from the Illinois Environmental Protection
21 Agency. I will mention that Mr. Heacock's prefiled testimony
22 will be entered into the record as if read. If he would prefer
23 to summarize it, that's fine.

24 Would the witnesses please identify themselves for the

19

KEEFE REPORTING COMPANY
1-800-244-0190

1 court reporter.

2 MR. HEACOCK: I am Dan Heacock with the Illinois EPA.

3 MS. TONSOR: I am Connie Tonsor, an attorney with the
4 Illinois EPA. Dan has prefiled testimony, but is going to do a
5 brief summary of his testimony.

6 HEARING OFFICER SUDMAN: Okay.

7 MS. TONSOR: And, in addition, has a couple of items that
8 he wishes to clarify from that testimony prior to going into his
9 summary.

10 HEARING OFFICER SUDMAN: Okay. We will have the court
11 reporter swear you in.

12 (Whereupon Dan Heacock was sworn by the Notary Public.)

13 MR. HEACOCK: I have two items to clarify initially. One
14 is there was a table that was attached with the prefiled
15 testimony, and I have a corrected version of that. There were a
16 couple of errors on that table. I have some copies here

17 available.

18 HEARING OFFICER SUDMAN: So you would like to introduce the
19 attachment with the corrected attachment as an exhibit?

20 MR. HEACOCK: Yes.

21 HEARING OFFICER SUDMAN: Okay. I will mark your attachment
22 to your prefiled testimony as Exhibit Number 1.

23 (Whereupon said document was duly marked for purposes of
24 identification as Hearing Exhibit 1 and entered into

20

KEEFE REPORTING COMPANY
1-800-244-0190

1 evidence as of this date.)

2 MR. HEACOCK: Also in my prefiled testimony I had some
3 discussion of boring distance of 20 feet for detection of voids.
4 And in the rules it is proposed for lagoons that distance or
5 depth be 50 feet. So I wanted to clarify that. Where I speak of
6 20 feet that should probably be 50 feet in most cases because
7 that is the greatest depth. The non-lagoons have a 20 foot
8 requirement.

9 CHAIRMAN MANNING: Could you point to the part of the
10 testimony that you are talking about right now?

11 MR. HEACOCK: That would be -- let's see.

12 CHAIRMAN MANNING: You might want to speak up just a little
13 bit, too.

14 MR. HEACOCK: Okay. There is a few places where that is
15 mentioned. On page six under Sections 506.207 and 506.312, the
16 first paragraph, where it mentions 20 feet for lagoons. It is 50

17 feet in the rule.

18 We also make mention of 20 feet on page seven. It looks
19 like it is the second full paragraph.

20 And there is a couple of other places. Page nine, the last
21 paragraph. That actually is not speaking of the boring. So I
22 will go to the next page.

23 Page eleven, the second to the last paragraph and then the
24 last paragraph on that page. I believe that's all of them.

21

KEEFE REPORTING COMPANY
1-800-244-0190

1 HEARING OFFICER SUDMAN: Okay. Thank you.

2 MR. HEACOCK: I can go ahead and read a summary of the
3 testimony that I have. My name is Dan Heacock. I am employed by
4 the Illinois Environmental Protection Agency as a Manager of the
5 Facility Evaluation Unit in the Watershed Management Section of
6 the Bureau of Water. The duties of that unit include reviewing
7 NPDES applications and providing technical assistance for the
8 Livestock Waste Management Program administered by the Illinois
9 EPA. I have been employed in the permit programs of the Bureau
10 of Water or Division of Water Pollution Control since 1985.

11 My experience with the Livestock Waste Management Programs
12 began with my employment with the Agency. I participated in the
13 Livestock Management Advisory Committee meetings during the
14 development of the proposed amendments to Part 506 and the
15 Illinois Department of Agriculture's Part 900 Rules. I am a

16 graduate of the University of Illinois in agricultural
17 engineering and I am a registered professional engineer in
18 Illinois.

19 The Agency participated in the development of this proposal
20 through the Livestock Management Advisory Committee and
21 appreciates the opportunity to further that participation by
22 offering comments and this testimony concerning the proposed
23 revision of 35 Illinois Administrative Code 506. I will provide
24 a summary of my prefiled testimony, and that summary does not

22

KEEFE REPORTING COMPANY
1-800-244-0190

1 include discussion of some of the items in my prefiled testimony
2 that regard clarifications due to typographical errors or other
3 reasons.

4 The ASAE EP 403.3 Design of Anaerobic Lagoons for Animal
5 Waste Management clarifies the method of determining the total
6 volume of the lagoon by specifically including runoff and
7 precipitation generated between manure removal events. The
8 proposed regulations do not specifically list this runoff and
9 precipitation as additional volumes, although the runoff and
10 precipitation generated, which are tributary to a lagoon for a
11 storage period of 270 days, should be accounted for in the
12 calculation in the amount of waste generated in the same 270 day
13 period.

14 The Illinois EPA suggests that for clarity these volumes be
15 listed in the proposed regulation and recommend that Section

16 506.204(g)(3)(c) be replaced with the language submitted in my
17 prefiled testimony.

18 The last sentence of 506.303(a) should be revised for
19 clarify to include the term "volume," as recommended in my
20 prefiled testimony. The regulations do not specifically list as
21 an additional volume the runoff and precipitation generated and
22 tributary to a non-lagoon livestock waste handling facility for a
23 period of 150 days. This runoff and precipitation is livestock
24 waste and should be included in the calculation of livestock

23

KEEFE REPORTING COMPANY
1-800-244-0190

1 waste volume generated during a period of 150 days and listed in
2 the regulations for the calculation of the total volume of the
3 non-lagoon livestock waste handling facilities. The Illinois EPA
4 suggests that for clarity this volume be added to the list of
5 additional volumes in the proposed regulations and recommends
6 that Section 506.303(a)(1) and (2) be replaced with the language
7 suggested in my prefiled testimony.

8 The Agency recommends that Section 506.304(c) be revised to
9 include specifications for the maximum allowable horizontal
10 separation between the perimeter drainage tubing and the
11 livestock waste handling facility. The drainage tubing must be
12 located near the structure to effectively lower the water table
13 below the livestock waste handling facility to prevent
14 floatation. The following language should be added. Quote, the

15 perimeter drainage tubing must be located at a horizontal
16 distance that provides sufficient drainage to maintain the water
17 table elevation below the bottom of the livestock waste handling
18 facility, unquote.

19 A required sampling port is recommended. The drainage
20 tubing may receive and transport livestock waste that has leaked
21 from the nearby waste storage structure. A sampling port located
22 on site immediately downstream of the subsurface drain around the
23 livestock waste handling facility would provide easy access for
24 sampling and inspection to determine if the particular facility

24

KEEFE REPORTING COMPANY
1-800-244-0190

1 is or is not causing the discharge of livestock waste from a
2 subsurface drain. Additionally, early detection of such a
3 discharge by sampling or inspection of the sampling port would
4 provide the facility a better opportunity to initiate actions to
5 contain the livestock waste or prevent a discharge to waters of
6 the State.

7 Also, a reference to how the seasonal high water table may
8 be determined is recommended. If the water table rises above the
9 livestock waste handling facility bottom, the livestock waste
10 handling facility can be damaged by floatation, possibly causing
11 a discharge. Therefore, it is critical to know accurately the
12 seasonal high water table elevation when no subsurface drainage
13 is installed.

14 A provision for the diversion of livestock waste that may

15 be discharged from the drainage tubing, away from the surface
16 waters, to a field or collection area, pending collection and
17 appropriate disposal is recommended. If the subsurface drainage
18 tubing receives livestock waste, a means to contain the waste and
19 prevent discharge to waters of the State would need to be
20 implemented.

21 Section 506.310(c)(3) requires the certification by the
22 Licensed Professional Engineer of the liners for livestock
23 facilities located near aquifer materials. The Agency is
24 uncertain from the language of the proposal if the certification

25

KEEFE REPORTING COMPANY
1-800-244-0190

1 includes 506.310 and 506.304 requirements and recommends that the
2 certification by the Licensed Professional Engineer include both
3 Sections 506.310 and 506.304 requirements, because the provisions
4 of both sections are important to the prevention of groundwater
5 contamination by livestock waste.

6 Sections 506.207 and 506.312 regard the construction of the
7 lagoons and non-lagoons in karst areas. The Agency is concerned
8 that if a single boring is made to a maximum depth of 50 feet
9 below the livestock waste handling structure bottom elevation, as
10 it is proposed in Part 506, a void may be present below the
11 proposed livestock waste handling structure and still be
12 undetected.

13 Agency research has revealed the following: In the State

14 of Minnesota three municipal and one manure livestock waste
15 lagoon located in the karst region had failed. Karst areas with
16 sinkholes exist in Illinois in areas with drift over the bedrock
17 that is up to 50 feet or more based on the review of the map
18 "Karst Terrains and Carbonate Rocks of Illinois" incorporated by
19 reference in Section 506.104(a)(3). In a paper by Benson and La
20 Fountain, the authors state that 1,000 borings conducted on a
21 grid would be needed for a 90 percent probability to detect a
22 void of 2.3 meters in size on a one acre site.

23 The Agency concludes, therefore, that if a single boring is
24 made to a maximum depth of 50 feet, or in the case of non-lagoons

26

KEEFE REPORTING COMPANY
1-800-244-0190

1 20 feet, below a waste handling structure bottom elevation a void
2 may be present below the proposed structure and still be
3 undetected. The Agency recommends a more comprehensive
4 investigation based upon several sources of data.

5 I will provide a description of systems for Minnesota and
6 Missouri. The State of Minnesota adopted regulations in October
7 of 2000 regarding the location of manure storage structures in
8 karst areas. The regulations adopted require that certain
9 facilities have the following:

10 A minimum separation from bedrock of 20 to 40 feet for
11 earthen liners, based on the size of operation and type of
12 structures.

13 Use rigid structures or composite earthen/synthetic liners.

14 Limit the size of manure storage structures to 250,000
15 gallons.

16 Prohibit manure storage structures if the bedrock is within
17 5 to 15 feet of the livestock waste handling structure bottom.

18 Or relocate away from the karst features.

19 Minnesota also convened a work group of engineers that were
20 not state regulatory personnel to determine what should be
21 required for the livestock facilities located in karst areas.
22 Their report, issued in December of 2000, indicates the
23 following:

24 That in five instances earthen manure storage structures

27

KEEFE REPORTING COMPANY
1-800-244-0190

1 have failed due to sinkhole development in states other than
2 Minnesota.

3 Minnesota and other states have also had non-livestock
4 wastewater treatment ponds fail due to sinkhole development.

5 In all of these cases the failures have occurred where
6 there is no liner or the liner is designed to seep at greater
7 than the Minnesota requirements for earthen soil liners.

8 The Minnesota work group report also concluded the
9 following be required:

10 No new earthen manure storages located in areas where
11 carbonate bedrock is less than 50 feet from the ground surface
12 and the upper bedrock is fractured or there is other geologic

13 strata where soil collapse or sinkhole formation occurs.

14 Construction of manure storage structure is not allowed if
15 voids are encountered in the construction of the structure or a
16 soil inspection.

17 Minimum bedrock separation of five feet for concrete --
18 minimum bedrock separation of five feet for concrete tanks, dual
19 lined basins, composite lined basins and above-ground tanks with
20 concrete floors.

21 A secondary liner with a leachate collection system is
22 required if the bedrock separation is less than five feet.

23 Soil inspections shall be required during construction.

24 Diversion of fresh water would be required away from the

28

KEEFE REPORTING COMPANY
1-800-244-0190

1 perimeter of the manure storage.

2 Annual liner inspections would be required.

3 Monitored manure levels.

4 And have emergency response plans.

5 The Missouri Department of Natural Resources regulations
6 require that each site for an earthen wastewater pond, including
7 livestock waste facilities, be subject to a geological
8 evaluation. If the facility has severe geological limitations,
9 the wastewater pond, in essence, the livestock waste lagoon or
10 holding pond, may be prohibited unless liner technology and/or
11 more detailed investigation and analysis can demonstrate that the
12 proposed pond will not cause groundwater contamination. If the

13 geological evaluation indicates high collapse potential, then the
14 ponds are generally prohibited.

15 The Missouri system provides for the evaluation and
16 designation of a score for eight factors in making an assessment
17 of the earthen lagoon collapse potential of a site. Listed with
18 each factor in my prefiled testimony is the condition that scored
19 the highest for potential wastewater pond collapse. The site is
20 not scored for an assessment of earthen lagoon collapse potential
21 if the earthen lagoon bottom is underlain by 20 feet or more of
22 unconsolidated material, other than relict bedrock residuum or
23 alluvium.

24 Section 2.5 of the Minnesota work group report provides a

29

KEEFE REPORTING COMPANY
1-800-244-0190

1 summary of the requirements of manure storage structures located
2 in karst areas of ten states with karst geology. The factors or
3 restrictions used by these ten states surveyed included:

4 Size of the manure storage structure.

5 The use of rigid materials, above-ground storage or
6 impermeable liners.

7 Liner permeability requirements.

8 Prohibition of earthen liners.

9 Setbacks from sinkholes of 150 to 500 feet.

10 Site assessment to determine relative risk.

11 And depth to bedrock.

12 As I mentioned earlier, the chart was submitted comparing
13 the -- and that chart compares the Minnesota and Missouri
14 regulations in the report that I have been speaking of, and
15 that's the chart that we provided a new copy of today.

16 The presence of voids below the structure presents the
17 greatest threat in karst areas to the integrity of the waste
18 storage structure. Based on the information presented here
19 regarding karst, a single soil boring to a depth of 50 feet, or
20 in the case of non-lagoons to 20 feet, will not be sufficient to
21 reliably detect voids located near the manure storage structure
22 that can cause failure of manure storage structures. Additional
23 borings will provide more assurance that voids are not present.
24 Multiple borings should be conducted to a depth of at least 50

30

KEEFE REPORTING COMPANY
1-800-244-0190

1 feet or to the bedrock to detect the presence of voids.

2 Alternatively, if a single boring to 50 feet or to bedrock
3 is used as proposed, additional requirements would provide
4 methods to prevent groundwater contamination due to failures of
5 manure storage structures into fractured bedrock. Examples of
6 these additional requirements are: Preventing the location of
7 the manure storage structures or requiring the use of secondary
8 liners with leachate collection in areas of shallow soils over
9 bedrock, requiring material and liners based on depth to bedrock,
10 limitations on the size of the manure storage structures,
11 diversion of fresh water away from the manure storage areas, and

12 prohibitions based upon detection of voids during construction.

13 A list of materials I use is provided in my prefiled
14 testimony and have been submitted as an exhibit in this
15 proceeding.

16 This concludes my testimony, and I will be happy to answer
17 any questions that you may have.

18 HEARING OFFICER SUDMAN: Thank you. Do the Board Members
19 have any questions at this time for Mr. Heacock? Okay. Anand,
20 do you have any questions at this time?

21 MR. RAO: Yes, I just have one. Mr. Heacock, on page
22 eleven of your prefiled testimony, where in the conclusion
23 portion of your testimony you said that there are a number of
24 alternatives for the Board to consider instead of the single

31

KEEFE REPORTING COMPANY
1-800-244-0190

1 boring approach that has been proposed by the Department, could
2 you comment on the proposed standard for construction of
3 livestock waste handling facilities in karst areas which require
4 rigid materials, such as concrete? You know, would that be
5 sufficient to address some of the concerns that you have
6 expressed?

7 MR. HEACOCK: Yes, it does address some of the concerns
8 that I expressed. That is one of the techniques that you can use
9 to at least reduce the risk of failure due to collapse.

10 MR. RAO: Since the proposal requires all facilities that,

11 you know, are located in the karst areas, based on the soil
12 investigation to have that rigid construction, could that, you
13 know, be what -- would that be something that is acceptable to
14 the IEPA instead of doing multiple borings or, you know, things
15 of that sort?

16 MR. HEACOCK: If you are not -- the borings are limited as
17 to whether they are going to detect a void or not, because they
18 may not hit them. Our concern is that maybe there is other
19 techniques that can be used to limit the risk, and some of those
20 would be what I have mentioned previously.

21 Besides the rigid structure would be if there is shallow
22 bedrock would be a secondary liner. In that case you would
23 divert fresh water away from the structures say coming off of
24 roofs, buildings, or on to the structure itself somehow so that

32

KEEFE REPORTING COMPANY
1-800-244-0190

1 you minimize risk of failure there. And then there is some other
2 liner technologies that could be considered as well, such as
3 composite liners where you would use a synthetic liner in
4 conjunction with a thicker clay liner, for instance, that might
5 afford some additional protection. You may or may not have a
6 void below a structure in those areas and that single boring may
7 not hit it. So maybe these are alternative ways to approach that
8 potential situation.

9 MR. RAO: So what you are suggesting is this alternative
10 liner, the composite liner, or the synthetic liner they can use

11 as alternatives to using rigid construction material?

12 MR. HEACOCK: It can be in, I think, certain circumstances.
13 But I think the rigid structures are probably considered the best
14 in the most severe circumstances, in other words, where the
15 bedrock is the shallowest. Or if you were for some reason going
16 to attempt to design a structure over a void that you knew about,
17 and I don't know that that is feasible, but you probably would
18 have to use a rigid structure, if you would happen to detect one.

19 MR. RAO: Okay. Thank you.

20 HEARING OFFICER SUDMAN: If anybody else has any questions
21 for Mr. Heacock, please raise your hand. Okay.

22 CHAIRMAN MANNING: Does the Department have any questions?
23 Mr. Harsch?

24 MR. HARSCH: Yes. Were a number of the points that you

33

KEEFE REPORTING COMPANY
1-800-244-0190

1 have raised today in the Illinois EPA's testimony the subject of
2 discussion before the joint committee process that gave rise to
3 the present draft regulations?

4 MR. HEACOCK: Could you ask that question again, please?

5 MR. HARSCH: Weren't a number of the points that you have
6 addressed today raised in discussions with the joint committee
7 process with the IEPA and the Department of Ag, Natural Resources
8 that gave rise to the draft rules that are proposed today?

9 MR. HEACOCK: We did raise some of these points in some of

10 those discussions, yes.

11 MR. HARSCH: Thank you.

12 HEARING OFFICER SUDMAN: Are there any further questions
13 for the IEPA? If not, I think we are through with you for now.

14 CHAIRMAN MANNING: Thank you.

15 HEARING OFFICER SUDMAN: Thank you.

16 MS. TONSOR: Thank you.

17 MR. HEACOCK: Thank you.

18 HEARING OFFICER SUDMAN: At this time I call on Ms. Pam
19 Hansen from the Illinois Stewardship Alliance. Ms. Hansen, your
20 prefiled testimony will be entered into the record as if read, if
21 you prefer to summarize.

22 MS. HANSEN: Thank you. We will summarize.

23 HEARING OFFICER SUDMAN: Okay. Thank you. Will you please
24 swear in the witness.

34

KEEFE REPORTING COMPANY
1-800-244-0190

1 (Whereupon Pam Hansen was sworn by the Notary Public.)

2 HEARING OFFICER SUDMAN: Do you have any exhibits you would
3 like to introduce into the record?

4 MS. HANSEN: Nothing that was not prefiled.

5 HEARING OFFICER SUDMAN: Okay. We will mark your
6 attachment to your prefiled testimony as an exhibit as well.

7 MS. HANSEN: Okay. Thank you.

8 (Whereupon said document was duly marked for purposes of
9 identification as Hearing Exhibit 2 and entered into

10 evidence as of this date.)

11 MS. HANSEN: Good morning. My name is Pam Hansen. I am
12 employed with the Illinois Stewardship Alliance. I am the
13 Industrial Agricultural Coordinator. As such, I work with rural
14 residents and farmers and their concerns about the seeming
15 invasion of industrial-sized livestock operations. While most
16 agree that farms are getting larger, they are still concerned
17 with degradation and quality of life, potential health impact,
18 and contamination of air and groundwater. Our members are
19 farmers, rural residents, and urban citizens who all share a
20 concern for the production of safe, healthy food in a manner that
21 is sustainable for the environment.

22 Now, back in 1996 when we were first looking at rules for
23 the very first Livestock Management Facilities Act we were able
24 to bring to you many of these people to express their concerns,

35

KEEFE REPORTING COMPANY
1-800-244-0190

1 for which the Board was appreciative. Unfortunately, being the
2 nice, beautiful sunny day it is, many of them are out in the
3 field planting today and are unable to be here. Had it rained,
4 that would be a different story. We do -- we will be bringing
5 their concerns to you this morning, and rest assured that in the
6 five years since we first started this their concerns have not
7 changed.

8 We do feel that the proposed 506 Rule is a step forward in

9 protecting the environmental quality for the State of Illinois.
10 Members of the Livestock Advisory Committee and stakeholder
11 groups, of which the Illinois Stewardship Alliance was one,
12 worked tirelessly to ensure that the rules were both protective
13 and fair for the producers.

14 I would like to thank the Department for making the
15 clarification on the emergency lagoon for Elmwood. That has been
16 a very large concern for a lot of our members. And the
17 information that they and I have received was different from what
18 the Department presented here today. So we would like to thank
19 them for that.

20 Regarding facilities located in known regions of karst, we
21 have noted that in Kentucky an estimated 1.5 million gallons of
22 manure did drain into a karst aquifer. That lagoon had a
23 synthetic liner that was across the bottom and four feet up the
24 sides. However, the collapse occurred along the side and above

36

KEEFE REPORTING COMPANY
1-800-244-0190

1 where the liner is, and quickly expanded to drain the entire
2 lagoon.

3 Now, at this point Illinois' proposed construction
4 standards will be more stringent requiring that those structures
5 constructed in karst be of concrete or of rigid materials. But
6 we would feel that to provide protection a portion of this
7 concrete or rigid material should be extended above the grade to
8 allow for some measure of visual inspection for cracks or other

9 potential subsurface problems. That way our farmers had felt
10 that if you see something at the surface it might be an indicator
11 that something is also going on subsurface and needs to be
12 addressed, where if it is entirely undergrade we won't know of
13 the potential problem until you can detect a leak.

14 The Kentucky report also recommends during a karst
15 investigation that a dye trace be performed to identify the
16 receiving spring or springs in the event of a leak. The springs
17 should then be tested periodically for groundwater contamination
18 associated with livestock waste. And we do endorse that measure,
19 as well.

20 In addition, facilities that were constructed prior to the
21 July of 1999 amendment to the LMFA requiring -- or that will
22 require a site investigation should be identified and monitored
23 for potential problems. Utilizing the IDNR-ISGS Map 8 that is
24 referred to in Section 506.202, large scale facilities that are

37

KEEFE REPORTING COMPANY
1-800-244-0190

1 located in known areas of karst should be identified along with
2 their potential receiving springs or waters, and those waters
3 tested routinely for the presence or increase in presence of
4 contamination that is associated with livestock manure. The
5 purpose here is not to identify and indict these facilities but
6 to prevent possible catastrophic contamination in groundwater.
7 Based on the previous information that is exhibit -- that is our

8 Exhibit 1, some lagoons had existed for 18 years before a breach
9 occurred.

10 Also regarding attempts to make sure that administrative
11 rules and construction standards are protective to the
12 environment and fair to the producer regarding new facilities and
13 new construction, some existing large-scale facilities that may
14 be in need of upgrades have been ignored. There may be large
15 facilities that are not subject to inspections because they
16 predate the 1996 LMFA or the most current amendments and are
17 potentially way behind current standards for livestock
18 operations.

19 There are some rules for minimum upgrades that all
20 facilities should be able to maintain, for example, making sure
21 that lagoons have visual markers for liquid levels, making sure
22 there is adequate freeboard, diversion of stormwater, which has
23 been causing problems at some facilities and, of course, all
24 facilities should have and maintain a waste management plan

38

KEEFE REPORTING COMPANY
1-800-244-0190

1 regardless of age, and that they should be followed up and
2 maintained and inspected on a regular basis, again, not to
3 identify and indict, but more to prevent the potential pollution.

4 Finally, we believe that these rules, again, are a step
5 forward towards protecting the environment, working around flaws
6 in statutory language, they appear to cover many new requirements
7 necessary to adequately site a new proposed facility.

8 We do thank you for the opportunity to comment, and look
9 forward to the implementation of final rules.

10 HEARING OFFICER SUDMAN: Thank you.

11 MS. HANSEN: Thank you.

12 HEARING OFFICER SUDMAN: Questions of the Board Members?
13 Anand? The Department? Does anybody have any questions for Ms.
14 Hansen? Okay. Thank you very much.

15 MS. HANSEN: Thank you.

16 HEARING OFFICER SUDMAN: Okay. I would now like to call on
17 Mr. Roy Harsch. I understand that you brought someone with you.

18 MR. HARSCH: We are going to provide written comments at
19 the conclusion.

20 HEARING OFFICER SUDMAN: I am sorry?

21 MR. HARSCH: We are going to provide written comments, but
22 Mr. Scheetz would like to address the Board.

23 HEARING OFFICER SUDMAN: Okay. You are representing
24 yourself?

39

KEEFE REPORTING COMPANY
1-800-244-0190

1 MR. SCHEETZ: Yes.

2 HEARING OFFICER SUDMAN: Okay. Would you please spell your
3 name for the court reporter.

4 MR. SCHEETZ: I gave her my card.

5 HEARING OFFICER SUDMAN: Oh, okay. Thank you.

6 MR. SCHEETZ: Thank you.

7 HEARING OFFICER SUDMAN: Would you please swear in the
8 witness.

9 (Whereupon Jim Scheetz was sworn by the Notary Public).

10 MR. SCHEETZ: I am sorry I don't have a prepared statement.
11 My name is Jim Scheetz. I am with Scheetz Family Farms. Myself
12 and my sons have a farming operation in Western Illinois. I have
13 three sons that graduated from Iowa State University in
14 agricultural fields of one division or another, and they have all
15 returned to the farm, one on a part-time basis and the other one
16 as a full-time member of our operation. We have been involved in
17 the grain production side as well as the swine production and we
18 also have cattle, a few cattle, as well.

19 I guess today after listening to both the Department of Ag
20 and the Illinois EPA and, as I understand it, you are the people
21 that decide what kind of new rules we have, and I would ask that
22 any time that someone wants to change the rules that we have we
23 should have some type of testimony to ask why the changes are
24 going to be proposed. And in my -- as a producer, the rules that

40

KEEFE REPORTING COMPANY
1-800-244-0190

1 you -- or the rules that the legislature enacted in 1997, I
2 believe -- yes, 1997, I believe, 1996, they were helpful, they
3 were needed at that time because people were concerned about the
4 way livestock facilities were being constructed and that there
5 were no standards.

6 At that time I thought that they were tougher than they

7 needed to be. I thought they were going to be harmful to the
8 Illinois farmer because the other states did not require as tough
9 a standards as what we required. They still don't require as
10 tough a standards as what we have. So I guess I am apprehensive
11 when I see that we come to a situation where we are going to ask
12 for more on the standards.

13 Costs involved in our operation -- we built a facility --
14 we have had confinement facilities for years. We expanded in
15 1997 when one of my sons returned to the farm. We are also going
16 to expand again this year with the new facility. It has already
17 been permitted and everything has been okayed. So it is a late
18 summer project and we will start in about a month.

19 For us, any type of -- you know, I can see where you have a
20 problem trying to decide what you should do, but any time you add
21 costs, it is a cost on our bottom line. In other words, when you
22 add concrete, rebar, what have you, to the cost of the facility,
23 I guess we can argue that it is safer. But that is not something
24 that us, as a producer, can recoup in additional production or

41

KEEFE REPORTING COMPANY
1-800-244-0190

1 efficiency or what have you. It is only a cost that the farmer
2 is going to have to pay for and is going to have to generate
3 through his operation.

4 So we have to be competitive not only in our state but
5 throughout the United States in the cost of our facilities to be

6 competitive. And most farmers in Illinois want to build or
7 expand their operation with their family close to their
8 operation. We live in Western Illinois, so we have options that
9 we can move into Iowa or Missouri, because it is close for us.
10 However, we would prefer to stay in Illinois, close to our home
11 base.

12 I guess some of the changes that were proposed today I
13 question. We have had confinement facilities with deep pitted
14 buildings, concrete structures, for well over 30 years, and they
15 were almost basically all a six inch wall and a four inch floor,
16 and to my knowledge there is no evidence that there has been any
17 problem with those structures to this date. On our new facility
18 that we are going to build, as a family, and worried about the
19 environment as well, we have decided on our own operation that we
20 would like to build concrete structures for our waste material.

21 Now, I am not afraid of lagoons. I think there is a
22 perception problem with the public, and I think it is unfair.
23 However, that is one reason we stayed away from that. Our
24 operation in 1997, when we built that, we built an above-ground

42

KEEFE REPORTING COMPANY
1-800-244-0190

1 concrete tank, which all of our waste is handled into. Now, with
2 the new standards that have been developed, that tank is very
3 expensive, almost too expensive to build once you consider that
4 you have to put a foundation and some type of flushing -- a basin
5 under the structure and then you also build the outside

6 structure, it becomes very expensive and it is almost too
7 expensive to use.

8 So our next alternative on this project was a deep pitted
9 barn, and that is what we are proposing and what we are going to
10 build this year. However, when we talk about the slab size and
11 the wall size, our current building is going to be a ten inch
12 wall, and I don't remember what size the slab on the floor is.
13 But that becomes almost prohibitive to go with that type of
14 structure over a lagoon system.

15 Now, I would think that as a producer, as a citizen, as
16 anyone in Illinois, that this facility that we are going to be
17 building is much safer and more desirable to the people of
18 Illinois than would be a lagoon system. However, the costs are
19 going to -- we are almost driving the producer to go to the
20 lagoon system if we add costs to these concrete structures. I
21 would just ask you to keep that in mind, and when anyone comes
22 before you and proposes a change, I think we need -- that has to
23 be considered as well.

24 One thing that you went with when we did -- or the

43

KEEFE REPORTING COMPANY
1-800-244-0190

1 legislature went with when they did the new rules, was that they
2 picked the MidWest Plan Service 36 as a building guideline. They
3 had to go with something. There was nothing out here for us to
4 go by. I think that was fine that we went with MidWest Plan.

5 But there are a few things in there that need to be overlooked.
6 And I would encourage that someone from the State, the University
7 of Illinois, or the Department of Ag, or someone, look at that
8 plan service, and maybe it is time to update that from the 1960s
9 or whenever it was produced.

10 There is one thing that I couldn't believe, and we have
11 talked about it today in the water stops and the construction
12 joints. Every 50 foot there is to be a construction joint, which
13 means that you stop the concrete, you pour it another day, and
14 you put a water stop there in there. Well, it seems to me, and I
15 couldn't believe that this was in the rules, that a much safer
16 pour -- with the concrete people that we have today, they can
17 pour concrete and they can make that one slab. It seems to me
18 that it would be much safer to have one slab than to stop a cold
19 construction joint, have a water stop in there, and then the next
20 day, for human error or what have you, for people to come back
21 and pour concrete against that joint and assume that it is all
22 going to be poured as well as a solid concrete pour. Now, that
23 adds cost to the producer. But I think we would benefit both
24 environmentally and on a cost-wise if that would be changed so

44

KEEFE REPORTING COMPANY
1-800-244-0190

1 that we could make one pour.

2 When a construction crew comes and there is a 200 foot barn
3 and they can do the floor in a 50 foot pour, theoretically you
4 can do that in two pours. You can do both ends and then come

5 back and do the two middles. However, the size of the
6 construction crews that do the jobs today, they are going to have
7 that pour done in about half a day, and they take off to the
8 motel and you still go ahead and pay for the labor of about ten
9 people. Because most of these large jobs, it is a construction
10 crew away from your area that are used to doing this type of
11 work. So I guess I question -- that is one of the main things I
12 question about the Plan Service 36.

13 We have talked today about going from a -- two things that
14 we have talked about is going from a four inch slab to a five
15 inch slab. And I guess I can't argue with anybody that if we can
16 go from a four inch to a five inch that it is stronger, or we can
17 go from a four inch to a six inch to a seven inch. But where is
18 the evidence that what we have is not working? I mean, my
19 opinion is that there are confinement pits and structures all
20 over Illinois and they are not leaking. There is no proof that
21 they are leaking.

22 In our current operation we have been totally confined
23 since 1993 and we expanded in 1997. All of our -- Ms. Anderson
24 talked about a sustainable agriculture. Well, I guess we would

45

KEEFE REPORTING COMPANY
1-800-244-0190

1 be considered an industrial agricultural, myself and my family.
2 However, what can be more sustainable than growing crops, feeding
3 those crops to the livestock, taking the waste, which has always

4 been a problem in this type of business, putting those back on
5 the field as fertilizer, and then the crops utilizing that
6 fertilizer to grow crops again. I would think that would be the
7 most sustainable agriculture anyone could have.

8 Since 1993, unlike some municipalities, I can honestly say
9 we have not dropped one drop of effluent into the local creek,
10 tributary, or what have you. It has all been utilized. That, to
11 me, is sustainable agriculture, irregardless of what size
12 operation that you have.

13 I guess that's all I have. I would entertain any
14 questions. But I would ask -- I thank you for the job that you
15 do. I would just ask that you, you know, ask why rules are
16 proposed. I would ask that they have hard data when they propose
17 rule changes. I would encourage that we look at that MidWest
18 Plan Service. Maybe there are some things there that need to be
19 stronger than they are, but there are also some things, for
20 instance, the wall size, that are almost getting beyond the
21 bounds of where we can build facilities.

22 With that, I thank you, and I will be happy to answer any
23 questions.

24 HEARING OFFICER SUDMAN: Thank you.

KEEFE REPORTING COMPANY
1-800-244-0190

46

1 CHAIRMAN MANNING: Thank you for your testimony. Would you
2 explain a little bit about the proposed facility that you are
3 building now? You said it was a deep pitted barn, ten inch wall?

4 MR. SCHEETZ: Yes, yes.

5 CHAIRMAN MANNING: Does it meet the current regulations and
6 even the proposed regulations that we have before us today?

7 MR. SCHEETZ: Yes, it does.

8 CHAIRMAN MANNING: It meets all of those regulations?

9 MR. SCHEETZ: Yes. I thought Mr. Feldman would be here,
10 who is an engineer from Peoria. He is the engineer that we have
11 been using for our site investigation as well as the acceptance
12 of the plans that we have through the Department of Ag.

13 Our current operation -- we are grain farmers, unlike some
14 livestock producers, large livestock producers that don't have
15 grain farming. Manure is a waste to them. Now, we call it
16 waste, but it is also a fertilizer to us. So we really --
17 although it is a by-product that is about the same cost as
18 fertilizer, but by the time we use it, it is something we have to
19 deal with anyway, so why not utilize it. We are grain farmers as
20 well, so we want to utilize that.

21 Our new structure, we felt the safest was a deep pitted
22 barn, concrete. The new regulations -- we are going to go 12
23 foot deep. We could have built a lagoon. We could have built
24 any structure on this facility where we are going to be. The

47

KEEFE REPORTING COMPANY
1-800-244-0190

1 setbacks have all been met. We could have built a lagoon. We
2 had the proper soil for that. We did not have a high water

3 table, so that was not a problem. We could have built an outside
4 tank or we could have built a deep pitted barn. We chose the
5 deep pitted barn. We wanted to go with a construct structure of
6 some type.

7 But, like I said, it was a very tough call for us to spend
8 the extra, I would say \$100,000.00 on concrete over a lagoon, and
9 that is not -- that is not monies that we can recoup unless we
10 can save ourself in some litigation or some problems in the area
11 of that sort. And we felt maybe that was the case. And a deep
12 pitted barn, we feel, is the safest. A deep pitted barn will
13 retain more of the nutrients in the manure, so we will have to
14 have more land base for that. But to us that is a plus. If we
15 can get there, we can utilize it. The crops will utilize it.
16 That's a product that we want. It is a waste but it is a product
17 that we want.

18 So to answer your question, we are going with a 12 foot
19 pit. I forget the exact floor size, but the walls will be ten
20 inch. The rebar is -- there is a certain size of rebar that is
21 required. Of course, Terry has engineered our walls and they all
22 meet the specifications and they have been approved. Everything
23 is go. As I said, it is a late summer project. So we are going
24 to start about June 1st.

48

KEEFE REPORTING COMPANY
1-800-244-0190

1 CHAIRMAN MANNING: Do you have enough ground, then? I
2 understand that you are able to use all of the waste yourself and

3 land apply it to your own ground?

4 MR. SCHEETZ: Yes.

5 CHAIRMAN MANNING: So you don't even have to bother selling
6 it or you don't have to give it to your neighbors? You can use
7 most of it yourself?

8 MR. SCHEETZ: We can use it all. Now, there are some farms
9 that will be a bit far to be hauling that. So it may come to a
10 point where we would rather sell it to neighbors than use it
11 ourselves. So that may be the case on some of what we have.
12 Preferably, we would rather use it ourself because it is better
13 than commercial fertilizer and you can raise better crops with it
14 than you can with commercial fertilizer. However, it -- we will
15 utilize all we can. However, there probably is a point there
16 where we will try to sell that to local neighbors and incorporate
17 it into the farm ground around there.

18 CHAIRMAN MANNING: More specifically, where are you
19 located? You said Western Illinois.

20 MR. SCHEETZ: Hancock County. The new facility will be
21 north of Carthage approximately ten miles.

22 CHAIRMAN MANNING: Okay. Thank you.

23 MR. SCHEETZ: Our other operation is just a little bit
24 further north and west of there, east of Nauvoo, Illinois, near

49

KEEFE REPORTING COMPANY
1-800-244-0190

1 Niota, Illinois, although we are not down in the bottoms where

2 they are flooding. We are up on high ground.

3 CHAIRMAN MANNING: Okay. Thank you.

4 HEARING OFFICER SUDMAN: Any other -- Elena.

5 BOARD MEMBER KEZELIS: Good morning. How many swine,
6 roughly, do you anticipate holding in your deep pitted barn?

7 MR. SCHEETZ: The animal units, you mean?

8 BOARD MEMBER KEZELIS: Yes.

9 MR. SCHEETZ: The current operation that we are going to
10 build will be a 3,600 sow site, and it is a farrow to wean
11 operation. So, in other words, we will farrow and then the pigs
12 will leave there at approximately 10 to 14 days of age and go
13 into another new facility.

14 BOARD MEMBER KEZELIS: Another deep pitted barn?

15 MR. SCHEETZ: Probably, although we don't own the pigs at
16 that point. Someone else owns that and they have control of
17 those. We are not -- but that is generally what happens.

18 BOARD MEMBER KEZELIS: Okay.

19 BOARD MEMBER GIRARD: Carol, I have a question.

20 HEARING OFFICER SUDMAN: Yes, Dr. Girard.

21 BOARD MEMBER GIRARD: Thank you, Mr. Scheetz, for coming in
22 and talking to us today. I realize that on a day like this in
23 the spring there is a lot of work for you to do out there.

24 MR. SCHEETZ: Exactly.

50

KEEFE REPORTING COMPANY
1-800-244-0190

1 BOARD MEMBER GIRARD: I saw a lot of planting going on on

2 the drive over here from Jacksonville this morning. We certainly
3 appreciate hearing from a good, conscientious farmer like you.
4 Because, let's face it, there are thousands of farmers out there
5 who are doing a good job and doing everything right and being
6 protective of the environment, and we don't hear from them very
7 often. What we see in the newspapers are the ones who are not as
8 conscientious and try to slip by, and then we have environmental
9 problems and then that gets the public in an uproar.

10 MR. SCHEETZ: Sure, sure.

11 BOARD MEMBER GIRARD: So we certainly appreciate you taking
12 time today from your operation to come here and testify. The
13 question I have is, it sounds to me like the structure you are
14 designing goes well beyond the minimum proposed standards here
15 for manure containment. And why is that? Is that just what your
16 engineer came back and said, that you need ten inch thick walls,
17 or are you just doing that to have a safety factor in there?

18 MR. SCHEETZ: I guess I would have to ask you a question.
19 Is that in regard to building a deep pitted barn or in the design
20 of the pit itself, is your question referring to?

21 BOARD MEMBER GIRARD: In the design of the pit itself.

22 MR. SCHEETZ: No, we worked through Mr. Feldman and -- you
23 are probably normally -- normally a pitted facility is only eight
24 foot deep. Our desire was to get to either a 10 or a 12 and

1 hopefully the 12, because that would hold a year's supply of
2 waste. An ideal grain farmer would rather just apply that in the
3 fall because spring becomes so hectic and compaction becomes a
4 problem and timing becomes a problem.

5 So our goal was to provide enough capacity to have a year's
6 supply. So we are going with a 12 foot, and as I understand it
7 from Terry and working with the Department of Ag, to get this
8 approved we had to go with the ten inch wall, and the size -- and
9 the amount of rebar that is in that as well as the thicker slab
10 on the floor.

11 So, no, we did not -- we did not go -- those are required
12 by the State. Now, normally in the past any pit that was ever
13 built was a six inch wall on a four inch floor, period, even a
14 ten foot. We built a circular concrete tank in 1997 where there
15 weren't any standards. Your building standards did not apply at
16 that time. We could design that round tank at that time. So it
17 is not as strong as this pit is going to be.

18 However, it seems to me that I do think that once we go to
19 a ten inch wall it is over-engineered, and it is -- I think what
20 you are forcing a lot of producers to do is rather than look at
21 the concrete structure is to go to a lagoon system. And I think
22 that if we want to encourage concrete structures possibly we
23 should come off that ten inch wall idea to an eight inch wall.

24 BOARD MEMBER GIRARD: So did the requirements for the ten

1 inch wall come out of this MidWest Plan?

2 MR. SCHEETZ: Yes.

3 BOARD MEMBER GIRARD: Okay. Thank you.

4 MR. SCHEETZ: I am sorry.

5 BOARD MEMBER GIRARD: No, that is --

6 CHAIRMAN MANNING: Well, what I understand you to say is
7 that your facility is able to handle a lot more -- has a lot more
8 capacity than --

9 MR. SCHEETZ: Than what is necessary. But normally most
10 farmers will build a facility so that they can haul their waste
11 in the spring and the fall. And our desire is to do that just
12 once a year, and I know we will be able to do that.

13 MR. RAO: I have one --

14 CHAIRMAN MANNING: Go ahead.

15 MR. RAO: In your testimony you talked about the cost
16 impact of the rules.

17 MR. SCHEETZ: Yes.

18 MR. RAO: And the additional design requirements. If you
19 are -- you know, any organizations that represent your interest,
20 if they have any cost data that they could submit to the Board,
21 it would be helpful to have that information.

22 MR. SCHEETZ: Okay. When you say cost data, is that a
23 lagoon compared to a concrete structure or is that --

24 MR. RAO: No.

1 MR. SCHEETZ: -- a concrete structure based on maybe --
2 MR. RAO: You know, design requirements like the cost
3 impact that a particular concrete wall would have.
4 MR. SCHEETZ: I see. I can send that.
5 MR. RAO: And then any other related cost data would be
6 helpful.
7 MR. SCHEETZ: Sure. I would be happy to do that.
8 MR. RAO: Thank you.
9 HEARING OFFICER SUDMAN: Okay. Thank you very much.
10 MR. SCHEETZ: Thank you.
11 CHAIRMAN MANNING: Thank you.
12 MR. SCHEETZ: Thank you.
13 HEARING OFFICER SUDMAN: At this time we will hear from Mr.
14 Ken Koelkebeck, who is representing the State Turkey Growers
15 Association, Perdue Farms, and the University of Illinois
16 Department of Animal Science. You gave a business card to the
17 reporter?
18 MR. KOELKEBECK: Yes.
19 HEARING OFFICER SUDMAN: Okay. Your name is tricky to
20 spell.
21 Could you please swear in the witness.
22 (Whereupon Ken Koelkebeck was sworn by the Notary Public.)
23 MR. KOELKEBECK: I am going to file written testimony by
24 the May 14th deadline, but I had some oral comments that I wanted

1 to make here this morning before the group.

2 CHAIRMAN MANNING: Just so you know, that would be
3 considered public comment, then. Your testimony is today.

4 MR. KOELKEBECK: Okay. Thank you. Yes. I want to just
5 briefly thank you for the opportunity to give testimony in regard
6 to the proposed changes in Code 506, construction standards. And
7 specifically I wanted to give testimony on the design and
8 standards for construction of livestock facilities other than
9 lagoons.

10 Basically, it is my understanding that any new facility or
11 an addition to an existing facility, specifically I am going to
12 talk about the poultry facilities in the state, we classify that
13 a new facility which is intended to house poultry has to conform
14 with certain construction standards related to floors within
15 these facilities, as stated. These proposed standards require
16 that new facilities that are built must be constructed on ground
17 that has a hydraulic conductivity or permeability of one times
18 ten to the minus seventh, and that was indicated in Section
19 506.304(a)(1).

20 In the event that a one times ten to the minus seventh
21 centimeter per second permeability cannot be attained within
22 these facilities or a new facility, that the construction process
23 for a new facility, turkey or layer facility, would have to be
24 involving a concrete floor. In addition, the producer or company

1 must obtain a soil sample to determine the presence or
2 nonpresence of aquifer containing material within five feet of
3 the floor facility, and that is Section 506.302.

4 These regulations and others that are not specifically
5 mentioned here, basically would greatly affect poultry producers
6 in the State of Illinois and specifically the turkey industry and
7 to some extent possibly the laying hen industry. These
8 regulations would also negatively affect the possible expansion
9 of the broiler industry into the State of Illinois.

10 Basically in regards to these few brief comments, I was
11 approached by an integrated turkey company that contracts
12 production in Southeastern Illinois about a year and a half ago.
13 This company had several contract producers that were wanting to
14 expand their operation, put in new facilities or upgrade their
15 current turkey grow-out facilities. They were informed that they
16 would have to met these guidelines set forth in Section 506, and
17 that being the one times ten to the minus seventh centimeters per
18 second permeability within the turkey facility itself.

19 The company had basically talked to the Department of
20 Agriculture and decided to obtain some scientific data on
21 permeability of soils for the proposed facilities that the
22 producer wanted to put in. In addition, this particular project,
23 we wanted to determine the extent of leaching, if there were any,
24 of nutrients from the turkey manure within the soils. Therefore,

1 this company approached me and we designed a field type trial.
2 Basically we got funding from the Illinois Council on Food and
3 Agriculture Research, CFAR organization in the state, and the
4 Department of Animal Sciences there at the U of I.

5 In particular, I wanted to briefly discuss, then, the
6 results of this particular study and, in addition, this study has
7 been presented at national and state meetings in the poultry
8 industry as well as a report was given to the Department of
9 Agriculture back on February 14th of 2000. And, in addition, a
10 peer review manuscript has been submitted to a poultry peer
11 review journal on December 11th of 2000 and is currently under
12 review.

13 Basically for this study we sampled two turkey grow-out
14 barns and a brooder barn, basically selected from commercial
15 turkeys in Southeastern Illinois to determine the possible
16 leaching of soil nutrients and permeability of properties within
17 the house at certain depths. Three barns that had been in
18 existence raising turkeys for approximately 10 to 12 years were
19 selected. And these barns were selected as a representative
20 sample of these turkey facilities in this area of the state.
21 Each barn we took soil samples from inside the facility, and
22 additional soil samples outside the facility, basically the soil
23 borers.

24 We contracted the services of the Illinois State Geological

1 Service to get a probe truck within the facilities and outside to
2 take soil bore samples. In addition, we wanted to take soil bore
3 samples up to five feet, but on the outside we wanted to take
4 samples up to 28 feet and actually go up to 50 feet if we could
5 to determine if there was aquifer material in and around this
6 proposed additional new building for this turkey producer.

7 We separated the soil borers within the house and sent them
8 into a private lab and looked at nitrogen, nitric nitrogen, and
9 phosphorus, basically nutrients that are leaching within the
10 manure and may have possible harmful affects on underground
11 water. In addition, core samples were taken at three depths, up
12 to about eleven inches, to determine soil permeability.

13 Briefly, the results of this study indicated that a greater
14 concentration of nitrogen in the first three foot of soil within
15 the house was found compared to samples outside the house.
16 However, at four and five foot depths underneath this turkey
17 facility there were no differences in the concentration of
18 nitrogen, kjeldahl nitrogen and total nitrogen and phosphorus.
19 Basically we found similar results, except for phosphorus was
20 only different at the first foot level basically. So phosphorus
21 essentially did not move into the soil and migrate into the soil
22 like nitric nitrogen and kjeldahl nitrogen.

23 So permeability results indicated a lower permeability.
24 That means basically it slowed the infiltration of water through

1 the soil inside the house versus outside samples in one to three
2 and five to seven inch depths. As a matter of fact, in going
3 into the turkey facility I was taking soil samples for the soil
4 permeability. We used what we called a u-line (spelled
5 phonetically) core sampler, and it essentially takes a core of
6 soil and basically we took those cores back to a lab at the U of
7 I to determine permeability studies on it.

8 Basically after the first sample that I took the instrument
9 broke because the ground was so hard and clay in nature and the
10 turkeys, basically 20,000 in the house, compacting the soil, we
11 had to rush the unit to a nearby welding shop and get it fixed
12 before we could continue. So that is an indication of how hard
13 the soil basically is. It is just like glass and a concrete
14 floor when you are in there walking on it, the compaction of the
15 turkeys over a number of years that are being produced.

16 Continuing, the permeability data also indicated that
17 several inside permeabilities exceeded one times ten to the minus
18 seventh centimeters per second permeability of water through
19 those soils. Thus, this -- basically this study indicated that
20 the leaching of soil nutrients essentially stopped at the four
21 and five foot level within these turkey facilities. In addition,
22 soil permeability was lowered by the presence of growing turkeys
23 within these facilities.

24 As an indication of the nutrients, and basically the

KEEFE REPORTING COMPANY
1-800-244-0190

1 outside core sample that we tried to sample going down to 50
2 feet, on the first facility we got down to 28 feet with the soil
3 probe and didn't find the presence of aquifer material and hit
4 bedrock, limestone, and couldn't go any further. So on the
5 subsequent three houses we went down and tried to go at least 28
6 feet with an outside core sample and look at that profile to
7 determine aquifer material. And basically we hit water on one of
8 the buildings and that depth was at 20 feet.

9 So it satisfied our curiosity that underneath these houses
10 there was not aquifer material within the first basically 28
11 feet. We couldn't go down any further because of bedrock. So
12 the soil permeability samples that we took determined that the
13 inside samples were lower permeability compared to the outside,
14 which was our control.

15 So in addition to this, I would like to make a few comments
16 basically on the impact of this particular study and relationship
17 to the poultry industry in the State of Illinois. I have been
18 here at the U of I for 14 years, and when Governor Thompson was
19 governor he was actively trying to recruit the poultry industry
20 to the State. We have umpteen supplies of corn and soybeans, if
21 you will, and I think you know that, that poultry production in
22 the State of Illinois would benefit if they would expand in the
23 State.

24 Basically, if these changes were to finally be enacted,

KEEFE REPORTING COMPANY
1-800-244-0190

1 further expansion of the turkey and layer industry basically, I
2 think, would be negatively affected. Turkey producers are forced
3 to build new grow-out buildings or expand their existing ones,
4 and have to meet a concrete floor permeability, the additional
5 cost of \$25,000.00 to \$30,000.00 per house on a house that
6 already costs about \$100,000.00 would make it virtually
7 impossible for the producer to secure a loan from any banker
8 based on the normal contracts that a contract company provides
9 for a turkey grower.

10 Also, when the existing facilities depreciate in value and
11 can no longer produce turkeys efficiently, the total production
12 volume of the State will decline because these new facilities
13 would be cost prohibited. Thus, in the end the State would lose
14 some 35 million dollars in cash receipts from the turkey industry
15 that are generated per year and, in addition, the money generated
16 by the sale and consumption of nearly 3.5 million bushels of
17 corn. Basically it takes a bushel of corn to produce a turkey up
18 to market weight. We produce about 3.5 million turkeys per year
19 in the State of Illinois. That would be lost and would have to
20 be sold elsewhere.

21 The State would, finally, not be able to receive any
22 monetary benefits from any broiler companies, which we have been
23 trying to attract in recent years, due to when they would
24 construct facilities they would probably have to put in the

KEEFE REPORTING COMPANY
1-800-244-0190

1 concrete floor if permeability couldn't be demonstrated.

2 So basically to summarize, our research findings reported
3 that -- seemed to support the contention that subsurface
4 groundwater would not be contaminated from leaching of the
5 nutrients from within the turkey facilities, particularly in the
6 State since we conducted this research trial. In addition, the
7 proposed construction standards as currently written would
8 negatively affect expansion of the turkey industry and layer
9 industry as well as prohibit any new broiler companies from
10 expanding into the State of Illinois.

11 I will entertain any questions that you have at this time.

12 HEARING OFFICER SUDMAN: Thank you. Are there any
13 questions?

14 CHAIRMAN MANNING: I have a few.

15 MR. KOELKEBECK: Yes, ma'am.

16 CHAIRMAN MANNING: Thank you for testimony today.

17 MR. KOELKEBECK: Yes, ma'am.

18 CHAIRMAN MANNING: The facilities that you studied, could
19 you describe them a little bit more for me, particularly where
20 are they located exactly? You just said the Southeast portion of
21 the State?

22 MR. KOELKEBECK: Yes, they are --

23 CHAIRMAN MANNING: You said four?

24 MR. KOELKEBECK: There are three facilities in Richland and

KEEFE REPORTING COMPANY
1-800-244-0190

1 Crawford County. It could have been Lawrence County. It was
2 about year and a half ago. These are the particular facilities,
3 one brooder barn, one grow-out barn --

4 CHAIRMAN MANNING: Could you explain those, the brooder
5 barn and the grow-out barn?

6 MR. KOELKEBECK: Yes. A brooder barn basically raises day
7 old turkeys up to about six or seven weeks of age. Then the
8 producers moves them, physically moves the birds to an adjoining
9 grow-out barn. It is basically a concrete foundation barn built
10 basically on existing soil, and the foundation sits up about two
11 or three feet and basically about 20,000 poults can fit in there
12 initially. When they are transferred to the grow-out barn, about
13 half of those are transferred to the grow-out barn, depending
14 upon whether they are raising hens or toms.

15 Basically both types of facilities are the same type of
16 construction with a foundation type but no concrete floor and
17 basically fan ventilated and, you know, typical watering. Water
18 is basically in bell drinker waterers. It is not -- is a
19 non-flowing water system. So the only possible leaks might occur
20 around waterers and feeders in there.

21 The company or the producer would remove the litter, which
22 is removed out of the building probably on a one to two year
23 rotation. The brooder barns are probably cleaned out after every

24 brood, but in the grow-out barn they are cleaned out about every

63

KEEFE REPORTING COMPANY
1-800-244-0190

1 two years. So it is a dry handling manure storage facility with
2 the turkeys in there, toms being raised, you know, 16 to 18 weeks
3 and hens about 14 weeks. And the producer initially puts in
4 about 12 inches of pine shavings to start a flock and then puts
5 the birds in until they are either moved or marketed.

6 CHAIRMAN MANNING: Where is the waste going on a daily
7 basis? I guess I don't understand that.

8 MR. KOELKEBECK: On a daily basis it sits inside the house.
9 Basically it is on a litter floor and then a compaction of the
10 pine shavings, which absorbs the moisture of the feces, it sits
11 inside the house until the turkeys are either moved out or moved
12 to the processing plant.

13 CHAIRMAN MANNING: So that what causes the compaction that
14 you talked about? When you are talking about the compaction, you
15 use -- I think you called almost like glass?

16 MR. KOELKEBECK: Yes. Well, basically --

17 CHAIRMAN MANNING: That is a compaction from the litter?

18 MR. KOELKEBECK: It is compaction from the turkeys walking
19 on it when there are 20,000 turkeys in the building. It is the
20 litter and the turkeys themselves over time.

21 MR. NALLY: I could better describe that when I come up.

22 CHAIRMAN MANNING: Okay. Thank you.

23 MR. KOELKEBECK: Yes.

24 CHAIRMAN MANNING: Were any of these facilities in a karst

64

KEEFE REPORTING COMPANY
1-800-244-0190

1 area that is being described now, in the regulations that we are
2 dealing with, karst areas? I assume none of them are, that you
3 studied?

4 MR. KOELKEBECK: I don't know that answer.

5 CHAIRMAN MANNING: Okay.

6 BOARD MEMBER GIRARD: I have a follow-up question.

7 HEARING OFFICER SUDMAN: Yes.

8 BOARD MEMBER GIRARD: When you move the turkeys out and
9 then you clean out the shavings and the feces what happens to
10 that?

11 MR. KOELKEBECK: To my knowledge the producer will store
12 the shavings and feces in a storage area outside the building,
13 and then possibly then spread it on his own land through a manure
14 spreader.

15 BOARD MEMBER GIRARD: Okay. Thank you.

16 MR. KOELKEBECK: In the dry format, in the litter format.

17 BOARD MEMBER GIRARD: So these shavings would be out in the
18 open? Are you, in your testimony -- first of all, are you going
19 to submit copies of these studies, I mean in your comments?

20 MR. KOELKEBECK: Yes, sir, I am.

21 BOARD MEMBER GIRARD: Thank you. Are you going to suggest
22 that maybe we would need different requirements if, say, you have

23 got a flooring under a covered structure like a brooding house as
24 opposed to say an outside structure which holds say shavings and

65

KEEFE REPORTING COMPANY
1-800-244-0190

1 feces, which is exposed to the elements?

2 MR. KOELKEBECK: Yes, sir.

3 BOARD MEMBER GIRARD: And that will be in your comments
4 also?

5 MR. KOELKEBECK: Yes.

6 BOARD MEMBER GIRARD: Thank you.

7 HEARING OFFICER SUDMAN: Okay. Thank you very much.

8 MR. KOELKEBECK: Thank you.

9 CHAIRMAN MANNING: The Department has a question.

10 HEARING OFFICER SUDMAN: Oh, the Department. I am sorry.

11 MR. GOETSCH: I just wanted to ask --

12 CHAIRMAN MANNING: Would you identify yourself, Warren,
13 again?

14 MR. GOETSCH: I am sorry. My name is Warren Goetsch. I am
15 with the Illinois Department of Agriculture. I just wanted to
16 ask, the results of your study suggested that the hydraulic
17 conductivity in the existing barns was or would meet the
18 requirement that we are proposing, the one times ten to the minus
19 seventh; is that correct?

20 MR. KOELKEBECK: In our particular study we had samples
21 that did not -- we had a number of samples, I guess, in the lab
22 analysis, that did not allow water to go through at all. But the

23 average of all of the samples taken together and analyzed
24 statistically was higher on the inside samples versus the

66

KEEFE REPORTING COMPANY
1-800-244-0190

1 outside. But they were like ten to the minus sixth, and that
2 will be in the written report submitted.

3 MR. GOETSCH: Okay. So then your point is our requirement
4 of one times ten to the minus seventh is not achievable or is
5 achievable based on the sites that you looked at?

6 MR. KOELKEBECK: It is achievable by a certain number of
7 samples, but on the average it was not achievable.

8 MR. GOETSCH: Okay. Thank you.

9 HEARING OFFICER SUDMAN: Are there any more questions
10 before the witness steps down? Okay. Thank you very much.

11 MR. KOELKEBECK: Thank you.

12 HEARING OFFICER SUDMAN: I know we have one person who
13 stills wants to testify.

14 Would you please raise your hand if you would still like to
15 testify today? Okay. I got you.

16 Is there anybody else here planning to testify today?
17 Okay. Well, it looks like we only have one more witness. If you
18 would like to come on up.

19 MR. NALLY: My name is a Scott Nally. I am the integrator
20 that he was discussing with.

21 THE COURT REPORTER: Could you state your last name again,

22 please.

23 HEARING OFFICER SUDMAN: And spell it, please.

24 MR. NALLY: It is Nally, N-A-L-L-Y.

67

KEEFE REPORTING COMPANY
1-800-244-0190

1 HEARING OFFICER SUDMAN: Thank you.

2 MR. NALLY: I signed the register. Do I need to be sworn
3 in?

4 HEARING OFFICER SUDMAN: Yes, please.

5 MR. NALLY: Okay.

6 (Whereupon Scott Nally was sworn by the Notary Public.)

7 HEARING OFFICER SUDMAN: You are representing Perdue?

8 MR. NALLY: I am representing Perdue Farms. I am the
9 integrator that he spoke about.

10 Good morning, Madam Chair and other panelists. I will give
11 you a little bit of my background first. I am the environmental
12 manager for Perdue. I have staff in several states. Actually,
13 Perdue Farms is in nine states currently. I have four.
14 Environmentally we are very proactive. I have been with Perdue
15 for eight years. As far as facilities, we spend upwards of six
16 or nine million dollars in a year for just waste disposal, for
17 example, at a slaughter plant through our waste management
18 process.

19 We have been very active on the producer side of the
20 equation. Of course, any time the producer tends to be a bad
21 actor, shall we say, when the news media or someone comes out on

22 site and takes a picture of the facility, of course, it says
23 Perdue right on one of the feed bins or down one of the
24 buildings. So we are very name conscious. We are a family-owned

68

KEEFE REPORTING COMPANY
1-800-244-0190

1 company based out of Salisbury, Maryland. I am based out of
2 Indiana. I have been in this business since 1982. I have been
3 with Perdue, like I said, for about eight years. It feels like
4 28 sometimes when you are -- my morning started at about 3:30
5 when I left the house to be here today.

6 A little bit more on my background before I get a little
7 more specific. My undergraduate was NC State. My Masters was
8 University of Wyoming. I have a staff of in excess of 128 people
9 that are environmentalists, either through waste managers,
10 through the waste management system as operators or water,
11 because some of our facilities draw water from wells. So I also
12 have people that are on staff with air, stormwater, land
13 application, land application of both industrial and livestock.

14 The issue I wanted to raise a little bit today is we are
15 kind of the other guys. I have heard a lot of testimony about
16 lagoons and about water treatment and runoff and runoff control,
17 and maybe I will describe our buildings a little bit, which might
18 answer some of the questions you had raised. Our buildings are
19 producer family-owned buildings and are roughly 500 feet long by
20 about 50 feet wide.

21 Most farms will have three of those buildings on site. One
22 will be the initial brooder barn, which will take all the birds
23 when they come in at one day old. And then in about five or six
24 or seven weeks, depending on whether they are hens or toms, he

69

KEEFE REPORTING COMPANY
1-800-244-0190

1 will take that amount and then split them half in one building
2 and half in the next one. So that will be the second and third
3 building. It gives them a little more square footage. There are
4 no cages. So they just kind of walk around the barns.

5 There are drinkers hung throughout the buildings. There
6 are food systems hung throughout the buildings. The buildings
7 are in this case normally built on earthen floors. On the
8 earthen floor will be a bedding material, whether it is litter
9 shavings or rice hulls, it is something that is soft.

10 Another issue that was not brought out during Ken's
11 discussion was that the pads of the birds are very tender, and if
12 you were to put them on concrete and if they scratched down
13 through and were standing on or if they scratched down through
14 the litter and stood on concrete there are several different
15 infections than can be given through the pad that you normally
16 would not even find on hard ground. We have all stood on
17 concrete all day. There is a difference between standing on
18 concrete all day and going out and standing in your backyard,
19 even if your backyard is still hard. So there is that issue of
20 tenderness on the feet.

21 More on the buildings, the brooder facilities are what we
22 call decaked, which means that the litter is -- there is a
23 machine that goes through that is on a vibrating sieve on an
24 angled incline. The litter goes up that incline and it is shaken

70

KEEFE REPORTING COMPANY
1-800-244-0190

1 like a screen. The manure is stuck together with the litter
2 material, the cake. The cake goes up the ramp and into a hopper.

3 So we will periodically decake a facility where we won't
4 have necessarily an entire clean out, where the house that has
5 the small birds, because of their susceptibility to diseases, we
6 clean those out every time, where the grower building might be
7 cleaned out after a time that is diminishing return and that
8 litter just is a little damper than what you want it to be.
9 Dampness in this case, especially with 86 degree air, and the
10 houses are ventilated, you would have some ammonia.

11 So it is not in the best interest of the producers to have
12 the litter get too awfully wet and not clean out on a frequent
13 basis, because then you get ammonia production, and then the
14 birds end up passing away from high levels of ammonia, which, we,
15 obviously, as the integrator, we pay them for the pounds, so we
16 need to keep the production plants at optimal efficiencies. We
17 would like to see them get as many pounds as efficiently through
18 those buildings as possible. So it is not to our best interest
19 to have them keep litter three or four, five or seven, or nine

20 years. The litter, to give you some dollars, are roughly around
21 \$1,200.00 or \$1,300.00 a building every time they go in and
22 change out a complete litter.

23 Concrete -- these facilities, because of the -- well, even
24 actually when the market was in good shape -- I guess I will

71

KEEFE REPORTING COMPANY
1-800-244-0190

1 speak a little out of turn here. The integrator is not the one
2 that is making the money hand over fist, unlike what the press
3 says sometimes. Our markets are very tight. We measure market
4 at our processing plant over in Washington and the one in
5 Bridgewater, Cromwell, Kentucky; Monterey, Tennessee, which are
6 the ones that I can speak for, because I am on the management
7 committee, we will measure our profit margin in a quarter -- in a
8 quarter of a cent per pound. And we take it all the way down to
9 the fourth decimal place when we are at our meetings. So our
10 market margin is very tight.

11 The only thing that is keeping a lot of us in business
12 currently is corn happens to be also very cheap, so when one of
13 your inputs is -- and in this case 72 percent of one of your
14 inputs is at a \$1.90s for next year's upcoming harvest, it can
15 help offset the depressed market. We transfer that or we carry
16 that over in contracts, which are long-term contracts to protect
17 these family farms. The longer for them the better off it is to
18 carry the note.

19 Most banks will allow these people, because of

20 depreciation, to carry notes between 10 and 12 years. So it is
21 to our best interest to have them build the best structure they
22 can, yet still be able to cash flow it. Because if they can't
23 make an income to survive at the end of the year, that facility
24 will be absorbed by the bank, and then it is hard to move an

72

KEEFE REPORTING COMPANY
1-800-244-0190

1 existing facility.

2 So what we try to do is we even provide contractors to help
3 them build it. We provide them blueprints to help them design
4 it. We save the PE requirements that this gentleman incurs,
5 because that would throw it -- the margin is so tight that it
6 throws it just above the cost of not being able to cash flow. So
7 the addition of concrete floors in this case would add between 21
8 and 29 percent to the cost of the building, which would
9 definitely put it over the cash flow option.

10 So that unless Perdue, being the integrator, would be the
11 bank and provide the loan, which that is not normally our
12 business, these people would not be able to go down to their
13 local lenders and be able to get a loan without having a
14 substantial amount of cash up front to put down as collateral.
15 They just can't cash flow it.

16 The issue that Ken had talked about -- and I saw an eyebrow
17 raise on the panel -- that there is some concrete in our
18 structure. It is called a rope barrier. We don't use it to

19 support anything. The panels that it sits on are about ten feet
20 long by about seven or eight feet. They are about 18 pounds a
21 square. So what we do is we have a small concrete curb, for a
22 better term, it is a curb. It goes below the ground so the
23 rodents won't bury under it, and it sits sufficiently above the
24 ground so that you can put your bait stations on the outside and

73

KEEFE REPORTING COMPANY
1-800-244-0190

1 keep the weeds trimmed around it, which is one of our good
2 management practices that we ask our producers -- or we promote
3 to the producers. So it is not any structural support.

4 The structural support is actually piers that are pulled
5 down that are then set in the ground three or four feet and then
6 the four by four posts that sit on that, which is all metal and
7 up into a truss system and the trusses are interlocked. So the
8 panels actually carry no structure. There is no structural
9 reason for them. It is just for -- I guess that clarifies that.

10 What I would recommend -- and then I will close here so
11 that everybody can go to lunch -- is that we further clarify the
12 difference between solid, or in their case semi-solid, and
13 liquid. I think we are talking about two different beasts here.
14 I think when you walk up to poultry manure, especially turkey,
15 broiler is a little wetter, and layers is even a little wetter
16 than that, unless they are fan ventilated to dry.

17 If you were to take a handful of turkey manure, with the
18 bedding material in it, you would be very hard pressed to squeeze

19 out any free liquid. We are talking about something that is
20 around 40, 45 percent solid material, 60, 65 percent moisture.
21 That is about the same thing as if you were to pick up hamburger
22 at the grocery store for solids and try to squeeze moisture out
23 of the hamburger. It would be very difficult to do that. So
24 there is not really any free liquid in it.

74

KEEFE REPORTING COMPANY
1-800-244-0190

1 At this point I will entertain any questions from the
2 audience or the panel.

3 HEARING OFFICER SUDMAN: Thank you.

4 CHAIRMAN MANNING: I didn't understand your last comment.
5 You said it has 60 percent moisture?

6 MR. NALLY: Yes, but it is not free moisture. It is not
7 something that would drip. It is 45 percent solid.

8 CHAIRMAN MANNING: Because I know if I squeezed a hamburger
9 something would come out. It would probably not be water. It
10 would probably be grease, depending on the --

11 MR. NALLY: A little bit. But that kind of tissue
12 capacity.

13 CHAIRMAN MANNING: Okay.

14 MR. NALLY: The reason I say that is we have some belt
15 filter presses at some of our wastewater plants, and we have to
16 pass paint filter tests on occasion with that. We achieve
17 anywhere between 35 and 45 percent solid, and we pass paint

18 filter tests.

19 CHAIRMAN MANNING: What is a paint filter test?

20 MR. NALLY: A paint filter test is a test required to get
21 into a Subtitle D landfill. It is a no drip test. I am not sure
22 if Illinois has it anymore. I know several of the states that we
23 are in that if we want to landfill some waste product material,
24 it has to pass the paint filter test for a Subtitle D landfill.

75

KEEFE REPORTING COMPANY
1-800-244-0190

1 BOARD MEMBER KEZELIS: Can you give similar solid liquid
2 figures for broilers and layers or rough approximations?

3 MR. NALLY: Off the top of my head, no. Purdue University,
4 which is where I started my Ph.D. program, they have some very
5 good publications on that, in which they give the curve, even
6 including NPK on it and moistures. In general it depends on the
7 waste management structure. Turkeys tend to be dryer because of
8 the bedding material. Broilers tend to be a little wetter, and
9 it is the diet. The birds are not held in there as long, but
10 there is a lot of cycles of birds, you know, we are talking a
11 five week cycle.

12 Their diet tends to be a different protein base. That
13 tends to make a little wetter -- birds don't urinate like you and
14 I would think they urinate. They defecate. It is kind of a
15 mixture of the two. And the broilers, that material tends to be
16 a little more moist. And then layers is even the next step more
17 because of the very high protein, high calcium diets for egg,

18 that they tend to be a little more wetter yet. You are probably
19 talking, and I am guessing at this point, between five and six
20 points as you go down the scale.

21 BOARD MEMBER KEZELIS: And the NPK, which you referred to,
22 is nitrogen, potassium, phosphorus?

23 MR. NALLY: Yes, ma'am.

24 BOARD MEMBER KEZELIS: Okay. Thank you, Mr. Nally.

76

KEEFE REPORTING COMPANY
1-800-244-0190

1 MR. RAO: I have a question.

2 MR. NALLY: Yes.

3 MR. RAO: You gave some cost figures for placing the
4 concrete floor. Have you considered any other material like, you
5 know, compacting the existing material to see how much that would
6 cost?

7 MR. NALLY: Yes. We just did one using a synthetic
8 material. In this case it was not a liner. It was betamide
9 clay, where we went in and put several hundred pounds per cubic
10 yard of soil and then tried to till it in and compacted it. We
11 did achieve the right compaction. I would not recommend that for
12 anybody that has any practicality I experienced. That was a
13 dusty, nasty mess. Trying to achieve compaction through it was
14 like trying to run your thumb down through jello and squeeze it
15 through. The jello just kind of moved around it. We didn't seem
16 to achieve what we wanted to.

17 Cost-wise, that was \$3,800.00, plus labor. I threw all the
18 labor in because I had several of my construction staff out there
19 doing it. We have a construction group that actually works for
20 Perdue. I did not charge the producer labor on that. If you
21 would have added labor it would have been about \$5,200.00, which
22 in my mind was a waste of money.

23 MR. RAO: What about flexible membrane liners?

24 MR. NALLY: I have not used any in the State of Illinois.

77

KEEFE REPORTING COMPANY
1-800-244-0190

1 This happened to be a project in the State of Illinois, by the
2 way. I have not used any liners in the State of Illinois. I
3 have used liners at some test trials in Indiana. Depending on
4 what you put over the top of the liner -- I don't have any
5 current costs. The projects that we did are in excess of five
6 years ago. I could probably get those and I can extrapolate
7 maybe some current, and I can submit written, if need be.

8 MR. RAO: Yeah.

9 MR. NALLY: No problem.

10 CHAIRMAN MANNING: Whatever you want to do to add to your
11 testimony to give us more specifics would be helpful.

12 MR. NALLY: Okay. I could try to address that and I could
13 actually put some actual moisture numbers together for you.

14 MR. RAO: Thank you.

15 HEARING OFFICER SUDMAN: Thank you. The Department? Would
16 you please identify yourself again?

17 MR. GOETSCH: Warren Goetsch, the Department of
18 Agriculture.

19 MR. NALLY: Yes.

20 MR. GOETSCH: This may not be a fair question, but I would
21 like to ask it anyway.

22 (Laughter.)

23 MR. NALLY: That figures, doesn't it.

24 (Laughter.)

78

KEEFE REPORTING COMPANY
1-800-244-0190

1 MR. GOETSCH: In the proposal we reference deep bedding
2 systems in the swine industry, hoop structures, as they are
3 called, are being used, which is a similar approach. I just
4 wanted to ask whether you have the opinion -- or if you are of
5 the opinion that those types of structures should also not have
6 any kind of hydraulic conductivity requirement associated with
7 them as well?

8 MR. NALLY: That's a very good question, and actually I
9 will answer that. We have been working diligently with NRCS in
10 Indiana and also with our local DC, which is District
11 Conservationists, and we have actually taken the blueprints of
12 waste handling structures from several of our neighboring states,
13 and it is kind of what works and what doesn't and let's piecemeal
14 something together that does work. We have come up with a very
15 good design. And on the hoop design that you have mentioned we

16 are actually opposed to that design. There are some issues with
17 structural wall integrity and the bowing of the wall and even
18 requiring -- then it gets into the cost issue of how deep to go
19 with footers and all of that.

20 The design that we have come up with for the handling the
21 manure or the litter combination that you had mentioned, we do
22 pull it out of the buildings, and what do you do with it when the
23 fields are not ready. Well, obviously two or three -- I mean, if
24 they are going to haul out four times a year, two times of the

79

KEEFE REPORTING COMPANY
1-800-244-0190

1 year it is not very good to get on the field. So we do need
2 something to hold that.

3 Do we need to have one times ten to the minus seventh
4 centimeter per second squared? No. Do I think we even need it
5 inside the buildings? No. That was the reason for what we had
6 done with the University of Illinois is, you know, what are we
7 trying to achieve here.

8 Obviously, as environmental manager, I am environmental
9 first and manager second. So the question was, well, we are
10 trying to protect something, and since my buildings are
11 completely enclosed and don't come in contact with stormwater, so
12 stormwater is not what I am protecting. And since there is not
13 much air emission from it, air is not what I am protecting. So
14 it is groundwater.

15 Then the question we asked ourselves is, well, what kind of

16 damage are we doing to groundwater or are we? So that's when we
17 contracted with the University of Illinois to determine if there
18 was any leaching and, if so, to what depth so we would need to
19 know then what kind of conscious management decisions we could
20 recommend to these family-owned producers. At this point I am
21 not sold that we need ten to the minus seventh in a barn, let
22 alone one of the handling facilities outside. That was kind of a
23 long answer.

24 MR. GOETSCH: Thank you.

80

KEEFE REPORTING COMPANY
1-800-244-0190

1 HEARING OFFICER SUDMAN: Any other questions for the
2 witness?

3 BOARD MEMBER GIRARD: Yes. Just a follow-up. Those
4 outside storage structures, are they protected from the elements
5 also or do they tend to just be out in an open area?

6 MR. NALLY: No, they are. Through cost share NRCS has been
7 very helpful with helping us with the design specs on those.
8 What they are, are a roof structure with some berm material to
9 keep from runoff and runoff on it. And then there is a wood wall
10 that -- once again, there is no flowing of this material. It is
11 bedded material with a little bit of manure mixed in it with it,
12 so it does not flow. It is almost like a compost, windrow.

13 For our size, I will give you some specifics. They are 48
14 by 96. What we consider a full unit, which is three of those 50

15 by 500s, you are looking at cubic feet. So they will hold a pile
16 of manure and litter combination of about seven or eight feet
17 high inside that with a windrow with wood structure about five
18 feet, ten inches up, and then open with -- as that composter
19 generates gases, so we are concerned with safety. So that's why
20 they are open from the top. Do they come in contact with the
21 elements? Not unless it is raining horizontally, which that has
22 happened on occasion. But, once again, it is not liquid so it
23 can absorb some of that and dry it right back out through the
24 process.

81

KEEFE REPORTING COMPANY
1-800-244-0190

1 BOARD MEMBER GIRARD: So basically, then, your testimony is
2 that if we have the waste protected from the elements, either
3 from direct rainfall or stormwater runoff, that we don't need to
4 have this strict conductivity standard on the soil underneath?

5 MR. NALLY: Correct, correct.

6 BOARD MEMBER GIRARD: Thank you.

7 MR. NALLY: That's a summary. For our type of waste.
8 Let's be specific on it. I think you are going to have to be
9 specific. And in Indiana, for example, we have been working on
10 our confined feeding rule now for three and a half years. It
11 just went to the Water Pollution Control Board for the third
12 reading here in March. We had to look at several of the verbiage
13 and it is species specific, whether it be horses, or cows, or
14 pigs, or chickens, or turkeys, or whatever, ducks. We had to be

15 specific for ducks. We have a duck operation in the northern
16 part of the state.

17 CHAIRMAN MANNING: Well, your facilities probably don't use
18 very much water at all, then? I mean, they don't use water to
19 flush out any of the -- the water pretty much is geared toward
20 the feeding of the animal and that -- the drinking of the animal?

21 MR. NALLY: That's about it. We will use a grand total
22 of -- looking through our disinfection between facilities, we
23 have a little mister where we will walk through and disinfect
24 like the sides. You are talking about 200, 250 gallons in a

82

KEEFE REPORTING COMPANY
1-800-244-0190

1 20,000 square foot building. I mean, it is droplets.

2 CHAIRMAN MANNING: That is daily?

3 MR. NALLY: No.

4 CHAIRMAN MANNING: 250 gallons, how --

5 MR. NALLY: Between cycles.

6 CHAIRMAN MANNING: And define a cycle for us.

7 MR. NALLY: On the brooder, five to seven weeks. At the
8 end of the cycle, as we move the birds over, go through and clean
9 out the litter and then just quickly mist everything as a
10 disinfectant with something that is approved.

11 CHAIRMAN MANNING: Thank you.

12 MR. NALLY: And the USDA does the approval on that one.

13 CHAIRMAN MANNING: Okay. Thank you. Member Lawton, go

14 ahead.

15 BOARD MEMBER LAWTON: Could you or someone on behalf of the
16 interest that you represent submit any suggested modifications in
17 the proposed regulations that would be compatible with your
18 interests?

19 MR. NALLY: As a mater of fact, I can do that. Since I was
20 one of the governor appointed on the Indiana one, I have some
21 similar verbiage.

22 BOARD MEMBER LAWTON: I think that would be helpful.

23 MR. NALLY: Okay.

24 BOARD MEMBER GIRARD: Great.

83

KEEFE REPORTING COMPANY
1-800-244-0190

1 HEARING OFFICER SUDMAN: Any other questions for the
2 witness? Board Members? Anand? Anybody? Okay. Thank you.

3 MR. NALLY: Thank you very much.

4 BOARD MEMBER GIRARD: Thank you.

5 CHAIRMAN MANNING: Thank you.

6 HEARING OFFICER SUDMAN: It is my understanding that nobody
7 else is interested in -- oh, we do have one more person.

8 MR. FRALEY: I have some written comments that I would like
9 to just submit.

10 HEARING OFFICER SUDMAN: Okay.

11 MR. FRALEY: My name is Jim Fraley. I am the manager of
12 the Illinois Milk Producers Association.

13 HEARING OFFICER SUDMAN: Thank you.

14 CHAIRMAN MANNING: Thank you.

15 MR. FRALEY: Thank you.

16 HEARING OFFICER SUDMAN: Okay. The transcript of this
17 hearing should be available on the Board's web site by May 14th.
18 We should have it around the 11th or so. Also, you can get a
19 hard copy from the clerk's office for 75 cents a page. The Board
20 will accept written comments until May 14th. We can extend this
21 deadline if necessary.

22 I am sorry. Before we close out this hearing, I wanted to
23 ask the Department if you had any responses that you wanted to
24 make to any of the testimony that we heard today, other than

84

KEEFE REPORTING COMPANY
1-800-244-0190

1 written comments?

2 MS. ERVIN: No. We will file written comments.

3 HEARING OFFICER SUDMAN: You will file written comment.

4 Okay. Thank you. Sorry about that.

5 I just want to remind you that if you are on the service
6 list your public comment should be served to other people on the
7 service list. All the comments and the prefiled testimony and
8 the transcript from this proceeding will all be available on the
9 Board's web site.

10 Are there any closing comments from the Board Members?

11 CHAIRMAN MANNING: I just wanted to thank everybody for
12 their testimony. Mr. Fraley, yours will be entered as a public

13 comment and it will go --

14 HEARING OFFICER SUDMAN: Yes.

15 CHAIRMAN MANNING: It will get a public comment number by
16 our clerk's office.

17 I did want to thank everybody for all of the testimony that
18 we received today. Certainly, at least it is my opinion, that
19 the State has come a long way since the mid 1990s when we first
20 started dealing with the first original Livestock Management
21 Facilities Act and we had those rounds of hearings, which I know
22 many of you are familiar with. A lot of testimony at that time
23 was more emotion and fear and that kind of thing.

24 It was really, I think, gratifying, from our perspective

85

KEEFE REPORTING COMPANY
1-800-244-0190

1 here, to hear most of the testimony today dealing with technical
2 issues and cost issues and those kinds of things. So we
3 appreciate all of the information that we received from everyone.

4 We appreciate the proposal from the Department, the
5 comments of the EPA and all of the comments that we heard here
6 today. We will take this back and do, as has been pointed out, a
7 rather difficult job, of sort of balancing environmental
8 protection and looking at the cost as well, but coming up with a
9 rule that I think everyone can live with and certainly will be
10 environmentally protective.

11 Thank you all for all the good work you have done. Please
12 be sure to give us whatever public comment you want.

13 MS. ERVIN: Madam Hearing Officer, just a clarification.
14 Did you state that the transcript would not be available until
15 the day the public comments were due?

16 HEARING OFFICER SUDMAN: Well, actually --

17 CHAIRMAN MANNING: Five days.

18 HEARING OFFICER SUDMAN: What is that?

19 CHAIRMAN MANNING: We will do it in five days. We will get
20 an expedited transcript. It will be available in five days.

21 MS. ERVIN: Thank you. We would like to respond to some of
22 the testimony.

23 CHAIRMAN MANNING: Sure.

24 HEARING OFFICER SUDMAN: Okay. Sorry.

86

KEEFE REPORTING COMPANY
1-800-244-0190

1 MS. ERVIN: Thank you.

2 HEARING OFFICER SUDMAN: If for any reason there is a delay
3 in posting it, we will extend the written comment deadline. And
4 if we do that, I will issue a Hearing Officer Order on that.

5 Are there any other questions or comments before we
6 adjourn?

7 Okay. We will adjourn. Thank you very much.

8 CHAIRMAN MANNING: Thank you all.

9 (Exhibits were retained by Hearing Officer Carol Sudman.)

10

11

12
13
14
15
16
17
18
19
20
21
22
23
24

87

KEEFE REPORTING COMPANY
1-800-244-0190

1 STATE OF ILLINOIS)
) SS
2 COUNTY OF MONTGOMERY)

3 C E R T I F I C A T E

4

5 I, DARLENE M. NIEMEYER, a Notary Public in and for the
6 County of Montgomery, State of Illinois, DO HEREBY CERTIFY that
7 the foregoing 87 pages comprise a true, complete and correct
8 transcript of the proceedings held on the 30th of April A.D.,
9 2001, at 600 South Second Street, Room 403, Springfield,
10 Illinois, In the Matter of: Amendments to Livestock Waste
11 Regulations (35 Illinois Administrative Code 506), in proceedings

12 held before Hearing Officer Carol Sudman, and recorded in machine
13 shorthand by me.

14 IN WITNESS WHEREOF I have hereunto set my hand and affixed
15 my Notarial Seal this 2nd day of May A.D., 2001.

16

17

18 Notary Public and
19 Certified Shorthand Reporter and
Registered Professional Reporter

20 CSR License No. 084-003677
My Commission Expires: 03-02-2003

21

22

23

24